
Thank you for your request to our REL Reference Desk regarding the association between the Classroom Assessment Scoring System and school readiness. Ask A REL is a collaborative reference desk service provided by the ten regional educational laboratories (REL) that, by design, functions much in the same way as a technical reference library. It provides references, referrals, and brief responses in the form of citations on research based education questions.

The information below represents the most rigorous research available. Researchers consider the type of methodology and give priority to research reports that employ well described and thorough methods. The resources were also selected based on the date of the publication with a preference for research from the last ten years. Additional criteria for inclusion include the source and funder of the resource.

Question: *What are the associations between scores on the Classroom Assessment Scoring System (CLASS) and school readiness?*

Search Process

Key words and search strings used in the search: *Classroom Scoring System AND school readiness prediction; prekindergarten AND school readiness*

Search databases and websites:

1. ERIC: <http://www.eric.ed.gov/>
2. JSTOR: <http://www.jstor.org/action/showAdvancedSearch>
3. Google Scholar: www.google.com/scholar
4. Institute of Education Sciences (IES) Resources: <http://ies.ed.gov>
5. What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc/>

Sample Citations Retrieved: *(NOTE: Abstracts and executive summaries are copied directly from the reports when possible to ensure accuracy):*

Chien, N.C., Howes, C., Burchinal, M., Pianta, R., Ritchie, S., Bryant, D., Clifford, R., Early, & D., Barbarin, O.A. (2010). Children's Classroom Engagement and Gains in Academic and Social-Emotional Outcomes across Pre-Kindergarten. *Child Development*, 81(5), 1534-1549. doi: 10.1111/j.1467-8624.2010.01490.x

Abstract/Summary: Child engagement in prekindergarten classrooms was examined using 2,751 children (mean age = 4.62) enrolled in public prekindergarten programs that were part of the Multi-State Study of Pre-Kindergarten and the State-Wide Early Education Programs Study. Latent class analysis was used to classify children into 4 profiles of classroom engagement: free play, individual instruction, group instruction, and scaffolded learning. Free play children exhibited smaller gains across the prekindergarten year on indicators of language/literacy and

mathematics compared to other children. Individual instruction children made greater gains than other children on the Woodcock Johnson Applied Problems. Poor children in the individual instruction profile fared better than non-poor children in that profile; in all other snapshot profiles, poor children fared worse than non-poor children.

Diamond, K.E., Justice, L.M., Siegler, R.S., & Snyder, P.A. (2013). Synthesis of IES research on early intervention and early childhood education. (NCSE 2013-3001). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education. Retrieved from: <http://ies.ed.gov/>.

Abstract/Summary: This report compiles finding from research grants on early intervention and education that were funded by the National Center for Education Research and National Center for Special Education Research since June 2010. The report presents evidence on classroom environment, instructional practices, measuring children's skills, and professional development.

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(1), 21-32. doi: 10.1016/j.ecresq.2011.07.005

Abstract/Summary: With the rising number of Latino and dual language learner (DLL) children attending pre-k and the importance of assessing the quality of their experiences in those settings, this study examined the extent to which a commonly used assessment of teacher-child interactions, the Classroom Assessment Scoring System (CLASS), demonstrated similar psychometric properties in classrooms serving ethnically and linguistically diverse children as it does in other classrooms. Specifically, this study investigated: (1) whether CLASS observations of teacher-child interactions are organized in three domains across classrooms with varying ethnic and language compositions (measurement invariance) and (2) the extent to which CLASS-assessed teacher-child interactions (emotional support, classroom organization, and instructional support) predict children's social, math, and literacy outcomes equally well for Latino and DLL children (predictive validity). CLASS observations of teacher-child interactions were conducted in 721 state-funded pre-k classrooms across 11 states. Direct assessments and teacher ratings of social, math, and literacy outcomes were collected for four randomly selected children in each classroom. CLASS observations factored similarly across pre-k classrooms with different Latino and DLL compositions and predicted improvements in school readiness regardless of a child's Latino or DLL status. Results suggest CLASS functions equally well as an assessment of the

quality of teacher-child interactions in pre-k settings regardless of the proportion of Latino children and/or the language diversity of the children in that setting. (Contains 5 tables and 1 figure.)

Mashburn, A.J., Pianta, R.C., Hamre, B.K., Downer, J.T., Barbarin, O.A., Bruant, D., Burchinal, M., Early, D.M., & Howes, C. (2008). Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills. *Child Development*, 79(3), 732-749. doi: 10.1111/j.1467-8624.2008.01154.x

Abstract/Summary: This study examined development of academic, language, and social skills among 4-year-olds in publicly supported prekindergarten (pre-K) programs in relation to 3 methods of measuring pre-K quality, which are as follows: (a) adherence to 9 standards of quality related to program infrastructure and design, (b) observations of the overall quality of classroom environments, and (c) observations of teachers' emotional and instructional interactions with children in classrooms. Participants were 2,439 children enrolled in 671 pre-K classrooms in 11 states. Adjusting for prior skill levels, child and family characteristics, program characteristics, and state, teachers' instructional interactions predicted academic and language skills and teachers' emotional interactions predicted teacher-reported social skills. Findings suggest that policies, program development, and professional development efforts that improve teacher – child interactions can facilitate children's school readiness.

Preschool Curriculum Evaluation Research Consortium (2008). Effects of Preschool Curriculum Programs on School Readiness (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Retrieved from: <http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCER20082009rev>

Abstract/Summary: A variety of preschool curricula is available and in widespread use, however, there is a lack of evidence from rigorous evaluations regarding the effects of these curricula on children's school readiness. The lack of such information is important as early childhood center-based programs have been a major, sometimes the sole, component of a number of federal and state efforts to improve young at-risk children's school readiness (e.g., Head Start, Even Start, public pre-kindergarten). In 2005, nearly half (47%) of all 3- to 5-year-old children from low-income families were enrolled in either part-day or full-day early childhood programs (U.S. Department of Education 2006). In 2002, the Institute of Education Sciences (IES) began the Preschool Curriculum Evaluation Research (PCER) initiative to

conduct rigorous efficacy evaluations of available preschool curricula. Twelve research teams implemented one or two curricula in preschool settings serving predominantly low-income children under an experimental design. For each team, preschools or classrooms were randomly assigned to the intervention curricula or control curricula and the children were followed from pre-kindergarten through kindergarten. IES contracted with RTI International (RTI) and Mathematica Policy Research (MPR) to evaluate the impact of each of the 14 curricula implemented using a common set of measures with the cohort of children beginning preschool in the summer-fall of 2003.

Winsler, A., Tran, H., Hartman, S. C., Madigan, A. L., Manfra, L., & Bleiker, C. (2008). School readiness gains made by ethnically diverse children in poverty attending center-based childcare and public school pre-kindergarten programs. *Early Childhood Research Quarterly*, 23(3), 314–329. doi: 10.1016/j.ecresq.2008.02.003

Abstract/Summary: Although intensive early childhood interventions and high quality preschool programs have been shown to foster children's school readiness, little is known about the school readiness gains made by ethnically and linguistically diverse children in poverty receiving subsidies to attend center-based childcare or those in public school pre-kindergarten programs. Within the context of a large-scale, university–community applied research and evaluation project, The Miami School Readiness Project, children receiving subsidies to attend center-based childcare (n = 1478), children attending free Title 1 public school pre-k programs (n = 1611), and children attending fee-supported public school pre-k programs (n = 749) were individually assessed at the beginning and end of their pre-kindergarten year in the areas of cognitive, language, and fine motor development. Parents and teachers reported on children's socio-emotional strengths and behavior concerns. Findings revealed that although children from all types of programs made considerable school readiness gains in most areas in terms of their national relative standing, children attending public school pre-k programs typically made somewhat greater gains in the areas of cognitive and language development. Results suggest that center-based childcare programs in the community may be beneficial for fostering school readiness within ethnically diverse children in poverty, and that public school pre-kindergarten programs may show even greater gains in some areas. Policy implications are discussed.

Referrals

Organizations:

- National Association for the Education of Young Children: <http://www.naeyc.org/>

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- National Institute for Early Education Research <http://nieer.org>

Federally Funded Resources:

- Institute of Education Sciences (IES), public search engine available at: <http://ies.ed.gov/pubsearch/>
- National Center for Research on Early Childhood Education: <http://curry.virginia.edu/research/centers/castl/project/ncrece>
- What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc>

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