Understanding Contextual Variations in Classroom Quality Observations in American Indian and Alaska Native Head Start

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Head Start operates in 12 regions nationwide

ACF Regions 1-10 are geographically based

Region XI (below) and Region XII are defined by the populations they serve
National data is available on Head Start programs

FACES
- FACES was conducted every 3 years from 1997-2009 in Regions I-X
- After a major redesign in 2012, it was last conducted in 2014
- Will be conducted again starting in fall 2019

AI/AN FACES
- Began in 2015 after multi-year collaborative planning effort to address process for engaging in research with sovereign tribal nations; concerns about use of existing measures in Region XI
- Will be conducted again starting in fall 2019
Workgroup guided decisions on culturally-informed measures and methods

- Guided in consultation with study workgroup
  - Consulted on direct child assessment, parent and staff surveys, and classroom observation
  - Started with FACES measures as a base and guided decisions on where to align, adapt, or add
There were three main components of the observation:

<table>
<thead>
<tr>
<th>Component</th>
<th>Features</th>
<th>Aligned with FACES 2014 or new for AI/AN FACES 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Assessment Scoring System (CLASS)</td>
<td>Examines quality of interactions in the classroom; used in some QRIS and in Head Start monitoring</td>
<td>Aligned (with additional enhanced training for AI/AN FACES 2015)</td>
</tr>
<tr>
<td>Early Childhood Environment Rating Scale - Revised Edition (ECERS-R, Short Form)</td>
<td>Measure of global quality; full ECERS-R used in some QRIS</td>
<td>Aligned (with additional enhanced training for AI/AN FACES 2015)</td>
</tr>
<tr>
<td>Cultural items checklist and cultural practices questions</td>
<td>Captures presence and use of cultural items as well as cultural practices (e.g., storytelling) observed during the AI/AN FACES 2015 observation</td>
<td>New</td>
</tr>
</tbody>
</table>
Historical context on the use of CLASS in Region XI

- CLASS is used as part of regular Head Start monitoring
- Concerns about appropriateness of use in classrooms serving Native children
- Reflections on the use of CLASS in Region XI
We addressed concerns about the validity of the CLASS in AI/AN classrooms in two ways

- We augmented our observation training approach from FACES
  - Standard CLASS training delivered as provided by Teachstone (company overseeing CLASS training), then supplemented
- We conducted confirmatory factor analysis (CFA) using data from FACES 2014 and AI/AN FACES 2015 to examine whether the data supported the factor structure defined by the developer
Adaptations to classroom observation training
AI/AN FACES 2015 developed a culturally grounded observation training

- Several additions were made to the FACES observation training
  - Observation training took place near a Region XI program
  - Observers participated in a cross cultural understanding (CCU) module
  - Observers viewed and discussed video from Region XI classrooms
    - Video talking points developed in collaboration with the Workgroup
Trained on the CLASS with discussion to ensure sense of full range of behavioral markers

- Observation working group reviewed CLASS structure and constructs
- Behavioral markers identified as area of focus
  - CLASS provides examples; AI/AN FACES training expanded on these examples
Confirmatory factor analyses
Approach to the confirmatory factor analysis

- Estimated CFA for AI/AN FACES 2015 and FACES 2014 separately
  - Included FACES to have a sample of Head Start classrooms as context for the AI/AN FACES 2015 results
- Started with FACES 2014 data (n=641 classrooms) to estimate the developer’s model, then modified model to improve fit with this low income sample
- Estimated the developer’s model with AI/AN FACES 2015 data (n=76 classrooms), then examined AI/AN FACES 2015 with the modified FACES 2014 model
  - Small sample size made it difficult to find an improved fit based on AI/AN FACES data
### Descriptive statistics (AI/AN FACES 2015)

<table>
<thead>
<tr>
<th>CLASS domain</th>
<th>FACES 2014 (mean and SD of classrooms)</th>
<th>AI/AN FACES 2015 (mean and SD of children’s classrooms)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Instructional Support</td>
<td>2.4</td>
<td>0.87</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>5.5</td>
<td>0.55</td>
</tr>
<tr>
<td>Classroom Organization</td>
<td>4.8</td>
<td>0.73</td>
</tr>
</tbody>
</table>

FACES statistics are weighted to represent all Region I-X Head Start classrooms. AI/AN FACES statistics are weighted to represent all children enrolled in Region XI Head Start in fall 2015 and who were still enrolled in spring 2016.

- Descriptive statistics are weighted as described above but confirmatory factor analyses were conducted using unweighted classroom level data.
Key findings - FACES 2014

- Findings undergoing clearance prior to public release
Key findings - AI/AN FACES 2015

- Findings undergoing clearance prior to public release
Further considerations

• Observation training
  • Additional training on how Teacher Sensitivity and Regard for Student Perspectives are manifested in AI/AN classrooms
Future directions

• Continued discussions about observers’ depth of understanding of the cultural context in each community they observed
  • In AI/AN FACES 2019 exploring ways to recruit observers regionally who are connected with Native culture and communities

• Confirmatory factor analysis tells us about the underlying factor structure, but there is limited understanding of how components of the CLASS function in Region XI compared to other Head Start classrooms
  • Possible next step to conduct analyses of differential item functioning

• No information on predictive validity
  • Data on child outcomes is available
Links for more information

• To learn more about the study:

• To learn more about accessing the data:
  https://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/36804

• Webinar on study overview and data access:
  https://www.youtube.com/watch?v=OXV4EC5KA3z&feature=youtube.be
For more information on AI/AN FACES

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