Cultural Relevance
Versus Construct Relevance

How do we Create Culturally Responsive Assessments?

Equity in Assessment and Measurement Webinar 2022
National Council on Measurement in Education
January 19, 2022
Defining Key Terms

- **Culturally relevant pedagogy** (or culturally relevant teaching): a way to “empower students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes” (Ladson-Billings, 1995)
  - Culturally relevant pedagogy is based on three propositions: **academic success**, **cultural competence**, and **sociopolitical consciousness**

- **Culturally responsive teaching**: “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2018).
  - **Culturally responsive teaching is validating, comprehensive, multidimensional, empowering, transformative, and emancipatory.**
Defining Key Terms cont.

- **Universal design (for learning and for assessment)**
  
  - **Universal Design for Learning (UDL):** a scientific framework for guiding educational practice that — provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.
  
  - **Universal Design for Assessment (UDA):** are designed and developed to allow participation of the widest possible range of students, in a way that results in valid inferences about performance on grade-level standards for all students who participate in the assessment.
Key Questions

1. Is culture considered construct-relevant or construct-irrelevant?

1. How might the tenets of culturally relevant pedagogy look when applied to assessments?

1. How do we increase the cultural relevance of assessment content?

1. How should assessment designers revise practices to ensure cultural responsiveness?
Is culture considered construct-relevant or construct-irrelevant?
Universal Design for Assessments

1(Thompson, Johnstone, & Thurlow, 2002)
Universal Design for Assessments

Element #2: Clearly Defined Construct

- Reading Comprehension
  - Anchor Standards for Reading
    - R2 “Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.”
    - R4 “Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.”

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Universal Design for Assessments

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• Mathematics
  – Standards for Mathematical Practice
    o MP1 “Make sense of problems and persevere in solving them.”
    o MP4 “Model with mathematics.”

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Universal Design for Assessments

Element #3: Accessible, Non-Biased Items

• Out-of-School Factors
  – Is this item essentially free of content that would make a student’s socioeconomic status or inherited academic aptitudes the dominant influence on how the student will respond?

• Bias
  – Is this item free of content that might offend or unfairly penalize students because of personal characteristics such as race, gender, ethnicity, [disability,] or socioeconomic status?

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Universal Design for Assessments

Element #6: Maximum Readability and Comprehensibility

• Readability is affected by “students’ previous experiences, achievement, and interests, and by text features such as word and sentence difficulty, organization of materials, and format” (Rakow & Gee, 1987, p. 28).

• Many students may be “unfairly disadvantaged by achievement tests that place a heavy burden on reading skills.” These researchers define “plain language” as “text-based language that is straightforward, concise, and uses everyday words to convey meaning.” (Hanson, Hayes, Schriver, LeMahieu, & Brown, 1998, p.2).

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Coda to the Above

1. How does culture feature in assessments now?
2. Universal design for assessments vs. universal design for learning
How Does Culture Feature in Assessment?
How Does Culture Feature in Assessment?

→ Culture
How Does Culture Feature in Assessment?

Culture
How Does Culture Feature in Assessment?
I'm not sure if everybody had similar questions to look at, but I really did appreciate the diversity. I don't want to say “I”... but most of the time, people don't really get to see a whole bunch of [representation] and I just thought it was really cool to include everybody instead of just having one specific group of people.”

– 8th Grade Focus Group Participant
"I'm not really sure how I feel about either of these items. Because I like the second one, because it makes more sense, but I like the first one because it's more diverse. We have a few other questions on tests that are diverse, but they're mainly... I'm not trying to be offensive at all, but they're mainly white people in those tests. So, I appreciate how they have diversity in that."

– 8th Grade Focus Group Participant
Universal Design for Assessment vs. Universal Design for Learning

Provide multiple means of Engagement
Affective Networks
The "WHY" of learning

Provide multiple means of Representation
Recognition Networks
The "WHAT" of learning

Provide multiple means of Action & Expression
Strategic Networks
The "HOW" of learning
How might the tenets of culturally relevant pedagogy look when applied to assessments?
## Tenets of Culturally Relevant Pedagogy

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Ladson-Billings (1995)
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<td>Students are aware of the systems and structures in place that impact their lives</td>
<td>Students encounter items related to advocacy and civic engagement</td>
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CRP is less about **optics** and more about **topics**

- Critical consciousness development within educators, centering culture, language, and experiences to adequately reflect student body diversity (Lopez, 2011)
- Increasing success for Students of Color should be linked to learning practices that are relevant to their lives and lived experiences (Lopez, 2011)
- Making “new” culture knowledge mainstream and changing the perspectives of the educators → inclusion, comfort, and validation for every student’s learning experiences (Vavrus, 2008)
- Transform assessments from what students **DO NOT** know to what they **DO** know (Ladson-Billings, 1998)
  - Avoids the pitfalls of internalized racism
- Scaffold assessment redevelopment: inclusion, comfort, and validation (avoiding the historically eugenicist backgrounds of standardized testing, Ladson-Billings, 1998) **THEN** sociopolitical consciousness (an individual’s ability to critically analyze the political, economic, and social forces shaping society and one’s status in it, Seider, 2017)
How do we increase the cultural relevance of assessment content?

And first, how do we know what’s culturally relevant?
How do we know what is culturally relevant?
“Student identity and culture are central to learning.”

National Academies of Sciences, Engineering, and Medicine, 2018
Cultural Relevance

Students are valued
Students are engaged
Students are empowered

Lyons, Johnson, & Hinds, 2021
Guiding Principles for Cultural Relevance

• **Cultural Context** – Valuing and empowering underrepresented students & communities

• **Diverse Voices** - Experiences from students, caregivers/parents, teachers, school & district leaders, and community members

• **Unintended Consequences** - Understanding the impact of processes and outcomes

• **Assessment Processes** – Transforming practice and development sources for test design, usage, bias & sensitivity, and improvement
Developing Culturally Responsive Items
Community Engagement

BOSTON PUBLIC SCHOOLS

- 8th Grade ELA benchmark assessment
- District collaboration to identify passages
- Teacher review & selection
- Student survey & focus groups
- Analysis of treatment and control groups

WESTERN NEW MEXICO UNIVERSITY (Beginning Phase)

- Math item development
- Collaboration with faculty & community members
- 3-day training and work session
- Standard alignment & implementation
- Survey & focus groups
How do we know what’s culturally relevant?
Student Voice
Focus Group Pilot Study (Summer 2021)

Sample characteristics
- 14 Students
  - 8 students in grades 4-6
  - 6 students in grades 6-8
- 9 female students, 5 males
- 4 white, 10 BIPOC
- 2 students noted as having a disability
- 2 came from single parent families
- 2 were first generation

Participant locations
- 8 from California
- 2 from Colorado
- 1 each from Texas, Georgia, New York, Massachusetts

Estimated family income based on zip code
- Minimum - $37,260
- Median - $58,738
- Maximum - $123,024

Participants received a $100 gift card
What did Students Notice?

Did Notice / Comment On

• Passage length / task complexity
• Efforts at diversity (older students)
• Authenticity (or not) of character portrayals

Did Not Notice / Comment On

• Efforts at diversity (younger students)
• Non-binary pronouns
What did Students Care About?

Did Care About

• How quickly / easily they could solve an item
  • Esp. length, clarity, simplicity, format

• How well an item matched their interests

Did Not Care About

• Assessment as a learning opportunity
• “Diversity” for its own sake, or at the cost of clarity, simplicity
I really liked the diversity of the first one, but it's a little bit confusing. But I also prefer multiple choice. So, I really liked the second one cause it's multiple choice and it's easier and straightforward. Also, I agree with [participant] but I'm not sure that tests are really supposed to be fun...”

– Middle School Focus Group Participant
Because like the first one was just like an old lady trying to read a book, but that one was about the astronauts… Astronauts are more, like, interesting than just normal people.”

– Middle School Focus Group Participant
I don't know if this is, like, the theme or not, but I would not, like, change how interesting the questions are for diversity. I would rather read something more interesting than something I was included in. It's a lot more enjoyable for me to read something that's interesting and less lengthy."

– Middle School Focus Group Participant
Where Does this Leave Us?

What is the relationship between representation and engagement?

What is the relationship between representation and performance?

How does representation play out at the test level?

How can we increase representation AND engagement?
Diversifying Content with Existing Staff

• Audit and Tagging
Diversifying Content with Existing Staff

- Audit and Tagging
- Prioritized Research
Diversifying Content with Existing Staff

- Audit and Tagging
- Prioritized Research
- Internal and External Resources
Diversifying Content with Existing Staff

- Audit and Tagging
- Prioritized Research
- Internal and External Resources
- Time Analysis
Time Analysis

Quantitative

• 30% time increase for reading

• 200+% time increase for math

• No pattern by grade level

Qualitative

• Math – As much as 50% of item development time is research and validation to represent context accurately and respectfully

• Math – DEI-related vocabulary can be challenging at lower grade levels and requires additional support from ELA teams
How should assessment designers revise practices to ensure cultural responsiveness?
How Can We Improve?

• What can we commit to doing today?
  – **Develop culturally competent students:** Revise content guidelines
    o Who gets to see themselves in the content?
    o Whose stories get told?
Carmen is a pastry chef who owns her own panadería, or bakery. From fresh loaves of bread, pies, croissants, and cakes to muffins, donuts, and all kinds of pan dulce, there's nothing that she can't confect!

Let's take a look at her baking plans for the upcoming week.

Carmen wants to create conchas, a soft and sweet Mexican bread named for their seashell-like appearance. She wants to create 72 conchas in one batch. If each baking tray holds 8 conchas, how many baking trays will Carmen need?
How Can We Improve?

“The idea that adding some books about people of color, having a classroom Kwanzaa celebration, or posting “diverse” images makes one ‘culturally relevant’ seem to be what the pedagogy has been reduced to.” Ladson-Billings (2014)
How Can We Improve?

- What can we commit to doing tomorrow?
  - Develop academically successful students: Re-imagine the format of assessments
    - How can we allow students to demonstrate their understanding in a way that’s relevant to them?
  - Develop socio-politically conscious students: Understand the role sociopolitical consciousness can play in assessments
    - What topics and themes to cover?
    - What is the impact on performance?
    - How do students respond?
Andrea lives in a part of the city where it is difficult to buy high-quality, fresh food. To help the people in her neighborhood, she wants to start a local community garden.

Recently, Andrea convinced her city to sponsor its first urban gardening program by providing a vacant lot to use. Now that Andrea has land for the garden, she could use some help deciding how to plan the garden beds.
“Assessment, if not done with equity in mind, privileges and validates certain types of learning and evidence of learning over others, can hinder the validation of multiple means of demonstration, and can reinforce within students the false notion that they do not belong.”

Montenegro & Jankowski (2017)
Re-imagining Bias and Sensitivity Review

- Equity Advisory Panel – Representative of students
- Criteria that ensures context and cultural relevance
  - Who are the students?
  - How do we validate, affirm, and empower learners?
  - How do we keep learners at the center of our work?
No such thing as colorblind assessments, so we must develop cultural competence:

1. Understanding of one’s own culture (beginning at basic, but always growing towards mastery)
2. Willingness to learn about the cultural practices and worldview of others
3. Positive attitude toward cultural differences
4. Readiness to accept and respect cultural differences
Thank you!