

Executive Summary

This study is an evaluation of Project Construct's impact on *student achievement* and *program quality*. Project Construct is an early childhood curriculum framework developed to provide a research-based, comprehensive, integrated curricular framework for early childhood education.

To demonstrate the effectiveness of the Project Construct curriculum, we will first measure the *student achievement* of Missouri preschool children using the 2007-08 *School Entry Profile: Preschool Assessment Project Edition (SEP)*. We will compare data within the developmental domains of Cognition, Language, and Social-Emotional Development, as well as within the area of Conventional Knowledge and the Preparation for Kindergarten item. We will compare the Project Construct curriculum with 1) a control group of preschool students taught with "other curricula," and 2) preschool children taught with The Creative Curriculum® or High/Scope™. These comparisons will demonstrate whether the type of curriculum used in a classroom affects student achievement. By comparing Project Construct with "other curricula," we are comparing an MPP-approved curriculum with a non-approved curriculum to see if there is a difference in student achievement. The comparison between Project Construct and High/Scope™ and The Creative Curriculum® combined demonstrates a comparison *within* the group of MPP-approved curricula to determine if there is a difference in student achievement. We expect that students in Project Construct classrooms will have higher achievement than students in classrooms using "other curricula." We also expect that students in Project Construct classrooms will be on par with students in classrooms using other research-based curricula such as The Creative Curriculum® and High/Scope™.

The second aspect of this study will demonstrate the *quality* of the education students receive in Project Construct classrooms. We will assess Project Construct program *quality* using a nationally and internationally recognized scale, the *Early Childhood Environment Rating Scale-Revised (ECERS-R)*, as well as the more curriculum-specific instrument: *The Project Construct Early Childhood Classroom Observation Scale (PC-ECCOS)*. These two instruments work together to provide a comprehensive review of the quality of Project Construct classrooms, because the *ECERS-R* evaluates the total environment of the classroom while the *PC-ECCOS* evaluates whether or not a classroom is consistent with and reflects implementation of the specific curriculum (in this case, Project Construct). We will compare *ECERS-R* scores of Project Construct classrooms with High/Scope™ and The Creative Curriculum® combined. This comparison will demonstrate whether or not Project Construct classrooms are of similar quality to classrooms using other MPP-approved curricula (The Creative Curriculum® and High/Scope™). We expect that Project Construct classrooms will have mean *ECERS-R* scores similar to those of High/Scope™ and The Creative Curriculum® classrooms. We will use another instrument, the *PC-ECCOS*, to compare the scores of the Project Construct classrooms prior to and after the lead teacher attended Project Construct professional development. This comparison will demonstrate whether or not attending Project Construct professional development improves the quality of the instruction in preschool classrooms. We expect that participants will have higher *PC-ECCOS* scores after attending Project Construct professional development.

The results of the 2007-08 *SEP* data analysis demonstrated that children taught with the Project Construct curriculum left preschool with higher achievement compared with children taught with "other curricula" on the following domains: Cognitive Development, Language

Development, and Social-Emotional Development, as well as on the Conventional Knowledge subscale and the Kindergarten Preparation item. On the Kindergarten Preparation item and all six of the *SEP* subscales, except Working with Others, the results were statistically significant. The results of the *SEP* data also demonstrated that children in Project Construct classrooms were on par with students in The Creative Curriculum® and High/Scope™ classrooms. Although the mean subscale scores were slightly higher for students in The Creative Curriculum® and High/Scope™ classrooms, the differences were statistically significant only for the Communication subscale and the Kindergarten Preparation item. Therefore, Project Construct students scored higher than students taught with “other curricula” on the *SEP* and were on par with The Creative Curriculum® and High/Scope™.

The 2006-08 *ECERS-R* and the 2008 *PC-ECCOS* results demonstrated that students in Project Construct classrooms received a high-quality preschool education. The *ECERS-R* results demonstrated that the mean score for all Missouri Preschool Project classrooms was 4.78 (on a seven-point scale), which is near the “Good” value of 5.00 on the instrument. There was very little measurable difference between Project Construct classrooms and High/Scope™ and The Creative Curriculum® classrooms combined. More specifically, Project Construct classrooms scored higher than The Creative Curriculum® and High/Scope™ classrooms combined on the overall score, as well as on the following subscales: Space and Furnishing, Personal Care Routines, Language-Reasoning, and Activities. The Creative Curriculum® and High/Scope™ scored slightly higher on the Interaction and Program Structure subscales. Only the higher Project Construct score on the Space and Furnishing subscale was statistically significant. In other words, the differences in scores on the *ECERS-R*, except the Space and Furnishing subscale, could be due to chance alone. Therefore, Project Construct classrooms were of similar high quality as High/Scope™ and The Creative Curriculum® classrooms.

The overall results of the *PC-ECCOS* demonstrated that after attending Project Construct professional development, Project Construct classrooms scored almost a point higher (on a four-point scale) than they did before the lead teachers attended the institute. The scores increased partway through the training, as well as after it. The overall score and all subscale scores increased after the complete training, and this difference was statistically significant. In other words, the teachers’ practices changed as a result of attending Project Construct professional development, and these practices were more developmentally appropriate for preschool classrooms.

This study adds to the growing body of research that demonstrates that comprehensive, researched-based curricula, specifically Project Construct, result in higher student achievement and program quality, including teacher development, in preschool classrooms. Most importantly, these positive outcomes for students are reflected in the Socio-Emotional as well as Cognitive and Language Development domains. A substantial body of research (see the Literature Review section of this study) indicates that a child’s personal and social development, along with a strong foundation in language and cognitive skills, is key to school success. Thus, the Project Construct approach aligns with state and national goals for readiness and success in kindergarten and beyond. Therefore, on the basis of the research evidence provided above, we believe that Project Construct should continue to be approved as a Missouri Preschool Project curriculum.