# **Universal Design and Assessments**

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Forum on Education for Each and Every Student: Perspectives on Universal Design in 2021

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# **Overview of Session**

- I. Introduction to Session
- II. Universal Design Applied to Assessments
- III. Steps for Applying Universal Design to Assessments
- IV. Cultural and Linguistic Diversity Considerations



# I. Introduction: An Updated State Guide to Universally Designed Assessments

- Update to a state guide originally produced by NCEO in 2006
- Purpose of Guide: To provide states with strategies for designing tests from the very beginning. The objective is to create tests that present an accurate measure of the knowledge and skills of diverse student populations



# I. Universal Design for Learning in Federal Law as It Applies to Assessments

- 2015 ESSA directly applies the concept of universal design to assessments
- States must use the principles of universal design for learning (UDL) when developing or revising their assessments
- The law specifically includes alternate assessments when doing so



## **II. Universal Design Applied to Assessments**

- Assessment accessibility is important because it provides all students with an opportunity to show what they know and what they can do
- Additionally, accessibility improves the overall fairness of the assessment for all students, including students with disabilities, English learners, and English learners with disabilities



## **Principles of Universally Designed Assessments**

- Universally designed assessments **do not** change the standards measured by assessments
- Universally designed assessments **should** improve the validity, reliability, and fairness of assessments
- Universally designed assessments may reduce the need for testing accommodations
- Universally designed assessments may improve the validity of assessment results and interpretations for all students including (but not limited to) students with disabilities, English learners, and English learners with disabilities



#### Elements Present in Universally Designed Assessments

- Inclusive testing population (meaning all students)
- Precisely defined constructs
- Accessible, non-biased items
- Amenable to accommodations
- Simple, clear, and intuitive instructions and procedures
- Maximum readability and comprehensibility
- Maximum legibility



## III. Steps for Applying Universal Design to Assessments



## **Step 1: Plan for Universal Design from the Start**

- For summative assessments, Universal Design means planning for an inclusive assessment population
- Assessment designers and consumers must understand the characteristics of students in their state
- Stakeholders should be involved when defining the purpose and potential use of each assessment
- Those involved in the process should recognize that students have a wide range of abilities, linguistic profiles, and sociocultural backgrounds
- There should be high expectations for **all** students



## **Step 2: Define Test Purpose and Approach**

- There is a need for agreement on the objectives, constructs, allowable flexibility in presentation and response, content that should never go into an assessment, and desired format of the test and items
- Stakeholders who know the state's student population well should be involved
- Universal design does not require states to substantially alter many of the technical requirements usually addressed in assessmentrelated RFPs



## Step 3: Require Universal Design in Assessment RFPs

- States can require evidence of, or a plan for, how bidders will incorporate universal design in assessments by asking for:
  - Evidence that the contractor has considered content that may advantage, disadvantage, or introduce offensive content for any student in the state
  - Evidence that the scope of the assessment aligns with state standards
  - Evidence that each individual item aligns with a state standard
  - A clearly defined construct for each item
  - Identification of target and access skills required to complete each item
  - Identification of flexibilities that minimize access skill barriers but do not change the construct
  - Evidence that contractors have included elements of universal design such as clear/intuitive instructions, maximum readability, and maximum legibility
- The RFP should require that companies that bid on the contract are immersed in the principles of universal design
- Involving knowledgeable stakeholders to help review and evaluate the types of evidence presented by contractors can increase the likelihood that their assessments will be universally designed



#### Step 4: Address Universal Design During Item Development

- Every new item needs to be written with accessibility in mind to ensure that items respect the diversity of the assessment population, are sensitive to test taker characteristics and experiences, avoid content that might unfairly advantage or disadvantage any student subgroup, and minimize the effects of extraneous factors
- Item writers often need to be trained on the principles of universal design, which might include a description of the state's population of test takers and their accessibility needs, as well as how to develop items that are universally designed



# Step 5: Include Universal Design Expertise in Review Teams

- Review teams might focus on things such as accessibility and accommodations policy, readability and language complexity, bias and sensitivity, item and test content, and Section 508 compliance
- Review teams should be well-versed in the principles of universal design and have in-depth knowledge of the student population to be tested
- Each team should have at least three types of expertise:
  - Academic content
  - Cultural/linguistic/specific disability/gender
  - Access/Accommodations



### Step 6: Perform Usability and Accessibility Testing

- In usability testing, students can identify potential problems by trying out test functioning and providing feedback
- Students who represent all populations in the state should be included in usability testing with accessibility and accommodations available to them, as needed
- Representatives from high and low English proficiency groups should be included, as should students with different disabilities



## **Step 7: Implement Item and Test Tryouts**

- A pilot or field test of items with larger numbers of students allows for some statistical analyses of results data
- The tryout sample should represent the diversity of students found in the state
- All accessibility features and accommodations need to be available, and the impact of specific accessibility features or accommodations can be looked at by using cognitive labs



#### Step 8: Conduct Item and Test-Level Analyses and Act on Results

- Descriptive analyses are one way to notice whether populations are scoring differently
- Inferential statistics may better help pinpoint where problems lie with accessibility or bias in items
- When items function differently for populations, they should be examined to understand whether this reflects reasons not related to constructs, such as bias or accessibility features



# **Step 9: Monitor Test Implementation and Revise as Needed**

- Careful monitoring of test administration should occur to help ensure that accessibility features and accommodations are administered appropriately and properly
- States must not simply rely on districts to monitor test implementation but must have their own plan and means for monitoring test implementation, especially adherence to state assessment participation requirements and accessibility and accommodations policy



### IV. Cultural and Linguistic Diversity Considerations

- States need to be aware of the characteristics of their student populations because each state has unique demographics
- Populations of students with disabilities differ across states in the percentage identified in certain disability categories, and the language backgrounds of English learners vary across states as well
- Planning requires the recognition that the abilities, linguistic profiles, and sociocultural backgrounds of students vary greatly, and assessments need to be accessible to all students
- Needs of diverse learners should be considered when developing both general and alternate assessments.



### Cultural and Linguistic Diversity Considerations: Construction of Test Items

- In the construction of test items, those involved in the process must ensure that content that could advantage, disadvantage, or introduce offensive content for any student is not included
- For example, items must be sensitive to test taker characteristics and experiences, such as gender, age, ethnicity, socioeconomic status, region, disability, or language – as well as the needs of students who use assistive technology



### Cultural and Linguistic Diversity Considerations: Construction of Test Items, Cont.

- Items should minimize the effects of extraneous factors, such as avoiding the unnecessary use of graphics that cannot be presented in braille or using font size and white space appropriate for clarity and focus
- The readability and language complexity of reading materials should not exceed grade-level expectations



### Cultural and Linguistic Diversity Considerations: Role of Advisors and Stakeholders

- Sensitivity teams should examine assessments for items that might introduce bias or offensive content
- Sensitivity teams should also examine how particular identity groups are portrayed or whether linguistic or experiential biases may provide an advantage unrelated to test constructs
- Educators and representatives from diverse identity groups can help identify potentially biased items



### Cultural and Linguistic Diversity Considerations, Role of Advisors and Stakeholders, Cont.

- Accessibility and accommodation experts can also be part of the sensitivity review teams to help provide expertise on biases that may be introduced in various accessibility settings or under particular accommodations conditions
- Various analyses can help determine whether bias or accessibility barriers might be causing items to function differently for different populations



**For More Information** 

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#### In Collaboration with:









#### For more information, see https://nceo.info/

