



## **Assessing academic performance for students with disabilities: Universal Design for Assessment (UDA)**

### **What are the challenges related to assessing the learning of students with disabilities?**

Most learning assessments worldwide, particularly in low- and middle-income countries (LMICs), are designed without considering the needs of learners with disabilities. As a result, even when learning environments are inclusive, inaccessible assessment tools and practices do not accurately measure the learning outcomes of learners with disabilities. As a result, the learning outcomes of students with disabilities are obtained but may not be accurately measured. Likewise, as the assessments do not accurately measure the learning of a student with a disability, these assessments cannot be used by teachers to adapt or individualize instruction as needed. Often, education practitioners try to adapt or modify existing assessments but, in the process, modify the tools or assessment practice to such an extent, they no longer have comparable data.

### **What is Universal Design for Assessment?**

Universal Design for Assessment (UDA) is the practice of designing assessments that are accessible and equitable for all learners.<sup>i</sup> A universally designed assessment any barriers that are irrelevant to the content being tested.<sup>ii</sup> This allows diverse learners to accurately demonstrate what they know while maintaining the integrity of the test itself.<sup>iii</sup>

### **Why is UDA important?**

Assessment is used in all aspects of education, from classroom quizzes to large-scale standardized tests. However, many assessments are not adequately designed for the diverse populations that will take them. These include people with disabilities, language learners, cultural minorities, and those from lower socioeconomic backgrounds.<sup>iv</sup> Assessments may contain 'access barriers' that are not relevant to the content being tested.

**UDA  
= better tests  
for everyone**

Examples of access barriers might include the following:

- Accurately recognizing words<sup>v</sup>
- Fluency in the language of the assessment<sup>vi</sup>
- Cultural familiarity with certain words or concepts<sup>vii</sup>
- Visual or sensory information such as color<sup>viii</sup>
- Emotional states such as motivation or anxiety<sup>ix</sup>
- Executive order functioning, or being able to complete a task in a certain order<sup>x</sup>
- Writing<sup>xi</sup>
- Performing mathematical calculations<sup>xii</sup>

Although assessments are intended to measure proficiency, access barriers can prevent learners from vulnerable populations from being able to equally access the content.<sup>xiii</sup> For instance, a learner with a reading-related disability might have difficulty answering a mathematics question that contains complex sentences and vocabulary. The learner would not be able to adequately demonstrate their knowledge of the concept being tested, leading to inaccurate assumptions of their abilities in mathematics.<sup>xiv</sup>

Although accommodations for learners with disabilities can be used during testing, this is not the same thing as UDA. Accommodations are external methods to make a test accessible, while UDA creates assessments that are inclusive of learners with disabilities from beginning.<sup>xv</sup>

### What are some examples of an assessment made using UDA?

An assessment made using UDA has the following characteristics:<sup>xvi</sup>

- Test designers include the needs of diverse learners at the earliest stages of the assessment design process and field-tested with an assessment population that includes learners with disabilities, linguistic, and cultural minorities
- The assessment can directly measure learner proficiency in the content without the influence of any irrelevant knowledge or skills.
- All questions in the assessment are checked for biases that might advantage or disadvantage certain groups of learners.
- Reasonable accommodations can be used without significantly changing the nature of the assessment.
- Instructions and text are written using language that is simple, concise, and developmentally appropriate.
- All text and non-text items are legible using font and size that can be viewed by persons with low vision.

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<sup>i</sup> Thompson, S., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large scale assessments*. University of Minnesota, National Center on Educational Outcomes.

<sup>ii</sup> (Ketterlin-Geller, 2005; Thompson, Johnstone, & Thurlow, 2002; Hanna, 2005). Ketterlin-Geller, L. R. (2005). Knowing what all students know: Procedures for developing universal design for assessment. *Journal of Technology, Learning and Assessment*, 4(2). <https://ejournals.bc.edu/index.php/jtla/article/view/1649>; Thompson, S., Johnstone, C. J., & Thurlow, M. L. (2002).; Hanna, E. I. (2005). *Inclusive design for maximum accessibility: A practical approach to Universal Design* [Research Report]. Pearson

<sup>iii</sup> Thompson, S., Johnstone, C. J., & Thurlow, M. L. (2002).

<sup>iv</sup> Ibid.

<sup>v</sup> Ketterlin-Geller, L. R. (2008). Testing students with special needs: A model for understanding the interactions between assessment and student characteristics in a universally designed environment. *Educational Measurement: Issues and Practice*, 27, 3-16. doi: 10.1111/j.1745-3992.2008.00124.x; Christensen, L. L., Shyyan, V., & Johnstone, C. (2014). Universal design considerations for technology-based, large-scale, next-generation assessments. *Perspectives on Language and Literacy*, 40(1), 23-31.

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<sup>vi</sup> Jamgochian, E. M. (2010). *Designing and validating a measure of teacher knowledge of universal design for assessment* [Doctoral dissertation]. University of Oregon

<sup>vii</sup> Hayes, A., Turnbull, A., & Moran, N. (2018). *Universal design for learning to help all children read: Promoting literacy for learners with disabilities*. USAID

<sup>viii</sup> Johnstone, C., Thurlow, M., Moore, M., & Altman, J. (2006). *Using systematic item selection methods to improve universal design of assessments*. University of Minnesota, National Center on Educational Outcomes.

<sup>ix</sup> Christensen, L. L., Shyyan, V., & Johnstone, C. (2014).

<sup>x</sup> Ibid.

<sup>xi</sup> Ibid.

<sup>xii</sup> Ibid.

<sup>xiii</sup> Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Alexandria, VA: ASCD.

<sup>xiv</sup> Ketterlin-Geller, L. R. (2008).

<sup>xv</sup> Ibid.

<sup>xvi</sup> Thompson, S., Johnstone, C. J., & Thurlow, M. L. (2002); Johnstone, C., Thurlow, M., Moore, M., & Altman, J. (2006)