

UC Berkeley

Berkeley Review of Education

Title

Assessment tools to differentiate between language differences and disorders in English language learners

Permalink

<https://escholarship.org/uc/item/6nj5f2x7>

Journal

Berkeley Review of Education, 5(1)

ISSN

1947-5578

Author

Shenoy, Sunaina

Publication Date

2014-01-01

Peer reviewed

Assessment Tools to Differentiate between Language Differences and Disorders in English Language Learners

Sunaina Shenoy¹

University of California, Berkeley
San Francisco State University

Abstract

English language learners (ELLs) who are in the process of acquiring English as a second language for academic purposes, are often misidentified as having Language Learning Disabilities (LLDs). Policies regarding the assessment of ELLs have undergone many changes through the years, such as the introduction of a Response to Intervention (RTI) model, assessment in both first and second languages, and utilization of supplemental assessments. The purpose of this study is to take stock of the assessment tools and district policies that are in place to make a differential diagnosis. A total of 75 participants from California school districts, consisting of speech language pathologists, school psychologists, special educators, and paraprofessionals, completed an online survey. The results indicate that while professionals in the field utilize standardized cognitive abilities tests, informal assessments, and bilingual language tests as part of their assessment battery, there is still a need for bilingual language support and a standardized RTI model across schools and districts.

Keywords: assessment tools, ELLs, language learning disabilities, RTI, district policies

Second language learners, typically referred to as English language learners (ELLs)² within the U.S. school context, speak a different native language at home and undergo the process of learning English as a second language in school. Goldenberg (2008) describes ELLs as students who are not sufficiently proficient in English to benefit adequately from mainstream instruction. The number of ELLs is growing in the US and, in 2011, English language learners constituted 61% of the U.S. school population (5.1 million students), of whom 25% (1.5 million students) are in the California school district system alone (U.S. Department of Education [USDOE], 2011). In California, approximately 80% of these students are Latino, 10% are Asian, and 10% are of other ethnic backgrounds (USDOE, 2011). We tend to think of ELLs as a homogeneous population, but in fact the range of their language and academic skills is extremely variable. The challenges that ELLs face

¹ Correspondence concerning this article should be addressed to Sunaina Shenoy, Graduate School of Education, University of California, Berkeley, 1500 Tolman Hall; Berkeley, CA 94720. Email: sunaina@berkeley.edu.

² I use the term *English language learners* (ELLs) to refer to students who are non-native speakers of the English language and are in the process of acquiring the language at the beginning and early-intermediate levels of fluency.

in classrooms are linked to language demands or, more specifically, to the linguistic knowledge required for productive participation. This linguistic knowledge is usually transparent to proficient English speakers (Goldenberg, 2008) but requires direct instruction for ELLs to become more proficient in English. There has been a considerable amount of research on language acquisition from the perspective of linguistics, but very little research exists on how language usage influences the educator's decisions regarding the placement of students.

In addition to learning the language, ELLs also have to learn grade level academic content in their second language (L2). Though instructional practices are similar for both ELLs and non-ELLs, they are less effective for ELLs because they face the dual challenge of learning academic content and the language of instruction simultaneously (Goldenberg, 2008). This process of language and literacy acquisition often results in errors in receptive and expressive oral and written language that closely resemble the errors made by students who have Language Learning Disabilities (LLDs)³. ELL students tend to exhibit lower academic achievement, especially with regards to literacy skills, than their non-ELL peers (August & Hakuta, 1998); in general, low achievement tends to be the primary indicator of an eventual learning disability (LD) diagnosis. Differentiation of whether English language learners' struggles are symptomatic of language learning disabilities or related to second language acquisition is often challenging. Nonetheless, differentiating these sub-populations is critical not only for our understanding of the unique learning trajectories they may experience, but also for appropriate educational placement. An accurate diagnosis would lead to better treatment options, both in general education and special education settings.

The assessment procedures and referral processes laid out by a school district in order to distinguish between these sub-populations are often products of the policies that shape them. When assessing monolingual students, the traditional method was an IQ-discrepancy model, which was used to establish a significant discrepancy between IQ and achievement before an LD diagnosis was made. While monolingual students could be tested at any time, as their primary language was English, this policy was problematic for ELLs who had to be given three to four years to acquire English before they could be assessed in it. Thus, this method of ELL assessment was traditionally conducted when the student was in third grade, so that the student had enough time to acquire English. But the current trend in assessment policy is shifting away from waiting to make a diagnosis and moving towards a Response-to-Intervention (RTI) model in order to provide students with better instructional support before a diagnosis is made, as well as to focus on the early detection of learning disabilities.

This work takes stock of the assessment tools commonly used to make an LD diagnosis in order to gain a deeper understanding of what resources are available to

³ The term *language learning disabilities* (Wallach & Butler, 1995, p.1) was introduced by Stark & Wallach (1980) in their attempt to develop a new conceptual framework for the term 'learning disabilities' by drawing from the fields of reading, psychology, and speech language pathology. The new approach was an effort to expand views on assessment and intervention and to stress the connections among language, learning, and literacy. For the purposes of this paper, I employ the term *language learning disabilities* (LLD) to incorporate learning disabilities that manifest primarily as problems with oral and written language development.

special educators, speech pathologists, and school psychologists. For the purposes of this paper, I developed a survey (available upon request) to collect data about current assessment tools utilized and district policies practiced in differential diagnosis. The survey was distributed to a random sample of 75 professionals (special educators, speech pathologists, school psychologists, and/or paraprofessionals) in California schools. The following research questions were addressed:

1. What are some of the standardized cognitive abilities tests and non-standardized supplemental and alternative assessments that special educators, school psychologists, and speech pathologists in the field utilize in order to make a differential diagnosis between students who are acquiring English as a second language and those that have Language Learning Disabilities (LLDs)?
2. In order to make a differential diagnosis, are students tested in both first and second languages? Do professionals use bilingual tests and other language tests in their practice?
3. Do a majority of school districts have a working Response to Intervention (RTI) model in place, shifting away from a discrepancy model?
4. What are some indicators of difference versus disorders that professionals look for in their assessment procedures?

My research study surveys speech language pathologists, school psychologists, and special educators in the field to better understand current assessment tools in the light of the policy that shapes them. I will first delineate the complexity of the second language learning process and the tendency in practice to treat ELLs similarly to students with LLDs. Second, I will shed light on various assessment issues that have been problematic for English language learners (ELLs). Third, I will delineate some important shifts in policy that have taken shape in the U.S. for diagnosing students with LLDs. Finally, I will conclude with some research-based solutions for diagnosing LLDs in ELLs, with an emphasis on current trends and practices.

Literature Review

English Language Learners vs. Students with Language Learning Disabilities

Cummins (1984) developed a model of second language acquisition and introduced the terms *basic interpersonal communication skills* (BICS) and *cognitive academic language proficiency* (CALP) to describe the language acquisition process. Cummins defines BICS as the ability to communicate basic needs and wants as well as carry on basic interpersonal conversations. A BICS-level proficiency takes approximately one to three years to develop after the student is first exposed to the second language, and it is insufficient to facilitate academic success. On the other hand, CALP, the ability to carry out advanced interpersonal conversations as well as communicate thoughts and ideas effectively, takes approximately five to seven years to develop and is essential for academic success. It thus takes an average ELL at least four to five years to become competent in the L2 in order to be assessed in that language. In this period of

development of CALP, the errors that are observed in the development of literacy skills often appear similar to students with LLDs, which leads to a potential misdiagnosis.

Ortiz (2002) observed that the introduction of a second language prior to the development of CALP in the native language could result in academic problems in the L2. However, protective factors such as language of instruction, parental education, continued opportunities for L1 development, and age of acquisition could positively affect the outcome. He also posited that the test administrator's knowledge of a child's language proficiency and language dominance is key to developing appropriate assessment procedures.

Valenzuela, Copeland, Qi, and Park (2006) noted that language can be seen as a combination of components: language form (which includes syntax, morphology, and phonology), language content, and language use. Children are socialized to use language in ways that are appropriate in their cultures. The language into which a child is socialized might be very different from the language the child is expected to use in school. For example, different cultural groups, even groups with a common L1, are likely to have different expectations of how children speak to adults. These differences extend to nonverbal communication as well, such as eye gaze. Educators who are not sensitive to the student's speech community might misidentify a cultural difference as a disorder.

The difficulties experienced by ELLs in the process of learning English and the difficulties experienced by students with diagnosed LLDs often appear similar, if not identical (Damico & Simmons-Mackie, 2003; Paradis, 2005); however, the basis of the oral language, reading, or written difficulties may differ. For example, problems related to language development and difficulties perceiving and organizing information can occur in both populations while the underlying causes may be different (Hamayan & Damico, 1991). Other symptoms of a disability, like difficulty following directions and experiencing anxiety during the school day, can also stem from different causes. ELLs may have difficulty following spoken directions in English whereas students with an LLD may have intrinsic difficulties with receptive language. However, each may result in similar behaviors. If students with LLDs are also ELLs, these difficulties will be evident in both languages and across many learning contexts (Crago & Paradis, 2003; Cummins, 1984, 2000; Hamayan & Damico, 1991).

The objective of this study is to determine whether there is a particular battery of standardized and non-standardized tests that has proven to be more useful than others in the differential diagnosis process.

Issues in Assessment of English Language Learners with Language Learning Disabilities

Discriminatory testing practices. Standardized tests, such as IQ tests and achievement tests, are usually conducted in English only. This limits access to English language learners, who are often misidentified as having LLDs. Special education identification, placement, and instruction decisions for students who are ELLs have been largely based on research and practices used with monolingual students with disabilities (Artiles & Ortiz, 2002). This is problematic for many ELL students with disabilities as these decisions do not take into consideration fluency rates and the linguistic basis of acquiring a second language. Because ELLs are not proficient in the language of

instruction, they usually experience difficulty learning the content. This is part of the typical development of proficiency in an additional language (Bialystok, 2001; Genesse, Paradis, & Crago, 2004). On one hand, there is a need to identify students in earlier grades so that they can receive early intervention services. On the other hand, it is critical to take language and cultural issues into account before deciding on the best educational placement for these students. Without a considerate assessment instrument and an educator who is aware of these differences, there is considerable risk of mis-identifying language learning for a language learning disability.

Inappropriate intervention and instructional models. The tendency to choose an intrinsic disability as the cause of the ELL's difficulties may be based on the assumption that the source of all educational difficulties is related to causes that are intrinsic to students (Carroll, 1993; Gutkin & Nemeth, 1997). This is exacerbated by teachers' lack of familiarity with principles of second language acquisition and their impact in academic contexts. Instructional models of special education are individual-specific and directed towards the cognitive aspects of the disability, such as phonological processing, learning styles, attention, and memory, rather than on language support, such as ESL classes or bilingual programs which target specific linguistic aspects such as vocabulary, story recall, and letter identification. Thus, ELLs without disabilities are more likely to get intensive second-language support and educational placement in bilingual programs, in comparison to ELLs with disabilities who are mainly instructed only in English (Klinger & Harry, 2006). While remediation programs cater to particular reading and writing deficits exhibited in students with language learning disabilities, these programs may not have efficient instructional practices for ELLs who do not have a more global understanding of the language as they struggle to gain proficiency. Moreover, the majority of ELLs with disabilities (55%) tend to receive special education services in segregated contexts (Zehler et al., 2003) like resource rooms or speech therapy. According to Connor and Boskin (2001), there is a large body of research on language acquisition from the perspective of linguists, psycholinguists, medical personnel, and sociologists, but very little research exists on how language usage influences the educator's decisions on the placement of students.

“Wait-to-Fail” model. According to Liu, Ortiz, Wilkinson, Robertson, and Kushner (2008), monolingual students who enter kindergarten are not usually referred for special education until second or third grade as it takes a few years to establish a level of discrepancy that will qualify them for services. Fletcher, Coulter, Reschly, and Vaughn (2004) called this approach the “wait-to-fail” model, which is not optimal in providing students with early intervention when they need it. The wait-to-fail model is frequently used by educational personnel who work with ELLs. The delay in referral is a result of various considerations, including lack of knowledge of when a child is ready to be assessed in English, confusion about when to refer ELLs, overreliance on test scores without considering other factors that may play a role, and misdiagnosing low proficiency in a language as an indicator of an LLD.

Thus, at the core of the problems related to the differential diagnosis of language differences versus language disorders lies several interrelated assessment issues such as an overreliance on cognitive aptitude testing, tests conducted in English-only instead of testing in both first and second languages, and the wait-to-fail model (Fletcher et al.,

2004). The next section explores the policy shifts that have affected assessment practices in schools today.

Policy Shifts in the U.S. for Diagnosing Students with Learning Disabilities

Bateman (1965) suggests a method for identifying learning disabilities by establishing a discrepancy between a student's general intelligence (measured by an IQ test) and actual academic performance (measured by an achievement test). In 1976, the U.S. Department of Education established federal guidelines for identifying students with LDs and set parameters on using Bateman's IQ-achievement discrepancy model (Epps, Ysseldyke, & Algozzine, 1985). According to Reschly (2005), the IQ-achievement discrepancy model assesses whether there is a significant difference between a student's scores on a test of general intelligence and scores obtained on an achievement test. If a student's score on the IQ test is at least two standard deviations (30 points) higher than his or her scores on an achievement test, the student is described as having a significant discrepancy between IQ and achievement and, therefore, as having a learning disability. Though the model has been established in schools and is an easy-to-administer, one-time assessment, Speece, Case, and Molloy (2003) found that problems far outweighed the gains made by employing this model. The assessments do not always discriminate between genuine disability and other explanations of low performance, such as inadequate teaching, teacher or testing bias, or invalid criteria. This concern, coupled with the fact that this approach does not inform instructional practice, has led to concerns about its validity.

Moreover, states and school districts began to opt for different criteria, causing students to be classified as LD in one state or district but not so in another state or district (Mercer, 1997). The most significant problem, according to Fletcher et al. (2004), was that students have to first fail in order to qualify for special education services. Since students have to perform at two grade levels below their own to establish a discrepancy, students with serious learning disabilities could not be identified or receive services in the primary grades. Fletcher and colleagues called this the wait-to-fail model. The problems with the IQ-discrepancy model led to a shift in the policy to address these assessment needs.

The reauthorization of Individuals with Disabilities Education Act (IDEA) in 2004 facilitated a shift away from the discrepancy model of diagnosing learning disabilities and introduced Response to Intervention (RTI) as a means of providing students with a more holistic assessment that shifted attention away from the intrinsic abilities of children and towards extrinsic variables such as instructional practice and assessment tools (Smith, 2005). The RTI model focuses on early intervention and prevention at the school-wide and district-wide level rather than concentrating on the limited cognitive abilities of the child or waiting for a child to fail. According to Fuchs and Fuchs (2006), intervention can be implemented at three different tiers, and additional instructional supports are put in place at each stage usually before a diagnosis is made. The first tier involves the initial screening of an entire class to identify approximately 20% of students who are at-risk for a disability. Those students who are considered "at risk" go through supplemental, intensive instruction in the classroom. Around 10% of the whole class are considered non-responders and are given further instruction usually outside the classroom as the

second tier of intervention. In the final tier, around 5% of students out of this group are referred for special education services. The purpose of RTI is for teachers to reflect on their teaching practices and curriculum at every tier and make an informed decision related to special education referral and educational placement. For example, if a student is not responding to tier one instruction, a teacher will refer the child for more intensive instruction targeted to his or her specific needs in reading and writing skills in tier three, before the student moves on to more complex ideas. Thus, at every level, a child gets instructional supports and early intervention practices to prevent him or her falling behind the other students in class. While teachers previously depended solely on class performance in order to make a referral, RTI allows teachers to try multiple pedagogical strategies before determining a true need. When the child clearly does not respond to intervention at tiers one, two, or three, the teacher can be confident in referring the student for special education services.

Fuchs and Fuchs (2006) provide three reasons for the shift towards using RTI as a more effective form of assessment and instruction. First, special education services are expensive, and the number of children being diagnosed with LDs has increased exponentially. Second, the varying definitions and criteria related to the IQ-achievement discrepancy have led to inconsistencies in the criteria for classification across states and districts, making it possible for students to qualify for special education services in one state but not another. Finally, the wait-to-fail model propagated by the discrepancy model, which requires students to be performing at least two grades below their grade level, essentially denies assistance until grade 3 and does not provide students with necessary, early intervention.

Even though scholars have found the RTI model to be effective (Fletcher et al., 2004; Fuchs & Fuchs, 2006; Haager, Vaughn, & Klingler, 2007; Vaughn, Bos, & Schumm, 2006), it has not been implemented in a standardized manner across school districts. I turn now to some possible solutions to assessment problems that have been suggested by researchers in the field and examine why some of these suggestions have not been implemented in current educational assessment practice.

Research-Based Solutions for Diagnosing Learning Disabilities in ELLs

Various recommendations have been made in order to employ more situated and comprehensive assessment tools to assess ELLs. Ortiz and Yates (2002) proposed using both standardized assessments, like cognitive abilities tests, and non-standardized assessments, such as conversational samples and narrative skills, as indicators of fluency in each language. In addition to gathering information about a child through standardized and non-standardized clinical protocols, it is important to add informal assessments to a battery of tests, especially if they can be easily administered by the teacher to get a quick screen of the language acquisition process of the ELLs in the classroom. Some examples of informal assessments include classroom observations, parent questionnaires, and child language samples that can give the teacher a wealth of knowledge about a child's language acquisition trajectories, which might be overlooked by a one-time standardized assessment. They also help to establish a pattern of language acquisition across home and school settings before a diagnosis is made.

There has been a long-standing concern in special education related to the over- and

underrepresentation of students from linguistically diverse groups, due primarily to inappropriate assessment and instruction (Donovan & Cross, 2002). With ELLs, additional considerations such as the language of instruction and opportunity to learn English (Linan-Thompson, Cirinco, & Vaughn, 2007) should be taken into account before an instructional program is put into practice. The introduction of a school-wide RTI model is effective (Fletcher et al., 2004; Fuchs & Fuchs, 2006; Stanovich & Siegel, 1994; Vellutino, Scanlon, & Lyon, 2000) as it makes use of students' learning rate and performance in determining instructional supports at every tier of intervention (Linan-Thompson, Cirinco, & Vaughn 2007). It thus gives students time to acquire language and literacy skills before a referral decision is made. Ideally, the RTI process would decrease the number of ELLs misdiagnosed with an LLD and would support them with quality instruction in the general education setting before they underachieve. For example, interventions that have interspersed language support activities to enhance oral language development have been found to produce a marked increase in performance on several reading measures (Gersten et al., 2005), suggesting that there is a transfer of L1 skills on to L2 literacy acquisition. Thus, the RTI framework is an evidence-based practice that is linked to school success not only for monolingual students, but for bilingual and multilingual students as well; not only for students in general education settings, but branching out to address the needs of students in special education settings as well. For ELLs, the benefits of a RTI model can be tremendous, especially in terms of offering instructional support at every tier and building on their language acquisition skills.

Purpose of the Study

The purpose of this study was to determine what assessment tools are being utilized and what policies are currently being practiced in the assessment of ELLs at the district level in California schools. The current trends in identifying ELLs as having language learning disabilities (LLDs) have to be viewed in the context of the current policies that shape them, in terms of access to bilingual programs, and the effectiveness of the RTI model (Klinger, Artiles, & Barletta, 2006).

The research questions were developed to find out more about the kinds of assessment tools that are currently being used in practice in California school districts to assess ELLs. The specific questions addressed the following concerns:

- (a) Identify some of the standardized cognitive abilities tests and non-standardized supplemental and alternative assessments that special educators, school psychologists, and speech pathologists in the field utilize in order to make a differential diagnosis between students who are acquiring English as a second language and those that have a LLD;
- (b) Validate the use of bilingual language tests in the first and second language before a diagnosis is made;
- (c) Validate the introduction of a working RTI model as a shift away from a discrepancy model;
- (d) Establish indicators of difference versus disorders that professionals look for in their assessment procedures.

Method

Participants

The sample for the current study consisted of speech language pathologists, special educators, school psychologists, and paraprofessionals across 23 middle to high-income school districts in California. This particular population of professionals was targeted because they are either the primary administrators or are familiar with the administration of standardized cognitive abilities tests and non-standardized supplemental and informal assessments for students who are suspected of having an LLD.

The sample included a total of 75 anonymous survey respondents, of whom 31 were speech language pathologists (41%), 17 were school psychologists (22.6%), 13 were special educators of special day classes or resource rooms (17.33%), and 14 were paraprofessionals (18.66%). All participants had experience working in the California school system, specifically with ELLs in a mild/moderate setting.⁴ Each participant was familiar with assessment procedures, having either administered the tests or having observed the administration of tests.

Of the 75 participants, 62 professionals (82.66%) worked primarily with students from preschool to Grade 3, and the remaining 13 (17.34%) worked with fourth grade and higher. As well, 68 professionals (90.66%) worked primarily with students with language learning disabilities and/or speech language impairments, while the remaining seven (9.34%) worked with other populations such as students with Autism Spectrum Disorders and Cerebral Palsy.

Procedure: Development of Survey and Distribution

My primary data source was a survey, created with Survey Monkey.⁵ It consisted of eight multiple-choice questions and four open-ended questions. The survey targeted speech pathologists, school psychologists, and special educators serving in California school districts. The questions were constructed to get an insight into the available assessment tools and district policies for the assessment of ELLs. The data collection was anonymous and no identifying information was collected. In order to maintain anonymity, the survey was distributed via a web link to schools, organizations, and individuals. It was also sent out to special education and related departments at various universities across California to be distributed to past and present students. It was also posted on websites, newsletters, and Facebook pages of organizations such as the California Association of Speech Pathologists, California Speech Language Hearing Association, California Teachers Association, and California Association of Private Special Education Schools. Data was collected during two months, and it represents a snapshot of assessment tools currently being used by professionals in the field to make a differential

⁴ Mild/Moderate Credential in Special Education authorizes the holder to conduct assessment and provide instruction and special education related services to individuals with a primary disability of specific learning disabilities, mild/moderate mental retardation, other health impairment, emotional disturbance, and autism spectrum disorders for Grades K-12.

⁵ <http://www.surveymonkey.com/s/SLZZN2H>

diagnosis between students who are acquiring a second language and those that potentially have language learning disabilities.

Results

While professionals report proclivity towards standardized tests in their practice (see Table 1), the use of non-standardized tests correlated to the job description of the participant. Special educators tend to focus on work samples and classroom observations, school psychologists tend to utilize standardized cognitive abilities tests, and speech language pathologists tend to use standardized bilingual tests and standardized and non-standardized language tests.

It is interesting to note that while 27 participants (36%) report having administered and/or observed the administration of the Woodcock-Johnson Cognitive Abilities Tests Third Edition (WJ III; Woodcock & Johnson, 2001), only seven participants (9.5%) report having administered the Spanish equivalent Bateria III Woodcock-Muñoz Third Edition (Woodcock, Munoz-Sandoval, McGrew, & Mather, 2007).

Table 1
Number of Participants Using Standardized Cognitive Abilities Tests⁶

Participants	Woodcock-Johnson Tests of Cognitive Abilities ^a	Bateria III Woodcock-Munoz ^b	Wechsler Intelligence Scale for Children ^c	Differential Abilities Scales ^d	None
Speech Pathologists	6	3	5	5	25
School Psychologists	7	2	10	10	3
Special Educators	10	2	3	4	1
Para-professionals	4	0	1	1	3
Total	27	7	19	20	32
Percentage	36.00	9.50	25.60	27.00	43.25

Note. Participants reported using more than one of these tests in their assessment practices, and therefore, totals do not add up to 100%.

^aWoodcock & Johnson (2007)

^bWoodcock, Munoz-Sandoval, McGrew, & Mather (2007)

^cWechsler (2003)

^dElliot (2007)

⁶ Cognitive abilities tests are tests of mental processes like memory, problem-solving, decision-making, learning, and attention.

The second research question addressed the issue of whether students are tested in both L1 and L2. Results of the current study suggest that cognitive abilities tests are still primarily conducted in English only. School psychologists report that they administered over 50% of the cognitive abilities tests, and most of the speech language pathologists attest that they did not administer these tests. Only three school psychologists (4%) report using the Spanish equivalent Bateria III Woodcock-Muñoz Third Edition (Woodcock et al., 2007), and two of the respondents report use of the nonverbal (performance) version of the Wechsler Intelligence Scale for Children (Wechsler, 2003). Of the 75 survey respondents, a total of 43% of all professionals indicate that they either did not administer cognitive abilities tests at all or use subtests of cognitive abilities tests in conjunction with other supplemental assessments.

Table 2
Number of Participants Using Standardized and Non-Standardized Supplemental Assessments

Participants	BASC II ^a	HLS ^b	PQ ^c	TRS ^d	WS ^e	CO ^f	CBMs ^g	DA ^h	LPQ/I ⁱ	LS ^j
Speech Pathologists	3	17	24	16	19	24	3	18	1	5
School Psychologists	17	10	15	14	14	16	9	1	3	0
Special Educators	5	3	8	6	11	13	13	3	3	0
Para-professionals	2	2	3	2	3	4	2	2	1	0
Total	27	32	50	38	47	57	26	24	8	5
Percentage	36.50	43.20	66.66	50.66	62.66	76.00	34.66	32.43	10.80	6.70

Note. Participants reported using more than one of these tests in their assessment practices and, therefore, totals do not add up to 100%.

^aBehavior Assessment System for Children Second Edition (BASC II, Reynolds & Kamphaus, 2007)

^bHome Language Survey

^cParent Questionnaires

^dTeacher Rating Scales

^eWork Samples

^fClassroom Observations^gCurriculum based measures

^hDynamic Assessment

ⁱLearning Profile Questionnaires/Inventories (e.g., QuickSmart Multiple Intelligence Scale)

^jLanguage Samples

Table 2 presents the standardized and non-standardized supplemental assessments⁷ that are commonly used by participants in the study. While professionals use both standardized and non-standardized supplemental protocols, standardized assessment protocols are used more often in developing a holistic assessment. From the total of four standardized protocols, parent questionnaires and teacher rating scales are the most commonly used, with 66.66% and 62.66% reporting using each type respectively. In addition, 36.50% use the Behavior Assessment System for Children Second Edition (BASC II; Reynolds & Kamphaus, 2007) which consists of rating scales such as the Teacher Rating Scales, Parent Rating Scales, Student Observation System, Structured Developmental History and Self Report of Personality. Home Language Surveys selected by school districts are used by 43.20% of respondents.

From the total of five non-standardized assessment protocols, classroom observations and work samples are the most commonly used supplemental assessments, with 76.00% and 62.66% of respondents report having used them as part of their assessment batteries. Curriculum-based measures are used by 34.66% of the participants, and dynamic assessment measures are used by 32.43% of the participants.

It is interesting to note that all the school psychologists in the study report having used the BASC II (Reynolds & Kamphaus, 2007) as a standardized and comprehensive supplemental assessment tool, and all the special educators report using classroom observations and curriculum-based measures as informative assessment tools to monitor the literacy development of students in their classrooms. Five speech language pathologists indicate that they also use language samples as supplemental assessment protocols.

As school psychologists primarily administer the cognitive abilities tests and special educators the curriculum-based measures, the language testing is left to speech language pathologists in the field. Table 3 shows that the most popular tests are the Clinical Evaluation of Language Fundamentals Fourth Edition (CELF IV; Semel, Wiig, & Secord, 2003), Expressive One Word Picture Vocabulary Test Fourth Edition (EOWPVT IV; Martin & Brownell, 2010a), and the Receptive One Word Picture Vocabulary Test Fourth Edition (ROWPVT IV; Martin & Brownell, 2010b). Sixty-five percent of speech language pathologists report that they used these tests in their practice. All of these respondents also mention that they preferred these tests because they can be administered in both English and Spanish. Of the speech language pathologists, 50% also reported that these tests were the most helpful in making a differential diagnosis between students who are acquiring English as a second language and those who have language learning disabilities.

⁷ Supplemental assessments are alternative assessments that professionals use to get a holistic evaluation of a child rather than relying solely on cognitive abilities and achievement tests to make a differential diagnosis (Sparrow & Davis, 2000).

Table 3
Number of Participants Using Language Tests

Participants	CELF ^a	CELF (Sp) ^b	CTOPP ^c	TOPPS ^d	PLS ^e	PLS (Sp) ^f	EOWPVT ^g	EOWPVT (Sp) ^h	ROWPVT ⁱ	RWOPVT (Sp) ^j
Speech Pathologists	17	11	6	0	14	5	20	12	18	10
School Psychologists	4	4	10	0	2	2	4	2	2	1
Special Educators	3	2	1	1	2	2	1	1	1	1
Para-professionals	2	1	2	0	0	1	1	1	1	1
Total	26	18	19	1	18	10	26	16	22	13
Percentage	34.66	24	25.33	1.33	24	13.33	34.66	21.33	29.33	17.33

Note. Participants reported using more than one of these tests in their assessment practices and, therefore, totals don't add up to 100%.

^aClinical Evaluation of Language Fundamentals Fourth Edition (Semel, Wiig, & Secord, 2003)

^bClinical Evaluation of Language Fundamentals Fourth Edition, Spanish (Wiig, Semel, & Secord, 2006)

^cComprehensive Test of Phonological Processing Second Edition (Wagner, Torgesen, Rashotte, & Pearson, 2013)

^dTest of Phonological Processing in Spanish (Francis et al., 2001)

^ePreschool Language Scale, Fifth Edition (Zimmerman, Steiner, & Pond 2011)

^fPreschool Language Scale, Fifth Edition, Spanish Edition (Zimmerman, Steiner, & Pond, 2012)

^gExpressive One Word Picture Vocabulary Test Fourth Edition (Martin & Brownell, 2010a)

^hExpressive One Word Picture Vocabulary Test Spanish Bilingual Test (Martin & Brownell, 2012a)

ⁱReceptive One Word Picture Vocabulary Test Fourth Edition (Martin & Brownell, 2010b)

^jReceptive One Word Picture Vocabulary Test Spanish Bilingual (Martin & Brownell, 2012b)

Table 4
Participant Responses to District Policies for Assessment of ELLs

Participants	Response to Intervention Model		Nonverbal and/or performance tests		Testing in L1 and L2		Language Support (Bilingual/Immersion Programs)	
	Yes	No	Yes	No	Yes	No	Yes	No
Speech Pathologists	2	5	0	12	20	0	2	0
School Psychologists	1	10	0	10	1	0	1	0
Special Educators	1	5	0	8	0	0	0	0
Para-professionals	0	1	0	0	1	0	1	0
Total	4	21	N/A	30	22	N/A	4	N/A
Percentage	5.33	28.00	N/A	40.00	29.33	N/A	5.33	N/A

Note. Sixty percent of survey respondents skipped this question; only a few definitively answered yes or no. A "0" indicates no response.

Table 4 shows that of the 75 survey respondents, four respondents (5.33%) indicate that their school or district follows a structured RTI model, 21 respondents (28.00%) report that their school or district does not follow a structured RTI model, and 50 respondents (66.66%) did not answer the question. When asked to describe the RTI model that was followed in their school/district, three of the four respondents made the following observations: “RTI is followed in resource and speech, but it is not a school-wide policy;” “RTI is talked about, but scarcely seen in practice;” and “Literacy intervention in all grade levels for the bottom 10% readers functions as RTI.”

In terms of access to nonverbal and/or performance tests, 30 respondents (40.00%) report that they do not have access to these tests and do not use them in their practice. Though none of the respondents reported using nonverbal tests, 45 respondents (60.00%) did not respond to the question.

The other questions regarding district policies were directed at testing in both L1 and L2 and language support. Results indicate that 20 of the 31 speech pathologists (64.50%) report that bilingual language tests were prescribed by their school districts. Sixty percent of these respondents also say that they used the EOWPVT IV (Martin & Brownell, 2010) and the ROWPVT IV (Martin & Brownell, 2010) in both English and Spanish to achieve this goal.

Language support refers to bilingual and immersion programs to help ELLs transition to the second language. Four professionals in total (5.33%) report that they have some form of language support in their school or district. Two respondents describe the language support offered by their school or district as being targeted intervention groups and pull-out support for students without IEPs.

With regard to the indicators of language differences versus disorders, four dominant response patterns emerged from a pilot study⁸ of 15 respondents:

- Students who are acquiring English reach literacy milestones faster than students who have language learning disabilities.
- Students must be tested in both L1 and L2, and the problems with literacy skills should be seen across both languages for a disability to be confirmed.
- Students with a disability will have difficulties grasping concepts and difficulties with nonverbal/performance tests in addition to linguistic tests.
- Even after the child is given a couple of years to acquire English, he/she will still manifest problems in reading, writing, and oral language development, suggesting that a language learning disability might be present.

Using this data from the pilot study, I constructed a multiple-choice questionnaire for the larger sample of 75 respondents, including the above four options as answer choices

⁸ For the pilot study, I utilized a questionnaire with 12 open-ended questions that I distributed to professionals in the field to find out about the current assessment tools, district policies, and indicators of differences versus disorders that they had observed in their practice. A sample of 15 respondents (7 speech language pathologists, 4 school psychologists, and 4 special educators) returned the questionnaire either in person or via email. Based on the information gathered through this initial questionnaire, the current survey was developed with the same questions, but with multiple answer choices in order to make it easier and less time-consuming for a larger, anonymous sample to participate in the study.

and adding an “other” column to generate more thoughts on the process. All of the respondents chose at least one of the answer choices, with the majority of 70 respondents (93.33%) choosing all of the answer choices.

Discussion

Though professionals in the field approached the differential diagnosis issue from varying angles based on their focus areas of assessment and diagnosis, there were certain markers that most of them identified before a diagnosis was made. The results also suggested that most professionals reported using both standardized cognitive abilities tests as well as alternative, informal assessments in their practice. This suggests a move away from the discrepancy model and a move toward comprehensive assessment rather than an overreliance on cognitive abilities tests.

Overall, the survey respondents report that they assessed various aspects of oral language development and literacy skills in order to make a differential diagnosis, using the reason for referral and the role they played as part of a multi-disciplinary team in order to provide students with the best educational outcomes. One speech pathologist commented, “I don't target reading/writing, but I work on expressive/receptive language, comprehension, vocabulary development, syntax/morphology, etc.” In a similar fashion, a school psychologist emphasizes that he or she collects “language samples in both L1 and L2 in addition to testing students on subtests of vocabulary and word recognition. But assessment depends on the kid’s motivation and parent involvement.” Finally, a special educator says that his or her main areas of interest while assessing ELLs are “oral language development, reading, phonemic awareness and communication skills.”

Currently, some school districts in California seem to be in a phase where there is a shift in thinking about the discrepancy model, and more professionals in the field are relying on alternate forms of assessment such as teacher rating scales, parent questionnaires, and student self-reports as a means to making a more holistic assessment of the child. Though subtests of cognitive abilities are still used, it is important to note that assessment batteries have been expanded to provide more situated information regarding the learning styles of ELLs by considering bilingual language testing and observations in both home and school settings before a diagnosis is confirmed. This suggests a clear break away from IQ testing as the only means to make a diagnosis.

Although there has been some progress in terms of the assessment of ELLs, the following are some policy changes that have positive theoretical implications. The 2004 reauthorization of the IDEA (Smith, 2005) stressed the importance of effective diagnosis and support of students with disabilities through a move away from the discrepancy model toward RTI, which is a more holistic model of progress monitoring throughout the school year. Of the 75 survey respondents, four respondents (5.33%) indicated that their school or district followed a structured RTI model, 21 respondents (28.00%) reported that their school or district did not follow a structured RTI model, and 50 respondents (66.66%) did not answer the question. This may suggest that they were not familiar with district policies or did not want to answer a more open-ended question that asked for more specific details. Though some districts are using some variation of the RTI for the identification, referral, and educational placement of students with learning problems, there seems to be a pressing need to make the RTI model more systematic and

standardized across school districts. The effective implementation of RTI could help to alleviate the problems of overrepresentation or misdiagnosis of students who are ELLs as having LLD.

Another important consideration is the use of and access to nonverbal or performance tests as well as the establishment of language support programs, such as bilingual and immersion programs, to support ELLs. In addition, professionals should have access to alternate non-standardized assessment procedures, such as work samples, classroom observations, rating scales, checklists, and batteries of tests that support a more holistic perspective on the child in question in determining a diagnosis. This assessment piece is crucial because language data helps distinguish characteristics associated with language acquisition from those associated with language disorders. These tools could potentially reduce the number of ELLs who are misidentified as having language learning disabilities.

Finally, teachers in the general education setting are the first to observe students who are performing below grade level and are likely to refer these students for special education services. They play an important role in providing language support and pre-referral intervention as a means to reduce the number of special education referrals. An important piece of the puzzle is providing teachers with both pre-service and in-service professional development opportunities that focus on pedagogical concerns related to teaching students from different cultural and linguistic backgrounds as well as education that will help them to identify concerns that might signify a disability rather than the typical, slow acquisition of English as a second language.

Future Directions

In terms of future research, it would be helpful to work closely with school districts and interview teachers, policymakers, and other professionals to get a more detailed picture of the daily practice as well as global district-wide level obstacles to referral processes and assessment practices and procedures. It would also be helpful to survey a targeted demographic in terms of age, gender, race, and a population who is representative of specific school districts or states so as to establish a baseline and derive more detailed data based on differences seen across U.S. school districts.

In regard to the limitations of this study, an anonymous survey prevents follow-up questions. Some questions were skipped, and there is no means of filling in the gaps in data. It would be helpful to expand on the study by interviewing professionals in the field with more open-ended questions as opposed to listing multiple options that might have prompted forced answer choices.

This research study provides a springboard for future research on assessment procedures for ELLs. By taking stock of assessment procedures being used in daily practice, we can determine if theoretical recommendations are being followed. Moreover, a continued model of holistic assessment practices—such as utilizing both standardized and non-standardized tests and including supplemental assessments—will reduce the number of ELLs who are referred for special education services and address existing differential diagnosis issues. Bilingual assessments across various learning contexts, as well as teacher preparation, are key in ensuring that there is a sustainable, ongoing, working model that is incorporated in the school system. In addition, the standardization of the RTI model at the policy level across districts and states will help in ensuring that

ELLs receive an appropriate educational placement, as the focus of assessment will be on reflective teaching and assessment at an instructional level. The current trend of assessment policy for ELLs, which ensures a move away from the IQ-discrepancy model, is highly reassuring. The next step forward in establishing a standardized RTI model will be unsurpassed in terms of addressing all assessment gaps to best serve the ELL population.

Author Biography

Sunaina Shenoy is a Doctoral Candidate in the Joint Doctoral Program in Special Education offered by University of California at Berkeley and San Francisco State University. Originally from Bangalore, India, Sunaina earned her M.Sc. in Developmental Psychology from Bangalore University before moving to the U.S. where she completed her M.Ed. in Special Education from University of Illinois at Chicago. Her research interests primarily focus on assessment issues related to differentiating between language differences and disorders in English Language Learners; the link between oral language development and emergent literacy; and the impact of culture on disabilities.

References

- Artiles A., & Ortiz, A. (2002). *English language learners with special education needs*. McHenry, IL: Center for Applied Linguistics and Delta Systems Co., Inc.
- August, D., & Hakuta, K. (Eds.). (1998). *Educating language minority children*. Washington, DC: National Academies Press.
- Bateman, B. (1965). An educator's view of a diagnostic approach to learning disorders. In J. Hellmuth (Ed.), *Learning disorders* (Vol. 1, pp. 219–239). Seattle, WA: Special Child.
- Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge, England: Cambridge University Press. doi:10.1017/CBO9780511605963
- Carroll, J.B. (1993). *Human cognitive abilities*. Cambridge, England: Cambridge University Press. doi:10.1017/CBO9780511571312
- Connor, M., & Boskin, J. (2001). Overrepresentation of bilingual and poor children in special education classes: A continuing problem. *Journal of Children & Poverty*, 7(1), 23–32. doi:10.1080/10796120120038019
- Crago, M., & Paradis, J. (2003). Two of a kind? Commonalities and variation in languages and language learners. In Y. Levy & J. Schaeffer (Eds.), *Language competence across populations: Towards a definition of specific language impairment* (pp. 97–110). Sussex, England: Psychology Press.
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. San Diego, CA: College Hill.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire* (Vol. 23). Tonawanda, NY: Multilingual Matters Ltd.
- Damico, J. S., & Simmons-Mackie, N. N. (2003). Qualitative research and speech-language pathology: A tutorial for the clinical realm. *American Journal of Speech Language Pathology*, 12(2), 131–143. doi:10.1044/1058-0360(2003/060)
- Donovan, S., & Cross, C. T. (2002). *Minority students in special and gifted education*. Washington, DC: National Academies of Education.

- Elliott, C. D. (2007). *Differential Ability Scales—Second Edition (DAS-II)*. [Measurement instrument]. San Antonio, TX: Psychological Corporation.
- Epps, S., Ysseldyke, J. E., & Algozzine, B. (1985). An analysis of the conceptual framework underlying definitions of learning disabilities. *Journal of School Psychology, 23*(2), 133–144.
- Fletcher, J. M., Coulter, W. A., Reschly, D. J., & Vaughn, S. (2004). Alternative approaches to the definition and identification of learning disabilities: Some questions and answers. *Annals of Dyslexia, 54*, 304–331.
- Francis, D., Carlo, M., August, D., Kenyon, D., Malabonga, V., Caglarcan, S., & Louguit, M. (2001). *Test of Phonological Processing in Spanish* [Measurement instrument]. Washington, DC: Center for Applied Linguistics.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly, 41*(1), 93–99.
doi:10.1598/RRQ.41.1.4
- Genesee, F., Paradis, J., & Crago, M. B. (2004). *Dual language development & disorders: A handbook on bilingualism & second language learning* (Vol. 11). Baltimore, MD: Paul H. Brookes Publishing.
- Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children, 71*(2), 149–164.
doi:10.1177/001440290507100202
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. *American Educator, 32*(2), 8–23, 42–44.
- Gutkin, T. B., & Nemeth, C. (1997). Selected factors impacting decision making in pre-referral intervention and other school-based teams: Exploring the intersection between school and social psychology. *Journal of School Psychology, 35*(2), 195–216. doi:10.1016/S0022-4405(97)00005-8
- Haager, D., Vaughn, S., & Klingner, J. K. (2007). *Validated practices for three tiers of reading intervention*. Baltimore, MD: Brookes Publishing Company.
- Hamayan, E., & Damico, J. S. (Eds.). (1991). *Limiting bias in the assessment of bilingual students*. Austin, TX: PRO-ED.
- Klingner, J. K., Artiles, A. J., & Barletta, L. M. (2006). English language learners who struggle with reading: Language acquisition or LD? *Journal of Learning Disabilities, 39*(2), 108–128. doi:10.1177/00222194060390020101
- Klingner, J. K., & Harry, B. (2006). The special education referral and decision-making process for English language learners: Child study team meetings and placement conferences. *The Teachers College Record, 108*(11), 2247–2281. doi:10.1111/j.1467-9620.2006.00781.x
- Linan-Thompson, S., Cirino, P. T., & Vaughn, S. (2007). Determining English language learners' response to intervention: Questions and some answers. *Learning Disability Quarterly, 30*(3), 185–195. doi:10.2307/30035563

- Liu, Y. J., Ortiz, A. A., Wilkinson, C. Y., Robertson, P., & Kushner, M. I. (2008). From early childhood special education to special education resource rooms: Identification, assessment, and eligibility determinations for English language learners with reading-related disabilities. *Assessment for Effective Intervention, 33*(3), 177–187. doi:10.1177/15345084307313247
- Martin, N., & Brownell, R. (2010a). *Expressive One Word Picture Vocabulary Test-Fourth Edition (EOWPVT-IV)* [Measurement instrument]. Austin, TX: PRO-ED.
- Martin, N., & Brownell, R. (2010b). *Receptive One Word Picture Vocabulary Test-Fourth Edition (ROWPVT-IV)* [Measurement instrument]. Austin, TX: PRO-ED.
- Martin, N., & Brownell, R. (2012a). *Expressive One Word Picture Vocabulary Test-Fourth Edition: Spanish (EOWPVT-IV)* [Measurement instrument]. Austin, TX: PRO-ED.
- Martin, N., & Brownell, R. (2012b). *Receptive One Word Picture Vocabulary Test-Fourth Edition: Spanish (EOWPVT-IV)* [Measurement instrument]. Austin, TX: PRO-ED.
- Mercer, C. D. (1997). *Students with learning disabilities*. Columbus, OH: Merrill.
- Ortiz, A. A., & Yates, J. R. (2002). Considerations in the assessment of English language learners referred to special education. In A. J. Artiles & A. A. Ortiz (Eds.), *English language learners with special education needs* (pp. 65–85). Washington, DC: Center for Applied Linguistics and Delta Systems Co., Inc.
- Ortiz, S. O. (2002). Best practices in nondiscriminatory assessment. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (Vol. 2, pp. 1321–1336). Bethesda, MD: National Association of School Psychologists.
- Paradis, J. (2005). Grammatical morphology in children learning English as a second language: Implications of similarities with specific language impairment. *Language, Speech, and Hearing Services in Schools, 36*(3), 172–187. doi:10.1044/0161-1461(2005/019)
- Reschly, D. J. (2005). Learning disabilities identification primary intervention, secondary intervention, and then what? *Journal of Learning Disabilities, 38*(6), 510–515. doi:10.1177/00222194050380060601
- Reynolds, C. R., & Kamphaus, R. W. (2007). *BASC II: Behavior Assessment System for Children Manual* [Measurement instrument]. Circle Pines, MN: American Guidance Service.
- Semel, E. M., Wiig, E. H., & Secord, W. (2003). *CELF-IV: Clinical Evaluation of Language Fundamentals-Fourth Edition* [Measurement instrument]. San Antonio, TX: Psychological Corporation.
- Smith, T. E. (2005). IDEA 2004: Another round in the reauthorization process. *Remedial and Special Education, 26*(6), 314–319. doi:10.1177/07419325050260060101
- Sparrow, S. S., & Davis, S. M. (2000). Recent advances in the assessment of intelligence and cognition. *Journal of Child Psychology and Psychiatry, 41*(1), 117–131
- Speece, D. L., Case, L. P., & Molloy, D. E. (2003). Responsiveness to general education instruction as the first gate to learning disabilities identification. *Learning Disabilities Research & Practice, 18*(3), 147–156. doi:10.1111/1540-5826.00071

- Stanovich, K. E., & Siegel, L. S. (1994). Phenotypic performance profile of children with reading disabilities: A regression-based test of the phonological-core variable-difference model. *Journal of Educational Psychology*, *86*(1), 24–53.
doi:10.1037/0022-0663.86.1.24
- Stark, J., & Wallach, G. P. (1980). The path to a concept of language learning disabilities. *Topics in Language Disorders*, *1*(1), 1–14.
- U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. (2011). *Education longitudinal study of 2002*. Retrieved from <http://nces.ed.gov/>
- Valenzuela, J. S. D., Copeland, S. R., Qi, C. H., & Park, M. (2006). Examining educational equity: Revisiting the disproportionate representation of minority students in special education. *Exceptional Children*, *72*(4), 425–441.
- Vaughn, S. R., Bos, C. S., & Schumm, J. S. (2006). *Teaching exceptional, diverse, and at-risk students in the general education classroom, IDEA 2004 Update Edition*. Boston, MA: Allyn and Bacon.
- Vellutino, F. R., Scanlon, D. M., & Lyon, G. R. (2000). Differentiating between difficult-to-remediate and readily remediated poor readers: More evidence against the IQ-achievement discrepancy definition of reading disability. *Journal of Learning Disabilities*, *33*(3), 223–238. doi:10.1177/002221940003300302
- Wagner, R., Torgesen, J., Rashotte, C., & Pearson, N. (2013). *Comprehensive Test of Phonological Processing-Second Edition (CTOPP-II)* [Measurement instrument]. Austin, TX: PRO-ED.
- Wallach, G. P., & Butler, K. G. (1995). Language learning disabilities: Moving in from the edges. *Topics in Language Disorders*, *16*(1), 1–26. doi:10.1097/00011363-199511000-00003
- Wechsler, D. (2003) *Wechsler Intelligence Scale for Children—Fourth Edition (WISC-IV)* [Measurement instrument]. San Antonio, TX: The Psychological Corporation.
- Wiig, E., Semel, E. M., & Secord, W. (2006). *CELF—4 Clinical Evaluation of Language Fundamentals—Fourth Edition—Spanish Edition* [Measurement instrument]. San Antonio, TX: The Psychological Corporation.
- Woodcock, R. W., & Johnson, M. B. (2001). *Woodcock–Johnson Tests of Cognitive Abilities Third Edition* [Measurement instrument]. Allen, TX: DLM Teaching Resources.
- Woodcock, R.W., Munoz-Sandoval, A.F, McGrew, K.S & Mather, N. (2007). *Bateria III Woodcock-Muñoz Third Edition* [Measurement instrument]. Rolling Meadows, IL: Riverside Publishing.
- Zehler, A. M., Fleischman, H. L., Hopstock, P. J., Stephenson, T. G., Pendzick, M. L., & Sapru, S. (2003). *Descriptive study of services to LEP students and LEP students with disabilities: Vol. I. Research Report*. U.S. Department of Education, Office of English Language Acquisition (OELA). Arlington, VA: Development Associates, Inc.
- Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (2011). *PLS-5: Preschool Language Scale-5* [Measurement instrument]. San Antonio, TX: Psychological Corporation.
- Zimmerman, I. L., Steiner, V. G., & Pond, R. E. (2012). *PLS-5: Preschool Language Scale Spanish Screening Test-5* [Measurement instrument]. San Antonio, TX: Psychological Corporation.