



RESEARCH BRIEF #5

## Early Care and Education Quality Measures: A Critical Review of the Research Related to Dual Language Learners

### Introduction

In the last two decades, the United States has experienced a demographic shift that has dramatically increased the racial, ethnic, cultural, and linguistic diversity among young children and families who are enrolled in early care and education programs. From a research perspective, it is important to examine the quality and influence of these experiences for dual language learners (DLLs) in different types of settings, the performance of measures used to evaluate the quality of early care and education for DLL populations, and the extent to which there are measurement issues that are unique to DLLs.

This brief report is a summary of a systematic review of the research literature to examine what is known about the use of quality measures for children birth-five in center-based and home-based settings. The focus was on studies that were conducted within settings primarily serving DLLs or that included comparisons among settings serving differing proportions of DLLs or between settings with and without DLL populations. The review included studies that used standard measures of quality and that reported findings specifically for DLLs. The review focused on peer-reviewed studies published in the U.S. from 2000-2010. An exhaustive search of the literature related to 49 quality measures produced 9 articles that were analyzed with respect to research methods and study results as described below.

### Results

- 1. Studies including DLL populations were found for only 9 of the 49 quality measures.** Only one study was found for most measures, with a maximum of 5 studies for any given measure, although some studies included more than one qual-

ity measure. (See list of measures below.) Most of these studies examined quality in center-based settings; only one of these studies examined the quality of experiences for DLL children in family child care settings, with sample sizes ranging from 2-248. All of the studies focused on Spanish-speaking and/or Latino populations exclusively or in comparison to English-speaking populations; no other language groups were represented.

- 2. There was no evidence that these measures functioned differently for settings serving DLL children.** In general, the range of scores and the associations with other variables looked similar in these studies compared to other studies in the literature looking at the broader population. For studies that included comparisons between settings primarily serving DLLs versus non-DLLs, there were generally no differences in scores on the measures of program quality (2, 6, 7). For studies that focused on settings serving DLLs, the scores looked similar to those found in the broader literature (1, 3, 4, 8, 9). In addition, quality measures related to children's outcomes in ways that were consistent with expected patterns (e.g., higher program quality ratings were associated with more positive child outcomes) (1, 2, 4, 9). However, it is not possible to draw conclusions about the validity of specific measures for use with DLLs, given that there were few studies for any particular tool. Only two research studies included measures that were designed specifically for examining early care and education for DLL populations (1,3).

**3. Several common methodological issues limit the conclusions that can be drawn about the performance of quality measures for DLL populations.** The definition of DLLs was inconsistent across studies and the method used to determine children’s cultural and linguistic characteristics was often limited or inadequately described. Only one of the studies conducted assessments of children’s language skills (4); four relied on teacher or parent reports (1, 5, 8, 9); and four did not specify how language status was determined (2, 3, 6, 7). In the majority of studies, the children were described as Spanish-speaking, Latino, or Hispanic. The measurement of DLLs at the setting level was often missing or inadequately reported. Although many studies included a substantial number of DLL children in the overall sample, no information was provided about the distribution of these children across the different settings within the sample, nor were analyses conducted to examine this issue. Little information was provided in most studies about whether data from these measures captured interactions with or among non-English-speaking children and/or providers for relevant measures.

## Conclusions

There is a need for further research to learn about the quality of experiences for DLL populations, including both center-based and home-based settings. Little is known about the extent to which their early care and education experiences are similar to or different from those of non-DLLs. However, there appear to be potential opportunities within many existing studies for further inquiry in this area. Many studies include sufficient samples of DLLs, but have not analyzed the data separately for this population. With regard to the tools themselves, there is a need for further research to examine the extent to which these measures adequately capture critical factors of program quality for DLL children. There may be some aspects of environments which need to look different for DLLs than for non-DLLs in order to support similar educational goals. Further, there is a need for research to examine the additional information contributed by DLL-specific program/classroom quality measures beyond that contributed by measures designed for the general population. When considering or designing measures for use with DLL populations, it would be important to understand the types of information that are needed, and to ensure that both specific and general measures are appropriate for their intended purpose. Important future directions include further examination of extant data to better understand the quality of early care and education experiences for DLLs as well as new research that includes measurement of aspects of quality specific to DLLs in conjunction with measurement of broader program quality. ●

## Method

The review focused on 49 measures that met criteria as measuring some aspect of the quality of care and education settings for children birth-five in center-based and/or home-based settings, the measure was publicly available (commercially or otherwise), and the measure was developed for use across research studies (i.e., not a project-specific measure). These measures represented six major categories based on the primary focus: DLL-specific, language/literacy, teacher-child interaction/relationship, global program/environment, instructional practices, and family/friend/neighbor care. This review focused on peer-reviewed journal articles published in the U.S. from 2000-2010. Two sets of search terms were defined, terms for measures (names and abbreviations) and the standard list of terms for DLLs, including language status (e.g., bilingual, English language learner, dual language learner), and children’s ethnicity or immigration status (e.g., Latino, immigrant, migrant).

## References of Studies Included in the Review

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4. Chang, F., Crawford, G., Early, D., Bryant, D., Howes, C., Burchinal, M., ... Pianta, R. (2007). Spanish-speaking children's social and language development in pre-kindergarten classrooms. *Early Education and Development, 18*, 243-269.
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6. Howes, C., Shivers, E. M., & Ritchie, S. (2004). Improving social relationships in child care through a researcher-program partnership. *Early Education & Development, 15*(1), 57-78.
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8. Winter, S. M., Zurcher, R., Hernandez, A., & Yin, Z. (2007). The early on school readiness project: A preliminary report. *Journal of Research in Childhood Education, 22*(1), 55-68.
9. Zuniga, S. A., & Howes, C. (2009). Predictions of children's experiences with Latina family child care providers. *Early Education and Development, 20*(2), 265-284.

## Early Care and Education Quality Measures

### DLL-specific

*Bilingual Teacher Behavior Rating Scale (B-TBRS)*

*Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA)*

\**Early language and literacy classroom observation addendum for English language learners (ELLCO-A)* (3)

\**Supports for English language learners classroom assessment (SELLCA)* (1)

### Language/Literacy

*Classroom Language and Literacy Environment Observation (CLEO)*

\**Early Language and Literacy Classroom Observation/ Early Language and Literacy Classroom Observation Pre-Kindergarten (ELLCO)* (3, 5)

*Early Literacy Observation Tool (E-LOT)*

*The Language Interaction Snapshot (LISn)*

*Measures of Early Language and Literacy (ELLE)*

\**Supports for Early Literacy Assessment (SELA)* (1)

*Observation Measures of Language and Literacy*

*Observation Measures of Language and Literacy: Quality Rating of Language and Literacy Instruction, Classroom Literacy Opportunities Checklist, Snapshot (OMLIT; OMLIT-QUILL; OMLIT-CLOC; OMLIT-Snapshot)*

### Teacher-Child Interaction/Relationship

\**Caregiver Interaction Scale or Arnett Caregiver Interaction Scale (CIS, Arnett Scale)* (2, 6)

*Caregiver Observation Form and Scale (COFAS)*

*Child Caregiver Interaction Scale (CCIS)*

*The Child-Caregiver Observation System (C-COS)*

*Classroom CIRCLE: Classroom Code for Interactive Recording of Children's Learning Environments (CIRCLE)*

\**The Emergent Academic Snapshot (EAS)* (4, 9)/*Adult Involvement Scale (AIS)* (2, 6, 7, 9)

### Global Program/Environment

\**Observational Record of the Caregiving Environment (ORCE)* (2, 7)

*Teacher Behavior Rating Scale (TBRS)*

*Teacher Knowledge Assessment (TKA)*

*Teaching Pyramid Observation Tool for Preschool Classrooms (TPOT)*  
*Supports for Social-Emotional Growth Assessment (SSEGA)*  
*Assessment Profile for Early Childhood Programs (APECP)*  
*Child Development Program Evaluation Scale (CDPES)*  
*Early Childhood Classroom Observation Measure (ECCOM)*  
*The Early Childhood Environment Rating Scale–Extension (ECERS-E)*  
*\*Early Childhood Environment Rating Scale/Early Childhood Environment Rating Scale–Revised (ECERS-R/ECERS) (1, 2, 4, 6, 8)*

### **Instructional Practices**

*Emlen Scales: A Packet of Scales for Measuring the Quality of Child Care From a Parent’s Point of View (Emlen Scales)*  
*Infant/Toddler Environment Rating Scale / Infant/Toddler Environment Rating Scale-Revised (ITERS, ITERS-R)*  
*The Preschool Classroom Implementation Rating Scale (PCI)*  
*Preschool Mental Health Climate Scale (PMHCS)*  
*Preschool Program Quality Assessment Instrument/ Preschool Program Quality Assessment Instrument, 2nd Edition (PQA)*  
*Program Administration Scale (PAS)*  
*Program for Infant/Toddler Care Program Assessment Rating Scale (PITC-PARS)*

*Quality of Early Childhood Care Settings: Caregiver Rating Scale (QUEST)*  
*Classroom assessment Scoring System (CLASS)*  
*Classroom Assessment Scoring System: Toddler Version (CLASS Toddler)*  
*Classroom Observation of Early Mathematics Environment and Teaching (COEMET)*  
*Classroom Practices Inventory (CPI)*  
*Individualized Classroom Assessment Scoring System (inCLASS)*  
*Preschool Classroom Mathematics Inventory (PCMI)*  
*Preschool Rating Instrument for Science and Math (PRISM)*  
*Ramey’s Observation of the Learning Environment (ROLE)*  
*Teacher Instructional Engagement Scale (TIES)*

### **Family/Friend/Neighbor Care**

*Assessment Profile for Family Child Care Homes (APFCCH)*  
*Child Care Assessment Tool for Relatives (CCAT-R)*  
*The Child Care HOME inventories (CC-HOME)*  
*Child/Home Early Language and Literacy Observation (CHELLO)*  
*\*Family Day Care Rating Scale (FDCRS)/Family Child Care Environment Rating Scale–Revised (FCCERS-R) (9)*

*\*Indicates measures that were included in the reviewed studies. Numbers in parentheses indicate reference numbers of reviewed studies which included that measure.*

## **About CECER-DLL**

CECER-DLL is a national center that is building capacity for research with dual language learners (DLLs) ages birth through five years. CECER-DLL aims to improve the state of knowledge and measurement in early childhood research on DLLs, identify and advance research on best practices for early care and education programming, and develop and disseminate products to improve research on DLLs. CECER-DLL is a cooperative agreement between the Frank Porter Graham (FPG) Child Development Institute at The University of North Carolina at Chapel Hill and the Office of Planning, Research, & Evaluation (OPRE) in the Administration for Children & Families (ACF), in collaboration with the Office of Head Start and the Office of Child Care.

### **Suggested citation**

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Additional Resources: For additional information regarding this research brief, see <http://cecerdll.fpg.unc.edu>

