

MEASURING EQUITY

A COMPENDIUM OF EARLY AND MIDDLE CHILDHOOD CULTURALLY RESPONSIVE PRACTICE MEASUREMENT TOOLS Authored by Meredith Dentes Powers, M.Ed., Start with Equity Fellow 2020 – 2021 Children's Equity Project

Measuring Equity:

A Compendium of Early and Middle Childhood Culturally-Responsive-Practice Measurement Tools

By: Meredith Dentes Powers, M.Ed., Start with Equity Fellow, 2020 – 2021 Children's Equity Project



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Introduction

In July 2020, the <u>Children's Equity Project</u> (CEP) and the <u>Bipartisan Policy Center</u> released a landmark report, <u>Start with Equity: From the Early Years to the Early Grades</u>, to shed light on the grave inequities that have long pervaded the education system and affect the lives of millions of children from historically marginalized communities, starting at birth.

One of the pivotal policy areas identified in the report as warranting urgent attention was harsh discipline (e.g., corporal punishment, exclusionary punishment) in schools and its disproportionate application to Black children, boys (across racial groups), and children with disabilities. Among the list of actionable solutions to address harsh discipline, **culturally responsive practice** was recognized as a type of asset-based pedagogy that can help foster positive student-teacher relationships and promote supportive learning environments. The report also identified serious concerns across issue areas in monitoring and accountability to address inequities and bias, and close disparities in child outcomes. Monitoring and holding administrators accountable for advancing equity is, at present, limited by a shortage of instruments that measure equity or, more specifically, one component of equity: culturally responsive practice in the classroom. The few instruments that do exist are not widely used and are not included in existing monitoring or accountability systems. This compendium seeks to begin to address this gap by identifying existing tools and providing easily accessible and practical information on each tool.

The process for developing this compendium included an assessment of currently available early and middle childhood (ages 0-10) measures of culturally responsive classroom practice. Existing measures and their published psychometric properties are highlighted; the appropriate application of these findings are also discussed. Future directions for research, practice, and policy are presented.

Finally, it is important to note the limitations in seeking quantifiable outcomes when evaluating nuanced teacher beliefs and complex student-teacher interactions. Any measure quantifying lived experiences of bias and racism, should be accompanied by qualitative input from the families of students affected, as well as the school staff who are involved with classroom interactions.^{1a}

About this Compendium

We selected three measures in each section (i.e., Observation Measures, Teacher-Report Measures, and Group-Specific Measures) to highlight for further research and practice considerations. It should be noted that the one-page profile on the nine spotlighted measures considers both the strengths and areas of need for future tools designed to measure culturally responsive practice, and other proxies of

equitable education. These profiles were derived from peer-reviewed articles, often validating the psychometric properties of newly developed measures. The spotlighted measures may not be reflective of the most recent measure versions and readers are encouraged to reach out directly to the corresponding authors for more information.

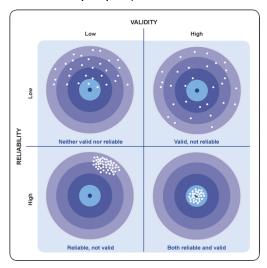
Frequently Asked Questions

Q: What are reliability and validity and why are they important? '

Reliability: The psychometric property of reliability refers to a measure's consistency. That is, when used multiple times (test-retest reliability), across all items (internal consistency), and with different people (inter-rater

reliability), it is consistent in its measurement of the construct.² An acc

Validity: The psychometric property of validity refers to the measure's ability to assess the construct it is designed to capture.³ That is, does the measure capture the full *breadth* and *depth* of culturally responsive practice? Cautionary note: validity can be subjective and based on how the measure's authors uniquely define culturally responsive practice.



Visual representation of validity and reliability of measurement⁴ (Benova et al., 2020)

Q: How is Early Childhood defined in this compendium?

his compendium defines early childhood as children 0-10 years of age. The three spotlighted observational measures (p. 11) were selected for their relevance to the PreK – Grade 3 age range in early childhood education.

Q: Which culturally responsive practice measurement tools are included and why?

The measurement tools included in this compendium were included if they were:

- ► Relevant to classroom-level experiences (e.g., school-wide or home experience measures were excluded);
- ➤ Specific to the United States given the unique education equity challenges faced in our country;
- ► Used within the PreK 5th grade range;

► Published in a **peer-reviewed** academic journal with access to **all items** and basic **psychometric properties** (i.e., reliability or validity)



If you cannot measure it, you cannot improve it.

"





Observation Measures

Summary Table 1: General Information about Observation Measures

Measure: <i>Subscale</i>	Authors	Early Childhood Grades in Sample	Full Scale or Subscale?	Region	Length	# of Observations per Classroom	# of Questions	Response Type	Scoring Procedures
Assessing Classroom Sociocultural Equity Scale (ACSES)	Curenton et al., 2019⁵	PreK	Full Scale	Midwest, Southeast	15 min.	1 – 4	33	5-pt Likert; % of pupils affected	Average
Assessing School Settings: Interactions of Students and Teachers (ASSIST) - Culturally responsive teaching strategies subscale	Debnam et al., 2015 ⁶	K — 5 th	Subscale	Mid-Atlanti C	15 min.	1	4	5-pt Likert	Average
Classroom Assessment of Sociocultural Interactions (CASI)	Jensen et al., 2018 ⁷	4 th — 5 th	Full Scale	N/R	15 min.	6	35	7-pt Likert	Average
Climate of Healthy Interactions for Learning and Development (CHILD)*	Gilliam & Reyes, 2017 (unpublished manuscript)								
Culturally Ambitious Teaching Practices in Mathematics	Waddell, 2014 ⁸	5 th	Full Scale	Southeast	N/R	2	20	4-pt Likert	N/R
Culturally Responsive Instruction Observation Protocol (CRIOP)	Powell et al., 2016 ⁹	K – 3 rd	Full Scale	Midwest	>2.5 hrs.	2	N/A	4-pt Likert informed by field notes	N/R
Early Childhood Ecology Scale (ECES) - Observation Form	Flores & Riojas-Cortez, 2009 ¹⁰	PreK	Full Scale	Southwest	4 hrs. total	2 – 3	28	5-pt Likert; 3 open-ended	N/R
Multicultural Teaching Observation Instrument (MTOI)	Saldana & Waxman, 1997 ¹¹	4 th — 5 th	Full Scale	South Central	~50 min.	2	18	Binary; % of time observed	Average

Measurement Spotlight Profiles: Observation Tools

Assessing Classroom Sociocultural Equity Scale (ACSES)

Peer-Reviewed Article: Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in Early Childhood Classrooms

Authors: Stephanie M. Curenton, Iheoma U. Iruka, Marisha Humphries, Bryant Jensen, Tonia Durden, Shana E. Rochester, Jacqueline Sims, Jessica V. Whittaker & Mable B. Kinzie

DOI: https://doi.org/10.1080/10409289.2019.1611331

Brief Description: The Assessing Classroom Sociocultural Equity Scale (ACSES) is a 15-minute observation published in 2020. In the validity study, the observations occurred one to four times.

Psychometric Properties:

Reliability

- Cronbach's alpha (α): .74 .90
- Interrater reliability measured via Intraclass Correlations (ICCs)
 - o Equitable Learning Opportunities, ICC = .915
 - o Challenging Status Quo Knowledge, ICC = .720
 - o Equitable Discipline, ICC = .849
 - o Cross-RML Peer Collaborations ICC = .928
 - o Connection to Home Life, ICC = .605

Validity

- Divergent validity established with CLASS
- Exploratory Factor Analysis conducted during measure development

Sample included:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

https://www.bu.edu/wheelock/profile/stephanie-curenton/
Early Childhood Ecology Scale (ECES) - Observation Form

Peer-Reviewed Article: Measuring early childhood teacher candidates' conceptualizations of a culturally responsive classroom ecology

Authors: Belinda Bustos Flores & Mari Riojas-Cortez

Stable URL: https://www.jstor.org/stable/23869608

Brief Description: The Early Childhood Ecology Scale (ECES) - Observation Form is a 15-minute observation with 25 Likert ratings and three open-ended items that ask for specific examples of observed classroom furnishings, wall displays, and play activities. In the validity study, multiple observations (i.e., two to three) that totaled to four hours were used. Of note, the ECES was developed by the authors to discern the ecology of classrooms serving young Mexican American, Latino children, though it was not reported whether any of the families included migrant or seasonal farm workers.

Psychometric Properties:

Reliability

• Cronbach's alpha reported as α = .96, but readers require clarity on whether this is a metric of Observation samples, self-assessments, or both

Validity

- No validity measures reported for the Observation Form, only the self-report form (see teacher-report profile of the ECES-R)
- Total Mean = "Self-Assessment" + "Observation," which poses methodological concerns

Sample included:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

https://education.utexas.edu/departments/curriculum-instruction/graduate-programs/bilingualbicultural-education/alumni/belinda-flores

Culturally Responsive Instruction Observation Protocol (CRIOP)

Peer-Reviewed Article: Operationalizing Culturally Responsive Instruction: Preliminary Findings of CRIOP Research

Authors: Rebecca Powell, Susan Chambers Cantrell, Pamela K. Correll, and Victor Malo-Juvera

Stable Link: https://www.tcrecord.org/books/pdf.asp?ContentID=18224

Brief Description: The Culturally Responsive Instruction Observation Protocol (CRIOP), Fourth Revised Edition (January 2017) is a observation tool designed to be used for at least 150 minutes (2.5 hours). Importantly, the CRIOP was originally used as a professional development framework with the intention of providing on-site support and coaching to increase teachers' use of culturally responsive instruction.

Psychometric Properties:

Reliability

- Cronbach's alpha $(\alpha) = .78$
- Cohen's kappa (K; measures interrater reliability) = .84
- Interrater agreement between Field Researcher 1 and Field Researcher 2 was 80%

Validity

 Convergent validity with (1) CRIOP Post-Observation Teacher Interview Protocol; (2) The CRIOP Family Collaboration Teacher Interview Protocol

Sample included:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

- ► CRIOP Measure Protocol
- <u>Peer-Reviewed Journal Article</u>
- CRIOP Resources Google Folder
- ► <u>Spanish Abbreviated Translation</u>
- Chinese Abbreviated Translation



Teacher-Report Measures

Summary Table 2: General Information About Teacher-Report Measures

Measure: <i>Subscale</i>	Authors	Full Scale or Subscale?	Teacher Sample Characteristics	Student Sample Characteristic S	Region	# of Question s	Response Type	Scoring Procedures
Cross-Cultural Competence Survey	McKoy, 2013 ¹²	Full Scale	Music preservice teachers N = 337 83% White 47% Female	N/R	Southern, Eastern, Southwestern , Western, North Central, Northwest	31	5-pt Likert	Average
Culturally Responsive Classroom Management Self-Efficacy (CRCMSE) Scale	Siwatu et al., 2017 ¹³	Full Scale	356 preservice teachers and 24 in-service teachers N = 380 83% White 62% Female	N/R	South, Southeast	35	Degree of confidence: 0 – 100	Sum; Average
Culturally Responsive Teaching Self-Efficacy (CRTSE) Scale	Siwatu, 2011 ¹⁴	Full Scale	Preservice teachers N = 34 62% White 62% Female	N/R	Southwest	31	Degree of confidence: 0 – 100	Average
Early Childhood Ecology Scale-Revised (ECES-R) - Self Assessment Form	Flores et al., 2011 ¹⁵	Full Scale	Preservice teachers pursuing early childhood - fourth grade certification N = 389 55% Latinx 97% Female	N/R	Southwest	35	5-pt Likert	N/R

Educational Beliefs and Multicultural Attitudes Survey (EBMAS): Multicultural Awareness subscale	Cherng & Davis, 2019 ¹⁶	Subscale	Preservice teachers N = 2,357 53% White 83% Female	N/R	Northeast	8	6-pt Likert	Binary coded as "High multicultural awareness" if score in top 1/5 th
Multicultural Awareness-Knowledge-Skills Survey - Teachers Form (MAKSS-Form T)	D'Andrea et al., 2003 ¹⁷	Full Scale	Preservice teachers (~60% experienced educators) N = 171 46% Japanese Americans 73% Female	N/R	Western	41	Multiple choice	N/R
Multicultural Dispositions Index (MDI)	Thompson, 2009 ¹⁸	Full Scale	Preservice teachers + counselors N = 1,091 89% White 77% Female	N/R	Midwestern	22	9-point Likert	Average
Multicultural Efficacy Scale (MES)	Guyton & Wesche, 2005 ¹⁹	Full Scale	Preservice teachers N = 626 82% White 81% Female	N/R	Southern, Northern, Western	35	4-pt and 5-pt Likert	Experience subscale is not intended for scoring Attitude: 0 to 15 (low); 16 to 24 (avg.); 24 to 28 (very positive) Efficacy: 0 to 54 (low); 55 to 66 (avg.); 67 to 80 (high)
Multicultural Physical Education Instrument	Sparks et al., 1996 ²⁰	Full Scale	In-service Physical Education Teachers N = 348 72% White 57% Female	N/R	Northeast, Midwest	41	Part A: Yes/No/Unsure ; Part B:, C 5-pt Likert scale	Average

Multicultural Staff Development Teacher Survey	Scott & Pinto, 2001 ²¹	Full Scale	In-service teachers N = 88 57% White 88% Female	School district serving predominatel y (97%) African American students" (p. 35)	Mid-Atlantic	29	5-pt Likert	Average
Pluralism and Diversity Attitude Assessment (PADAA)	Stanley, 1996 ²²	Full Scale	Preservice Physical Education Teachers N = 215 Teacher race and gender not reported	N/R	Southeast, Northeast, West, Midwest	19	6-pt Likert	N/R
Professional Beliefs About Diversity Scale	Pohan & Aguilar, 2001 ²³	Full Scale	Preservice + in-service teachers N = 187 Teacher race and gender not reported	N/R	Midwest	25	5-pt Likert	Sum
Teacher Multicultural Attitude Survey (TMAS)	Ponterotit o et al., 1998 ²⁴	Full Scale	In-service teachers N = 88 56% White 81% Female	"38% of teachers worked with majority minority student populations" (p. 1008)	Northeast	20	5-pt Likert	N/R
[Unnamed Survey] Inspired by Ladson-Billings (1994)	Love & Kruger, 2005 ²⁵	Full Scale	In-service teachers N = 50 70% Afr. American Gender N/R	K – 5 th predominatel y African American students	Southeast	48	5-pt Likert	N/R

Measurement Spotlight Profiles: Teacher-Report Tools

Culturally Responsive Classroom Management Self-Efficacy Scale (CRSMSE)

Peer-Reviewed Article: The Culturally Responsive Classroom Management Self-Efficacy Scale: Development and Initial Validation

Authors: Kamau Oginga Siwatu, S. Michael Putman, Tehia V. Starker-Glass, and Chance W. Lewis

DOI: http://doi.org/10.1177/0042085915602534

Brief Description: An eminent scholar in the area of K-12 culturally responsive practice measurement, Kamau O. Siwatu created a classroom management-focused scale given the important connection between culturally responsive practice and disproportionate disciplinary action against students of color. The response scale is unique in that it measures a teacher's sense of self-efficacy or confidence in engaging in these practices.

Psychometric Properties:

Reliability

• Cronbach's alpha $(\alpha) = .97$

Validity

- Exploratory Factor Analysis used to establish one, unidimensional factor
- Construct validity was obtained with two existing measures—CRTSE (Siwatu, 2007) and TSE Scales (Tschannen-Moran & Woolfolk Hoy, 2001)

Sample included teachers who serve:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

https://www.depts.ttu.edu/education/our-people/Faculty/kamau_siwatu.php

Early Childhood Ecology Scale-Revised (ECES-R) - Self Assessment Form

Peer-Reviewed Article: Validation of the Early Childhood Ecology Scale - Revised: A Reflective Tool for Teacher Candidates

Authors: Belinda Bustos Flores, Cindy M. Casebeer & Mari Riojas-Cortez

DOI: https://doi.org/10.1080/10901027.2011.594487

Brief Description: A revised measure, the Early Childhood Ecology Scale-Revised (ECES-R) - Self Assessment Form, is limited to teacher self-report and no longer includes the observation format previously mentioned. Instead, it is intended to serve as a reflective tool to help early childhood teacher candidates examine their own about their classroom's ecology. The self-report form includes 30 Likert ratings questions, as well as five open-ended questions for reflection.

Psychometric Properties:

Reliability

- Cronbach's alpha $(\alpha) = .90$
- Test-retest reliability: r = .96

Validity

- Expert Review involved Interrater agreement (IRA) metrics among professionals reviewing the measure. They rated strong for relevance (.99) and clarity (.875), though it should be noted that this secondary rating process is an unusual approach to measurement development.
- Exploratory Factor Analysis was used to inform measurement development

Sample included teachers who serve:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

http://tkcom.eu/activities/tools_repository/early-childhood-ecology-scale-revised
 -reflection-form-eces-r-alternate-title-is-eces-self-assessment-form/

Multicultural Efficacy Scale (MES)

Peer-Reviewed Article: The Multicultural Efficacy Scale: Development,

Item Selection, and Reliability

Authors: Edith M. Guyton & Martin V. Wesche

DOI: https://doi.org/10.1207/s15327892mcp0704 4

Brief Description: Although referred to multicultural education in this measure, the self-report form aims to capture's teacher's knowledge, understanding, attitude, and skill. There are seven experience items, seven attitude items, twenty efficacy items, and one item asking participants to identify their strongest belief about teaching in a multicultural setting. Since this measure has been in development since 1995, there are benefits of validity on multiple samples, but also require revisions to keep up with modern day understandings od culturally responsive practice.

Psychometric Properties:

Reliability

• Total MES: $\alpha = .89$

• Experience subscale $\alpha = .78$

• Attitude subscale $\alpha = .72$

• Efficacy subscale $\alpha = .93$

Validity

Confirmatory Factor Analysis conducted to validate measure

Sample included teachers who serve:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

Link to Measure



Group-Specific Measures

Summary Table 3: General Information About Group-Specific Measures

Measure: <i>Subscale</i>	Authors	Type of Measure	Full Scale or Subscale?	Teacher Sample Characteristics	Student Sample Characteristics	Region	# of Question s	Response Type	Scoring Procedure s
Scale of Teacher Empathy for African American Males (S-TEAAM)	Warren, 2015 ²⁶	Teacher self-report	Full Scale	In-service teachers N = 72 55% White Teacher gender not reported	N/R	N/R	5	4-pt Likert	Average
[unnamed; Cultural Content Integration and Heritage Language]	Matthew s & López, 2019 ²⁷	Teacher self-report	Full Scale	In-service teachers N = 33 Teacher race and gender not reported	"Latino children in grades 3 – 5"	Southwes t	22	5-pt Likert	Average
[unnamed; Concerns Teaching Latino Students Survey]	Anhalt & Rodrígue z Pérez, 2013 ²⁸	Teacher self-report	Full Scale	In-service math teachers N = 68 Teacher race and gender not reported ("predominantly Latino/a")	"[A]pproximatel y an 85% Latino/a student population and 1/3 of the students are identified as ELLs" (p. 45)	West, Southwes t	20	1 (Unimportant) to 5 (Important)	Weighted Averages
Native Language and Culture (NLC) - Teacher Questionnaire	Van Ryzin et al., 2016 ²⁹ (via U.S. Dept. of Education)	Teacher self-report	Full Scale	In-service teachers N= N/R if student sample had exclusively different teachers Teacher race and gender not reported	N = 12,700 4 th and 8 th grade [American Indian/Alaska Native (AI/AN)] students	N/R	24	Binary; 3- and 4-pt Likert	N/R
Multicultural and Special Education Survey (MSES)	Utley, 2011 ³⁰	Teacher self-report	Full Scale	In-service teachers N = 403 93% White 75% Female	School districts w/ 10 percent or more CLD students returned 50% of the survey	Midwest	33	5-pt Likert; Y/N checklist	Average

Measurement Spotlight Profiles: Group-Specific Tools

Scale of Teacher Empathy for African American Males (S-TEAAM) [Teacher-Report]

Peer-Reviewed Article: Scale of Teacher Empathy for African American Males (S-TEAAM): Measuring Teacher Conceptions and the Application of Empathy in Multicultural Classroom Settings

Author: Chezare A. Warren

DOI: https://www.jstor.org/stable/10.7709/jnegroeducation.84.2.0154

Brief Description: This measure is comprised of two scales: the 4-item Teacher Conceptions of Empathy (TCE) scale and the Teacher Application of Empathy (TAE) scale. The TCR is intended to capture teacher beliefs regarding the importance and relevance of showing empathy to African American males, while the TCR assess teacher's self-report regarding the application of empathy toward the target student population. A significant limitation to the validity of this measure is the lack of control for social desirability bias, which would likely greatly influence teachers self-report about their feelings and actions towards this specific demographic group.

Psychometric Properties:

Reliability

- TCE, $\alpha = .80$
- TAE, $\alpha = .80$

Validity

Exploratory Factor Analysis used to establish a two-factor model

Sample included teachers who serve:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

Additional article by the author

Cultural Content Integration and Heritage Language Survey [Teacher-Report]

Peer-Reviewed Article: Speaking their language: The role of cultural content integration and heritage language for academic achievement among Latino children

Authors: J. Sharif Matthews & Francesca López

DOI: https://doi.org/10.1016/j.cedpsych.2018.01.005

Brief Description: When published in 2019, this scale, but consisted of two subscales: Heritage Language (Spanish) and Cultural Content Integration. The authors utilized a mixed-methods approach that included interviews with teachers, as well as teachers' self-report. It is acknowledged in the paper that social desirability is a limiting factor to the interpretability of the results. Interestingly, the quantitative findings presented suggest that incorporating students' heritage language, in this case Spanish, into instruction is a mediating factor through which cultural content integration (a key component of culturally responsive practice) predicts Latino students' academic achievement.

Psychometric Properties:

Reliability

 $\alpha = 0.75$

Validity

Confirmatory Factor Analysis conducted to validate measure

Sample included teachers who serve:

- X Children with special needs?
- X Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

Corresponding author's website

Native Language and Culture (NLC) Survey [Teacher-Report]

Peer-Reviewed Article: Initial exploration of a construct representing Native language and culture (NLC) in elementary and middle school instruction

Authors: Mark Van Ryzin, Claudia Vincent & Joe Hoover

DOI: https://www.jstor.org/stable/10.5749/jamerindieduc.55.1.0074

Brief Description: The only study in this literature review that met criteria and included a specific focus on Native American and Indigenous youth. However, the measure was not a novel development from the authors, rather a compilation of existing survey questions originally collected in 2009 and 2011 through the National Indian Education Study. Using this archival data, the authors operationalize representing Native language and culture (NLC) as "hands-on learning and validation of Native identity through use of Native language, culture, and history," which can be achieved through "student-centered instruction and use of Native languages as vehicles of Native culture and traditional knowledge" (p.75). The sample in this study was 4th grade (falling into our target 0-10 age range) and 8th grade teachers.

Psychometric Properties:

Reliability

Not reported

Validity

 Exploratory Factor Analysis and Confirmatory Factor Analysis using different subsamples

Sample included teachers who serve:

- X Children with special needs?
- ± Native American/Indigenous children?
- X Children of migrant and seasonal farm workers?

Related Resources:

Subsequent article published (2017) examining the association between
 NLC and academic achievement





Key Takeaways

In the current sociopolitical landscape in which educational equity is a priority, it is critical to hold early childhood (EC) and K-12 education systems accountable for providing high-quality education to all students. In order to provide an inclusive, supportive learning environment, teachers must teach to their students' cultural orientation and vast funds of knowledge. At present, we know many EC educators do not feel comfortable adapting their curricular materials or classroom dialogue to reflective a culturally responsive approach. The concept of culturally responsive practice can be vague and difficult to fully operationalize

- ➤ There is a shortage of well-validated *early childhood* culturally responsive measurement tools. New tools need to be developed or exsisting tools need to be adapted for the unique EC setting.
- ► There is a need for a consensus on the definition, and operationalziation, of CRP in order to track teacher behaviors and measure progress.
- ► The reliability and validity of exsiting measures is variable. As many of the measure dvelopers reference themselves, these measures should not be used to make high-stakes decisions about teacher qualtiy, but rather as a coaching tool to be used by trained professionals such as early childhood mental health consultants.

Limitations

Although accountability and data-based decision making are essential to making lasting, effective change, there can also be unintended consequences at the local community levels of early childhood education. As seen in the K-12 space with equity audits, quantitative data can be misleading and historically the reporting by predominately White scholars has adopted a deficit-view of differences in classroom experience or quality for students of color. Instead, examinations of the classroom settings require qualitative, participatory data from families and educators within the community to supplement quantitative ratings with important contextual information.

Policy Implications

"The term **equity** means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality." (E.O. 13985)

The above definition from President Joseph Biden's January 2021 executive order calls for equity across the federal agencies, but also through the delivery of federal resources. These calls for equity in the wake of the racial injustices in the United States (U.S.) originated at the local, community organizer levels and have successfully caught the attention of state and federal policymakers. However, to achieve early childhood educational equity, it is not only important to identify the important practices (e.g., culturally responsive practice) that can foster positive school experiences and reduce inequitable disciplinary outcomes, but it is also essential to operationalize and quantify such practice to ensure that it is being done in a developmentally appropriate, promotive manner.

Additionally, it is important to recognize that this is not the first time that U.S. presidents, both Democrat and Republican, have attempted to ensure that all students are educated in a way that is consistent with their culture. Specially, Executive Order 13336 issued by President George W. Bush and the subsequent update Executive Order 13592 issued by President Barack Obama, focused specially on the education of Native American and Indigenous students in a manner that is "consistent with tribal traditions, languages, and cultures." To ensure that the present day calls for equity and utilization of asset-based pedagogies result in substantive change we encourage policy stakeholders to consider the following at each level of government:

► Local –

- o Assess outcome measures (e.g., CLASS) evaluate measurement tools for inclusion of culturally responsive practice
- o School districts including culturally responsive practice in classroom quality and school quality ratings

➤ State –

- o Trying this out a state systems levels; incorporate into quality-rating systems. Equity is a perquisite to high quality!
- ► Federal Offer funding opportunities to encourage rigorous measurement work in educational equity. How to validate, how to replicate across states, CLASS type

measure; least burdensome and scalable as possible. Expand on the feasibility of rolling out the ASCSES measure in Headstart settings.

Endnotes

- ¹ Powers, M. D., Bottiani, J. H., Nguyen, A., & Bradshaw, C. P. (2021). *Measures of Culturally Responsive Practices in PreK-12 Classrooms: A Systematic Review.* [Manuscript submitted for publication]. Department of Human Services, University of Virginia.
- ^{1a} https://doi.org/10.1080/13613324.2017.1377417
- ² https://www.theanalysisfactor.com/what-is-reliability/
- ³ https://statisticsbyjim.com/glossary/validity/
- ⁴ https://doi.org/10.1371/journal.pone.0233969.g002
- ⁵ https://doi.org/10.1080/10409289.2019.1611331
- ⁶ https://doi.org/10.1002/pits.21845
- ⁷https://doi.org/10.1080/10627197.2018.1515010
- 8 https://doi.org/10.9741/2161-2978.1069
- ⁹ Powell, R., Chambers Cantrell, S., Malo-Juvera, V., & Correll, P. (2016). Operationalizing culturally responsive instruction: Preliminary findings of CRIOP research. *Teachers College Record*, *118*(1), 1-46.
- ¹⁰ https://doi.org/10.1080/10901027.2011.594487
- 11 https://eric.ed.gov/?id=EJ546772
- 12 https://doi.org/10.1177/0022429412463398
- 13 https://doi.org/10.1177/0042085915602534
- ¹⁴ https://doi.org/10.1016/j.tate.2010.09.004
- ¹⁵ https://doi.org/10.1080/10901027.2011.594487
- ¹⁶ https://doi.org/10.1177/0022487117742884
- ¹⁷ https://doi.org/10.4135/9781452231693.n10
- 18 https://doi.org/10.1080/15210960903028776
- ¹⁹ https://doi.org/10.1207/s15327892mcp0704 4
- ²⁰ Sparks, W. G., Butt, K. L., & Pahnos, M. (1996). Multicultural education in physical education: A study of knowledges, attitudes and experiences. *Physical Educator*, *53*(2), 73.
- ²¹ https://doi.org/10.1080/1066568010340105
- ²² https://doi.org/10.1177/0013164496056005017
- ²³ https://www.jstor.org/stable/3202517
- ²⁴ Ponterotito, J. G., Baluch, S., Greig, T., & Rivera, L. (1998). Development and initial score validation of the teacher multicultural altitude survey. *Educational and Psychological Measurement*, *58*(6), 1002-1016.
- ²⁵ Love, A., & Kruger, A. C. (2005). Teacher beliefs and student achievement in urban schools serving African American students. *The Journal of Educational Research*, *99*(2), 87-98.
- ²⁶ https://www.10.7709/jnegroeducation.84.2.0154
- ²⁷ http://www.10.1016/j.cedpsych.2018.01.005
- ²⁸ https://eric.ed.gov/?id=EJ1085786
- ²⁹ https://www.jstor.org/stable/10.5749/jamerindieduc.55.1.0074

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