Measuring Teacher-Child Interactions in Linguistically Diverse Pre-K Classrooms

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Researchers investigated whether the Classroom Assessment Scoring System™ reliably characterized prekindergarten classrooms having varying ethnic and language compositions across the instrument's three domains (Emotional Support, Classroom Organization, and Instructional Support). They also examined whether the instrument predicted children's social, mathematics, and literacy outcomes equally well for Latino and dual language learner children as it does for their White, English-speaking peers.

Education researchers have consistently linked young children's development of social, language, literacy, and cognitive skills to warm, sensitive, well-organized, and cognitively stimulating interactions with adults in early education and care environments. As a result, performance standards, accountability systems, and assessment measures have been refined to more explicitly focus on high-quality teacher-child interactions in early childhood care settings.

Primarily due to the growing Latino population in the U.S., linguistic diversity has increased in publicly funded preschool programs. Latinos already comprise 25% of the population of children under 5 years of age. The Head Start Preschool programs, which primarily serve a low-income population, have a 28% enrollment of dual language learners, that is, children who primarily speak a language other than English in the home.

Unfortunately, the academic achievement of Latinos and dual language learners across all grade levels has consistently fallen below that of their White, English-speaking peers. This achievement gap often is seen as early as the preschool years and tends to persist.

Although Latino and dual language children benefit substantially from a preschool experience and show large gains on measures of school readiness skills, many remain well below the mean level of their peers at the end of the academic year. One of the most pressing challenges for early childhood educators is to understand what types of classroom environments and instructional practices may best meet the needs of Latino and dual language children and further reduce the achievement gap.

Two competing perspectives exist regarding what constitutes high quality classroom experiences for Latino and dual language children. One viewpoint suggests that they might benefit most from instruction tailored to their unique cultural and linguistic needs. The other viewpoint supports the notion that a common, global set of high-quality teaching practices exist that are equally beneficial to all children in most classroom environments.

In the early childhood field, there is a well-established, commonly used measure of global teaching practices, called the Classroom Assessment Scoring System™, or CLASS. Researchers at the Center for Advanced Study of Teaching and Learning conducted a study to determine whether the CLASS is equally reliable and valid across a range of ethnically and linguistically diverse classrooms.

The Study

The researchers had access to rich observational data from the National Center for Early Development and Learning's (NCEDL) Multi-State Study of Pre-Kindergarten and the NCEDL-NIEER State-Wide Early Education Programs (SWEEP) Study. At the time, the 11 states included in these studies served approximately 80% of U.S. children who attended state prekindergarten programs.

Participants included 2,983 children enrolled in 721 preschool classrooms. Four children were randomly selected to participate from each classroom, and whenever possible, two boys and two girls were selected. Dual language learners were identified among this population. The classroom populations were labeled as follows:

- 348 classrooms (48.3%) had no dual language learners (DLL).
- 256 classrooms (35.5%) were labeled "Mid DLL," meaning they included less than 50% DLL children.
- 102 classrooms (14.2%) were labeled "Hi-DLL," meaning they included greater than 50% DLL children.
- 15 classrooms (2.0%) did not have accurate information available regarding their DLL populations.

Classrooms were further characterized based on their specifically Latino populations:
- 307 classrooms (42.6%) had no Latino children.
- 223 classrooms (30.9%) had less than 50% Latino children (labeled "Mid Latino")
- 174 classrooms (24.1%) had greater than 50% Latino children (labeled "High Latino")

- 17 classrooms (2.3%) did not have accurate information available regarding their Latino populations

The quality of teacher–child interactions was assessed in each classroom via live observations using the CLASS instrument. A trained observer rated the preschool classroom and teacher–child interactions on nine dimensions roughly every 30 min during an observation day, and observation days lasted from the time children arrived until they started nap (in full-day programs) or left for the day (in half-day programs). For the Multi-State Study, CLASS scores for each dimension are mean ratings from two observations conducted in the spring, and for the SWEEP study, CLASS scores were derived from a classroom observation during one school day during the spring.

Children in the study participated in direct assessments of academic skills at the beginning and end of the prekindergarten year. Children were assessed in either English or Spanish, depending on an initial language screening process to determine the most appropriate language of assessment.

Results

The researchers found that the CLASS applies equally well across prekindergarten classrooms with different Latino and dual language learner compositions. In addition, CLASS measures of emotional support, classroom organization, and instructional support in prekindergarten classrooms predict positive development equally well for all children, regardless of their Latino or dual language learner status. There may be additional Latino- and dual-language-learner-specific teaching strategies that could benefit children and are in need of further study. These findings, however, underscore that warm, sensitive, well-organized, and cognitively stimulating interactions are at the very least a set of core practices that early childhood teachers can use to support the positive development of ethnically and linguistically diverse children.

The latest reauthorization of federal Head Start programs explicitly targets high-quality teacher–child interactions as a key standard of classroom practice, and CLASS is being used as the metric for that standard. Given the linguistic and cultural diversity of Head Start and other early childhood education programs across the United States, findings from this study provide reassurance that the CLASS three-domain structure for measuring teacher–child interactions can be applied similarly across ethnically and linguistically diverse classrooms.

For more information about the Center for Advanced Study of Teaching and Learning, visit *curry.virginia.edu/castl.*

A full report of this study may be found at Downer, J.T., Lopez, M. L., Grimm, K.J., Hamagami, A., Pianta, R. C., & Howes, C. (2012). Observations of teacher-child interactions in classrooms serving Latinos and dual language learners: Applicability of the Classroom Assessment Scoring System in diverse settings. *Early Childhood Research Quarterly, 27*, 21-32.