



Early Achievers Standards Validation Study



EXECUTIVE SUMMARY

The Statewide Internal Standards Validation Study of Early Achievers addressed whether elements of Washington State's Quality Rating and Improvement System (QRIS) for early care and education are associated with measurable gains in children's outcomes across developmental domains. With this validation study, Washington joins a handful of other states that have attempted to examine whether sites that receive higher ratings are actually producing better outcomes in terms of child development (Karoly, 2014). The University of Washington Childcare Quality & Early Learning Center for Research & Professional Development (CQEL) conducted this study from June 2014 through December 2015 in partnership with the Washington State Department of Early Learning (DEL).

Nearly every state in the nation has created a QRIS to raise the quality of early care and education. Washington State's QRIS is called Early Achievers. At the time of this study Early Achievers was a voluntary program, but since the passage of the Early Start Act in 2015, participation has been mandated for all child care sites serving children with subsidies as well as Early Childhood Education and Assistance Program (ECEAP) sites. With support from a federal Race to the Top Early Learning Challenge grant, Early Achievers went statewide beginning July 1, 2012. Its goal—consistent with the overarching purpose of QRIS—is to help early learning professionals offer high-quality child care that supports children's learning and development.

Early Achievers is comprised of elements including a standard area rating structure, a quality rating system (quality levels 1–5), coaching and professional development, incentives to attain higher levels of quality, and information sharing among families. In the validation process, independent observers assess quality across standard areas that include Child Outcomes, Family Engagement, Professional Development, and Curriculum and Staff Supports. These ratings are intended to distinguish meaningful levels of quality and subsequent improved outcomes for children.

The validation study

Our validation study employed research methods including records review, surveys with early learning professionals and parents and families, observational assessments of center care classrooms and family child care homes, and individual direct child assessments to explore three key research questions (shown below). Focus areas of the study were provider characteristics and program quality, child outcomes (residual gains in children's learning and development), and parent and family profiles.

The quality standards validation study began in June 2014 and continued through three phases of data collection (October 2014-February 2015; February-May 2015; and March-July 2015). The University of Washington hired research team staff members in August 2014, and in partnership with DEL, began to recruit study participants. Program directors of child care centers (CCCs) and family child care (FCC) program owners served as primary contacts throughout the study. The initial sampling frame included all sites enrolled in Early Achievers, and the study was designed to include both infant/toddler and preschool classrooms across all regions of Washington State.

At the time of initial study recruitment, 2,303 sites were enrolled in Early Achievers. Our final study sample was 100 sites, 152 classrooms, and 761 children ranging in age from 8 months to 71 months. Children younger than 36 months participated in the infant/toddler (I/T) assessment battery (31.4%), and the remaining 68.6% of the sample were considered preschool age. By program type, 139 children attended FCC sites, 532 attended CCCs, and 90 attended HS/ECEAP sites.

Assessment measures

We used a battery of measures for child assessments including both direct and indirect assessments (via teacher report). The instruments we used to assess the quality of the learning environment were the Classroom Assessment Scoring System (CLASS, which assesses classroom practices by measuring teacher-child interactions and material use); Environment Rating Scales (ERS, which measures classroom interactions, activities, and materials); Language Environment Analysis (LENA, which captures information about language use in a child's environment), and Engagement in Classrooms Data Collection (ECDC, an observational tool that tracks children's engagement, or on-task behaviors). We trained data collectors and held them to stringent thresholds of reliability on these instruments.

General areas of individual child assessments were cognitive, early reading, early science, early writing, executive function, expressive language, fine and gross motor, early math, receptive language, and social-emotional. We conducted individual child assessments throughout fall 2014 and again in spring 2015 to determine children's learning and development over time.

Study results

Our validation study found several relationships between early learning setting characteristics (Early Achievers rating levels, standards, and observational measures of quality) and children's developmental gains. But the relationship we found between the complex construct of classroom quality and resulting children's gains resulted in both informative findings and implications for further research.

Our study addressed **three primary research evaluation questions**:

1. Do children who attend higher-rated Early Achievers sites show greater gains than children who attend lower-rated Early Achievers sites?
2. Are the Early Achievers' quality standards associated with children's learning?
3. What is the association between Early Achievers observational measures of quality and children's learning?

Our analyses found that:

- Children make gains in the expected direction across most domains in a relatively short period of time.
- Children make greater gains in sites with higher-level ratings than in sites with lower ratings in the learning domains of receptive language, expressive language, and fine motor skills.
- A relationship of practical significance occurs between the Professional Development standard area and letter word knowledge. Additionally, a single factor comprised of 17 standard items was related to children's gains in receptive language.
- Some associations exist between CLASS domains and child outcomes. The CLASS PK Instructional Support domain was positively related to receptive language and early writing. But Toddler CLASS Emotional and Behavioral Support was related in an unexpected direction to social emotional skills—a curious finding.
- When analyzed with the current Early Achievers threshold, a significant positive relationship exists between CLASS PK Instructional Support and both early writing and letter word knowledge. Additionally, the Toddler CLASS Engaged Support for Learning domain was associated with fine motor skills.
- An alternate administration and proportion scoring method of the Environmental Rating Scales (ECERS-R, ITERS-R, FCCERS-R) family of tools showed positive associations with gains in receptive language, early science, expressive language, cognitive, and social-emotional skills.
- Classrooms implementing Montessori or research-based curriculum improved the effect of CLASS Instructional Support on letter word knowledge. Mastery engagement was associated with social-emotional and early writing skills.

There are important limitations to our study that compel us to advise caution when interpreting results. These include a small dataset in regards to the number of participating sites, classrooms, and children; missing data; limited range of scores on independent variables; and the fact that we observed children whose parents chose these sites and volunteered to participate in our study, raising issues regarding self-selection and the representativeness of our sample. A final limitation concerns the short time frame (average 150 days) from pre- to post-direct child assessments. Ideally, we would follow children over their time in care and have enough data points to understand individual children's growth curves longitudinally. In general, we found some positive results that support the existing literature base. But unexpected findings proved contradictory and require further investigation.

Survey of provider and family experiences in Early Achievers

As part of the validation study, we surveyed key stakeholders in Early Achievers: early learning professionals and the families of children enrolled in their sites.

Among early learning professionals (60.4% response rate for directors/owners and 48.9% for teachers/providers), we found that:

- CCC directors, FCC owners, and CCC teachers/providers (including Head Start and ECEAP) participating in this survey were predominately female, married, white, and English-speaking. Directors and owners tended to be older, have more experience in the field of early childhood education than teachers/providers, and reported higher annual salaries and household incomes than teachers/providers.
- Both centers and FCCs implement curriculum, but they vary considerably in the way they use curriculum. Directors and teachers/providers were more likely to report use of research-based, published curriculum, while FCC owners were more likely to develop and use their own. Directors, owners, and teachers/providers reported that they are most confident teaching children social-emotional skills. FCC owners also indicated higher levels of confidence for teaching physical development and health and early writing. Directors, owners, and teachers/providers identified low wages as interfering with their job performance, and in addition, they all reported that workplace stressors, job expectations, and lack of sleep inhibit their ability to perform their jobs.
- Directors, owners, and teachers reported mixed satisfaction with Early Achievers. Some expressed very positive experiences such as opportunities to learn and become more intentional with teaching practices, while others felt that changes were needed such as time required to participate.

Among the 599 parents/guardians who completed the family survey (64.0% response rate):

- A majority reported that proximity to home was the top reason they chose their child care program, while special needs programming and the caregiver speaking their home language were least important.
- Parents reported overall satisfaction with their children's site/facility/setting. High percentages of parents felt comfortable at their site, connected with the teacher/provider, had children excited to attend, and had seen positive changes in their child's skills since enrollment.
- Parents reported participating in many different types of activities with their children at home, with the most frequent activities being book reading, singing songs, and tickling their child. The least frequent activities were trips to the library and playing board games.

Recommendations

1. Results indicate that children are making positive but modest gains across most developmental domains. Strengthening the focus of teaching and learning across all domains—especially in sites serving children from low-income backgrounds—could enhance learning and development. Specifically, in the year before kindergarten, children were not as strong in early math and letter word identification compared to other domains. More than half of low-income children entering kindergarten were below the mean or established age expected score on standardized measures in receptive vocabulary, letter word identification, executive function, and early math. We recommend considering the results from the analyses of children's developmental gains to inform professional development for early learning professionals.
2. Noting that the sample of dual language learners was very small, our results indicate that children made marked receptive language gains in English, but they did not gain equally in Spanish. This suggests the children could be learning English at the expense of becoming bilingual. We recommend considering professional development for child care professionals in supporting bilingual learners.

3. Our results suggest links between the use of research-based curriculum and children’s learning. We recommend considering incentivizing and providing support for the uptake and use of research-based curriculum in Early Achievers sites. Support could include efforts to reduce the costs of curriculum to the providers, training, and ongoing coaching to fidelity.
4. We found some positive linkages between quality assessments and child outcomes, but not for all domains and most linkages are lost when the assessments are summed to Early Achievers quality levels. We recommend exploring domain specific quality assessments. Future work could involve simulations for the inclusion and alternative weighting of quality measures and standard areas that may strengthen linkages to child outcomes.
5. Alternative scoring of the Environmental Rating Scales using a proportion score was related to child outcomes across more developmental domains than traditional scoring. Scoring “all the way up” captures developmentally enhancing interactions within the context of a safe and engaging environment. Results yielded from proportion scoring also provide more helpful links to tailor information for coaching and professional development goals. We recommend considering using the alternative scoring method of ERS. Additionally, Washington State is currently engaged in an effort to validate the ECERS-3, which has a similar approach to the proportion score and might be a viable measure for QRIS. We recommend exploring alternative administration and scoring methods of ERS, as well as considering the new ECERS-3 tool as future options.
6. Early Achievers data collection is extensive and can be overly time-consuming. We recommend exploring ways to increase the efficiency of data collection in Early Achievers. Validating short forms of quality instruments, collecting data on tablets to streamline data entry, and eliminating duplicative measures are all viable options.
7. More than 25% of directors reported asking a child to leave their centers due to challenging behavior. Child care expulsion is a concerning event and indicates providers need more support to care for all children. We recommend considering system-wide and focused professional development on positive behavioral support for young children.
8. Providers reported stress, and they experience depressive symptoms at higher rates than the general public. Caring for children is demanding physical and mental work and even more difficult to do when one feels stressed or depressed. We recommend considering system-wide and focused support for child care professionals’ health and well-being.
9. Limitations in this study were mostly related to sample characteristics due to voluntary recruitment during a less-than-optimal time in the evolution of Early Achievers. But ongoing study of the Early Achievers program is essential to continued quality improvement of the program to optimize child outcomes—especially for vulnerable children. Continued evaluation efforts of Early Achievers in its current structure may be beneficial in understanding future refinement needs of the rating system and the differentiation of quality rating levels. We recommend requiring or rewarding participation in future, ongoing evaluation of all Early Achiever sites.