¿Cómo pueden ser altamente sobresalientes si no hablan inglés? Percepciones de los maestros de alumnos con talento de segundo grado en un programa bilingüe

How Can They Be Gifted If They Don’t Speak English? Teacher Perceptions of the Talents of Second Graders in a Dual Language Program

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Resumen

Existe una necesidad de evaluaciones que puedan proporcionar a los educadores valiosa información para lograr intervenciones educativas que ayuden a los estudiantes a alcanzar su potencial académico, en particular a los estudiantes de grupos lingüísticos minoritarios. En este estudio se detalla la relación entre las calificaciones asignadas por los profesores al desempeño de los estudiantes y los resultados en las pruebas estandarizadas de rendimiento escolar y habilidades académicas. Las preguntas de investigación fueron: ¿en qué medida coinciden las calificaciones de los estudiantes asignadas por los maestros y el rendimiento en las pruebas estandarizadas de logros y capacidades académicas?; ¿qué tipo de datos son necesarios para tomar decisiones acerca de la distinción como talentosos y sobresalientes a estudiantes en aprendizaje del inglés?; y ¿qué talentos son pasados por alto o subestimados utilizando los datos que están disponibles para los maestros? Este trabajo se basa en la creciente literatura que aborda una perspectiva social más justa para la identificación y la educación de los niños sobresalientes y talentosos en aprendizaje del inglés.

Palabras clave: educación bilingüe, evaluación, estudiantes sobresalientes

Abstract

There is a need for assessments that can provide educators with valuable information to allow for educational interventions for students to achieve their academic potential, particularly students from linguistic minority groups. This study details the relationship among teacher ratings of student academic achievement and standardized test achievement and ability measures. The research questions were: to what extent do the teacher ratings of students and the performance on standardized tests of achievement and ability match; what kinds of data are needed for teachers to make decisions about gifted programming for English Learners; and what talents are overlooked/undervalued using data that are available to teachers? This work builds on the growing literature base informing a more socially just policy for the identification of and education of gifted and talented children learning English.

Keywords: bilingual, assessment, gifted, talented, English Language Learners
Introduction

English Learners (ELs) are students “whose English proficiency has not yet developed to a point where they can profit fully from English instruction” (García, Jensen, & Scribner, 2009, p. 10). Today, more than 10% of U.S. students are EL, an increase of 150% from 20 years ago, and ELs are the fastest-growing subgroup in the nation (Spellings, 2005; U.S. Department of Education, 2012). By 2025, researchers project ELs will comprise a quarter of all students (Spellings, 2005). Despite the increase in the population, ELs are disproportionately underrepresented in gifted and talented programs across the country (Callahan, 2005; Ford, 1998).

One way American schools determine whether a student qualifies for gifted and talented programming is through the use of standardized tests. Specifically, ability tests are widely used in American schools and provide important information that cannot be derived from achievement tests, teacher observations, or student self-ratings of learning styles. Because of this, ability tests are used to help educators make better decisions about students’ academic programming. For example, students who show unusual discrepancies between their scores on achievement and ability tests may be identified for evaluation of a learning disability. Conversely, students with unexpectedly high ability in one or more domains may be provided access to educational programming and resources reserved for gifted and talented students. Commonly used screening tests for these purposes in K-12 schools include the Otis-Lennon School-Ability tests (Otis & Lennon, 2003), Inview (CTB/McGraw-Hill, 2000), the Progressive Matrices Test (Raven, Court, & Raven, 1983), the Naglieri Nonverbal Ability test (Naglieri, 1997) and the Cognitive Abilities Test (CogAT; Lohman & Hagen, 2001). A national survey by MMS Education (2007) found that the CogAT was by far the most widely used of these tests. Typically, the directions and/or items on ability tests, which often have novel item types, are difficult to understand if the student is not fluent in English.

Many have assumed that nonverbal ability tests would level the playing field for non-native English speakers. However, Lohman, Korb, and Lakin (2008) found that EL students scored 8 to 10 points lower than native English speakers on three nonverbal tests. Thus, for this project an adapted form of the CogAT Form 7 with Spanish instructions was used with selected students. Teachers identified which students would receive the Spanish directions based on home language and teacher perception of ability in English and Spanish.

One of the most important features of CogAT is the profile of each student’s abilities to reason with verbal, quantitative, and figural/spatial symbols. Profiles with extreme score discrepancies are particularly common for both high- and low-ability students (Lohman, Gambrell, & Lakin, 2008). For low-ability students, score profiles typically show a significant cognitive strength whereas for high-ability students profiles often show a relative weakness. In both cases, students learn more successfully when instruction is adapted better to capitalize on their strengths (Snow, 1977).

Policy Context

In 1965, the United States Congress passed the largest federal intervention in education to that date, the Elementary and Secondary Education Act (ESEA). That original version of ESEA was intended to provide compensatory programs for students from lower socioeconomic levels. In the 1965 ESEA, Title III addressed innovative programs in education. Three years after the
original passing of the bill, ESEA was amended to include Title VII, the Bilingual Education Act with outcomes to better educate children who did not speak English as a first language “to encourage the establishment and operation, where appropriate, of educational programs that use Bilingual educational practices, techniques, and methods” and “to provide financial assistance to local education agencies, and to state education agencies for certain purposes” (Iowa Department of Education, 2007, p. 3).

Throughout the 1970s, 80s, and 90s the federal government’s goals for educating English Learners (ELs) changed. By 1973 the goals of Title III had developed into providing money to short-term programs (often no longer than three years) to school districts (Norman & Balyeat, 1973). A series of court cases, including Lau v. Nichols, 1974, Castenada v. Pickard, 1981, and Plyler v. Doe, 1982 emphasized the legal requirements to educating EL students, as well as students whose immigration status is undocumented. By the time the 1994 reauthorization of the ESEA passed, funding for EL programs was provided through a series of competitive grants through Title VII (Boyle, Taylor, Hurlburt, & Soga, 2010a). The focus of EL education had also moved from bilingual education to a focus on English language acquisition (Ramsey & O’Day, 2010).

A major change to the education of ELs came with the 2001 reauthorization of ESEA as the No Child Left Behind Act (NCLB). The act outlined a new paradigm for education, centered on accountability, “Now, in addition to detailed grade level expectations for student achievement in reading and math, states were also required to set academic achievement standards with cut-scores for basic, proficient and advanced performance” (Hollingworth, 2008). Education for ELs moved from Title VII to Title III, and funding changed from a competitive grant structure to formula-based grants allocated to states, depending on the population of EL students in that state. States were to issue grants to districts or consortia of districts to implement the programs for ELs. With this funding, grantees were required use the monies to enhance language instruction educational programs to improve English Language proficiency and academic achievement and to provide professional development to teachers surrounding EL instruction (Boyle, Taylor, Hurlburt, & Soga, 2010b). In return for these monies, schools needed to demonstrate that they had a system for holding educators accountable for student learning.

From a federal policy perspective, both Title I of the 1994 Improving America’s Schools Act and NCLB require schools to test all students to establish annual goals for accountability purposes, even those who are limited in their ability to express themselves in English. However, there is limited research on the value of those student test scores to make educational decisions that might benefit this specific population. Lindholm-Leary and Borsato (2006) found “while there has been an increased emphasis on the inclusion of ELLs [English Language Learners] in high-stakes tests, research on assessment that is pertinent to this population is scarce” (p. 196). Many school systems spend significant time and effort on making sure that EL students who are falling behind are able to close the gap to meet assessment standards. However, research and practices surrounding EL students who meet the criteria for gifted and talented is limited.

**Research on Gifted Bilingual Students**

The construct of giftedness from a policy perspective is typically defined in terms of academic, school subject-specific talents, as opposed to a child’s fluencies in multiple languages. Valdés and Figueroa (1994) write, “the unique American tragedy of bilinguals has been that over the last century both test makers and testers have generally ignored the psychological robustness of bilingualism. The result has been a waste of human potential” (p. 87). Vald and Valdes (2003)
outline the debates in gifted education about the inclusion of young bilingual interpreters in the construct of “giftedness”. The authors argue “formal definitions of giftedness are particularly important because they become part of official policies and guidelines that are later used to inform identification and programming practices in schools” (p.8). Indeed, current policies for identification have resulted in the low representation of linguistic minority students in gifted programs. Bialystok (2007) contends bilingualism is advantageous because “bilinguals develop executive control earlier and maintain their ability to control those functions longer than monolinguals” (p. 220). Gonzalez (2006) found that bilingual, low SES children had the cognitive potential to outperform monolingual, middle-to-high SES counterparts.

However, EL and bilingual children have long been under-represented in programs for gifted and talented (G&T) students in American public schools (Barkan & Bernal, 1991; Callahan, 2005; Ford, 1998). Esquierdo and Arreguin-Anderson (2012) go so far as to identify these students as “the invisible gifted and talented bilingual students”. They argue that two factors in this underrepresentation include the definition of giftedness that many school systems use and teachers’ level of preparation in gifted education. Castellano and Diaz (2002) identify additional reasons for the underrepresentation of Hispanic students in gifted education programs, including low expectations from educators, non-responsive curriculum, and inadequate identification and assessment tools. This lack of adequate assessment tools is a significant barrier to accurate identification (Solano-Flores & Trumbull, 2003): “Existing approaches to testing ELLs do not ensure equitable and valid outcomes because current research and practice assessment paradigms overlook the complex nature of language, including its interrelationship with culture” (Solano-Flores & Trumbull, p. 3).

Moreover, there is a lack of use of students’ first language in assessing academic abilities across content areas (Gonzalez, 2012). The lack of first language assessment is especially concerning as primary language is connected to “personal and cultural identity, to the expression of their learning styles and temperament, self-concept, and self-esteem, all factors very much connected to the cultural expression of their cognitive and academic skills” (p. 293). Gifted and talented assessment tools essentially use language to identify students for gifted and talented programs and it is critically important to recognize the difference between the students’ inability to express knowledge and ability as opposed to the actual lack of knowledge or ability (Fultz, Lara-Alecio, Irby, & Tong, 2013). This difference amplifies the possibility of measurement error and the risk of misidentifying students for entry to gifted and talented educational programs (Solano-Flores & Trumbull, 2003).

These programs range from pull-out classes, to special schools, to enrichment programs open to most any student in the school who displays interest in a topic and the ability to pursue it. Collectively, in-school talent identification and development programs are an important resource for all students, especially for poor children whose parents cannot afford or who are reluctant to participate in special tutoring, field trips, summer programs, and other enrichment and acceleration opportunities. Although the criteria for admission to such programs vary widely across school districts, many districts administer an ability test in first or second grade either to those students who are nominated for the program by a classroom teacher or to all students in the identified grade level.
Research Questions

We wondered if the teachers and the existing achievement tests could identify gifted and talented children in a school district that has embraced the values of bilingual education for all elementary children. The research questions guiding this study are:

1. To what extent do the teacher ratings of students and the performance on standardized tests of achievement and ability match?
2. What kinds of data are needed for teachers to make decisions about gifted and talented placement for children who are ELs?
3. What talents are overlooked or undervalued using the data that are available to the teachers?

Methods

The case study is designed to gain an in-depth understanding of both the situation and the meanings for the subjects in order to develop general theoretical statements about the process under observation (Merriam, 1998). Yin (2003) also recommends relying on theory to drive the analysis of case study data.

Primary Research Site

The Community School District (CSD) is located in a Midwestern town with a population of 3,531. The community is the first minority-majority town in the state, with 52% of the population identifying as Hispanic on the 2010 U.S. Census. There are 1,168 K-12 students in the district, which spends $4,231 per pupil. Table 1 identifies the participant characteristics. Five languages are spoken by PK-12th grade students in CSD: English, Spanish, Lao, Vietnamese, and Nepali. More than one-third of the students list a language other than English spoken in their home.

Table 1. Participants Characteristics

<table>
<thead>
<tr>
<th>Participants</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (Grade 2)</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>37</td>
<td>49</td>
</tr>
<tr>
<td>Home Language English</td>
<td>47</td>
<td>63</td>
</tr>
<tr>
<td>Home Language Other</td>
<td>29</td>
<td>39</td>
</tr>
<tr>
<td>Special Education</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>Gifted and Talented</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Free and Reduced Lunch</td>
<td>44</td>
<td>59</td>
</tr>
<tr>
<td>Receiving Spanish directions</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>English Learners</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>Teachers</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
In October 2010, 13% of the district 2nd graders qualified for special education services. None were identified as talented and gifted, as the program starts in 3rd grade. Table 2 shows the percent’s proficient in reading and math of the fourth grade class, as reported by the state for NCLB purposes.

<table>
<thead>
<tr>
<th></th>
<th>Reading District</th>
<th>State</th>
<th>Math District</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELL</td>
<td>52.27</td>
<td>54.72</td>
<td>50.00</td>
<td>58.40</td>
</tr>
<tr>
<td>African American</td>
<td>N/A</td>
<td>57.66</td>
<td>N/A</td>
<td>56.26</td>
</tr>
<tr>
<td>White</td>
<td>78.87</td>
<td>82.13</td>
<td>78.87</td>
<td>83.55</td>
</tr>
<tr>
<td>Hispanic</td>
<td>52.78</td>
<td>63.87</td>
<td>52.78</td>
<td>64.98</td>
</tr>
<tr>
<td>Asian</td>
<td>N/A</td>
<td>80.61</td>
<td>N/A</td>
<td>82.99</td>
</tr>
<tr>
<td>American Indian</td>
<td>N/A</td>
<td>65.31</td>
<td>N/A</td>
<td>61.37</td>
</tr>
</tbody>
</table>

Note. The percent of student’s proficient is calculated if the total number of students taking the test is 10 or greater. If fewer than 10 students took the test, the data will show as N/A in the data table, and will not be charted. Source: iowaschoolprofiles.com

**Participants**

This is a case study of 11 teachers of 75 second graders enrolled in a dual language program in an elementary school in a rural Midwestern town. The school had been identified for field testing of Spanish language directions for administration of the CogAT 7 because of its unique dual language program. The dual language program is a choice program, with about 60% of students in the district opting to participate. Native language literacy is emphasized and students learn together in mixed, linguistic groupings for literacy, math, science, and social studies in English and Spanish emphasizing a 50/50 model where approximately 50% of instruction is in English and 50% is in Spanish. The program strives for a balance between native English-speakers and native Spanish-speakers. At the elementary levels, instruction is also balanced. Students in the program receive half of academic instruction in English, and the other half in Spanish, with languages changing weekly. The dual language program in CSD has been active since 1998 and extends through the twelfth grade. Second grade was selected for this study as the talented and gifted program does not begin until third grade in CSD.

Participating teachers were drawn from a pool of 18 educators who had direct teaching experience with the student participants as primary dual-language classroom teachers (N=15) or as pull-out EL or Gifted and Talented teachers (N=3). Eleven teachers responded to a request for participation for a response rate of 61%.

The 75 students participated in the spring of their second grade year, when they took the Iowa Tests of Basic Skills (ITBS) Form A, primary achievement battery or the Logramos (Spanish-language equivalent) and the CogAT7 ability test battery with either Spanish or English directions, depending on home language. Teachers used professional judgment to determine the language most appropriate for students’ testing.
Measures

CogAT 7

The CogAT Form 7 includes three batteries of tests: verbal, quantitative, and non-verbal (Lohman & Hagen, 2007). Though the batteries can be administered separately, all three were used for this study. The Primary Edition of the CogAT is typically administered for students in grades K-2 and requires no reading ability. The test administrator reads a question out loud and the children choose the picture that best answers the question.

The Iowa Tests of Basic Skills (ITBS)

This is an achievement test that is divided into batteries including vocabulary, word analysis, reading comprehension, listening, language, mathematics, science, sources of information, and social studies at levels 5-8, typically administered to students in grades K-2. The Core Battery contains all tests in the Complete Battery except Social Studies, Science, and Sources of Information. All tests at Levels 7 and 8, with the exception of Vocabulary and Reading, are orally administered.

Logramos, Second Edition

The Logramos, Second Edition is a group administered achievement test battery in Spanish. With content parallel to the ITBS, Logramos levels 7 and 8 are typically administered in first and second grades. Batteries include vocabulary, word analysis, reading, listening, language, math concepts, math problem solving, and math computation. All tests at Levels 7/8, with the exception of vocabulary, reading, and a portion of mathematics computation, are orally administered. Students mark their answers in the machine-scorable booklets.

Procedures for Gathering Data

The research team worked closely with the district to facilitate administration of the CogAT Form 7 for second grade students. Test administrators read directions to students aloud and students choose the picture that best completes the problem. All three batteries (Verbal, Quantitative, Non-Verbal) were administered to students. Teachers in the bilingual program identified which students they felt should take the CogAT with directions in English and which students should take the CogAT in Spanish based on home language and teacher perception of ability. Of the students whose home language was Spanish (N=27), 82% were selected by teachers to receive CogAT directions in Spanish (N=22).

After CogAT administration and before receiving results of the ability test teachers were asked to rank order their students’ academic abilities in reading and math based on classroom observations and teacher-built assessments. The research team mailed a questionnaire to teachers for completion. The teachers used a forced-choice format for ranking on the questionnaire, arranging equal numbers of students into groupings ranked high, middle, and low. The completed forms were submitted to an official at an intermediate education agency who connected teacher rankings of students with standardized test measures. This official removed any identifying student information before sending data to the researchers.
Researchers then ranked students based on performance on the standardized test measures, specifically the CogAT non-verbal core, CogAT quantitative core, CogAT verbal core, ITBS Reading Core, ITBS Math Core, Logramos Math Core, and Logramos Reading Core. National norms were used to code scores into high, medium, and low groups.

**Quantitative Data Analysis Methods**

Data were collected with the technical help of personnel from an intermediate education agency. The data were submitted directly to the intermediate education agency and were received from the agency with all identifying information removed. Data were transferred from Excel to SPSS. Results from the testing instruments were coded with a 1, 2, or 3 to indicate if the student’s result was in the top, middle, or bottom tercile of scores. The teacher rankings of high, medium, and low ability were also coded with a 1, 2, or 3 and SPSS was used to run correlational studies. This study examines the relationships between the teacher perceptions of student ability and achievement and student ability and achievement as represented by standardized testing.

**Results**

**Teacher Rankings**

Teachers ranked students with a home language of English higher than those who did not speak English at home (p = .01). Students who were selected by teachers to receive directions in English on the CogAT were ranked higher than students who teachers selected to take the CogAT with Spanish directions for administration (p=.05). Table 3 outlines these results.

**Table 3. Teacher Ranking, Home Language, and Language of Directions**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Average Teacher Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>75</td>
<td>2.00</td>
</tr>
<tr>
<td><strong>Home Language English</strong></td>
<td>47</td>
<td>1.84*</td>
</tr>
<tr>
<td><strong>Home Language Other</strong></td>
<td>29</td>
<td>2.26*</td>
</tr>
<tr>
<td><strong>English Directions on CogAT</strong></td>
<td>55</td>
<td>1.90**</td>
</tr>
<tr>
<td><strong>Spanish Directions on CogAT</strong></td>
<td>20</td>
<td>2.27**</td>
</tr>
</tbody>
</table>

*Significant at P=.01;**Significant at P=.05

Teacher rankings, CogAT rankings, and ITBS/Logramos rankings were exactly the same for only 6% of students (N=5). Teacher rankings were positively correlated (r = .269, p = .05) with ability as measured by CogATVQN scores (Table 4). However, teacher rankings were more highly correlated with measures of achievement on the ITBS Reading (r = .657, p = .01), ITBS Math (r = .602, p = .01), Logramos Reading Comprehension (r = .575, p = .01), and Logramos Math (r = .627, p = .01).
<table>
<thead>
<tr>
<th>Table 4. Teacher Ratings, Student Ability, and Student Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CogAT VQN</strong></td>
</tr>
<tr>
<td><strong>Teacher Rating</strong></td>
</tr>
<tr>
<td><strong>ITBS Reading</strong></td>
</tr>
<tr>
<td><strong>Logramos Reading Comprehension</strong></td>
</tr>
<tr>
<td><strong>Logramos Math</strong></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Underestimation of Student Ability

By comparing teacher rankings with rankings on the CogAT researchers determined that teachers had either overestimated or underestimated abilities of 43% of students (N=28). Achievement was either overestimated or underestimated in 36% of students (N=27) as represented by both ITBS Reading and ITBS Math scores. As represented by Logramos scores, achievement was either overestimated or underestimated in 34% of students (N=13). Table 5 details the over and underestimation of ability and achievement by standardized measure.

<table>
<thead>
<tr>
<th></th>
<th>Overestimation</th>
<th></th>
<th>Underestimation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>CogATVQN</td>
<td>15</td>
<td>23</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>ITBS Reading</td>
<td>9</td>
<td>12</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>ITBS Math</td>
<td>5</td>
<td>6</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Logramos Reading</td>
<td>4</td>
<td>10</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>Logramos Math</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>31</td>
</tr>
</tbody>
</table>

Discussion

The research questions for this study were: to what extent do the teacher ratings of students and the performance on standardized tests of achievement and ability match?, what kinds of data are needed for teachers to make decisions about gifted and talented placement for children who are ELs?, and what talents are overlooked or undervalued using the data that are available to the teachers? We found that while teachers’ perception of student ability and achievement were positively correlated with standardized test measures of ability and achievement, teachers were more accurate in perceptions of achievement than ability. Though some may think that enrollment in a dual language program may make assessments of teacher assessments of student ability more accurate, we found that multiple measures were necessary to gain a full understanding of a student’s ability. Given that teachers were more likely to rank students whose primary language was English higher than those whose primary language was other than English, we call for the importance of using multiple measures when making decisions about placement in gifted and talented programs. Teacher rankings alone are insufficient to make placement decisions. This study highlights the need for proper assessment tools to identify gifted and talented language minority speakers.

Limitations and Pedagogical Implications

This study is limited by the potential bias inherent in teacher perceptions. Teachers chose which students were to take the ability tests with Spanish directions and which students were to take the test with English directions. Furthermore, the categorization of
students into high, medium, and low groups used broad classifications of ability and achievement. Future studies would gain more information by using a finer grain of classification.

Like many school districts around the country with a large, English-learning population, CSD finds itself with very few Hispanic high schoolers enrolled in advanced or AP math and science classes. By identifying the talents in the elementary children without the interference of language, there is hope that the long-term result will be that a greater percentage of Hispanic students will have the groundwork provided to them in elementary school be prepared for advanced coursework later in their academic careers. We also call for additional trainings for teachers to help understand and use results of standardized test measures, as well as information sessions for parents of ELs. Further research, including teacher interviews, would help complete a more in-depth understanding of teacher perceptions of ability and achievement.

Conclusions

Overall, the present findings provide evidence for the use of multiple data sources to make decisions about placement of students in gifted and talented programs. Teacher rankings alone are insufficient and unreliable means for evaluating the potential giftedness of EL students. Ford (1998) has argued that the misidentification of minority students for gifted and talented programs is a “tragic and unnecessary waste of human potential and promise” (p. 12). The results of this work can be used to inform a more socially just policy for the identification of and education of gifted and talented children learning English in a dual language program.

To get the full picture of what a student knows and is able to do, schools need multiple data sources. The rationale for this study is grounded in the growing critical need for appropriate, psychometrically sound tools to measure fairly what all school children know and are able to do. Specifically, there is a need for assessments that can provide educators with valuable information to allow for educational interventions for students to achieve their academic potential, particularly students from linguistic minority groups.

References


