Applying Universal Design to Assessments

Assessment in higher education courses typically occurs in the form of examinations. However, assessment can be thought of in broader terms. Indeed, assessment is the systematic collection, review, and use of information for the purpose of improving student learning and development (Office of Institutional Assessment, n.d.). For students with disabilities, assessments sometimes evaluate the effects of the disability rather than the student’s knowledge. How can faculty design assessments that measure the knowledge and skills of their students with disabilities without testing the effects of the disabilities? One way of doing this is by utilizing universal design in the creation of assessments. Universal design (UD) is “the design of products and environments to be usable by all people, without the need for adaptation or specialized design” (Center for Universal Design, 2008). UD is a goal and a process—it is a way of thinking proactively to increase the accessibility and usability of products and environments. This Quarterly Update provides some universal design tips for faculty who assess students, with and without disabilities, in their courses.

**UD Principles and Essential Elements**

1. **Equitable Use:** The instruction is useful and accessible to people with diverse abilities.
2. **Flexibility in Use:** The instruction accommodates a wide range of individual preferences and abilities.
3. **Simple and Intuitive Use:** Instruction is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level.
4. **Perceptible Information:** The instruction communicates necessary information effectively to the student, regardless of ambient conditions or the student’s sensory abilities.
5. **Tolerance for Error:** The instruction minimizes student errors.
6. **Low Physical Effort:** The instruction is delivered efficiently and minimizes student fatigue.
7. **Size and Space for Approach and Use:** Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of student’s body size, posture, or mobility.
Multiple Means of Representation: Information is represented in multiple formats and media.
Multiple Means of Expression: Students are able to demonstrate knowledge through multiple pathways.
Multiple Means of Engagement: There are multiple ways of engaging students’ interests and motivations.

Steps for the UD of Assessments (Thurlow, Johnstone, & Ketterlin-Geller, 2008)

1. Clearly articulate the decisions you want to make about students’ skills and knowledge from the test or assignment. Before you can design an assessment, you need to know what the constructs are that you are going to measure, as well as the level of expertise you want your students to have.

2. Think about how students can best demonstrate their skills and knowledge in a way that will help you make decisions. One way of doing this is to ask yourself, “What does the student have to do to convince me that he or she knows the content (Diamond, 2008)?” Keep an open mind—assessment of the skills and knowledge a student has mastered can be demonstrated in more ways than just via examinations (e.g., papers, presentations, demonstrations, observations, interviews; Diamond, 2008).

3. Identify the access skills needed to successfully interpret and respond to assessment items. Access skills are those that a student needs in order to demonstrate, or access, their skills or knowledge in the targeted content area. Access skills may be unintentionally assessed, so it is important for test designers to differentiate between content skills and access skills. Testing accommodations are often necessary for students with disabilities in order to mediate the assessment of access skills. However, by minimizing the assessment of access skills, an instructor may also minimize the need for accommodations. Plus, students with other diverse characteristics, such as being non-native English speakers, will benefit from assessments that do not test access skills.

4. Design a task (test or assignment) that will allow you to make the decisions you want to make. The learning experience is most effective when the goals, learning outcomes, and assessments are aligned (Diamond, 2008). Goals are short statements that describe the major objectives and usually include a range of skills, a basic knowledge base, and essential attitudes. Learning outcomes are descriptions of what students must be able to do in order to reach the goal. Learning outcomes are not necessarily behavioral outcomes; learning outcomes can be process outcomes. Useful learning outcomes include a verb that describes an action, a description of the conditions in which the action will occur, and the acceptable performance criteria.

5. Explicitly state the expectations for students and which skills you will and will not be evaluating. By providing straightforward instructions, you will minimize the assessment of access skills. Having the students repeat what they understand and how they will accomplish the task is a good way to check the clarity of the instructions.

6. Design the scoring guide or rubric with the decisions in mind. Tell students what you are trying to measure. The purpose of the assessment should be clear and the assessment should be designed for that purpose. Keep in mind that not all assessment needs to be formal because students benefit from informative feedback, too.

References