

# A Validation Study of the Assessing Classroom Sociocultural Equity Scale (ACSES) in Pre-Kindergarten to Third Grade Classrooms

Molly J. Goldberg<sup>1,2</sup>, Dalhia D. Lloyd<sup>1,2</sup>, Gullnar Syed<sup>3</sup>, Greg W. Welch<sup>1,2</sup>, & Stephanie M. Curenton<sup>3</sup>

<sup>1</sup> Department of Child, Youth and Family Studies, University of Nebraska – Lincoln  
<sup>2</sup> Buffett Early Childhood Institute, University of Nebraska  
<sup>3</sup> Wheelock College of Education & Human Development, Boston University



## Introduction

Racially marginalized learners (RMLs) experience racial bias in early childhood (EC) classrooms. Yet, the field of EC lacks precise observational tools to measure RMLs' experiences.

The *Assessing Classroom Sociocultural Equity Scale (ACSES)* (Curenton et al., 2019) measures equitable, sociocultural interactions for RMLs in EC classrooms. This study aims to strengthen the knowledge base about the psychometric properties of ACSES.

**Aim 1:** To examine the underlying factor structure of ACSES in Pre-K to third grade classrooms.

**Aim 2:** To investigate patterns of convergent and divergent validity between ACSES and a widely used observational measure, CLASS.

## Methods

### Sample Description

We conducted a secondary analysis of 348 classroom videos from Pre-K to 3<sup>rd</sup> grade classrooms across four school districts from 2016-2019. To be included, videos needed to feature at least one RML. Most teachers were White ( $n = 62, 95.4\%$ ), and fewer teachers were Latine ( $n = 2, 3.1\%$ ) or Black ( $n = 1, 1.54\%$ ).

### Measures

The *ACSES* (Curenton et al., 2019) contains 40 items (Table 1). There is emerging evidence to support the psychometric properties of ACSES (Curenton et al., 2019; Syed et al., 2021). *CLASS* (Pianta et al., 2008) was used to measure teacher-child interactions.

### Procedures

For the ACSES training, coders attended a two-day virtual reliability training. 18.10% ( $n = 63$ ) of videos were scored by multiple coders to check for inter-rater reliability (mean = 89.32%).

### Analytic Strategy

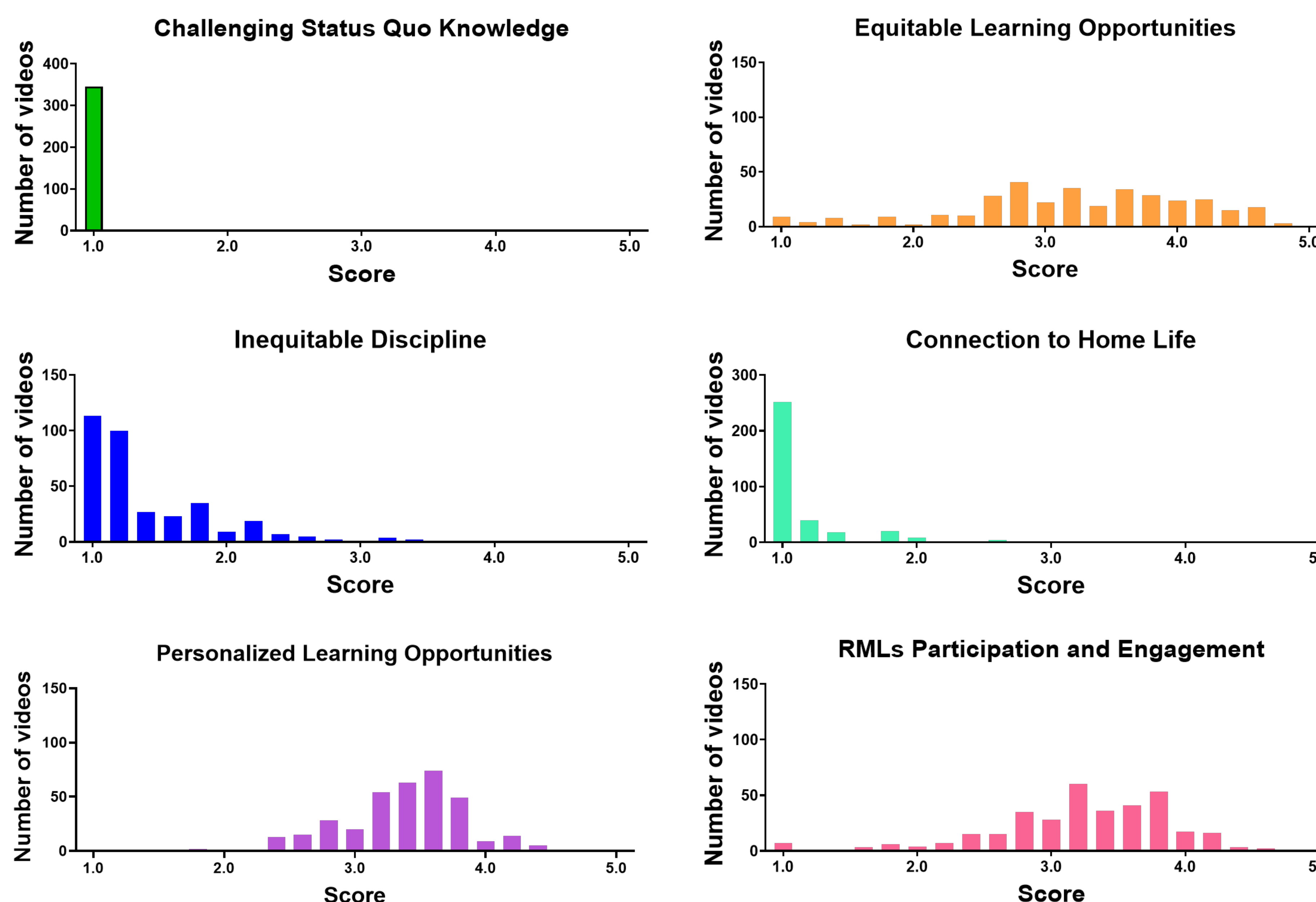
To address aim 1, an exploratory factor analysis was conducted. To address aim 2, bivariate associations between ACSES and CLASS were examined.

**Table 1. Description of ACSES Dimensions**

Dimension	Description
Challenging Status Quo Knowledge	Conversations about equity and/or fairness
Equitable Learning Opportunities	Teacher affirms RMLs, asks higher order questions to RMLs
Inequitable Discipline	Behavior directives and/or punishment tactics are unfair, biased, or harsh
Connection to Home Life	Teacher provides opportunities for RMLs to talk about their family, personal life, or culture
Personalized Learning Opportunities	Class-wide instructional quality
RMLs Participation & Engagement	RMLs' comfort and willingness to share with teacher and peers

## Results

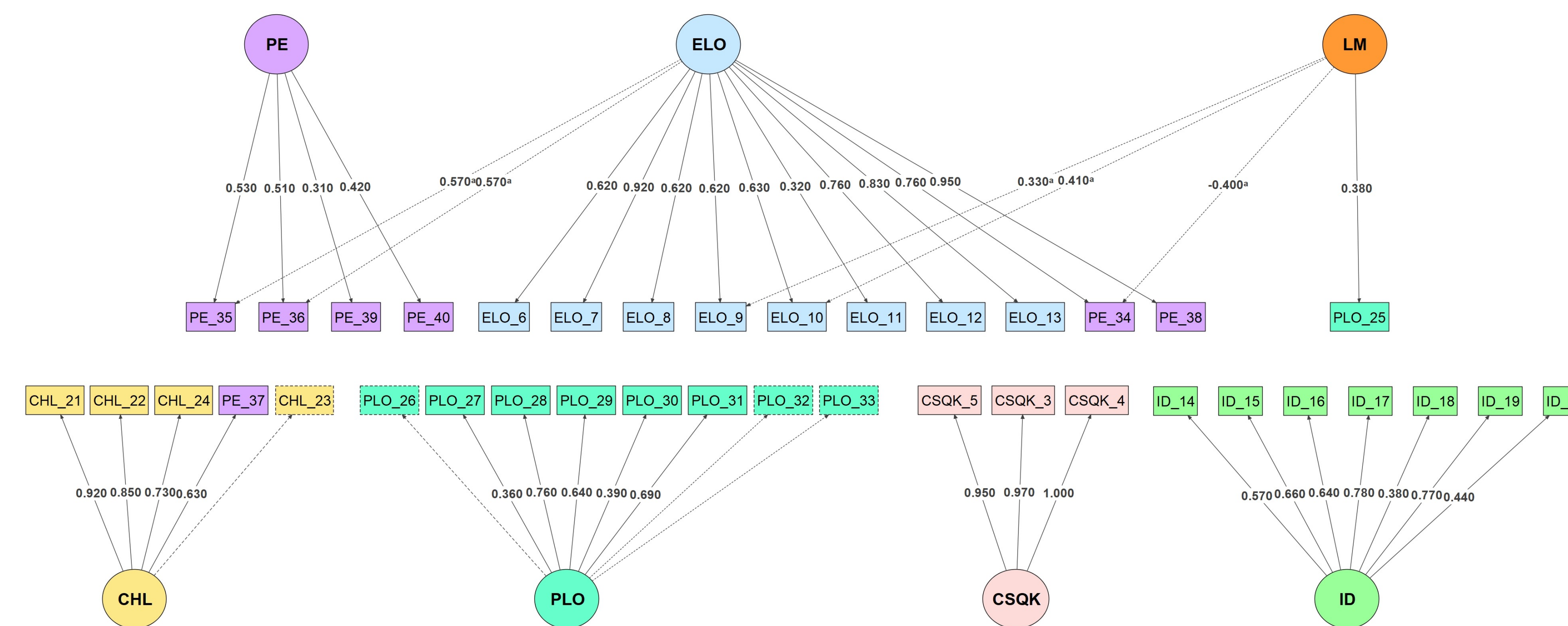
**Figure 1. Histograms Depicting ACSES Scores in Each Dimension**



*Note.* Ratings for the Equitable Learning Opportunities, Personalized Learning Opportunities, and RMLs Participation and Engagement dimensions were in the midrange on average, with substantial variability across classrooms. In contrast, ratings for the Challenging Status Quo Knowledge, Inequitable Discipline, and Connection to Home Life dimensions were in the low range on average, with few classrooms receiving high scores.

### Aim 1: ACSES Factor Structure

**Figure 2. ACSES Seven-Factor Structure**



*Note.* Two items (CSQK\_1 and CSQK\_2) were removed, due to low variance. An EFA of the remaining 38 items was conducted. An oblique geomin rotation was used, with a ML estimator. Factor loadings needed to be 0.30 or greater. Figure 2 displays EFA results. Seven factors were proposed. Cronbach alphas indicated moderate to strong internal consistency.

**Table 2. Correlations of ACSES Dimensions and CLASS Domains**

ACSES Dimension	CLASS Domains		
	Emotional Support	Classroom Organization	Instructional Support
CSQK	-.051	-.003	.108
ELO	.091	.104	.220**
ID	-.495**	-.446**	-.340**
CHL	.212*	.103	.207*
PLO	.408**	.283**	.428**
PE	-.001	.014	.108

CSQK = Challenging Status Quo Knowledge; ELO = Equitable Learning Opportunities for Racially Marginalized Learners; ID = Inequitable Discipline; CHL = Connection to Home Life; PLO = Personalized Learning Opportunities; PE = Racially Marginalized Learners' Participation and Engagement

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

### Aim 2: Convergent Validity

There were statistically significant correlations between the ACSES dimensions and CLASS domains, providing evidence for convergent validity (Table 2). Inequitable Discipline was negatively correlated with all CLASS domains, and Personalized Learning Opportunities was positively correlated with all CLASS domains.

## Discussion

**Classroom activities rarely focused on societal injustice or children's home lives.** The results from the EFA supported a **seven-factor structure**, which is similar to other research (Syed et al., 2021). ACSES measures similar, yet distinct, aspects of classroom quality to the CLASS.

### Implications for Practice

ACSES may be used to guide in-service professional learning in Pre-K to 3<sup>rd</sup> grade.

### Future Research

- A confirmatory factor analysis should be used to validate the dimensional structure of the measure.
- Research is needed to understand inequitable discipline and other aspects of classroom quality.

### References

- Curenton, M. S., Iruka, U. I., Humphries, M., Jensen, B., Durden, T., Rochester, E. S., Sims, J., Whittaker, V. J., & Kinzie, B. M. (2019). Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms. *Early Education and Development, 31*(2), 284-303. <https://doi.org/10.1080/10409289.2019.1611331>
- Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom assessment scoring system™: Manual K-3*. Paul H Brookes Publishing.
- Syed, G., Curenton, S.M., & Rochester, S.E. (2021, April 7-9). *Construct Validity of the Revised Assessing Classroom Sociocultural Equity Scale (ACSES): Confirmatory Factor Analysis* [Poster presentation]. Society for Research in Child Development 2021 Biennial Meeting.

## Contact

ACSES has been copyrighted by Stephanie M. Curenton-Jolly. Brookes Publishing has the exclusive right for distribution.

Questions? Email: [molly.goldberg@huskers.unl.edu](mailto:molly.goldberg@huskers.unl.edu)

