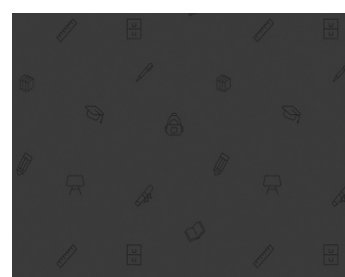


Exploratory Study on the Identification of English Learners for Gifted and Talented Programs



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National Center for Research on Gifted Education (NCRGE) English Learners Expert Panel



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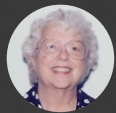
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The content of this report is based on the NCRGE's research on the identification of gifted English learners (ELs) and the views expressed herein do not necessarily represent the positions or policies of the Department. No official endorsement by the Department of any identification procedures, practices, and instruments mentioned in this report is intended or should be inferred. Nor does a description of state, district, or school practices in this report mean that these practices comply with federal laws, regulations, and other applicable requirements, or that the Department approved these practices.

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Exploratory Study on the Identification of English Learners for Gifted and Talented Programs

Executive Summary

English learners (ELs) are the fastest growing population of learners in the United States (National Center for Education Statistics, 2013). However, despite the growing numbers of ELs, their representation in gifted identification and programming continues to lag behind not only traditional populations of learners from advantaged communities (Callahan, 2005), but also other underserved populations of learners (Iowa Department of Education, 2008; Matthews, 2014). The United States Department of Education, Office for Civil Rights (2014) indicated that 2% of ELs are enrolled in gifted and talented programs, as compared to 7% of non-ELs. Historically, there is an underrepresentation¹ of students from culturally, linguistically, and economically diverse (CLED) communities in gifted and talented programs.

A comprehensive literature review on gifted ELs (Mun et al., 2016) determined that identification procedures and policies have been cited as the crux of the problem. To further investigate this issue and seek solutions, a preliminary theory of change for EL gifted education (including the four phases of pre-identification, preparation, identification, and placement) was developed and tested by the National Center for Research on Gifted Education (NCRGE, 2016).

A quantitative analysis of data from three states with mandated gifted identification policies confirmed that ELs were *generally* underrepresented in gifted and talented programs, even in states with mandates.

With funding from the Office of English Language Acquisition at the U.S. Department of Education, NCRGE then embarked on a systematic, qualitative study to better understand the following:

1. What are the patterns of underrepresentation in gifted and talented programs for ELs by grade level?
2. What procedures, practices, and instruments are used to assess and identify ELs for gifted and talented programs?
3. What are the roles, backgrounds, and qualification of district and school personnel involved in the assessment and identification of ELs for gifted and talented programs?
4. What challenges do districts and schools encounter in the assessment and identification of ELs for gifted and talented programs?
5. To what extent do the findings from the qualitative study map onto the preliminary NCRGE EL Theory of Change?

The researchers visited 16 elementary and middle schools across the three states, selected because they were exemplary in their identification of gifted ELs. The NCRGE team conducted group and individual interviews with a total of 225 administrators; district gifted coordinators; gifted specialists; classroom teachers; parents/guardians/caretakers; and school psychologists or counselors, yielding a total of 84 transcripts. Group and individual interviews were transcribed, coded, and analyzed.

The research findings led to the following recommendations for review and reflection for stakeholders involved in designing and implementing gifted and talented programs. (*Note: these recommendations are detailed in the full report.*)

- Adopt a policy of universal screening of all students in one or more grade levels for the identification process.
- Create alternative pathways to identification, allowing schools to use a variety of different assessment instruments (including native language ability and achievement assessments and reliable and valid nonverbal ability assessments) and to apply flexible criteria to ensure that students' talents and abilities are recognized.
- Establish a web of communication to ensure that all stakeholders (administrators, district gifted coordinators, classroom teachers, gifted specialists, psychologists, multilingual teachers, and parents/guardians/caretakers) are

¹ Typically, underrepresentation is a term used to describe the students' proportional representation by race/ethnicity, EL status, gender, free or reduced-price lunch (FRPL) status, or twice-exceptionality (identification as gifted and special education status) in gifted and talented programs compared to the proportions in the general student population at the national, district, or state levels.

aware of the identification system in its entirety and are empowered to interact with one another in all components (i.e., screening, nomination, identification, and placement).

- View professional development as a lever for change, providing information to gifted specialists, classroom teachers, psychologists, and parents/guardians/caretakers on identifying giftedness in multiple ways and creating a school climate with the goal of identifying students' strengths rather than weaknesses.

Future studies involving other states with gifted and talented identification and programming mandates and different cohorts may yield additional insights and recommendations for addressing the underrepresentation of ELs in gifted and talented programs.

Exploratory Study on the Identification of English Learners for Gifted and Talented Programs

Need for the Study

English learners (ELs) are the fastest growing population of learners in the United States (National Center for Education Statistics, 2013). However, despite the growing numbers of ELs, their representation in gifted identification and programming continues to lag behind not only traditional populations of learners from advantaged communities (Callahan, 2005), but also other underserved² populations of learners (Iowa Department of Education, 2008; Matthews, 2014). The United States Department of Education, Office for Civil Rights (2014) indicated that 2% of ELs are enrolled in gifted and talented programs, as compared to 7% of non-ELs. Historically, there is an underrepresentation³ of students from culturally, linguistically, and economically diverse (CLED) communities in gifted and talented programs. Identification procedures and policies have been cited as the crux of the problem (Card & Giuliano, 2015; Hodges, Tay, Maeda, & Gentry, 2018; Mun et al., 2016).

Prior to exploring the identification of ELs for gifted and talented programs, it is important to present current definitions of terms. The Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every Student Succeeds Act (ESSA 2015), defines gifted and talented as follows:

Gifted and talented, when used with respect to students, children, or youth, means 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 or activities

² The term “underserved” is used to reference individuals or groups that have not had opportunities to learn at high levels or to be exposed to content, concepts, or skills to prepare them for challenging work. The lack of opportunities may be related to living in challenging economic communities or the inability to have access to multiple resources to promote learning.

³ Typically, underrepresentation is a term used to describe the students’ proportional representation by race/ethnicity, EL status, gender, free or reduced-price lunch (FRPL) status, or twice-exceptionality (identification as gifted and special education status) in gifted and talented programs compared to the proportions in the general student population at the national, district, or state levels.

not ordinarily provided by the school in order to fully develop those capabilities. (Section 8101(27))

The federal definition of gifted and talented is categorical and need based, while the federal definition of ELs is more explicit as it addresses native languages, mobility patterns, reading, writing, and speaking skills in English, and the students’ potential to be successful in classrooms where the instruction is in English. The definition follows:

- English learner**—The term “English learner,” when used with respect to an individual, means an individual—
- (A) who is aged 3 through 21;
 - (B) who is enrolled or preparing to enroll in an elementary school or secondary school;
 - (C)(i) who was not born in the United States or whose native language is a language other than English;
 - (ii) (I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and
 - (II) who comes from an environment where a language other than English has had a significant impact on the individual’s level of English language proficiency; or
 - (iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and
 - (D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual—
 - (i) the ability to meet the challenging State academic standards;
 - (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or
 - (iii) the opportunity to participate fully in society. (United States Department of Education, 2016, ESEA Section 8101(20), p. 43)

In the United States, educational policies reside at the state and local levels (Stephens, 2008). How ELs are identified and served might differ by state and district

educational policies, which further complicates the issue of identifying gifted ELs. Additionally, there is no federal mandate to identify nor serve gifted learners (Castellano & Matthews, 2014). How gifted and talented students are defined, identified, and served depends on the state, district, and school (National Association for Gifted Children and Council of State Directors of Programs for the Gifted, 2015). Students considered gifted in one district may not be identified in another (Borland, 2005; Coleman & Cross, 2005; J. R. Cross & T. L. Cross, 2005; Hertzog, 2009).

The field of gifted education has been perceived by many as an elitist program mainly serving students from privileged backgrounds (e.g., White, high socioeconomic status [SES] (Borland, 2003; Sapon-Shevin, 2003). Students with advantages are perceived as gaining even more advantages by enjoying the benefits of gifted pedagogy, smaller classrooms, and more skilled teachers, which runs counter to the ideals of egalitarianism (Sapon-Shevin, 2003; Subotnik, Olszewski-Kubilius, & Worrell, 2011).

Plucker and Callahan (2014) asserted that for gifted education to advance and thrive, the field “needs to take several bold steps to shrink excellence gaps—and to do so by raising the achievement levels of underachieving groups, not by allowing already high-performing groups to slip” (p. 400). Part of that advancement requires more research in the field of EL gifted education since what is known is quite limited (Granada, 2003). Some have suggested that the achievement gap at the top begins with an identification gap in selecting students for gifted and talented programs (McCoach, Siegle, Callahan, Gubbins, & Hamilton, 2016). The underrepresentation of ELs in gifted and talented programming is both a societal and research problem that merits a thorough investigation. The first step in this research is to investigate what practices are being successfully implemented to identify gifted ELs.

Historical Background Related to Demographics and Identification Challenges

The percentage of ELs in public schools in the United States was “higher in school year 2014-15 (9.4 percent, or 4.6 million students) than in 2004-05 (9.1 percent, or 4.3 million students)” (National Center for Education Statistics, 2017, p. 1). These ELs may include foreign-born immigrants (also called first generation immigrants), native-born children with immigrant parents (second generation immigrants), and native-born children of native-born parents.

With the Immigration Act of 1990, the foreign-born population in the U.S. doubled to 35.2 million between

1990 and 2005, with a 47% increase since 1990 of the number of U.S. residents above age 5 that speak a language other than English at home (Rong & Preissle, 2009). Many of the new immigrants are of Asian and Latin American descent (Grieco et al., 2012), but immigrants and their children are an increasingly diverse group with over 350 different languages being spoken, according to the U.S. Census data collected through 2013 (American Community Survey, 2015). New immigrants also are more likely to experience poverty than are native-born families, with 23% of current immigrant households living in poverty compared to 13.5% of native-born households in 2010 (Camarota, 2012).

Lack of Inclusive Definitions of Giftedness

Academic achievement of ELs in comparison to non-ELs is found to vary by the length of time in an English language acquisition program and the assessment for gifted services. In an overview of EL research findings, K-3 students typically scored lower than their non-EL counterparts until later elementary, middle, and high school when their educational outcomes matched or exceeded their non-EL counterparts (Genesee, Lindholm-Leary, Saunders, & Christian, 2005). Hakuta, Butler, and Witt (2000) found that “even in districts that are considered the most successful in teaching English to ELs, oral proficiency takes 3 to 5 years to develop, and academic English proficiency can take 4 to 7 years” (p. 13). Thus, it is important that the identification of ELs for gifted and talented programs be viewed as an ongoing process across all grade levels. As gifted ELs’ language skills improve, they become more successful academically, and their giftedness is revealed.

How children are identified for gifted and talented programs in public schools is one of the most controversial and contested aspects of programming because the process results in some students being labeled as gifted and others not being labeled as such. Historically, students who were not identified as gifted were frequently from CLED communities (Borland, 2003; Ford, 2014; Ford & Whiting, 2008; Kitano, 2003; Worrell, 2014).

Teachers may have “deficit thinking” biases about dual language and/or culturally diverse students, which may result in fewer referrals for students from CLED communities (Castellano, & Díaz, 2002; Ford & Whiting, 2008). The starting point of any effective gifted identification model for ELs should begin with the acknowledgment that gifted potential exists in all groups of children regardless of ethnicity, race, language, culture, or socioeconomic status (SES, Melesky, 1985; United States Department of Education, 1993). De Wet and Gubbins (2011) found that teachers generally believed that above-average abilities existed in all populations regardless of ethnicity, SES, and culture; that IQ tests were not accurate indicators of giftedness in students from CLED communities; and that gifted and talented programs would benefit from their inclusion.

Identification of ELs for Gifted and Talented Programs

The NCRGE conducted a comprehensive literature review (Mun et al., 2016) for the United States Department of Education (USDE), Office of English Language Acquisition (OELA), and the Institute of Education Science (IES). To provide context for the reader, we have included information from the literature review. For the full literature review please go to: [https://ncrge.uconn.edu/wp-content/uploads/sites/982/2016/01/NCRGE_EL_Lit-Review.pdf].

Recent movements in educational literature have emphasized focusing on strengths rather than deficits (Aldridge, 2008; Ford & Grantham, 2003) and various forms of capital (e.g., cultural, social) that students from CLED communities bring with them (J. S. Coleman, 1988;

Noguera, 2004). For example, funds of knowledge is the view that all people accumulate bodies of knowledge and skills for functioning and well-being over time and bring those to the learning context (Moll, Amanti, Neff, & Gonzalez, 1992). Using this framework, ELs can be viewed as possessing a wealth of previous knowledge, ability, skill, and fluency in

multiple languages, as demonstrated in code switching (Hughes, Shaunessy, Brice, Ratliff, & McHatton, 2006) or “alternating use of two languages on the word, phrase, clause, or sentence level” (Valdés-Fallis, 1978, p. 6). Early fluency at code switching is considered a possible characteristic of giftedness (Brulles, Castellano, & Laing, 2011). For ELs, there are additional indicators that educators should acknowledge, such as speed of English language acquisition (while retaining sophistication and acuity in the dominant language), strengths in leadership, creativity, visual and performing arts, and even rapid rates of acculturation (Granada, 2003).

Many scholars have advocated for using multiple criteria in the identification of students to increase effectiveness in identifying students from CLED communities (Davis, Rimm, & Siegle, 2010; Granada, 2003; Kogan, 2001; Obi et al., 2014; Pfeiffer & Blei, 2008; Reis & Renzulli, 1984; Renzulli & Reis, 1985, 1997, 2014; Rimm, Siegle, & Davis, 2018). Multiple measures and alternative assessments include, but are not limited to, nonverbal ability tests, intelligence tests in the students’ own languages, dynamic and authentic procedures, classroom observations, checklists and rating scales, portfolios, parental input, and self-identification (Ford, Grantham, & Whiting, 2008; Gonzalez, 1974; Harris, Rapp, Martinez, & Plucker, 2007; Melesky, 1985; Stein, Hetzel, & Beck, 2012).

How and when multiple measures and alternative assessments are used are important considerations in the overall identification process for gifted and talented programs. Universal screening of all students in one or more grade levels may include standardized tests of IQ, ability or aptitude, and achievement. For ELs, these cognitive assessments represent one of the greatest barriers to gifted identification if they are not culturally sensitive. Researchers have long asserted that ELs will not perform as well on cognitive assessments with verbal components in English due to linguistic and cultural factors (Bernal, 2002; de Bernard & Hofstra, 1985; Esquiedo & Arreguin-Anderson, 2012; Ford et al., 2008; Gonzalez, 1974; Harris et al., 2007; Melesky, 1985).

In one study, the implementation of a universal screening program for all grade 2 students in a large, urban school district with no change in the minimum standards of gifted identification led to a “180% increase in the gifted rate among all disadvantaged students, with a 130% increase for Hispanic students and an 80% increase for [B]lack students” (Card & Giuliano, 2015, p. 20). Access to the universal screening results is one component of the identification process; nomination is often another component of the gifted and talented program identification process.

Overall, teachers make the most nominations (McBee, 2006). They work closely with students in the classroom, and they have the advantage of observing students’ critical thinking skills, reasoning abilities, content knowledge, subject interest, and social emotional regulation. Therefore, professional development related to the identification of gifted and talented students from CLED communities is essential (Bernal, 2002; Esquiedo & Arreguin-Anderson, 2012; Ford et al., 2008; Harris et al., 2007; Melesky, 1985; Stein et al., 2012). Implicit beliefs related to intelligence, giftedness, SES, and language ability may influence how teachers view the abilities and potential of ELs in their classrooms. Cultural bias may also be embedded in teacher rating scales. Items such as being assertive, initiating activities, asking questions, and contributing in class represent behaviors valued in Anglo-American culture, but are not necessarily culturally appropriate for some children who may be raised in a Hispanic family that values a collectivist



culture. Furthermore, students who are still learning English may not yet feel comfortable expressing themselves verbally in the classroom (A. Brice & R. Brice, 2004). These behavioral skills are not necessarily related to academic giftedness but reflect social skills that can be taught.

Simply using multiple criteria for gifted and talented identification is not enough—how districts choose to weight and combine or not combine scores from each criterion also matters (McBee, Peters, & Waterman, 2014). If there are minimum requirements for each criterion (e.g., GPA, standardized achievement test, cognitive ability test), ELs who perform very well on two of those measures will still fail to be identified due to the third measure, despite their strong potential. Tannenbaum (2003) argued for widening the diagnostic net so as not to exclude any potentially gifted young students; along similar lines of reasoning, Reis and Renzulli (1984) and Renzulli and Reis (1985, 1997, 2014) recommended identifying a larger talent pool of 15-20% of the student population with above average abilities, creativity, and talent commitment. Through this broadened conception of giftedness, students in the talent pool receive an array of enrichment experiences. The way students respond to these experiences determines the type of advanced enrichment and acceleration opportunities they experience (Renzulli & Reis, 1985, 1997, 2014; Renzulli, Reis, & Smith, 1981).

Bernal (2002) was adamant about the need to gather data about successful identification approaches and student success. He argued that “no meaningful changes in the identification process will take place in very traditional, very middle-class-based GT programs unless good data can be used to justify the outcomes of an alternative selection system” (p. 85). Our study is one step in that direction, as the overall goal was to identify best practices resulting in increased identification of ELs for gifted and talented programs.

NCRGE EL Research Study Questions

The United States Department of Education, Office of English Language Acquisition (OELA), commissioned a study on the identification of English learners (ELs) in gifted and talented programs to be conducted by the National Center for Research on Gifted Education (NCRGE). The NCRGE research team was implementing a large-scale study in three states with mandates for identifying and serving gifted and talented students under a grant from the Institute of Education Sciences (IES), which made this specific study of identification of ELs in gifted and talented program possible. In addition, the state departments of education in these three states NCRGE was studying agreed to share achievement and demographic data for students entering grade 3 in 2011 and completing grade 5 in 2014. Details on how schools were selected are provided in Appendix A. The following research questions guided this study:

1. What are the patterns of underrepresentation in gifted and talented programs for ELs by grade level?
2. What procedures, practices, and instruments are used to assess and identify ELs for gifted and talented programs?
3. What are the roles, backgrounds, and qualification of district and school personnel involved in the assessment and identification of ELs for gifted and talented programs?
4. What challenges do districts and schools encounter in the assessment and identification of ELs for gifted and talented programs?

We added research question 5 to determine the extent to which inductive findings reflected the four-phase NCRGE EL Theory of Change (2016, Pre-Identification, Preparation, Identification, and Acceptance of Placement) in Appendix B.

5. To what extent do the findings from the inductive analyses map onto the preliminary NCRGE EL Theory of Change?

As the findings related to these research questions are presented, it is important to understand that identifying gifted and talented students is a multi-stage process reflecting state laws, regulations, and guidelines. Given that procedures associated with this process vary, it is helpful to define terms, such as screening, nomination, identification, and placement, and to separate the components for explanatory purposes.

- **Screening** refers to a purposeful approach to determining students' gifts and talents. The spring of grade 2 or grade 3 is often the designated time for group administration of a reasoning and problem solving test (e.g., Cognitive Abilities Test [CogAT]) or a nonverbal ability test (e.g., Naglieri Nonverbal Ability Test [NNAT]). CogAT measures verbal, nonverbal, and quantitative abilities; NNAT measures nonverbal ability. Achievement tests (e.g., Iowa Tests of Basic Skills [ITBS]) are sometimes used as part of the screening process. The term “universal screening” is used when data are collected on all students at one or more grade levels.
- **Nomination** involves naming students to be considered for gifted services. This involves collecting informal or formal data about students who perform above grade level or demonstrate potential strengths and abilities. Potential respondents include administrators; district gifted coordinators; gifted specialists; classroom teachers; parents/guardians/caretakers; students; or community members. One example of an informal process involves requesting student names based on state or local definitions of giftedness. Formal processes may include disseminating a list of behavioral characteristics to guide the respondents' ratings or requesting completion of standardized nomination/rating

scales consisting of close-ended items. Responses to open-ended items may require the inclusion of real-life examples of behavioral characteristics associated with gifted and talented students.

- **Identification** may involve one or more of the following approaches:
 - a. The first approach is reviewing existing student data from formal and informal sources and determining eligibility and need for programming.
 - b. If a “screener” was used initially, which includes samples of item types, the second approach includes administering the full test battery. Depending on the test, district gifted coordinators, gifted specialists, classroom teachers, school psychologists, or counselors would conduct the assessment.
 - c. The third approach includes requesting parent permission for the administration of an individual IQ test by a school psychologist. Resulting data are then presented to the decision-making team and parents/guardians/caretakers.

Persons composing the decision-making team may include administrators, district gifted coordinators, gifted specialists, classroom teachers, school psychologists, or counselors. The team reviews quantitative data and may apply specific cut scores on ability tests, achievement tests, or nomination/rating scales. Students’ profiles are reviewed within or across schools to determine the need for special services.

- **Placement** is the final component of the process when decisions are made about the students’ status as meeting the qualifications and demonstrating a need for programs and services, not meeting the qualifications, or requiring further testing or consideration.

The next sections of this report focus on the development of the preliminary NCRGE EL Theory of Change (2016), school selection and demographics, and qualitative methods.

NCRGE EL Theory of Change

We based the preliminary NCRGE EL Theory of Change (2016, see Appendix B) on our review of literature for this study (Mun et al., 2016) and the professional expertise and experiences of our research team. The process of creating the NCRGE EL Theory of Change capitalized on these human and material resources as each variable was vetted for inclusion under one or more phases. The General Education Program influenced the first three phases (i.e., Pre-Identification, Preparation, Identification), while the fourth phase (i.e., Placement) was the overall goal or outcome of the theory:

- **Pre-Identification**
 - Purpose: Identify students who would benefit from an emergent talent experience.

- Definition: Any screening process that sorts subgroups of students for preparation services.
- Special Issue for ELs: Gifted and talented students from EL populations may have had fewer or different opportunities to acquire the background knowledge and academic skills necessary to be recognized as gifted.

- **Preparation**

- Purpose: Provide opportunities for talent to emerge.
- Definition: Any organized set of activities, often for EL populations, which are designed to enhance the knowledge and academic skills necessary for a student to be recognized as gifted.
- Special Issue for ELs: Gifted and talented students from EL populations may not have the support and resources to participate in preparation activities.



- **Identification**

- Purpose: Identify gifted and talented students and match students to appropriate services (curriculum and grouping options), including support and bridge services.
- Definition: The processes and procedures used to select students to receive services beyond those offered in the general education curriculum.
- Special Issue for ELs: Gifted and talented students from EL populations can exhibit their giftedness in different ways that are detectable with selected district tools. Additionally, educators’ perceptions of the students’ ability to function in their native language and English are critical to identification.

- **Acceptance of Placement**

- Purpose: Communicate accurate information to parents/guardians/caretakers about programming and services in a trustworthy manner.
- Definition: The processes and procedures used to communicate to parents/guardians/caretakers about programming and services.
- Special Issue for ELs: Gifted and talented students from EL populations may need to continue receiving support to develop their academic English skills. They may also need to change classrooms or leave their home school to be involved in programming and services.

Research Question 1: Patterns of Underrepresentation for ELs by State and Grade Level

We selected three states using a deliberate process with defined criteria for research question 1. The first set of criteria follow:

- The state mandates identification and services for gifted and talented students.
- The state has data sets that allow identification of important student-level outcomes for gifted and talented students in general and historically underserved gifted and talented students in particular.
- The state data sets contain student achievement over time, whether a student had been identified as gifted, which school the student attended, and student demographics.
- The state may require districts to provide plans describing how they serve gifted and talented students. Program plans were available from two of the three states
- The state director of gifted education approved the proposed research.

For this question, we focused on determining patterns of underrepresentation in gifted and talented programs for ELs by grade level. We analyzed data for each of our three states from cohorts of students who entered grade 3 in 2011 and completed grade 5 in 2014.

Descriptive Analyses

First, we utilized descriptive analysis to examine the extent to which ELs were represented in programs for individuals identified as gifted. We conducted a series of cross-tabulations to compare proportions of EL and non-ELs that were and were not identified as gifted. We also utilized cross-tabulations to examine the proportions of gifted and talented students that did and did not have EL status during the 3-year study period.

As presented in Table 1, EL students represented between 12.1% and 21.7% of the student population across the three states. Therefore, if EL students were proportionally represented in programs for the gifted, the percentages of EL students that were identified as gifted should be similar to the overall percentage of students that were identified as gifted. However, as noted in Table 2, the proportion of EL students that were identified for gifted services by fifth grade ranged from 3.8% to 14.4% across the three states. Overall, across the three states, EL students were not proportionally represented in the gifted population. Further, when compared to White and Asian students in particular, smaller percentages of EL students were identified for gifted services (see Table 3).

Table 1
Overall Percentage of Selected Subpopulations

	State 1	State 2	State 3
Identified as Gifted	17.4%	10.5%	10.5%
FRPL-eligible	60.9%	50.6%	67.1%
Black/African American	24.6%	4.8%	21.9%
Hispanic	15.7%	33.3%	30.6%
EL	12.1%	20.1%	21.7%
White	51.6%	54.6%	40.9%
Asian	2.9%	3.4%	2.8%

Table 2
Percentage of Gifted Population From Selected Subpopulations

	State 1	State 2	State 3
% of Gifted that is FRPL-eligible	28.5%	30.2%	42.4%
% of Gifted that is Black/African American	9.1%	2.5%	8.8%
% of Gifted that is Hispanic	7.3%	21.2%	26.6%
% of Gifted that is EL	3.8%	14.4%	13.9%
% of Gifted that is White	73.0%	66.5%	53.9%
% of Gifted that is Asian	6.0%	5.3%	6.6%

Table 3
Percentage of Subpopulations Identified as Gifted

	State 1	State 2	State 3
% of FRPL-eligible Identified	8.2%	6.2%	6.6%
% of Black/African American Identified	6.5%	5.6%	4.2%
% of Hispanic Identified	8.0%	6.5%	9.1%
% of EL Identified	5.5%	7.4%	6.3%
% of White Identified	24.6%	12.8%	13.8%
% of Asian Identified	36.7%	16.7%	24.9%

Based on these data, we created a representation index (RI; Kitano & DiJiosia, 2002) to demonstrate each subpopulation's likelihood for identification. A group's RI represents the actual proportion of the group being identified in the school divided by the expected proportion of that subpopulation, given the proportion of gifted students and the subpopulation in the school. A value of '1' indicated that the subpopulation was proportionately represented in the gifted and talented programs. A value less than '1' indicated that the subpopulation was proportionally underrepresented and a value greater than '1' indicated that the subpopulation was proportionally over-represented in gifted and talented programs, when compared to the base rate of the subgroup within the population. In Table 4, we present each group's RI. The EL student representation index was lower than '1' suggesting that EL students were proportionally underrepresented across all three states.

Table 4
Gifted Representation Index (RI)

	State 1	State 2	State 3
FRPL-eligible RI	0.47	0.60	0.63
Black/African American RI	0.37	0.54	0.40
Hispanic RI	0.46	0.63	0.87
EL RI	0.32	0.70	0.63
White RI	1.41	1.22	1.32
Asian RI	2.11	1.59	2.37
NOT FRPL, Black/African American, Hispanic, Native American RI	1.77	1.37	1.84

In Table 5, we present each group's likelihood for identification. We calculated this number by dividing the proportion of the subgroup that were gifted by the proportion of non-subgroup members that were identified. For example, the likelihood for identification for FRPL students is calculated by dividing the proportion of FRPL students that are identified as gifted by the proportion of non-FRPL students that were identified as gifted. EL students were less likely to be identified for gifted services in each of the three states. Depending on the state, EL students were slightly over one-quarter to slightly over one-half as likely to be identified as gifted as their non-EL peers.

Table 5
Likelihood of Identification for Selected Subgroups

	State 1	State 2	State 3
Likelihood of identification for FRPL students	0.26	0.42	0.36
Likelihood of identification for Blacks/African Americans	0.31	0.52	0.35
Likelihood of identification for Hispanics	0.42	0.53	0.82
Likelihood of identification for ELs	0.29	0.65	0.55
Likelihood of identification for Whites	2.53	1.67	1.69
Likelihood of identification for Asians	2.18	1.63	2.47
Likelihood of identification for students NOT FRPL, Blacks/African Americans, Hispanics, or Native Americans	6.12	2.73	3.42

Multilevel Analyses

Next, we utilized multilevel modeling to examine student representation after controlling for achievement. In States 1 and 3, there is a statistically significant underrepresentation of EL students in gifted and talented programs both in models without academic achievement measures (model 1) and models with academic achievement measures (model 2). For State 2, there is statistically significant underrepresentation for EL in a model without academic achievement (model 1) but no

statistically significant difference when academic achievement is controlled (model 2). (See Appendix C for more details.)

Figure 1 further demonstrates the role of achievement in the identification of EL students. In States 1 and 3, EL students with achievement that was a standard deviation above the mean were still less likely to be identified for gifted services than non-EL students with similar achievement. In State 2, this was not the case.

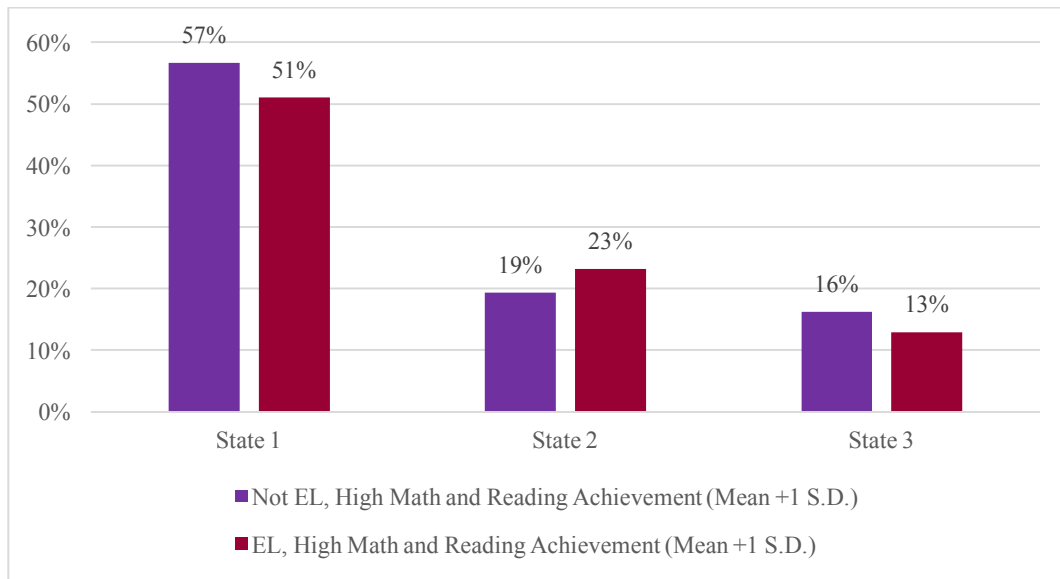


Figure 1. Percentage of high achieving EL and non-EL students identified as gifted.

Although these results suggest that ELs were underrepresented in gifted and talented programs, schools that we visited did not follow this trend. Using state data, we intentionally selected districts and schools in which the percentage of EL students identified for gifted and talented programming was proportionally representative of the overall population of EL students in the school.

Now that we addressed research question 1 quantitative results, the next section provides a brief overview of the qualitative methods.



Qualitative Methods

We visited 16 schools including 14 elementary schools and two middle schools. Middle schools were included in visits as part of a specific request by OELA. Upon selection and approval, schools and districts where ELs were proportionally represented in their gifted and talented programs were selected for school site visits in this study. All three states provided us with all students' reading and mathematics academic achievement outcomes across grades 3-5; student demographics, including race/ethnicity, free or reduced-price lunch (FRPL) status, gifted status; the school students attended, and their grade level. (See Appendix A for more details.)

Additionally, OELA stipulated the inclusion of nine purposively-selected districts with no more than two public schools from one district. Further, at least five of the

districts would have a large number of ELs and at least three would have smaller but growing EL populations. This sample included districts that used different processes for identifying all students, including ELs, as qualifying for gifted and talented programs (USDE, OELA, 2014). Based on these criteria, nine districts and 16 schools were selected: State 1: three districts, five schools; State 2: three districts, five schools; and State 3: three districts, six schools.

A two-member research team spent one day at each school between March 8, 2016 and September 15, 2016 to collect data, along with specific school documents. At these schools, we conducted group and individual interviews with key persons ($N=225$) most knowledgeable about identification practices, including administrators ($n=30$), district gifted coordinators ($n=15$), gifted specialists ($n=25$), classroom teachers ($n=75$), parents/legal guardians/caretakers ($n=71$), and school

psychologists or counselors ($n=9$). Some of the same participants were also part of identification committee interviews. We analyzed comments from these 225 key persons, which yielded 84 transcripts, to address research questions 2-5. (See Appendix D for information about qualitative methods and the NCRGE EL codebook.) The following sections of this report highlight qualitative findings related to research questions 2-5.

Table 6 includes various school-level characteristics for the schools visited including cohort percentage of Black/African American, Hispanic, and Native American students (UNDER); cohort designated as FRPL eligible students; cohort percentage of English learners (EL); cohort percentage of gifted and talented students; cohort percentage of gifted UNDER students; cohort percentage of gifted FRPL students; expected cohort percentage of gifted ELs; and the actual cohort percentage of gifted ELs.

Table 6
Demographics of Schools Selected for Visits by State, District, and School

State	District	School	Cohort % Under (Black/African American/Hispanic, Native American)	Cohort % FRPL	Cohort % EL	Cohort % Gifted	Cohort % Gifted Under	Cohort % Gifted FRPL	Actual Cohort % Gifted EL	Expected Cohort % Gifted EL
1	1	A	84%	97%	38%	7%	5%	5%	3%	2.7%
1	1	B	84%	97%	59%	14%	14%	14%	9%	8.3%
1	2	A	68%	83%	30%	20%	13%	11%	6%	6.0%
1	3	A	89%	95%	36%	16%	14%	13%	5%	5.8%
1	3	B	96%	98%	38%	9%	9%	7%	4%	3.4%
2	1	A	96%	99%	69%	24%	23%	24%	20%	16.3%
2	1	B	97%	97%	77%	26%	23%	26%	21%	19.9%
2	2	A	41%	55%	19%	15%	9%	5%	5%	2.8%
2	2	B	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
2	3	A	87%	98%	59%	7%	5%	6%	5%	3.9%
3*	1	A	79%	80%	29%	14%	7%	12%	2%	4.0%
3*	1	B	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
3*	2	A	99%	99%	60%	14%	14%	14%	9%	8.2%
3*	2	B	77%	65%	40%	18%	15%	10%	9%	7.2%
3*	3	A	33%	47%	11%	20%	7%	8%	4%	2.2%
3*	3	B	67%	79%	39%	13%	6%	11%	6%	5.0%

Note: *Because of limited data availability during the site selection phase, schools in State 3 were selected using alternative achievement state data. *n/a*: Despite visiting both elementary and middle schools, we were only provided data on schools we visited that offered grades 3 through 5.

Research Question 2: Identification Procedures, Practices, and Instruments for EL Gifted and Talented Students

Research question 2 focused on determining the districts' procedures, practices, and instruments used to assess and identify ELs for gifted and talented programs. Researchers used a semi-structured interview protocol for each individual or participant group (see Appendix E). Participants described multiple components and several instruments involved in the overall process of screening and identifying gifted and talented students. The level of detail about each component was dependent on information shared during group and individual interviews as well as the review of available district and school documents. Identification procedures and practices are highlighted next.

Procedures and practices for identification varied across states but included similar basic components. Table 7 indicates the use of universal screeners, nonverbal assessments, cut scores, speed of language acquisition, and talent pool/watch list was evident in most districts. All states and districts used cognitive ability and achievement tests as part of the identification process. The gifted specialist in State 1, District 2 described ways assessments were used to increase access to the gifted and talented program:

So, we give an aptitude test, an achievement test, and there is a group test, and once those come back we look at that and if they've got a high aptitude score but not so high on the achievement then we can give them additional tests like Woodcock Johnson. If it's the other way around where achievement is high and aptitude is not, then we'll give them either the [Reynolds Intellectual Screening Test] RIST or the Raven's. (Gifted specialist interview, 1-2-A, 4/19/2016)

In addition to standardized assessments, eight of the nine districts included performance assessments, such as portfolios, work samples, and grades as a component for identification. For example, State 3, District 3 initiated a new practice to collect information for student portfolios, which was used to provide a complete picture of a student's abilities. The district gifted coordinator for State 3, District 3 described the portfolio procedures:

And the portfolio would be at least three products . . . people on a team who would independently look at those products. Then they get together. They come to consensus on the reading of those products that would demonstrate creativity, motivation, leadership and or advanced academics. And that can be used in

place of the test scores. (District gifted coordinator interview, 3-3-A, 6/1/2016)

Despite the consistent use of standardized cognitive and achievement assessments along with performance assessments, variability in identification procedures occurred across states and districts most often when practices specific to the identification of ELs were involved. Table 7 indicates that the majority of districts in State 2 and State 3 utilized flexible identification policies related to choice of instruments, cutoff scores, observation data, and the students' need for challenging learning experiences to accommodate students from underrepresented populations, including EL students. These districts use multiple measures to identify gifted EL students. For example, in State 1, District 3, a member of the identification team commented on the use of multiple measures:

We look at the teacher's recommendation as well; we look at several different test batteries with the classwork and observation, so we try and compile a lot of different things to get the whole picture of the child, so it's not just test scores or it's not just this or that, to try and really widen that scope of who are identified. (Identification committee focus group, 1-3-B, 9/15/2016)

Gifted specialists also expressed how they approached their search for students with gifts and talents who many not have full command of English. One specialist in State 2, District 2 described the "hunt" for students with high potential.

Maybe having someone that's in a position that my job is to be on the hunt—kind of at all times, so knowing the scores of my students at my school and being the one that says, "Wait a minute, this person got ninety-nine percent on the nonverbal; . . . might have gotten thirty percent on the verbal scores on the CogAT or the quantitative scores but look at the nonverbal." So, we've got a language barrier here but they're obviously able to think at a higher level, so let's start getting the data. (Gifted specialist focus group, 2-2-A, 5/11/2016)

Additionally, the majority of districts in State 2 and State 3 utilized native language evaluations or instructions (see Table 7). For example, a group of administrators in State 3, District 2 were asked if the assessment and identification process varied for ELs, and one commented:

Yes and no. No, because procedurally it is the same, it's the same paperwork, the same checklist, the same thing we send. The only thing that would differ is if they truly do not speak any English.

We give the Aprenda. We have [an alternative pathway] also that we follow which is a slightly different set of criteria in terms of IQ score. We're very lucky, as [another administrator] was saying that we have many bilingual people in our system so we have bilingual assessors.

That's necessary we have that and bilingual assessments but otherwise the procedure is the same. . . . [W]e had one student, in fact, earlier this year who, we had an outside psychologist because our psychologist was just very overloaded with cases so they sent an outside psychologist to assess and, luckily, . . . he was bilingual as well and he sat down with the child and she was not doing well. He couldn't

get response since it's an oral test and he came to me and he said, "I think that I need to work with this child again another day with a bilingual assessment. Do you mind if I come back?" And he came back two or three days later did a different assessment and sure enough she qualified. (Administrator focus group, 3-2-B, 5/26/2016)

Table 7
District Identification Procedures, Practices, and Instruments by State and Number of Districts

Procedures/Practices		State 1	State 2	State 3
		n=3	Districts n=3	n=3
Universal screener		2	2	3
Nonverbal assessments		3	2	3
Cut scores		3	2	2
Identification categories/pathways		2	1	1
Flexible identification policies		0	2	3
Native language evaluations or instructions		1	2	3
Speed of language acquisition		2	3	1
Talent pool/watch list		3	3	1
Identification Tools		State 1	State 2	State 3
Category	Instruments	n=3	Districts n=3	n=3
Cognitive ability or aptitude Test	NNAT; CogAT; TOMAGS; WPPSI; KBIT; RIST; RIAS; Raven's; OLSAT; Bateria III Woodcock-Muñoz; DAS; WISC Spanish; Slosson Full Range Intelligence Test	3	3	3
Achievement test	State Test; MAP; PARCC; Star Reading and Math; ITBS; Bateria III Woodcock-Muñoz; Aprenda; SAT; Logramos	3	3	3
2nd Language assessment	ACCESS; CELLA	0	1	1
Performance assessments	Work samples; observation tools; checklists; observations; grades	2	3	3
Nominations	Teacher; parent; student	1	3	3
Behaviors/characteristics	District rating scales; Slocumb-Payne Teacher Perception Inventory; SIGS; SRBCSS; interest surveys; reports	2	1	1
Rating scales	KOI; GES; GRS	1	2	1
Interviews	Parents/guardians/caretakers; teachers	0	1	0
Creativity assessment	CAP	0	0	2

Notes: Appendix F includes a complete listing of the Identification Tools by Number of Schools by State and Across Schools. Appendix G includes Descriptions of Cognitive Ability, Achievement, Rating Scales, and Creativity Assessments.

Another practice noted in the majority of districts in State 1 and State 2 was the focus on speed of English language acquisition among ELs. As noted earlier, it may take 3-5 years for students to develop oral English proficiency and 4-7 years for students to develop academic English proficiency (Hakuta et al., 2000). When asked if the identification systems varied for ELs, the district gifted

coordinator in State 2, District 2 reflected on students' mastery of reading, writing, listening, and speaking in English as an indicator of their abilities:

So, with English Language Learners we collect an additional data set around the ACCESS test. . . . Standards, like how quickly the students are

progressing from Level-I to Level-VI become significant when we're talking about a potential gifted student. (District gifted coordinator, 2-2-A, 5/11/16)

Students who made such progress may have demonstrated their intellectual and academic abilities in multiple ways prior to their formal assessment in English. The resulting data from the ACCESS test extended information available during the screening, nomination, identification, and placement procedures.

Additionally, a gifted specialist in State 1, District 3 explained that consultation with EL teacher was essential:

We also encourage our specialists to talk to their EL teachers at their schools if they have a child who is progressing very rapidly through those language acquisition levels, and then we want to know about them and how can we use that as part of our identification. (Gifted specialist, 1-3-B, 9/15/2016)

Examining behaviors or characteristics associated with giftedness occurred less commonly across states (see Table 7). A classroom teacher in State 3, District 2 mentioned behavior as a component of identification:

You see by their behavior, their actions in the class, that's how you can really tell, cause like I always say a test doesn't always tell you what a child can or cannot do. (Classroom teacher focus group, 3-2-B, 5/26/2016)

To gather data on students' behaviors, classroom teachers in State 3, District 3 conducted observations using a locally-developed rating scale of gifted characteristics and the Creativity Assessment Packet (CAP).

Of note, locally-developed rating scales were used to gather student data from administrators; teachers; parents/guardians/caretakers; students; and community members. At the 16 schools, locally-developed teacher ($n=8$, 50%), parent ($n=6$, 38%), and student ($n=5$, 31%) rating forms were used rather than published scales that typically document procedures to determine reliability and validity.

EL Parental Input

The nine district-level procedures in three states documented the components of identifying gifted EL students, choices for instruments, and decision-making processes. Of the 16 schools in 9 districts, all declared that parental input was a source for the identification system through one or more of the following: written communication with parents/guardians/caretakers; nominations; cultural liaisons; surveys/rating scales; or conferences.

In State 2, District 1, the gifted specialist explained that a letter was sent home at the beginning of the year in English and Spanish explaining the program and asking if parents/guardians/caretakers want to refer their child for

testing. The gifted specialist commented: "I've had maybe five or six parent requests this year. And they were basically first graders. First and second." (Gifted specialist interview, 2-1-B, 3/9/2016), which included referrals from EL parents.

Across three states and four districts, rating scales/surveys were mentioned as ways of involving parents/guardians/caretakers in the identification process. For example, in State 1, District 2, parents/guardians/caretakers were invited to complete the Parent Observation Checklist in English and Spanish.

The checklist requires parents/guardians/caretakers to review 33 closed-ended items and to determine if the

behavior is *Not Observed* or *Observed*. State 3, District 2 provided the Parent Nomination Form for Gifted Programs in English, Spanish, and other languages. Items are clustered by four categories with a 3-point response scale (i.e., *Hardly Ever*, *Sometimes*, *Often*). And finally, State 2, District 2 adapted the Kingore Observation Inventory (KOI), and it was available to parents/guardians/caretakers in English and Spanish. The inventory is based on seven clusters of academic and behavioral characteristics: Advanced Language, Analytical Thinking, Meaning Motivation, Perspective, Sense of Humor, Sensitivity, and Accelerated Learning. This statement follows each cluster: "Examples from above of things student said." Parents/guardians/caretakers are required to provide real-life examples based on their observations.

One district gifted coordinator explained how the district supported parents/guardians/caretakers:

We have a very strong cultural liaison department here and so they are both cultural liaisons and interpreters. So, what can also happen is that in a context of a regular parent/teacher conference the parents can bring that up using the interpreter to say you know I think I have a really bright child. (District gifted coordinator, 2-2-A, 5/11/2016)

Finally, in State 3, District 2, the school psychologist discussed the importance of gathering additional data from parents/guardians/caretakers:

We also like to get some background information from the parent when we're screening such as you know, "Did your child begin to read at an early age? Is he a precocious child? What exactly makes you think



that maybe your child is beyond maybe the typical [milestones]? Activities as well, what is the child involved in after school? Is this a book smart type of child or is this child also musically inclined? . . . Are they learning to play an instrument? Do they play chess?" What other kinds of activities would potentially lead us to believe that maybe there's some additional spark there for that particular child and then the parents can be the ones to originate the request? So, although here in the school system, most of the time, it comes from performance so we usually have the teachers identifying the students or the administration or someone who's come into contact with that child or that child's data. However, we do have times where the parents are the ones that believe that their child should have the opportunity and then we screen for that because a lot of parents of course, they think their children are exceptional. (School psychologist/counselor interview, 3-2-B, 5/26/2016)

Parent involvement in identification processes varied by district. In some cases, there were formal processes requiring parental input, while other parents/guardians/caretakers approached districts informally. Some parents/guardians/caretakers were reticent to contact the school about their children's giftedness; others were not. If one child had been identified as gifted, parents/guardians/caretakers were more likely to talk with the schools about a second child.

In summary, the district-level identification procedures included multiple components to gather more information about students using a variety of instruments. Advocacy, proactive searches for students of promise, and flexibility in how identification criteria for gifted and talented programs were applied were important components of the process to ensure students were not overlooked. The goal was to determine students' obvious gifts and talents and their potential to achieve at high levels. Instruments used in this process varied within and across districts. The classification as gifted was a decision based on evidence from multiple sources.

Now that EL identification procedures, practices, and instruments have been explored, the next section of this report presents information about personnel involved in identification processes.

Research Question 3: Personnel Involved in Identification Processes

Research question 3 determined the roles, backgrounds, and qualifications of district and school personnel involved in the assessment and identification of ELs for gifted and talented programs. District gifted coordinators and/or gifted specialists were centrally involved in the assessment and identification processes, both within and outside of the classroom. They generally had or were

working on earning gifted education endorsements or degrees in gifted and talented education. "All GT teachers, so anyone in the district that has a GT position is required to either be endorsed in Gifted Education, which is the state endorsement, or to have their Master's or higher in Gifted Education" (District gifted coordinator interview, 2-1-B, 5/6/2016).

Gifted specialists were frequently responsible for providing informal training to classroom teachers, which was important as classroom

teachers often made the initial referrals/nominations for assessment. After this initial referral step, these classroom teachers were often not part of the process. Some schools involved their EL teacher in the referral and/or assessment process as well.

So, our ESL teacher, our teachers that teach in Spanish, when they have a kiddo that's above grade level or whatever, then they go tell her. Like, this kid might not come out in the standardized test as high but doing really well in Spanish. (Administrator focus group, 2-1-B, 5/6/2016)

Schools with identification committees generally attempted to include gifted specialists, school psychologists or counselors, administrators (usually a principal or assistant principal), and classroom teachers on the committee.

. . . [G]ifted teachers are going to [determine] eligibility, they're writing the [Education Plans] (EPs). If it's an English language learner, the EL resource teacher is involved, and then my guidance counselor will set up those meetings . . . and then of course the classroom teacher. Those are the people that would be involved. (Administrator interview, 3-3-B, 6/2/2016)

So, it's [the gifted specialist], myself, and then the teacher of record of the students that are being identified, and that's it. Three to four [people]. Because in second through fifth grade we departmentalize. So, they're going to have at least two teachers, so a math teacher and a reading teacher . . . our assistant principal . . . she's part of that process as well, but we're sort of one and the same. (Administrator interview, 1-2-A, 4/19/2016)

So, our ESL teacher, our teachers that teach in Spanish, when they have a kiddo that's above grade level or whatever, then they go tell her. . . [gifted specialist]

Well the psychologist . . . he's the most important person. . . . Generally, the general education [teacher] is present, the teacher of the gifted is present, psychologist, and a representative from the district . . . so they are there to make sure that everything is well organized. (Gifted specialist focus group, 3-2-A, 5/25/2016)

To ensure accountability, district personnel were involved in the process as well. In cases where schools did not have an identification committee, the district gifted coordinator or gifted specialist was generally the person who ultimately made the final identification determination. In general, the same personnel were responsible for assessing and identifying both EL and non-ELs for gifted and talented programs. However, some schools made an effort to ensure their identification committees were as diverse as possible.

In thinking about the committee, we tried to have mixed abilities in the diverse group, so some of the teachers you talked to today have [gifted education] certification, have worked in [gifted education] for years, have played a role in the classroom . . . as well. So, we tried to include teachers like that. There are also teachers who don't have much experience in [gifted education] and we're trying to pull them in and get them involved because they also have valuable input that we need to hear about, so that's something we're thinking about. (Gifted specialist interview, 1-3-B, 9/15/2016)



When there are several ELs who share a common language with EL personnel, the identification process is more efficient. "So, we have a lot of bilingual staff. So, they're able to seek out students that are EL"

(Administrator interview, 3-1-A, 5/4/2016). Of the schools with multilingual personnel, they

referred mostly to Spanish/English multilingual school psychologists assisting in this process. "We do use, if the student is EL, then . . . they're tested by a bilingual psychologist" (Administrator interview, 3-1-A, 5/4/2016). There was also mention of using an interpreter/translator during assessment, as needed, in at least one school.

Personnel involved in identifying ELs for gifted and talented programs had knowledge of the characteristics of gifted and talented students; understood the importance of assembling a group of educators from various roles,

backgrounds, and responsibilities; and sought alternative measures, when possible, to make informed decisions.

Professional Development Opportunities

Interview participants described approaches to professional development on assessing, identifying, and serving ELs specifically. Personnel at five schools discussed professional development opportunities about gifted ELs, some of which took place outside of the academic school year. "Every summer the . . . department . . . we have . . . boot camp weeks . . . usually gifted is represented So, we get information on compliance and current trends in gifted education . . . and what we can do to ramp up our program" (Administrator focus group, 3-2-B, 5/26/2016). Personnel at another five schools mentioned this as a goal for the future. Personnel from three schools mentioned that courses for gifted and talented education endorsements were their only training. Professional development in these areas was more common for gifted specialists, counselors, EL personnel, and school psychologists or counselors. Often these training opportunities were targeted towards one specific group of school personnel at a time. For example, one school offered identification training for gifted specialists focused on recognizing biases.

We just did a training about a month ago on bias and how bias impacts the work that we do with our GT kids and especially around identification because we know if it's very teacher-driven and we've got those biases that we want to make sure that that is—so that is actually going to be an ongoing thread through our PD training next year. (District gifted coordinator interview, 2-1-B, 5/6/2016)

At another school, the school psychologist mentioned training specifically focused on identification and selecting assessment instruments that matched the students' characteristics.

Most of the times those trainings [are] for us psychologists. So, for instance, we'll go to trainings to look at gifted identification and let's say the child that maybe gets overlooked because they're quiet, they're reserved. So, they're not as vocal and the teacher just kind of thinks oh they're okay. The child may be extremely bright but just socially, they're not demonstrating it or that behavior problem child that's all over the place [because] he's so bored. He has done his work and it's not that he's really a behavior problem. It's just that he's not being challenged. So, we have those type of trainings to discuss a lot of that and then sensitivity with instruments, knowing which instruments are maybe more sensitive to populations . . . so, part of completing our job is to be very sensitive to that particular child's needs so that we choose an instrument that's really [going to] tap into the most or the best components of that child's abilities versus giving them an instrument that maybe based on their language background or just based on

their social interaction would maybe limit them.
(School psychologist/counselor interview, 3-2-B,
5/26/2016)

Within this topic of professional development, the frequency and format varied significantly across schools. Professional development frequency was described as ranging from ongoing to yearly.

Our GT teachers do have ongoing support . . . there's been professional development every month, now the exact topics I'm not sure of. (Administrator interview, 2-2-A, 5/17/2016)

They get PD, if you're a gifted cluster teacher in this district now, you have to come to see me every month. So, we have about two and half to three hours of PD every month. That's just simply a requirement. (District gifted coordinator interview, 2-3-A, 5/17/2016)

So, I know as counselors we get probably once or twice a year every year and sometimes if we've been here for a while the same information and sometimes it changes a little bit, but that's where I know our department gets it. (Gifted specialist interview, 3-3-B, 6/2/2016)

So, part of completing our job is to be very sensitive to that particular child's needs so that we choose an instrument that's really [going to] tap into the most or the best components of that child's abilities

In terms of format of professional development, there were online and in-person options.

Well, there is in one of the prerecording trainings that I've done. It's there. It goes to the process. I also do training like live trainings for teachers on identification and paperwork and so on and we briefly go through the portfolio process. But what I find is they don't remember it until they need to use it. (District gifted coordinator interview, 3-3-A, 6/1/2016)

One final aspect of professional development for consideration was that several schools offered professional development opportunities that included people from different specialty areas to collaborate.

I know with the guidance counselors at the beginning of every year when we're having our preplanning or sometimes those meetings that we have at the beginning of the year [the district coordinator] comes out and she again gives us the guidelines. We just had a meeting because I came back to her with some paperwork more for the EL and they gave us like a

checklist for . . . what we should be looking for and things that we should consider before we either look at going the [special education] route or the [gifted and talented] route so that we're not kind of funneling these kids in the wrong direction just because they don't have a second language. . . . [O]ur bilingual psychologist will come to our training or sometimes we have different professional development training and it includes how to identify EL students or advocating for our EL students who also will be tested or looking for any characteristics of our EL so that they too have the opportunity to get in the gifted program. (Gifted specialist interview, 3-3-B, 6/2/2016)

I mean, I know when I go to my meetings they talk about, because I go to EL meetings, and once a year we do have the bilingual psychologist that comes in, and talks to us about you know, identifying your students and what you could do and things we should look at, but they're not any different than things we

would look out for in general, so it's not, it's just reminding us that just because they may not be completely fluent in English does not mean they cannot be gifted, so that's kind of what they say to us, but it's nothing like they're saying, this, these particular things have to occur it's just these are the things we look at in general for gifted and talented students. (Classroom teacher focus group, 3-3-A, 6/1/2016)

Spreading this professional development about identifying gifted and talented EL students to the entire school community at large was not always a priority. When professional development related to identifying gifted and talented students who may or may not be EL occurred, the formats included ongoing to yearly sessions, online and in-person options, gifted and talented education endorsement classes, outside the academic year, or an informal, just-in-time basis. However, outcomes observed in one school suggested that formal, collaborative professional development between English Language Acquisition and gifted specialists may result in substantial increases in EL student identification for gifted education programs.

That was six years ago we had a joint meeting between as many [English Language Acquisition] teachers as could be there and as many [Gifted and Talented] GT teachers that could be there and we sat as a school team and we looked at data and at first time I started getting really embarrassed because we walked into that room and four children in our entire district were identified as gifted ELs and I think they

were all probably exited, at least momentarily, right. We left that room with forty-five students ready to identify. So, think of that like in terms of percentage of increase. Then the following year we thought well let's get everyone in the same room, so we had a really cool meeting that was [English Language Acquisition] . . . and [Gifted and Talented] GT. . . . I paid for a substitute from the GT budget and then we actually had a smaller team that would go out and support schools. So, we would go out in subsets with the . . . team and meet their principals, like "Hey, let's talk about your data." That team asked some very hard questions like "Hey principal, when we look at your data we've noticed it's a lot easier if you're a Hispanic male to be identified as special education than to be identified as gifted?" (District gifted coordinator interview, 2-2-A, 5/11/2016)

Although professional development related to identifying ELs for gifted and talented programs was not a requirement for all administrators and teachers, interview participants shared various strategies to inform educators and the community at large about identification procedures, practices, and instruments. Both formal and informal approaches to providing professional development were evident during the group and individual interviews, which ultimately affect current and future decisions about identifying and serving EL gifted and talented students.

In the next section of this report, challenges to assessing and identifying ELs for gifted and talented programming are highlighted.

Research Question 4: Assessment and Identification Challenges of ELs for Gifted and Talented Programs

Research question 4 focused on the challenges districts and schools encounter in the assessment and identification of ELs for gifted and talented programs. As stated earlier, the identification process can be divided into four components: screening, nomination, identification, and placement. Each component presents different challenges related to identifying gifted ELs. Interview participants described the challenges in this process, shared potentially beneficial strategies, and noted suggestions for additional interventions and strategies.

Screening

The goal of this first component of the system was to determine which students should be evaluated for gifted and talented services. The major challenge in this component was a general hesitation by teachers;

parents/guardians/caretakers; and other stakeholders in referring ELs for evaluation. This hesitation can delay or outright prevent the identification of ELs as gifted and talented and may be found at all grade levels and across students with any native language other than English. The problem diminished as students gained English language mastery. In the words of a district gifted coordinator: "Sometimes teachers are quick to dismiss those kids because of the language barrier, like they don't recognize it because they're so focused on them learning their lack of knowing the language that maybe they don't recognize the other areas" (District gifted coordinator, 1-1-A, 3/8/2016).



The most common strategy to combat this challenge was the utilization of a universal screening process, which involved evaluating all students at grade 2 or 3. When everyone participates in the initial assessment for giftedness, issues of bias, awareness, and understanding are diminished in comparison to systems in which teachers and other school personnel are gatekeepers. "I think the universal screening has helped at, not only at our Title 1 schools but at our affluent schools for the kids who don't exhibit those behaviors that people think are gifted characteristics but aren't necessarily" (District gifted coordinator interview, 3-1-A, 5/4/2016). Of the schools we visited, 14 of the 16 used some form of universal screening, most often an ability test such as the CogAT or the NNAT. Two schools used achievement test data as their universal screening tool. Universal screening appeared to be a successful strategy at our schools, but many interview participants acknowledged that it could not entirely mitigate screening challenges. Students who are not identified at the time of the screening for gifted and talented programs, or who move into the district at other grade levels, must have a way to access the evaluation process, which most often involves administrator, teacher, or parent/guardian/caretaker referrals.

Teachers who are thinking about individual student referrals may have trouble assessing the depth of an EL

student's knowledge. One parent commented: "The challenge? It's because of the language. They cannot express all that they are thinking and that limits the ability of the teachers to realize how much they know" (Parent focus group, 3-1-A, 5/4/2016). Building teacher awareness regarding the intersection of EL student needs and giftedness was mentioned. We found professional development for teachers that specifically addressed giftedness and ELs used at five schools and mentioned as potentially helpful by stakeholders at seven others. One gifted specialist articulated the need by stating: "I think a lot of education needs to happen beyond just gifted teachers. I think classroom teachers need to be able to recognize the characteristics" (Gifted specialist interview, 1-1-B, 3/9/2016).

Another challenge is that parents/guardians/caretakers often did not have sufficient information about gifted and talented programming, as illustrated by the comments below:

They never asked me how is he at home or do you think he would fit into the program, like it wasn't questions asked as a parent. It was more the teachers identifying [and] testing them. . . . We received only information at the meeting, at the conference. . . . With all the results and everything. (Parent focus group, 3-1-A, 5/4/2016)

As one identification committee member noted EL parents/guardians/caretakers may not be familiar with gifted identification procedures:

You know a lot of our parents grow up in other countries and may or may not have a gifted program, you know, they might think their child is really smart, he's doing the best in his class, but that's the end of the story and they might not know there is this whole other enrichment opportunity that could be available to them. (Identification committee member focus group, 1-1-B, 3/9/2016)

To address this challenge, two schools conducted outreach specifically aimed at educating their parent communities about the gifted and talented programming that is available. One district gifted coordinator has recently begun this type of outreach and commented:

I think as we get better interacting with our communities, with our parents, that this process is going to become normal and something we just look to, of course we would do this; why wouldn't we do this? I think we're not very good at that yet. (District gifted coordinator, 2-2-A, 5/11/2016)

To foster awareness, schools also utilized their multilingual personnel to communicate with parents/guardians/caretakers or send home written communications translated into the family's home language, whenever possible. These language intervention strategies were used at seven schools, and nine schools, including some of the original seven, indicated that this would be helpful to either start using or

to increase the number of multilingual personnel or languages available. One gifted specialist explained:

Considering that this district in particular is eighty-five percent or higher Latino Hispanic. I think in order to get more parent involvement and more, I think they need to have someone who speaks the language and is a native [speaker]. (Gifted specialist focus group, 2-3-A, 5/17/16)

As described above, interview participants shared different approaches to mitigating challenges related to screening EL students for gifted and talented programs. The next phase of the identification process involves nominations from persons who are most knowledgeable about students' talents and abilities.

Nomination

Teachers were responsible for the nomination process because they worked closely with students in the classroom, and they had the advantage of observing students' critical thinking, reasoning abilities, content knowledge, subject interest, and social emotional regulation. As noted earlier, locally-developed teacher, parent, and student rating scales were used more often than published instruments, which raises questions for the researchers about the reliability, validity, and research-based evidence about characteristics of gifted and talented students. There are several issues related to reliability and validity:

- It is important to offer professional development related to administering rating scales.
- Rating scales may yield varied results if administered at different times of the year due to students' learning growth and maturity.
- Educational terminology related to gifted and talented education may be unfamiliar to persons completing the rating scales.
- Rating scales may reflect the possible biases or misconceptions of persons involved in their development.

Identification

The third component of the identification process was the review of the data and determination of identification status. Interview participants discussed two challenges. The first, and more commonly discussed of the two was the set of policies determining who can and cannot be identified and admitted into gifted and talented programs. Some of the states or districts in this study have set cut scores below which students cannot be identified for gifted and talented programs. Individual schools within those states or districts have struggled to meet the needs of ELs because of the noted difficulties with test-taking and assessment and have developed strategies to work within the system.

In some cases this led to alternative pathways to identification—typically including ELs. One state has a

specifically designated alternative pathway to identification. In other cases, this has been done at the school level. In addition, interview participants from six schools talked about alternative pathways; other participants talked about using multiple measures for gathering data. If students scored poorly on one test, another test or assessment might be used. Identification team members noted the importance of cultural awareness when evaluating students from varied backgrounds. “So, when it comes to identifying students for gifted they are automatically thinking of all of the different aspects of that child’s life, so I think it gives them more of an objective and open-minded feel” (Identification committee focus group, 1-2-B, 9/15/2016).

Another strategy schools used was to create a talent pool or watch list of students who were close but did not meet the identification criteria to attend the gifted and talented program. One gifted specialist commented, “there is nothing in the rules that our folks provide that says I can only pull a group of gifted identified students” (Gifted specialist interview, 1-3-B, 9/15/2016). In other words, state and/or district policies outlined who can be identified, but schools could provide services for additional students.

The second challenge interview participants had about this component of the identification process was the lack of communication and coordination between the EL and gifted education departments when they shared, or potentially shared, the same students. Interview participants at 13 of the 16 schools mentioned this topic. One school formed an EL advisory committee to work with the gifted specialists, while others conducted or would like to conduct professional development sessions for EL and gifted specialists together on topics relevant to both departments, such as how ELs who are gifted might present themselves in the classroom.

Placement

The final component of the identification process was the placement decision. Members of the identification committee made the final decision and sought approval from the students’ parents/guardians/caretakers. Both school personnel and parents/guardians/caretakers expressed concerns about the mismatch between testing in a native language and gifted services provided in English. In the words of one parent, “Services are only offered in English and so when kids are advanced or they have different needs when they’re in Kindergarten and First Grade there is nobody who can provide those services for them in the language that they’re learning in” (Parent focus group, 2-1-B, 5/6/2016). One administrator

talked about the balance between flexibility in testing and rigor in services, stating:

Are we flexible? Maybe a child is not fully ready . . . but . . . show signs of again, like a high level of thinking and so forth; that’s really the biggest thing for me. That really sticks out to me with the EL students, because again, they have to navigate a lot, two languages, two cultures. . . . (Administrator interview, 1-3-B, 9/15/2016)

As with other components, parents/guardians/caretakers may have difficulty navigating the complex logistics. In some areas, gifted and talented programming is offered at magnet locations, requiring a student to switch schools to

take advantage of the services. “The other challenge was the program at one time was just at one of the other magnet sites . . . so then you’re added another challenge with the child changing schools” (Parent focus group, 2-1-B, 5/6/2016).

Ultimately, in addition to the challenges, it can also be difficult to accurately

assess the number of ELs identified for gifted and talented programs due to changing classifications related to the level of language acquisition. As one district gifted coordinator said:

You know where the state looks at our numbers and says you have this percentage of EL kids who are gifted, it’s always wrong. Because it’s like a leaky sieve. These kids are going from LY [enrolled in classes for ELs] to LF [exited from English to speakers of other languages program and followed up for 2 years] when they pop out as LZ [exited from English to speakers of other languages program and 2 year follow up-period completed] they’re no longer considered an EL gifted kid even though they may have been identified when they were LY or LF. . . . (District gifted coordinator interview, 3-3-A, 6/1/2016)

Another strategy schools used was to create a talent pool or watch list of students who were close but did not meet the identification criteria. . . .



In the three states, screening, nomination, identification, and placement policies were the same for EL and non-ELs. However, within each component of the process, there were differences in practice used to reduce the impact of English proficiency on gifted identification. These practices included nominations by EL teachers based on speed of English language acquisition, assessments or directions in Spanish, nonverbal assessments, and talent pool lists. Personnel also used parental input in the identification process, which included nomination and behavioral characteristics input. Potential challenges to participation by parents/guardians/caretakers of ELs included lack of knowledge about gifted and talented programs and challenges related to the nature of written materials and parental literacy levels in English or native languages. The involvement of translators or cultural liaisons helped to mitigate these challenges to identifying gifted ELs.

Now that research findings related to patterns of underrepresentation; assessment procedures, practices, and instruments; roles, backgrounds, and qualifications of district and school personnel; and assessment and identification challenges have been documented, it is time to map them onto the preliminary NCRGE EL Theory of Change.

Research Question 5: NCRGE EL Theory of Change: Deductive Analysis Mapping

The inductive qualitative analysis of research questions 2-4 included a selective coding process, which required exploring the story line and asking questions such as: What was most informative about practices related to identifying ELs as gifted? What story does the data tell? This process led to the emergence of four themes:

- Adopting Universal Screening Procedures
- Creating Alternative Pathways to Identification
- Establishing a Web of Communication
- Viewing Professional Development as a Lever for Change

The next step was to address research question 5: To what extent do the findings from the inductive analyses map onto the preliminary NCRGE EL Theory of Change (see Appendix B)? We reviewed the purposes, definitions, and special issues that may be related to underserved populations in our four-phase NCRGE EL Theory of Change: Pre-Identification, Preparation, Identification, and Placement.

The theme of Adopting Universal Screening Procedures was critical to Pre-Identification and Identification phases because it provides increased opportunities for all students to display their abilities and achievements. Gifted and talented students from EL populations may be

at various levels of mastering reading, writing, speaking, and listening skills in English or even their own native languages, and they may be dealing with other challenges related to immigration, socioeconomic status, or the existence of disabilities masking their strengths. Universal screening “uncovered” students’ emergent abilities. Of the nine districts, eight had policies related to universal screening in grades 2 or 3, and several had procedures for conducting assessments at earlier grades, especially when English language acquisition or math skills were advancing quickly.

The theme of Creating Alternative Pathways to Identification emerged from the qualitative analysis, which allowed identification teams to use flexible criteria based on student readiness and the need for challenging learning opportunities.

The results of Pre-Identification and Identification data signaled the importance of helping underrepresented students gain requisite skills. Some schools created organized sets of activities to enhance knowledge and academic skills necessary for students to be recognized as gifted in the future. These learning activities qualified as Preparation programs, as they were intentional enriched and accelerated learning opportunities. Identification as a singular event became a process of “developmental identification,” in which educators strategically planned ways to enhance students’ knowledge and academic skills.

The last phase of the NCRGE EL Theory of Change, Placement, overlapped with the earlier themes and integrated two additional themes: Establishing a Web of Communication and Viewing Professional Development as a Lever for Change. Repeated calls for effective communication techniques and opportunities for professional development were evident. Both themes required human, material, and financial resources. Ultimately such investments led to awareness of how characteristics of gifted and talented students are presented and how advocacy takes many forms:

I really just waved my pirate flag too sometimes and said, “This kid is gifted and whether that score says it or not.” I know based on all these things that this child is. (Gifted specialist focus group, 2-2-A, 5/11/2016)

This exploratory study on the identification of ELs for gifted and talented programs was the first check on the preliminary NCRGE EL Theory of Change (see Appendix B). Interview and focus group participants spoke about the importance of several variables within each phase. The

I really just waved my pirate flag too sometimes and said, “This kid is gifted and whether that score says it or not.”

deductive mapping on Pre-Identification revealed that the definition of giftedness and data collection strategies were important components of determining which students would benefit from intentional talent development opportunities.

Definitions of giftedness, cultural awareness and sensitivity, alternative manifestations of giftedness, and the availability of testing materials and procedures in other languages do make a difference in the screening, nomination, identification, and placement procedures. It is important for parents/guardians/caretakers to have access to testing, identification process, and program specifics so they, too, can be talent scouts for their own children.



Placement typically involves a formal meeting with district and school representatives, and parents/guardians/caretakers to discuss identification results procedures and to determine students' eligibility for gifted and talented programs. Trustworthiness of communicators, awareness and responsiveness to the culture, accessibility of program information, location of programming, and the cultural implication of being labelled as gifted and talented can make a difference to identification and placement procedures. How, where, and who shares results about the screening, nomination, identification, and placement procedures can make a difference in ensuring that EL students' gifts and talents are recognized, addressed, and supported.

Discussion and Recommendations

We present the four themes that emerged from the qualitative data analyses for research questions 2-5 and offer recommendations to be considered by state and local decision makers responsible for the screening, nomination, identification, and placement of gifted and talented ELs in programs.

Although ELs continue to be underrepresented in gifted and talented programs, their underrepresentation was not universal among the three states with mandates for identification and programming of gifted and talented students. We were able to locate schools in which the percentage of EL students identified for gifted and talented programming was proportionally representative of the overall population of EL students. In these schools, four themes prevailed. Each theme is presented followed by a brief discussion and recommendations based on the qualitative data from group and individual interviews.

Theme 1, Adopting Universal Screening Procedures, points to the importance of adopting universal screening procedures to assess students' academic and reasoning skills. Eight of the nine districts employed universal

screening procedures. All students were screened for inclusion in the gifted and talented program and had opportunities to display their abilities and achievement. Rather than identifying students' deficits to prevent them from receiving services, school personnel sought evidence of students' strengths from a variety of

sources. These schools recognized that giftedness could manifest in different ways and thus the identification process extended across grades.

Recommendations: Adopting Universal Screening Procedures

- Adopt a policy of universal screening of all students in one or more grade levels for the identification process.
- Select assessment instruments that are culturally sensitive and account for language differences.
- Assess the speed of English language acquisition and monitor the rate of mastering reading, writing, listening, and speaking skills in English.
- Consider including reliable and valid nonverbal ability assessments (e.g., Cognitive Ability Test [CogAT, nonverbal subtest], Naglieri Nonverbal Ability Test [NNAT], Raven's Progressive Matrices, Comprehensive Test of Nonverbal Intelligence [CTONI], Universal Nonverbal Intelligence Test [UNIT]) as part of the overall identification process.
- Use other identification tools (e.g., nominations, rating scales, portfolios) to supplement results of universal screening.

Theme 2, Creating Alternative Pathways to Identification, follows universal screening and allows schools to use a variety of different assessment instruments and apply flexible criteria to ensure that students' talents and abilities are recognized. In our study, schools avoided a deficit model that blocks students from services and implemented practices that sought to identify students' strengths. School district personnel recognized the value of using native language abilities and achievement assessments to determine students' academic strengths, and they also ensured that multilingual school psychologists were the assessors.

In some schools, students with academic potentials that were not fully developed were invited to participate in preparation programs or placed on a talent pool list for further observation. These preparation programs, which often included an emphasis on creative and critical thinking skills, further developed the students' skills. These opportunities also enabled program personnel to serve as talent scouts who recognized students' strengths in learning environments that differed from the students' general education classroom experiences. These experiences not only met the students' learning needs, but also helped develop the knowledge and academic skills necessary to later be identified for official gifted and talented program services.

Recommendations: Creating Alternative Pathways to Identification

- Use native language ability and achievement assessments as indicators of potential giftedness, when available. Ability tests are available in Spanish (e.g., Bateria III Woodcock Muñoz, Wechsler Intelligence Scale for Children [WISC] Spanish). Achievement tests are also offered in Spanish (e.g., Aprenda, Logramos). Typically, standardized, norm-referenced tests are limited to Spanish only.
- Maintain a list of multilingual school psychologists who are qualified to administer assessments in Spanish.
- Establish a preparation program prior to formal identification procedures that provides students with learning opportunities to enhance knowledge and academic skills necessary for a student to be recognized.
- Create a talent pool list of students who exhibit high potential but are not yet enrolled in gifted and talented programs. Observations, daily interactions between teachers and students, informal assessments, and formal assessments provide multiple opportunities to gauge students' learning progress.

Theme 3, Establishing a Web of Communication, ensures that all stakeholders are aware of the identification system in its entirety and are empowered to interact with one another in all components (i.e., screening, nomination, identification, and placement). School personnel in our study established a Web of Communication where everyone served as talent scouts and interacted with each other to identify ELs' talents. Multilingual instructors were an essential component of the web. For some schools, they were the first persons at the school to recognize ELs' advanced skills and the speed at which an EL was acquiring English, which is a characteristic of giftedness. Multilingual personnel's interactions with the gifted specialists and their participation with gifted identification teams increased the number of ELs considered for the gifted and talented

program.

Parent/guardian/caretaker involvement was important but not always consistent within or across schools. Without this web of communication among administrators, district gifted coordinators, classroom teachers, gifted specialists, multilingual teachers, and parents/guardians/caretakers, the observations of individuals with first-hand knowledge of ELs' gifts would have been lost.



Recommendations: Establishing a Web of Communication

- Establish an identification committee that includes representatives who have key responsibilities in various roles (e.g., administrators, classroom teachers, gifted specialists, district gifted coordinators, EL teachers, multilingual personnel, school psychologists or counselors, special education personnel) and departments.
- Focus on the development and implementation of intentional outreach to the school community, particularly parents/guardians/caretakers. This process should utilize multiple pathways in languages appropriate to the population, such as clearly written program information available via the district or school website, video segments posted to school websites and made shareable via social media, information and community-building nights held at the school or in conjunction with community groups, and regularly distributed newsletters.
- Emphasize collaboration within and across specializations/departments (e.g., general education, English as a second language [ESL], special education) regarding identification processes. Educators can offer their perspectives on the gifts and talents of ELs in various educational environments.

Theme 4, Viewing Professional Development as a Lever for Change, points to the importance of establishing an ongoing plan to disaggregate district demographic and achievement data to study the proportionality of students identified as gifted by underrepresented groups and to offer professional development opportunities focused on ensuring equitable representation (Borland, 2004). Personnel in this research study used, or wanted to use, professional development as a lever for change. Educators and parents/guardians/caretakers who understood that giftedness can be revealed in different ways and who were knowledgeable about the process of

second language acquisition were more likely to identify ELs as gifted and talented. The challenge these schools faced was how to provide the necessary professional development to share this understanding with all stakeholders. Schools provided information about identifying ELs to the gifted specialists or they extended opportunities to classroom teachers and school psychologists. Parents/guardians/caretakers would benefit from opportunities to learn about the



characteristics of students with gifts and talents. Schools that were able to provide professional development created a school climate where the goal of gifted and talented identification was to identify students' strengths, rather than using weaknesses to serve as identification roadblocks. In this climate, personnel viewed having more than one language as an asset, rather than a deficit. As one administrator asserted: "Bi-literacy does not just provide the academic

language, it provides the confidence. It provides a belief in one's self; it provides a culturally responsive educational experience, identity . . ." (AI, 2-3-A, 9/7/2016).

Recommendations: Viewing Professional Development as a Lever for Change

- Provide professional development opportunities for school personnel about effective policies and practices to support equitable representation of ELs in gifted and talented programs.
- Develop a systematic approach to analyzing district and school demographics (e.g., race/ethnicity, FRPL, ELs) and the status of students identified/not identified for gifted and talented programs, along with goals for ensuring equitable opportunities to participate in such programs.
- Promote efforts to diversify the teaching corps so that the adult community of a school reflects the student population and includes members who are multilingual, as they can assume proactive roles in advocating for ELs during the screening,

nomination, identification, and placement procedures.

These recommendations associated with the four themes from the qualitative analyses provide "lessons from the field" about procedures, practices, and instruments related to identifying gifted ELs. Interview participants shared what they learned and acknowledged that challenges still exist. Their lessons may provide guidance for other district and school personnel who are examining the representation of ELs in their gifted and talented programs.

The resulting data from this exploratory study and the extent to which it reflected our preliminary NCRGE EL Theory of Change prompted further discussions, resulting in a revised four-phase model for improving identification of ELs for gifted and talented programs based on the qualitative themes.

NCRGE Four-phase Model for Improving Identification of ELs for Gifted and Talented Programs

Initially, we posited a host of variables as potentially important to the NCRGE EL Theory of Change that would determine how the general education program may influence Pre-Identification, Preparation, Identification, and Placement of ELs in gifted and talented programs. Qualitative data identified specific variables within each phase, while the relevance of other potential variables of interest was not available. As this study occurred in three states with gifted and talented identification and programming mandates and focused on a cohort of students entering grade 3 in 2011 and completing grade 5 in 2014, these results provide preliminary evidence.

We modified our NCRGE EL Theory of Change to improve identification of ELs for gifted and talented programs (see Figure 2). We also outlined the Web of Communication process for improving identification of ELs for gifted and talented programs (see Figure 3). Our model retains the four phases of Pre-Identification, Preparation, Identification, and Acceptance of Placement from the original NCRGE EL Theory of Change. Successful programs identify students who will benefit from an emergent talent experience. They provide opportunities for these students' talent to emerge. This enables them to better identify EL students for gifted and talented services. Finally, successful programs communicate information to parents/guardians/caretakers about program services in a trustworthy manner.

Four Phases for Improving Identification of ELs for Gifted and Talented Programs

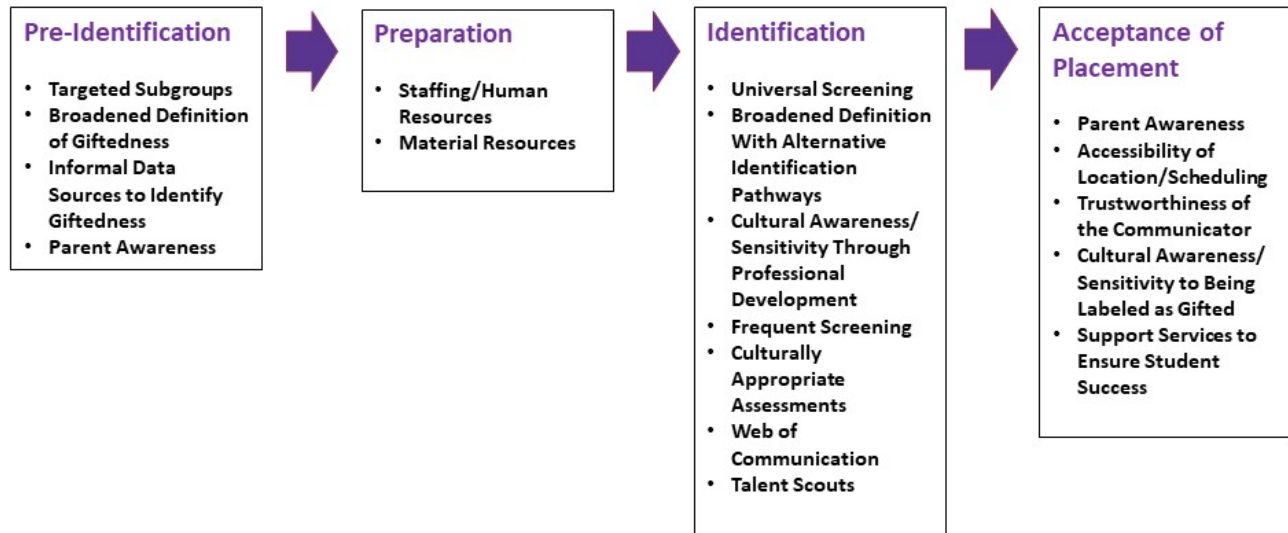


Figure 2. Four phases for improving identification of ELs for gifted and talented programs.

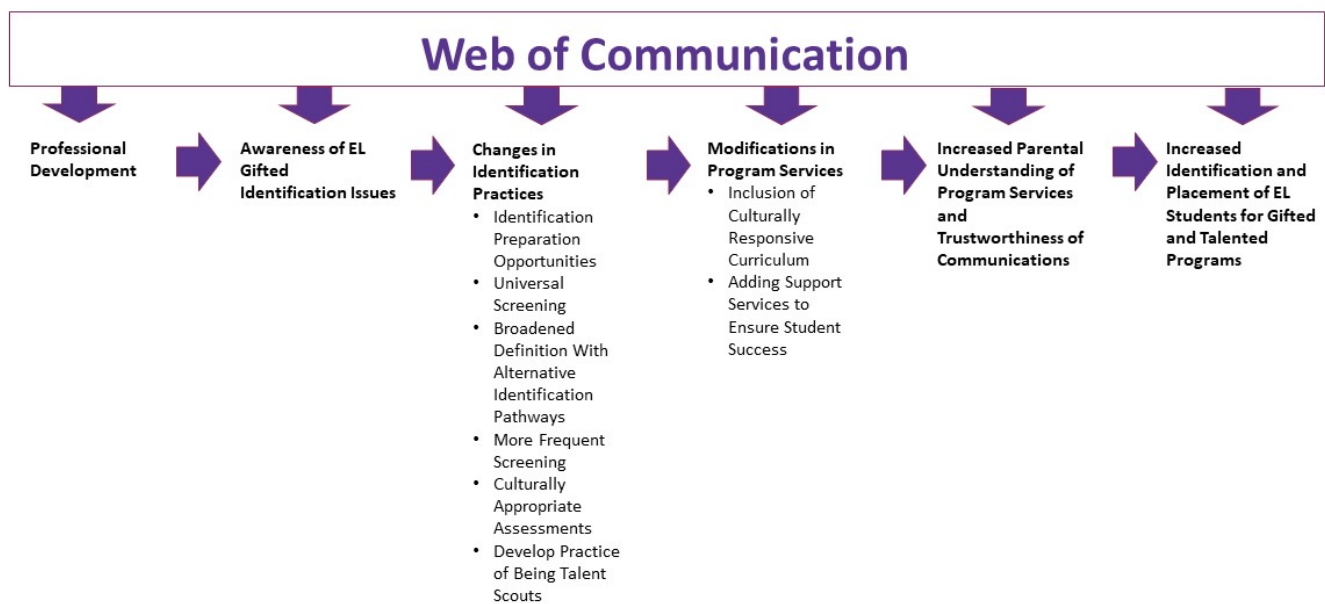


Figure 3. Web of Communication process for improving identification of ELs for gifted and talented programs.

Pre-Identification. Successful gifted and talented programs identify students who will benefit from an emergent talent experience. They apply a broadened definition of giftedness and use formal as well as informal data sources to identify these students. They involve the extended school community and parents/guardians/caretakers in the process of identifying students.

Preparation. The success of preparation programs is dependent on a school's staffing and human resources. Often gifted specialists provided the service; however, this limits other gifted education services they provided. The greatest threats to providing a preparation program are

limited staffing and material resources, which, in addition to limited material, are a location to conduct the preparation program and the time to conduct it.

Identification. Schools identified greater numbers of gifted EL students when they applied universal screening that considers all students to avoid overlooking talented students. Using a broadened definition of giftedness with alternative identification pathways beyond a single IQ score, providing professional development that creates cultural sensitivity and awareness of special issues related to identifying EL students for gifted and talented programs, and using culturally appropriate assessments, such as testing in the student's native language, improve

identification practices. Frequent screening is necessary to identify gifted EL students whose talents may manifest later. Finally, all stakeholders (e.g., administrators, district gifted coordinators; gifted specialists; parents/guardians/caretakers; EL specialists, classroom teachers, school psychologists, or counselors) create a web of communication through which they serve as talent scouts.

Acceptance of Placement. Parents/guardians/caretakers are more likely to place their identified gifted EL students in gifted and talented programs when the program demonstrates cultural awareness and sensitivity to issues surrounding students being labelled as gifted and talented, when support services exist to ensure student success in the program, when scheduling and the program location do not place undue hardship on students' families, and when parents/guardians/caretakers are involved throughout the identification process and have developed a trusting relationship with program personnel.

We also found similar processes to the web of communication (see Figure 3) that support the four phases described in Figure 2 occurred across our research sites. In schools that successfully identified EL students for gifted and talented programs, administrators, district gifted coordinators; gifted specialists; parents/guardians/caretakers; EL specialists, classroom teachers, and school psychologists, or counselors work together to form a web of communication. Through this web of communication, all stakeholders assume responsibility for identifying and developing students' talents. The web of communication results in impactful professional development. Through professional development all of the stakeholders become aware of gifted identification issues for EL students. This resulted in changes in identification practices and modifications in program services. These modifications increase trustworthiness in communication among stakeholders and improve acceptance rates and placement of ELs in the gifted and talented program.



teacher and parent capacities for supporting equitable representation in gifted education. This evolution in practice originated in the daily work of teachers, school personnel, and administrators committed to recognizing and serving the needs of students, across differences that include language-acquisition, immigration, and socioeconomic status. In a nation where one in five residents speaks a language other than English in the home (Batalova & Zong, 2016), it has become incumbent on all educators to reflect on how to support multilingualism and multiculturalism, which is the explicit goal of culturally sustaining pedagogy (Paris, 2012). The integration of knowledge from the fields of multicultural education, which encompasses culturally sustaining pedagogy, and gifted education offers new possibilities for equitable practices in developing the gifts and talents of all students.

Many of the practices in this study are examples of ways in which educators have sought to include alternative tests, flexible cutoff scores, and advanced learning opportunities using their current district policies. These are all important remedies in the systems that have been in place, and all educators should have access to information about how to utilize them to benefit the students they serve. However, there is an unavoidable link between these practices and the monocultural, deficit-based thinking that has contributed to imbalances in representation in gifted and talented programs and relying on them to attain equitable representation has not proved successful.

Language diversity exists in many different forms across states, districts, and schools, and programs that serve one community well are not transferrable to all other sites. In addition, with over 350 languages spoken in the U.S. (Batalova & Zong, 2016), it will not always be possible to have fulltime teachers or personnel who speak the native languages of their students, and new programs are not implemented overnight. Nieto and Bode (2012) offered some essential capacities that all schools can seek to build

through professional development and hiring practices to support ELs:

- Familiarity with first- and second-language acquisition
- Awareness of the sociocultural and sociopolitical context of education for language minority students
- Awareness of the history of immigration in the United States, with particular attention to language policies and practices throughout that history
- Knowledge of the history and experiences of specific groups of people, especially those who are

Looking Forward

The evidence documented here reflects new and growing awareness, knowledge, and skills for addressing historical and persistent patterns of underrepresentation of ELs and other groups in gifted and talented programs. It illustrates that there are no uniform solutions, but rather developing

residents of the city, town, and state where one is teaching

- The ability to adapt curriculum for students whose first language is other than English
- Competence in pedagogical approaches suitable for culturally and linguistically heterogeneous classrooms
- Experience with teachers of diverse backgrounds and the ability to develop collaborative relationships with them to promote the learning of language-minority students
- The ability to communicate effectively with parents of diverse language, cultural, and social class backgrounds (p. 232)

The historic patterns of underrepresentation in gifted and talented programs illustrated in this study can be disrupted through recognizing the barriers of current and historic practices to equitably serving all of our students and pursuing new culturally sustaining approaches. As demonstrated by group and individual interview participants, this begins with evaluating and changing current practices that function as barriers to recognizing and serving the advanced learning needs of students in

underrepresented groups. This is supported by the effective collection and use of data to ensure that goals for equitable representation are included at every level of decision-making processes.

To make more than incremental progress toward these goals for ELs, educators must examine underlying philosophical beliefs about predominantly monolingual approaches to education and the existence of gifts and talents across all populations in creating professional development and hiring practices to build cultural competence. Recognizing that students' cultural and linguistic identities are inseparable from their academic identities, it is essential to provide a welcoming and inclusive school climate for all students and their families. Parent/guardian/caretaker, and community involvement provides connection between students' home and school experiences, fostered by the types of district and school communication practices recommended in this study. The future of culturally and linguistically-sustaining gifted education in the U.S. is one that will reflect the diversity of our student population across all differences, measured at the local level in every school building.



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References

- Aldridge, J. (2008). Among the periodicals: What's happening in special education? *Childhood Education, 84*, 180-182. doi:10.1080/00094056.2008.10523003
- American Community Survey. (2015). *Census bureau reports at least 350 languages spoken in U. S. homes* (Release No. CB15-185). Washington, DC: Author
- Batalova, J., & Zong J. (2016, November 11). *Language diversity and English proficiency in the United States*. Retrieved from <http://www.migrationpolicy.org/article/language-diversity-and-english-proficiency-united-states>
- Bernal, E. M. (2002). Three ways to achieve a more equitable representation of culturally and linguistically different students in GT programs. *Roeper Review, 24*, 82-88. doi:10.1080/02783190209554134
- Borland, J. H. (2003). The death of giftedness: Gifted education without gifted children. In J. H. Borland (Ed.), *Rethinking gifted education* (pp. 105-124). New York, NY: Teachers College Press.
- Borland, J. H. (2004). *Issues and practices in the identification and education of gifted students from under-represented groups* (RM04186). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.
- Borland, J. H. (2005). Gifted education without gifted children: The case for no conception of giftedness. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 1-19). New York, NY: Cambridge University Press.
- Brice, A., & Brice, R. (2004). Identifying Hispanic gifted children: A screening. *Rural Special Education Quarterly, 23*, 8-15. doi:10.1177/875687050402300103
- Brulles, D., Castellano, J. A., & Laing, P. C. (2011). Identifying and enfranchising gifted English language learners. In J. A. Castellano & A. D. Frazier (Eds.), *Special population in gifted education: Understanding our most able students from diverse backgrounds* (pp. 305-313). Waco, TX: Prufrock Press.
- Callahan, C. M. (2005). Identifying gifted students from underrepresented populations. *Theory Into Practice, 44*, 98-104. doi:10.1207/s15430421tip4402_4
- Camarota, S. A. (2012). *Immigrants in the United States: A profile of American's foreign-born population*. Washington, DC: Center for Immigration Studies. Retrieved from <http://www.cis.org/sites/cis.org/files/articles/2012/immigrants-in-the-united-states-2012.pdf>
- Card, D., & Giuliano, L. (2015). *Can universal screening increase the representation of low income and minority students in gifted education?* (Working paper No. 21519). Cambridge, MA: National Bureau of Economic Research.
- Castellano, J. A., & Díaz, E. I. (2002). Introduction. In J. A. Castellano & E. I. Díaz (Eds.), *Reaching new horizons: Gifted and talented education for culturally and linguistically diverse students* (pp. xii-xxvi). Boston, MA: Allyn and Bacon.
- 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.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95-S120.
- Coleman, L. J., & Cross, T. L. (2005). *Being gifted in school: An introduction to development, guidance, and teaching*. Waco, TX: Prufrock Press.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: SAGE.
- Cross, J. R., & Cross, T. L. (2005). Social dominance, moral politics, and gifted education. *Roeper Review, 28*, 21-29. doi:10.1080/02783190509554333
- Davis, G. A., Rimm, S. B., & Siegle, D. (2010). *Education of the gifted and talented* (6th ed.). Boston, MA: Pearson.
- De Bernard, A. E., & Hofstra, U. (1985). Why José can't get in the gifted class: The bilingual child and standardized reading tests. *Roeper Review, 8*, 80-82. doi:10.1080/02783198509552939
- De Wet, C. F., & Gubbins, E. J. (2011). Teachers' beliefs about culturally, linguistically, and economically diverse gifted students: A quantitative study. *Roeper Review, 33*, 97-108. doi:10.1080/02783193.2011.554157
- Esquierdo, J. J., & Arreguin-Anderson, M. (2012). The "invisible" gifted and talented bilingual students: A current report on enrollment in GT programs. *Journal for the Education of the Gifted, 35*, 35-47. doi:10.1177/0162353211432041
- Every Student Succeeds Act. (2015). *Title VIII, Part A, Section 8101(22): Definitions*, Public Law 114-95. Retrieved from <https://www2.ed.gov/documents/essa-act-of-1965.pdf>
- Ford, D. Y. (2014). Underrepresentation of African American and Hispanic students in gifted education: Impact of social inequality, elitism, and colorblindness. In J. P. Bakken, F. E. Obiakor, & A. F. Rotatori (Eds.), *Gifted education: Current perspectives and issues* (pp. 101-126). Bingley, England: Emerald Group Publishing.
- 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

- 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*, 289-306. doi:10.1177/001440290807400302
- 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.
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2005). English language learners in U. S. schools: A review of research findings. *Journal of Education for Students Placed at Risk, 10*, 363-385. doi:10.1207/s15327671espr1004_2
- Gonzalez, G. (1974). Language, culture, and exceptional children. *Exceptional Children, 40*, 565-570.
- Granada, J. (2003). Casting a wider net: Linking bilingual and gifted education. In J. A. Castellano (Ed.), *Special populations in gifted education: Working with diverse gifted learners* (pp. 1-16). Boston, MA: Allyn and Bacon.
- Grieco, E. M., Trevelyan, E., Larsen, L., Acosta, Y. D., Gambino, C., de la Cruz, P., . . . Walters, N. (2012). *The size, place of birth, and geographic distribution of the foreign-born population in the United States: 1960 to 2010*. Washington, DC: U. S. Census Bureau. Retrieved from <http://www.census.gov/content/dam/Census/library/working-papers/2012/demo/POP-twps0096.pdf>
- Hakuta, K., Butler, Y. G., & Witt, D. (2000). *How long does it take English learners to attain proficiency?* Stanford: University of California Linguistic Minority Research Institute.
- Harris, B., Rapp, K. E., Martinez, R. S., & Plucker, J. A. (2007). Identifying English language learners for gifted and talented programs: Current practices and recommendations for improvement. *Roeper Review, 29*, 26-29. doi:10.1080/02783193.2007.11869221
- Hertzog, N. B. (2009). The arbitrary nature of giftedness. In L. V. Shavinina (Ed.), *International handbook on giftedness* (pp. 205-214). Amsterdam, Netherlands: Springer.
- Hodges, J., Tay, J., Maeda, Y., & Gentry, M. (2018). A meta-analysis of gifted and talented identification procedures. *Gifted Child Quarterly, 62*, 147-174. doi:10.1177/0016986217752107
- Hughes, C. E., Shaunessy, E. S., Brice, A. R., Ratliff, M. A., & McHatton, P. A. (2006). Code switching among bilingual and limited English proficient students: Possible indicators of giftedness. *Journal for the Education of the Gifted, 30*, 7-28. doi:10.1177/016235320603000102
- Iowa Department of Education. (2008). *Identifying gifted and talented English language learners*. Des Moines, IA: Author.
- Kitano, M. K. (2003). What's missing in gifted education reform? In J. H. Borland (Ed.), *Rethinking gifted education* (pp. 159-170). New York, NY: Teachers College Press.
- Kitano, M. K., & DiJiosia, M. (2002). Are Asian and Pacific Americans overrepresented in programs for the gifted? *Roeper Review, 24*, 76-80.
- Kogan, E. (2001). *Gifted bilingual students: A paradox?* New York, NY: Peter Lang.
- Matthews, M. S. (2014). Advanced academics, inclusive education, and English language learners. In M. S. Matthews & J. A. Castellano (Eds.), *Talent development in English language learners* (pp. 11-14). Waco, TX: Prufrock Press.
- McBee, M. T. (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *Journal of Secondary Gifted Education, 27*, 103-111. doi:10.4219/jsge-2006-686
- McBee, M. T., Peters, S. J., & Waterman, C. (2014). Combining scores in multiple-criteria assessment systems: The impact of combination rule. *Gifted Child Quarterly, 58*, 69-89. doi:10.1177/0016986213513794
- McCoach, D. B., Siegle, D., Callahan, C., Gubbins, E. J., & Hamilton, R. (2016, December). *The identification gap: When just as good isn't enough*. Poster presented at the 2016 Institute of Education Sciences Principal Investigators Meeting, Washington, DC.
- Melesky, T. J. (1985). Identifying and providing for the Hispanic gifted child. *The Journal for the National Association for Bilingual Education, 9*, 43-56. doi:10.1080/08855072.1985.10668498
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice, 31*, 133-141.
- Mun, R. U., Langley, S. D., Ware, S., Gubbins, E. J., Siegle, D., Callahan, C. M., . . . Hamilton, R. (2016). *Effective practices for identifying and serving English learners in gifted education: A systematic review of the literature*. Storrs: University of Connecticut, National Center for Research on Gifted Education.
- National Association for Gifted Children and Council of State Directors of Programs for the Gifted. (2015). *2014-2015 state of the states in gifted education: Policy and practice data*. Washington, DC: National Association for Gifted Children.
- National Center for Education Statistics. (2013). *English language learners*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=96>
- National Center for Education Statistics. (2017, March). *English language learners in public schools*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cgf.asp
- National Center for Research on Gifted Education. (2016). *National Center for Research on Gifted Education English learner theory of change*. Storrs, CT: Author.
- Nieto, S., & Bode, P. (2012). *Affirming diversity: The sociopolitical context of multicultural education*. Boston, MA: Pearson Education.
- Noguera, P. A. (2004). Social capital and the education of immigrant students: Categories and generalizations. *Sociology of Education, 77*, 180-183. doi:10.1177/003804070407700206
- Obi, S. O., Obiakor, F. E., Obi, S. L., Banks, T., Warner, S., & Spencer, N. (2014). Giftedness as it relates to culturally and linguistically diverse students. In J. P. Bakken, F. E. Obiakor, & A. F. Rotatori (Eds.), *Gifted*

- education: *Current perspectives and issues* (pp. 71-100). Bingley, England: Emerald Group Publishing.
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93-97. doi:10.3102/0013189X12441244
- Pfeiffer, S. I., & Blei, S. (2008). Gifted identification beyond the IQ test: Rating scales and other assessment procedures. In S. I. Pfeiffer (Ed.), *Handbook of giftedness in children* (pp. 177-198). New York, NY: Springer.
- Plucker, J. A., & Callahan, C. M. (2014). Research on giftedness and gifted education: Status of the field and considerations for the future. *Exceptional Children*, 80, 390-406. doi:10.1177/0014402914527244
- Reis, S. M., & Renzulli, J. S. (1984). Key features of successful programs for the gifted and talented. *Educational Leadership*, 41(7), 28-34.
- Renzulli, J. S., & Reis, S. M. (1985). *The Schoolwide Enrichment Model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., & Reis, S. M. (1997). *The Schoolwide Enrichment Model: A how-to guide for educational excellence* (2nd ed.). Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S., & Reis, S. M. (2014). *The Schoolwide Enrichment Model: A how-to guide for talent development* (3rd ed.). Waco, TX: Prufrock Press.
- Renzulli, J. S., Reis, S. M., & Smith, L. H. (1981). The Revolving Door Model: A new way of identifying the gifted. *Phi Delta Kappan*, 62, 648-649.
- Rimm, S. B., Siegle, D., & Davis, G. A. (2018). *Education of the gifted and talented* (7th ed.). Upper Saddle River, NJ: Pearson.
- Rong, X. L., & Preissle, J. (2009). *Educating immigrant students in the 21st century* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Los Angeles, CA: SAGE.
- Sapon-Shevin, M. (2003). Equity, excellence, and school reform: Why is finding common ground so hard? In J. H. Borland (Ed.), *Rethinking gifted education* (pp. 127-142). New York, NY: Teachers College Press.
- Stein, J. C., Hetzel, J., & Beck, R. (2012). Twice exceptional? The plight of the gifted English learner. *Delta Kappa Gamma Bulletin*, 78(2), 36-41.
- Stephens, K. R. (2008). Applicable federal and state policy, law, and legal considerations in gifted education. In S. Pfeiffer (Ed.), *Handbook of giftedness in children* (pp. 387-408). New York, NY: Springer.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: SAGE.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest*, 12, 3-54. doi:10.1177/1529100611418056
- Tannenbaum, A. J. (2003). Nature and nurture of giftedness. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 45-59). Boston, MA: Allyn & Bacon.
- United States Department of Education. (1993). *National excellence: A case for developing America's talent*. Washington, DC: Author.
- United States Department of Education. (2016, September). *Non-regulatory guidance: English learners and Title III of the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act (ESSA)*. Retrieved from <https://www2.ed.gov/policy/elsec/leg/essa/essatitleiiiiguidenglishlearners92016.pdf>
- United States Department of Education Office for Civil Rights. (2014). *Civil rights data collection, Data snapshot: College and career readiness*. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/docs/crd-c-college-and-career-readiness-snapshot.pdf>
- Valdés-Fallis, G. (1978). Code switching and the classroom teacher. *Language in Education: Theory and Practice*, 4, 3-31.
- Worrell, F. C. (2014). Ethnically diverse students. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education* (pp. 237-253). Waco, TX: Prufrock Press.

Appendix A

Selection of Districts and Schools

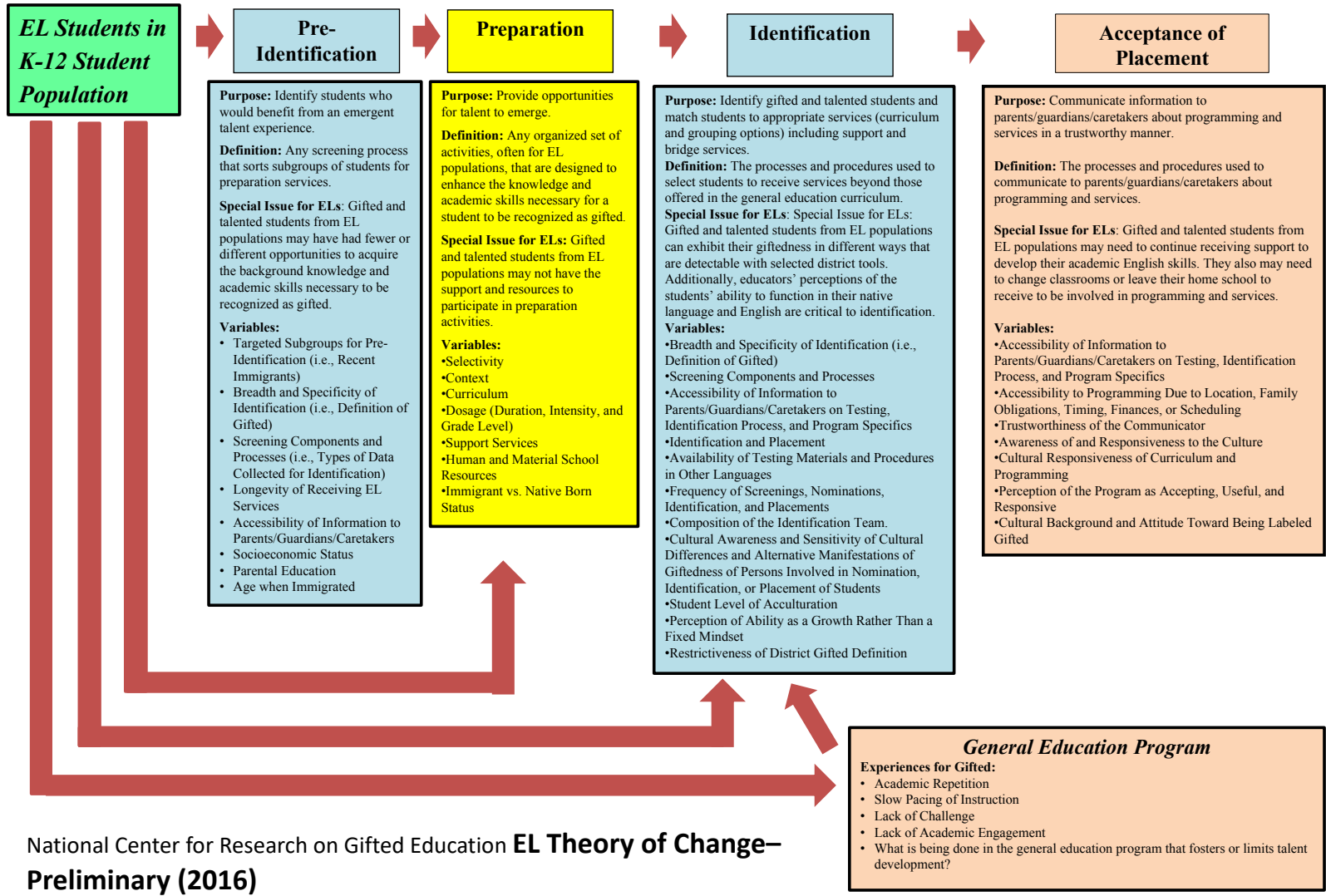
Upon selection and approval, selected states provided us with all students' reading and mathematics academic achievement outcomes across grades 3-5; student demographics, including race/ethnicity, FRPL status, gifted status; the school students attended, and their grade level.

Schools and districts where ELs were proportionally represented in their gifted and talented programs were selected for school visits in this study. To select schools, we conducted analyses using a school level data file that contained counts of the students classified as EL (EVER_ELL), students identified as gifted by grade 5 (GIFT5), and students classified as both (GIFT5*EVER_ELL) variables for the grade 5 data within the school. Our school level data file contained the actual proportion of GIFT5*ELs in the school. To estimate the expected proportion of gifted ELs in the school, we computed the product of the GIFT5 and the EVER_ELL variables. We then created a variable that we called the *proportionality ratio* (or RATIO). The *proportionality ratio* represents the *actual* proportion of gifted ELs being identified in the school divided by the *expected* proportion of gifted ELs, given the proportion of gifted and talented students and the proportion of ELs in the school. A value of 1 indicates the ELs are proportionately represented in the gifted and talented programs—there are as many gifted ELs as would be expected based on the number of gifted and talented students and the number of ELs in the school. A value less than 1 indicates ELs are underrepresented and a value greater than 1 indicates ELs are better represented than would be expected. We used .90 as our cut-off for proportional representation. In other words, the actual proportion of GT-ELs had to be at least 90% of the expected proportion for us to consider the school as “proportionally identifying GT-ELs.” Because the denominator of the expression becomes very small when there are either relatively few ELs in a school or relatively few gifted and talented students in a school, it would be a mistake to assume that higher proportionality ratios are always better. Ratios of approximately 1 or more are good, and ratios closer to zero are certainly worse than larger ratios. However, some schools with very few gifted or very few ELs end up with computed ratios well above 1. Therefore, rather than simply taking the schools with the highest ratios as our schools of interest, we generated inclusion criteria:

1. At least 3 GT/ELs in the cohort
2. At least 10 students in the cohort
3. The proportionality ratio for Gifted EL was $\geq .90$.
4. Proportion of EVER_ELL students was at least .10

Appendix B

NCRGE Gifted English Learner Theory of Change (2016)



National Center for Research on Gifted Education EL Theory of Change—Preliminary (2016)

Appendix C

Results of Multilevel Analyses

Table C1 below presents the results from a multilevel model that estimates the level of underrepresentation of EL students in gifted and talented programs. In States 1 and 3 there was a statistically significant underrepresentation of EL students in gifted and talented programs both in models without academic achievement measures (model 1) and models with academic achievement measures (model 2). For State 2, there was statistically significant underrepresentation for EL in a model without academic achievement (model 1) but no statistically significant difference when academic achievement is controlled (model 2). State 2, model 2 shows that this State 2 differs notably from the other two, in that the estimated statistically significant estimates of EL underrepresentation become statistically insignificant when academic ability is controlled.

Table C1

Underrepresentation of English Learners and Academic Ability: A Multilevel Model of the Odds of Being Identified as Gifted and Talented

	State 1		State 2		State 3	
	Model 1	Model 2: (Model 1 +Achievement)	Model 1	Model 2: (Model 1 +Achievement)	Model 1	Model 2: (Model 1 + Achievement)
English Learner	0.28 *	0.80 *	0.56 *	1.26	0.48 *	0.76 *
Academic Ability- Math (Grade 3)		1.23 *		1.01 *		1.04 *
Academic Ability- ELA (Grade 3)		1.18 *		1.01 *		1.05 *

Note: * = Statistically significant at a $p < .01$; sample sizes: State 1=95,587, State 2=58,154, State 3= 168,184. These models are estimated with a logistic multilevel models using the HLM statistical package.

Appendix D

NCRGE English Learner Codebook and Qualitative Methods

We developed the document entitled *NCRGE Development of English Learner Codebook for Transcripts* (August 14, 2016) using multiple techniques, including reviewing the main study codebook entitled *NCRGE Development of Codebook for Transcripts* (July 27, 2016), studying the research questions, conducting a preliminary analysis of English learner (EL) parent transcripts, and analyzing the extant research literature summarized in early iterations of *Effective Practices for Identifying and Serving English Learners in Gifted Education: A Systematic Review of the Literature* (Mun et al., 2016).

The NCRGE EL Codebook includes two Parent Codes based on the NCRGE Main Study Codebook. Subcodes referring to nine Child Codes and 70 Grandchild Codes were customized for the NCRGE EL Study as needed.

- I. Screening, Nomination, Identification, & Placement (5 Child Codes; 39 Grandchild Codes)
- II. Infrastructure & Resources (4 Child Codes; 31 Grandchild Codes)

For each Parent Code, we created definitions for Child Codes and Grandchild Codes. We added sample text using verbatim or edited phrasing from the group and individual interview transcripts with administrators; gifted program coordinators; gifted specialists; school psychologists; parents/guardians/caretakers; and identification committee members to clarify the meaning of the codes. We also added exclusion criteria to guide the application of the code, when necessary. Figures D1-D3 present a visual overview of the Parent and Child Codes.

CODEBOOK PARENT CODES–EL STUDY

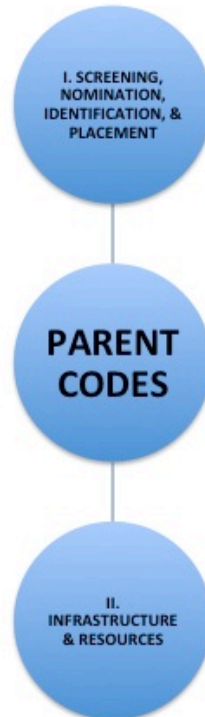


Figure D1. Parent codes–EL study.

I. SCREENING, NOMINATION, IDENTIFICATION, & PLACEMENT

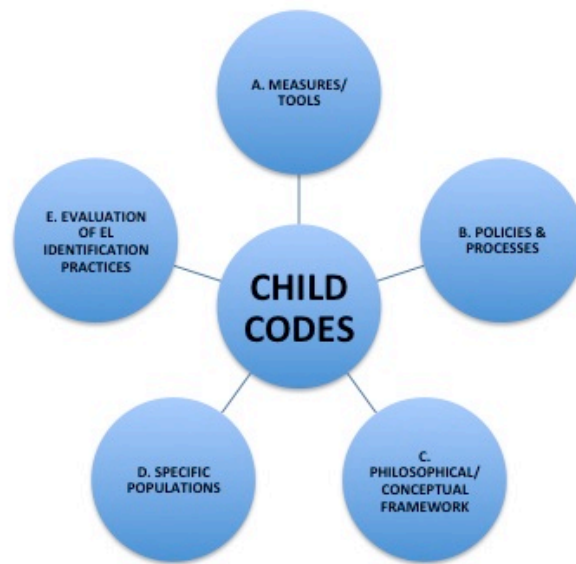


Figure D2. I. Screening, nomination, identification, and placement child codes–EL study.

II. INFRASTRUCTURE & RESOURCES

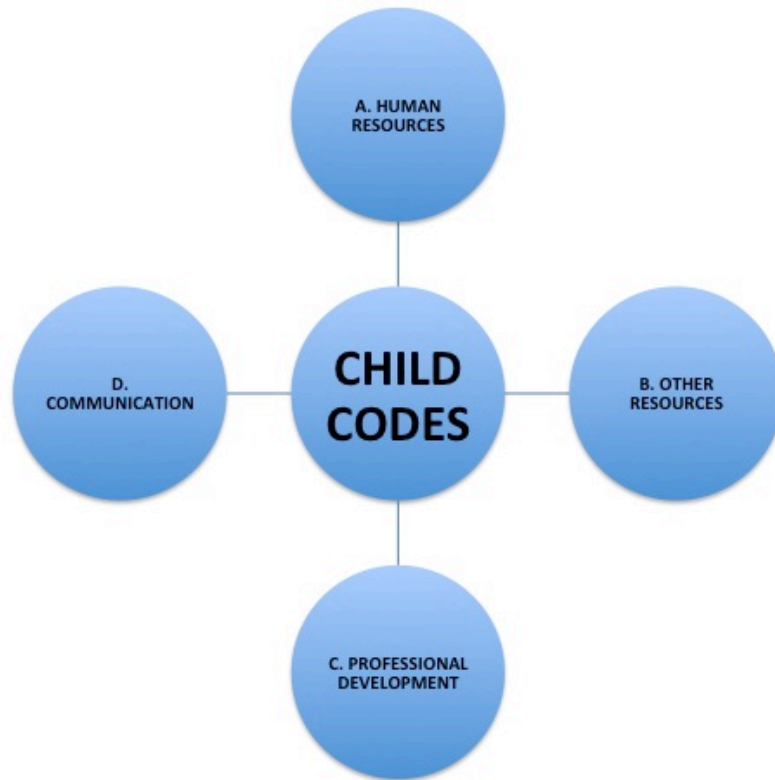


Figure D3. II. Infrastructure and resources child codes–EL study.

Figure D4 presents the complete EL codebook.

I. Screening, Nomination, Identification, & Placement

A. Measures/Tools

1. Cognitive ability test
2. Nonverbal test of cognitive ability
3. Achievement test
4. Creativity test
5. Parent nominations/rating scales
6. Teacher nominations/rating scales
7. Other nomination types/rating scales
8. Observation tools
9. Student work/portfolios/performance based assessment
10. Dynamic assessment
11. Assessments in native language
12. Anecdotal/informal data collection

B. Policies & Processes

13. Universal screening
14. Timelines
15. Talent pool/watch list
16. Multiple measures
17. Identification matrix
18. Cut scores
19. Selection committee or student study team
20. Pre-identification measures
21. Appeals process
22. Re-assessment policy
23. Exit or withdrawal policy
24. Placement decision
25. Accessibility to programming due to location
26. Cultural responsiveness of curriculum and planning

C. Philosophical/Conceptual Framework

27. Giftedness as fixed trait
28. Giftedness as malleable trait
29. Characteristics of giftedness
30. Giftedness influenced by environment
31. Globally gifted focus
32. Domain specific areas giftedness
33. Policies regarding gifted label
34. Policies regarding EL gifted label

D. Specific Populations

35. Underrepresented/underserved students
36. Twice-exceptional learners
37. Highly gifted

E. Evaluation of EL ID Practices

38. Fidelity to laws, policy, initiatives, standards
39. Evaluation of gifted and talented teachers/staff
40. Suggested changes for identification practices

II. Infrastructure & Resources

A. Human Resources

**Roles & responsibilities, qualifications*

1. Gifted and talented coordinator
2. Gifted and talented teacher specialist
3. Administrator/principal
4. Counselor
5. School psychologist/assessment personnel
6. Steering/oversight committee
7. General education teacher
8. EL teacher
9. Bilingual teacher
10. Interpreters
11. Individual parent advocacy
12. Parent advocacy group

B. Other Resources

13. Material
14. Financial

C. Professional Development

15. GT teachers
16. General education teachers
17. GT coordinator
18. Administrators
19. School psychologist
20. Counselors
21. Parents
22. ID of English learners
23. Assessing English learners
24. Curriculum and programming for English learners
25. Giftedness, characteristics of gifted students, philosophical beliefs
26. Underrepresented/underserved populations

D. Communication

27. Program transparency
28. Program documentation
29. School personnel
30. Parents
31. Community

Figure D4. EL codebook.

Qualitative Methods

On August 11, 2016, we conducted training on using the EL codebook and working with Dedoose for six qualitative research team members; four of these team members conducted site group and individual interviews. Several sections of transcripts were used to experiment with assigning codes on paper, comparing results of codes, and discussing terminology and code definitions. Then we practiced coding sample sections of transcripts using Dedoose. Throughout the process of coding transcripts, we met weekly to share and discuss potential patterns and themes. We selected a subset of transcripts to check intercoder agreement, which “requires that two or more coders are able to reconcile through discussion whatever coding discrepancies they may have for the same unit of text” (Campbell, Quincy, Osserman, & Pedersen, 2013, p. 297). As we discussed coding results and coding discrepancies, we re-visited the codebook, clarified interpretations of definitions, and added more examples of text from transcripts that reflected definitions.

To analyze transcripts for group and individual interviews, we used Strauss and Corbin’s (1998) and Corbin and Strauss’s (2008) stages of open, axial, and selective coding for research questions 1-4. Brief descriptions of these stages follow:

- *Open Coding*: breaking down, examining, comparing, conceptualizing data by labeling phenomena, discovering categories, or developing categories; asking questions such as: What is this? What does it represent?
- *Axial Coding*: making connections between categories; drawing an axis through the codes; asking question such as: What actions do people take with respect to this category?
- *Selective Coding*: selecting the core category or theme by exploring the story line and relating other categories; using both inductive and deductive thinking; asking questions such as: What was most informative about practices related to identifying ELs as gifted? What story do the data tell?

The coding of the 84 transcripts yielded: 2,207 excerpts; 6,278 total code applications; 208 total axial codes; four selective codes or themes. The final stage of selective coding process functioned “like an umbrella that covers and accounts for all other codes and categories formulated thus far in grounded theory analyses” (Saldaña, 2013, p. 223). The goal was to find one or more themes that explained the data. A theme “consists of all the products of the analysis condensed into a few words that seem to explain what ‘this research would be all about’” (Strauss & Corbin, 1998, p. 146).

The analysis of qualitative for research question 5 involved deductive analysis, as our goal was to determine the extent to which our data mapped on the preliminary NCRGE EL Theory of Change. The theory of change included four phases related to the identification of ELs for gifted and talented programs: pre-identification, preparation, identification, and acceptance of placement. Research team members checked and re-checked the qualitative data from group and individual interviews to determine if variables listed under each phase of the theory of change was supported by interviewees. These analyses led to a four-phase model for improving identification of ELs for gifted and talented programs.

References

- Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*, 42, 294-320. doi:10.1177/0049124113500475
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: SAGE.
- Mun, R. U., Langley, S. D., Ware, S., Gubbins, E. J., Siegle, D., Callahan, C. M., . . . Hamilton, R. (2016). *Effective practices for identifying and serving English learners in gifted education: A systematic review of the literature*. Storrs: University of Connecticut, National Center for Research on Gifted Education.
- National Center for Research on Gifted Education (NCRGE). (2016, August 14). *NCRGE development of English learner codebook for transcripts*. Storrs: University of Connecticut, National Center for Research on Gifted Education.
- National Center for Research on Gifted Education (NCRGE). (2016, July 27). *NCRGE development of codebook for transcripts*. Storrs: University of Connecticut, National Center for Research on Gifted Education.
- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Los Angeles, CA: SAGE.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: SAGE.

Appendix E

EL Research Study Interview Questions

Q1. *Gifted education defined:* Will you please describe how your district/school carries out the identification of gifted and talented students? (All Informants)

What do you think about the identification of gifted and talented students? (Classroom Teacher, District Gifted Coordinator)

Q2. *Gifted education process:* Will you please describe how you first learned that your child was gifted? (Parent/Guardian/Caretaker)

How were you involved in the process of getting your child identified as gifted? (Parent/Guardian/Caretaker)

Q3. *Gifted education process:* Will you please describe how your district/school assesses and identifies students for gifted programming? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Does this process vary by . . .

student grade level? If so, in what way? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

language group? If so, in what way? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

level of English language proficiency (e.g., does not speak English, limited English proficient)? If so, in what way? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Does this process vary at all for English learners? If so, in what way? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Are alternative methods, special efforts, and/or special strategies used to assess and identify English learners for gifted programming? If so, what are they? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

How are parents/guardians/caretakers involved in the identification process, if at all? Does this process vary at all for English learners? If so, in what way? (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Q4. *Gifted education process:* Based on your experience, how involved are parents/guardians/caretakers of English learners in the identification process? (Classroom Teacher)

Q5. *Gifted education challenges:* What do you perceive as the biggest challenges to assessing English learners for gifted programming? What do you perceive as the biggest challenges to identifying English learners for gifted programming? (Parent/Guardian/Caretaker)

Do you believe these challenges vary across student grade level, language group, and level of English language proficiency? If so, in what way? (Parent/Guardian/Caretaker)

Possible prompts include: bias in teacher referrals, preference toward certain behaviors, restrictive identification procedures, student/parent concerns over participating in G&T, peer pressure on academic expectations, automatic cut score, single criteria must be met before other criteria considered, lack of translation services to communicate with parents/guardians/caretakers, timing of parent, guardian, or caretaker meetings to discuss gifted education for their child, etc. (Parent/Guardian/Caretaker)

What do districts and schools use to overcome these challenges? (Parent/Guardian/Caretaker)

What else could they do? (Parent/Guardian/Caretaker)

Q6. *Gifted education challenges:* What do you perceive as the biggest challenges to assessing English learners for gifted programming? What do you perceive as the biggest challenges to identifying English learners for gifted programming? (Classroom Teacher)

Possible prompts include: bias in teacher referrals, preference toward certain behaviors, differential performance on IQ and achievement tests, restrictive identification procedures, student/parent concerns over participating in G&T, peer pressure on academic expectations, automatic cut score, single criteria must be met before other criteria considered, lack of interpretation services to communicate with parents/guardians/caretakers, timing of parent/guardian/caretaker meetings to discuss gifted education for their child, etc. (Classroom Teacher)

Do you believe these challenges vary across student grade level, language group, and level of English language proficiency? If so, in what way? *(Classroom Teacher)*

What do you see districts and schools use to overcome these challenges? *(Classroom Teacher)*

What else could they do? *(Classroom Teacher)*

Q7. Gifted education personnel: Who is involved in the assessment and identification of students for gifted programming? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

What are the roles, backgrounds, and qualifications of personnel involved? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Do the personnel involved vary for English learners? If so, in what way? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Do you provide professional development to personnel involved in assessing, identifying, and serving English learners? If so, what type? How often? Who is involved? Who provides the professional development? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Q8. Wrapping up: Is there anything else that you think is important for me to know before I leave about your experience with the assessment and identification of your child as gifted? *(Parent/Guardian/Caretaker)*

Q9. Wrapping up: Is there anything else that you think is important for me to know before I leave about the assessment and identification of English learners for gifted programming in your classroom or school? *(Classroom Teacher)*

Q10. Acceptance of placement: What factors may foster or inhibit parents/guardians/caretakers' decisions about agreeing to place their identified child in the gifted program? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Possible prompts from Theory of Change include: Accessibility of information to parents/guardians/caretakers on identification and programming (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Accessibility to programming due to location, family obligations, timing, finances, or scheduling (Coordinator, G/T Teacher, School Psychologist, Administrator)

Trustworthiness of the communicator (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Awareness of and responsiveness to the (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Cultural responsiveness of curriculum and programming (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Perception of the program as accepting, useful, and responsive (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

Q11. Gifted education challenges: What do you perceive as your biggest challenges to assessing English learners for gifted programming? What do you perceive as your biggest challenges to identifying English learners for gifted programming? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Are there policies, procedures, or practices that staff perceive as delaying the identification of English learners for gifted programming? If so, what is the evidence to support that perception? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Do these challenges vary across student grade level, language group, and level of English language proficiency? If so, in what way? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Possible prompts include: bias in teacher referrals, preference toward certain behaviors, differential performance on IQ and achievement tests, restrictive identification procedures, student/parent concerns over participating in G&T, peer pressure on academic expectations, automatic cut score, single criteria must be met before other criteria considered, lack of interpretation services to communicate with parents/guardians/caretakers, timing of parent guardian/caretaker meetings to discuss gifted education for their child, etc. (District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)

What strategies do districts and schools use to overcome the challenges related to the assessment and identification of English learners for gifted programming? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

What additional tools and approaches do you believe would help improve schools and districts' abilities to identify those English learners who could qualify for gifted and talented? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Q12. *(Middle School Only)* What services are provided to gifted and talented students at the middle school level? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

What are the identification procedures? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Q13. *Wrapping up:* Is there anything else that you think is important for me to know before I leave about the assessment and identification of English learners for gifted programming in your district/school? *(District Gifted Coordinator, Gifted Specialist, School Psychologist/Counselor, Administrator)*

Appendix F

Identification Tools by Number of Schools by State and Across Schools

	# of Schools by State			Total*
	1	2	3	
Cognitive Ability/Intelligence Tests				
CogAT Cognitive Abilities Test	5	4	0	9
NNAT Naglieri Nonverbal Ability Test	2	4	2	8
KBIT Kaufman Brief Intelligence Test	2	1	2	5
OLSAT Otis Lennon School Ability Test	2	0	2	4
Bateria III Woodcock Muñoz	2	0	1	3
WISC Wechsler Intelligence Scale for Children	1	1	1	3
Raven's Progressive Matrices	2	0	1	3
RIAS Reynolds Intellectual Assessment System	1	0	1	2
DAS Differential Ability Scales	0	0	2	2
CTONI Comprehensive Test of Nonverbal Intelligence	2	0	0	2
S-FRIT Slosson Full Range Intelligence Test	0	0	2	2
RIST Reynolds Intellectual Screening Test	1	0	0	1
WPPSI Wechsler Preschool Primary Scale of Intelligence	0	1	0	1
TOMAGS Test of Mathematical Abilities for Gifted Students	0	1	0	1
KABC Kaufman Assessment Battery for Children	0	0	1	1
WISC Wechsler Intelligence Scale for Children Spanish	0	0	1	1
UNIT Universal Nonverbal Intelligence Test	0	0	1	1
Achievement Tests				
ITBS Iowa Tests of Basic Skills	3	0	4	7
MAP Measures of Academic Progress	0	2	2	4
State Comprehensive Assessment Test	0	0	3	3
PARCC Partnership for Assessment of Readiness for College and Careers	0	2	0	2
State End of Grade Tests	2	0	0	2
State Standards Assessment	0	0	2	2
District Assessment Test	0	0	2	2
Woodcock Johnson Achievement Test	2	0	0	2
SAT Stanford Achievement Test	0	0	2	2
Aprenda (SAT in Spanish)	0	0	2	2
State Assessment Program	0	1	0	1
ACT American College Test	0	1	0	1
Aspire ACT	0	1	0	1
State Measures of Academic Success	0	1	0	1
Star Reading and Math	0	1	0	1
Logramos	0	0	1	1
i-Ready	1	0	0	1
Rating Scales				
Teacher rating	0	2	6	8
Parent rating	0	2	4	6
Student rating	0	1	4	5
Gifted Behaviors Characteristics Checklist	0	0	4	4
Slocumb-Payne Teacher Perception Inventory	2	1	0	3
KOI Kingore Observation Inventory	0	2	0	2
Creative Thinking	2	0	0	2
CAP Creativity Assessment Packet	0	0	2	2
SIGS Scales for Identifying Gifted Students	0	1	0	1
SRBCSS Scales for Rating the Behavioral Characteristics of Superior Students	0	1	0	1
GES Gifted Evaluation Scale	0	1	0	1
GRS Gifted Rating Scales	1	0	0	1
Administrator rating	0	1	0	1
TOPS Teacher's Observation of Potential in Students	1	0	0	1

Note. Sixteen schools participated in this EL identification research study.

Appendix G

Descriptions of Cognitive Ability, Achievement, Rating Scales, and Creativity Assessments

Table G-1
Cognitive Ability/Intelligence Tests

Cognitive Ability/Intelligence Tests	
Batería III Woodcock-Muñoz	The Batería III Woodcock- Muñoz is a norm-referenced, individually administered intelligence/general aptitude assessment for individuals, ages 2 to 90+ who are Spanish-language dominant. It is comprised of 32 tests that measure broad and narrow cognitive abilities and aspects of executive functioning.
Cognitive Abilities Test (CogAT)	The CogAT is a norm-referenced ability assessment that evaluates a student’s reasoning and problem solving skills utilizing verbal, visual, and spatial symbols. The CogAT is administered in a group setting to students in grades K-12.
Comprehensive Test of Nonverbal Intelligence (CTONI)	The CTONI is an individually administered, norm-referenced intelligence/general aptitude test for individuals ages 6 through 89. The assessment reports a Full Scale IQ, Geometric Scale, and Pictorial Scale (mean 100 and standard deviation 15) and percentile ranks.
Differential Abilities Scale (DAS)	The DAS is a norm-referenced individually administered assessment of cognitive ability and basic academic skills. It is comprised of 17 cognitive subtests and 3 achievement subtests. Cluster scores are reported in Verbal, Nonverbal, and Spatial skills. A General Conceptual Ability Score is also reported.
Kaufman Assessment Battery for Children (KABC)	The KABC is a norm-referenced, individually administered assessment of intelligence/general ability for children ages 3 to 18. It is comprised of 23 subtests with composite scores in Sequential Processing, Simultaneous Processing, Mental Processing, Achievement, Nonverbal, and Fluid-Crystallized Intelligence (mean 100 and standard deviation 15). The nonverbal index and subtests may be utilized for hearing impaired, non-English-speaking students, and student with speech and language disorders.
Kaufman Brief Intelligence Test (KBIT)	The KBIT is a norm-referenced, individually administered intelligence assessment comprised of three subtests that yield a verbal, nonverbal score, and IQ composite score. The assessment may be administered to individuals ages 4 to 90. The subtests are comprised of Verbal Knowledge, Riddles, and Matrices and scores are reported using standard scores (mean of 100 and standard deviation of 15).
Naglieri Nonverbal Ability Test (NNAT)	The NNAT is a norm-referenced, group-administered nonverbal assessment of ability for students in grades K-12. Matrices of increasing difficulty are grouped in four clusters (Pattern Completion, Reasoning by Analogy, Serial Reasoning, and Spatial Visualization) and are scored producing a Nonverbal Ability Index score with a mean of 100 and standard deviation of 15.
Otis Lennon School Ability Test (OLSAT)	The OLSAT is a norm-referenced, group-administered intelligence/general aptitude assessment. A Verbal Index Score, Nonverbal Index Score, and a Total Score are reported. A School

Cognitive Ability/Intelligence Tests

	Ability Index is also reported with a mean of 100 and standard deviation of 16.
Raven's Progressive Matrices	The Raven's is a norm-referenced, group-administered assessment of nonverbal abilities. It is comprised of three levels of matrices (Coloured Progressive Matrices, Standard Progressive Matrices, and Advanced Progressive Matrices). Within levels, the matrices incrementally increase in complexity.
Reynolds Intellectual Assessment System (RIAS)	The RIAS is a norm-referenced, individually administered intelligence/general aptitude assessment for individuals ages 3 to 94. It is comprised of four indices: (a) Verbal Intelligence Index; (b) Nonverbal Intelligence Index; (c) Composite Intelligence Index; and (d) Composite Memory Index. It should be noted that the Nonverbal Index requires verbal responses.
Reynolds Intellectual Screening Test (RIST)	The RIST is the screening portion of the Reynold's Intellectual Assessment. It provides three scores: Guess What, Odd-Item Out, and a Total RIST index score.
Slosson Full Range Intelligence Test (S-FRIT)	The S-FRIT is an individually administered, intelligence/aptitude test given to individuals ages 5 through 21. It provides a full-range IQ score (mean 100 and standard deviation 15) as well as the following index scores: Rapid Cognitive, Best g, Verbal, Abstract, Quantitative, Memory, and Performance). Subdomains are reported using a mean of 50 and standard deviation of 16.
Wechsler Intelligence Scale for Children (WISC)	The WISC is a norm-referenced, individually administered intelligence/general aptitude assessment for students, ages 6 to 16. It is comprised of five indices (Verbal Comprehension, Visual Spatial, Fluid Reasoning, Working Memory, and Processing Speed). The WISC reports a Full-Scale IQ (FSIQ) and a Generalized Ability Index (GAI) that does not account for working memory and processing speed.
Wechsler Intelligence Scale for Children (WISC)-Spanish	The WISC-Spanish is a norm-referenced, individually administered intelligence/general aptitude assessment for students, ages 6 to 16 who are Spanish-language dominant. It is comprised of four indices (Verbal Comprehension, Perceptual, Working Memory, and Processing Speed). The WISC-Spanish reports a Full-Scale IQ (FSIQ) and a Generalized Ability Index (GAI) that does not account for working memory and processing speed.
Wechsler Preschool and Primary Scale of Intelligence (WPPSI)	The WPPSI is a norm-referenced, individually administered intelligence/general aptitude assessment for students, ages 2-6 to 7-7. It is comprised of five indices (Verbal Comprehension, Visual Spatial, Fluid Reasoning, Working Memory, and Processing Speed). The WPPSI reports a Full-Scale IQ (FSIQ) and a Generalized Ability Index (GAI).

Table G-2
Achievement Assessments

Achievement Tests	
American College Test (ACT)	The ACT is a nationally normed, college entrance examination that is administered 5 times per year. The assessment is comprised of five parts (a) English usage; (b) mathematics usage; (c) social studies reading; (d) science reading; and (e) writing. Scores range from 1 to 36 on reading, mathematics, English, and science and between 1 and 12 on writing. Score reports also include percentile rankings.
ACT Aspire	ACT Aspire assessments are periodic, interim, or summative assessments that monitor the progress of students in grades K through 10 in reading, mathematics, science, and English. Growth is recorded and ACT predicted scores are given based on 9th and 10th grade assessments.
Aprenda	The Aprenda is group-administered achievement test designed specifically to assess the academic skills of Spanish-speaking students in grades K-12. The content is based on the Stanford Achievement Test.
Batería III Woodcock-Muñoz	The Batería III Woodcock- Muñoz test of achievement is designed for ages 2 to 90+. The subtests measure Reading, Oral Language, Mathematics, Written Language, and Knowledge.
Iowa Tests of Basic Skills (ITBS)	The ITBS is both a group-administered, norm- and criterion-referenced achievement assessment for students in grades K through 9. It is comprised of tests in reading, language arts, mathematics, social studies, science, and information sources. Scores are reported using raw scores, standard scores, and percentile rankings.
i-Ready	i-Ready is an adaptive, computerized assessment based on the Common Core Standards for students in K-12.
Logramos	Logramos is a group-administered achievement assessment for Spanish-speaking students in grades 1 through 8. Content areas include reading, language, math, social studies, and science. It has been adapted from the Iowa Assessments.
Measures of Academic Progress (MAP)	The MAP is a computer-administered, norm-referenced achievement assessment given to a group of students in grades 2 through 12. The assessment adapts to the student and provides scores in reading, language usage, mathematics, and science. Scores are reported using standard scores and percentile ranks.
Partnership for Assessment of Readiness for College and Careers (PARCC)	The PARCC assessment is a standardized, annual, year-end assessment based on the Common Core State Standards that is given to students in grades 3 through 8. It measures reading language arts/literacy and mathematics.
Star Reading and Math	The Star Reading and Math assessments are norm-referenced computerized, adaptive achievement tests for students in grades 3 through 12. Scores are reported using percentiles and grade equivalencies.

Achievement Tests

Stanford Achievement Test (SAT)	The SAT is a norm-referenced, group administered achievement test for students in grades K-12. It assesses reading, language, spelling, study skills, listening, mathematics, science, and social science. Scores are reported using scaled scores, percentiles, grade equivalents, and normal curve equivalents.
State Assessments	Include end-of-year state mandated testing in English language arts, reading, math, science, and social studies.
Test of Mathematical Abilities for Gifted Students (TOMAGS)	The TOMAGS is a norm-referenced assessment that identifies students, ages 6 through 12, as gifted in mathematics. It is comprised of two levels: primary and intermediate. It provides a score (with a mean 100 and standard deviation 15) and scores of 125 or above are indicative of giftedness in mathematics.
Woodcock Johnson III Achievement Test	The Woodcock Johnson Achievement test is a norm-referenced for individuals between the ages of 2 and 90+. Cluster cores are reported in the following areas: Broad Reading, Oral Language-Standard, Broad Math, Math Calculation Skills, Broad Written Language, Written Expression, Academic Skills, Academic Fluency, Academic Applications, and Total Achievement. Scores are reported using standard scores and percentile rankings.

Table G-3
Rating Scales

Rating Scales

Administrator Rating Scale	District created rating scale for administrators.
Gifted Behaviors Characteristics Checklist	School district created rating scale.
Gifted Evaluation Scale (GES)	The GES is an individually administered rating scale for students ages 5 through 18 that teachers or other school personnel complete. It contains six subscales (Intellectual, Creativity, Specific Academic Aptitude, Leadership Ability, Performing and Visual Arts, and Motivation) with scores reported as standard scores and percentiles.
Gifted Rating Scales (GRS)	The GRS is an individually administered rating scale for students ages 6 through 13. It is designed to identify observable behaviors that indicate giftedness. The GRS evaluates the following domains: Intellectual, Academic, Motivation, Creativity, Leadership, and Artistic Ability.
Kingore Observation Inventory (KOI)	The KOI is a rating scale for students in grades K through 8 that is used to identify students with potential giftedness. It includes teacher and parent forms. Seven categories categorize gifted behaviors and performance: Advanced Language, Analytical Thinking, Meaning Motivation, Perceptive, Sense of Humor, Sensitivity, and Accelerated Learning.
Parent Rating Scale	District created rating scale for parents.
Scales for Identifying Gifted Students (SIGS)	The SIGS is an individually administered rating scale for students ages 5 through 18. It assesses across seven domains: general intellectual ability, language arts, mathematics, science, social studies, creativity, and leadership. It includes a home rating scale and school rating scale.

Rating Scales

Scales for Rating the Behavioral Characteristics of Superior Students (SRBCSS)	The SRBCSS is an individually administered rating scale for students in K through 12. Teachers rate students across 14 domains: Learning, Creativity, Motivation, Leadership, Artistic, Musical, Dramatics, Communication (Precision), Communication (Expressiveness), Planning, Mathematics, Reading, Technology, and Science.
Slocumb-Payne Teacher Perception Inventory	The Slocumb-Payne Teacher Perception Inventory is a rating scale that is focused on assessing students from diverse backgrounds. It includes both positive and negative attributes of giftedness.
Student Rating Scale	District created rating scale for students.
Teacher Rating Scale	District created rating scale for teachers.
Teacher's Observation of Potential in Students (TOPS)	Teachers review multiple items organized categorically: Learns Easily (12 items), Shows Advanced Skills (16 items), Displays Curiosity & Creativity (14 items), Has Strong Interests (9 items), Shows Advanced Reasoning & Problem Solving (14 items). Compared to children of the same age, teachers check each appropriate descriptor to determine if the student would benefit from gifted and talented programs and services.

Table G-4
Creativity

Creativity Assessments

Creativity Assessment Packet (CAP)	The CAP includes the Williams Scale, The Test of Divergent Thinking, and the Test of Divergent Feeling. It is group administered creativity test given to students' ages 6 through 17.
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