

Significant Discrepancy and Consideration of Speech or Language Impairment

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The following resource was created to answer questions that have arisen around the use of norm-referenced tests as part of a comprehensive assessment when addressing criteria for Speech or Language Impairment (SLI). A comprehensive assessment for addressing criteria for SLI is part of a comprehensive special education evaluation. More information about comprehensive special education evaluation is available on the Wisconsin DPI Comprehensive Special Education Evaluation web site. Wisconsin's SLI rule was revised August 1, 2021 and can be found on the [Wisconsin Department of Public Instruction Speech or Language Impairment website](#).

What does the term “significant discrepancy” in the SLI rule mean?

As defined in the [Wisconsin DPI rule for SLI](#), “significant discrepancy” means performance on a norm-referenced assessment that meets the cutoff score for a speech or language disorder and is significantly below age- or grade-level expectations relative to a normative sample, often reported as a percentile or standard score.”

When conducting an assessment where the team is considering SLI, speech-language pathologists (SLPs) should be considering the preponderance of evidence that would indicate a significant discrepancy of a student’s communication skills from expected communication skills given the student’s age, culture, and linguistic background. Assessment methods would include a variety of tasks and allow the SLP to observe or interact with the student in a variety of situations and environments. The impact of the student’s communication difficulty must include documentation of its effects on their academic performance, or their social, emotional, or vocational development.

How do we apply “significant discrepancy” when considering SLI?

SLPs should follow the comprehensive assessment model and gather information from a variety of sources. A significant discrepancy in score on a norm-referenced test must be observable or captured across contexts and assessment methods. Norm-referenced tests are just one part of the model even though they are often the “go to” for “finding out if a student has an impairment.”

Comprehensive Assessment Model
4 Part Model for Comprehensive Assessment

<p>Academic Activities</p> <ul style="list-style-type: none"> ● Artifact analysis ● Curriculum-based assessment ● Observations in school (natural) settings ● Educational records 	<p>Speech-Language Probes</p> <ul style="list-style-type: none"> ● Case history ● Interviews ● Language or narrative samples ● Stimulability ● Dynamic assessment ● Play-based assessment
<p>Contextualized Tests</p> <ul style="list-style-type: none"> ● Norm-referenced measures of academic achievement ● Curriculum benchmarks 	<p>Decontextualized Tests</p> <ul style="list-style-type: none"> ● Norm-referenced speech-language tests (parsed skills: articulation, semantics, syntax, morphology, fluency, etc.)

Ireland, Marie. "The Real Requirements Behind Eligibility Decision Making in Schools". Lecture, ASHA Connect, Chicago, IL. July 19, 2019.

Collecting information from all four quadrants of the comprehensive assessment model ensures IEP teams consider the natural environment and the student’s performance within that environment. SLPs must partner with classroom teachers and review how the student is currently performing across contexts. SLPs need to also use “speech-language probes” and take detailed case histories, which includes interviewing students, families, and educators who know the student best. Speech-language probes include language samples, stimulability testing, and dynamic and play-based assessment. When considering speech or language disorders that may qualify a student for SLI (i.e., speech, voice, fluency, language), rubrics have been adopted from the Virginia Department of Education (VDOE) to guide decision-making after the SLP has gathered data. These rubrics can be found as they are published, with permission from VDOE, on the Wisconsin DPI Speech-Language website within the corresponding category domain (i.e., speech, voice, fluency, language).

Why was -1.75 SD removed from the language criteria for SLI?

As a profession, there has been an overreliance on formal (i.e., norm-referenced) assessments in identification of speech or language impairments (Fulcher-Rood, Castilla-Earls, & Higginbotham 2018; Ireland & Conrad 2016), and research has shown that test selection is often not dependent on student need or psychometric properties of the test (Merrell & Plante 1997; Betz, Eickhoff, & Sullivan 2013; Fulcher-Rood, Castilla-Earls, & Higginbotham 2020).

The chance of obtaining a score of -1.75 SD across more than one formal assessment is highly unlikely and has not shown to be evidence of an impairment (Plante and Vance 1994; Spaulding et al. 2006).

The removal of this arbitrary cutoff score and the addition of other evidence-based assessment practices in the criteria will allow SLPs to use their clinical judgment as well as use norm-referenced assessments in the way they were intended. (Plante & Vance 1994; Spaulding, Plante, & Farinella 2006; Ireland & Conrad 2016).

Why must SLPs shift thinking around norm-referenced assessments as determiners of SLI?

The Individuals with Disabilities Education Act (IDEA) requires that when conducting a special education evaluation, the public agency must “use a variety of assessment tools and strategies to gather relevant functional, developmental, and academic information about the [student], including information provided by the parent “ (C.F.R. §§300.304 (b)(1) and to “not use any single measure or assessment as the sole criterion for determining whether a [student] is a [student] with a disability ” (C.F.R. §§300.304 (b)(2)). In addition, IDEA states that “assessments and other evaluation materials used to assess a [student]...are selected and administered so as not to be discriminatory on a racial or cultural basis; are provided and administered in the child's native language or other mode of communication and in the form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is clearly not feasible to so provide or administer; are used for the purposes for which the assessments or measures are valid and reliable” (U.S.C. §§300.304 (c)(1)(i)-(iii)).

In order to be in accordance with IDEA as well as employ evidence-based assessment practices, it is necessary to shift thinking to utilize the comprehensive assessment model. It is through the gathering of information from a variety of sources and assessments that evaluators are able to gain an understanding of the whole child.

Will the removal of -1.75 SD from the SLI criteria mean more students are identified with SLI or lead to greater disproportionality for certain student groups?

The removal of an arbitrary cutoff score and the recommendation to utilize a variety of assessment methods will lead to more accurate identification of students, including students who are culturally and linguistically diverse. Dr. Catherine Crowley from the Leader’s Project at Columbia University argues that there are limitations of norm-referenced tests especially for students who are culturally and linguistically diverse, as well as for those who are navigating poverty (2012). The group of students a norm-referenced test is normed on is often more limited in scope than the students we see in schools. IEP teams need to be careful and not use these tests if the students we are evaluating are not reflected in the normative sample of a particular test. Students who are bilingual or multilingual and students who use a dialect other than General American English are disproportionately identified as needing special education (Farrugia-Bernard 2018).

Norm-referenced tests also assume that all children have had the same experiences and opportunities prior to the evaluation itself; students come to school with a wide variety of experiences and not all children have similar preschool and early childhood experiences. Students should not be penalized on assessments based on their previous experiences and exposure. Skills evaluated by norm-referenced tests more often assess skills that are tied or associated with culture and economic status, such as vocabulary, rather than skills that can distinguish a student as having a language disorder (Leaders Project 2012).

In addition to the reasons outlined above, norm-referenced tests artificially isolate discrete skills, which may or may not be related to classroom demands or the functional use of the skills in a student's natural learning environment.

The comprehensive assessment model is consistent with the Converging Evidence Framework outlined in a 2020 research article by Castilla-Earls, Bedore, Rojas, Fabiano-Smith, Pruitt-Lord, Restrepo, and Peña. Castilla-Earls et al. recommend evaluators utilize this framework when assessing students who are bilingual or multilingual to collect a variety of evidence and weigh all information equally.

The Converging Evidence Framework was created to assist speech-language pathologists in engaging in culturally responsive assessment practices to more accurately identify students with a speech or language impairment.

The SLP would use the following assessment practices and consider information from all areas when making decisions about individual students and their needs:

- Parent, caregiver, teacher, and SLP concerns
- Norm-referenced assessment results
- Observations of student learning
- Information regarding student connected speech and language production

This framework has broader utility because it is based on culturally responsive assessment practices and can be applied with all students versus needing a handbook for each cultural pattern. If the evaluator understands second language acquisition and has a structure to follow, it is up to the evaluator to apply observation, language samples, and authentic dynamic assessments when considering speech or language impairment.

How do SLPs appropriately select and consider results from norm-referenced tests?

The following considerations may guide evaluators when selecting and considering results from utilizing norm-referenced assessments:

- Look at a test's manual to determine its purpose. Some tests are designed to determine disorder from typical development while others are designed to determine severity or to profile a student's strengths and weaknesses (Plante 2020).

- Look at a test’s manual to determine its psychometric properties, such as:
 - How accurate a test is in identifying a student as having a disorder (sensitivity) as well as accurately identifying students who do not have a disorder (specificity).
 - How stable and consistent the test data are (reliability).
 - Whether or not the test items accurately capture what they were intended to capture (validity).
 - If the test manual does not include this important information, consider writing the test developers and asking for this information.
- Consider additional research documenting the test’s psychometric properties.
- Look at the normative sample for the individual assessment. Are the characteristics of the student being evaluated similar to those of the normative sample (e.g., race, ethnicity, language spoken, socioeconomic status)?
- Review individual test items for potential bias for students who are culturally and linguistically diverse or for students who have had limited exposure.
 - Does the student have experience completing the types of tasks on the test?
 - Has the student had adequate exposure to the content in the test (e.g., vocabulary, world knowledge)?
 - Are the tasks practiced in the student’s culture (e.g., asking for known information; requiring eye contact with unfamiliar adults; requiring answers in a short amount of time)?
 - Was the test designed for students who are bilingual, multilingual, or who speak a dialect other than General American English?
- For students who are bilingual or multilingual or who speak a dialect other than General American English: reporting standard scores would be inappropriate. IDEA does not require the use of norm-referenced tests. If norm-referenced tests are used with culturally and linguistically diverse students, evaluators could describe the items and student responses if they provide meaningful information about the student’s communicative competence.
- If a norm-referenced test is appropriate to use, look at how the standard score from the norm-referenced test fits within the results from other assessments administered. What is the preponderance of evidence saying about the whole child?

Summary

The use of norm-referenced tests is one component of conducting a comprehensive assessment and should be balanced with obtaining information with a variety of other sources including classroom artifacts, classroom observations, and various SLP probes. Norm-referenced tests are not appropriate for students who do not reflect the normative sample. Determining whether a student has a “significant discrepancy” on a norm-referenced test is one component in determining whether or not a student may

meet criteria for SLI and IEP teams are encouraged to reflect on all of the data collected in considering a SLI.

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