Predicting Academic Success in Kindergarten based on Pre-School Factors

IMPORTANCE
Pre-Kindergarten programs have been gaining momentum as many studies show that they may be helpful in closing the achievement gap between disadvantaged students and their more advantaged counterparts at least in the short term. One of the current concerns is that the short term gains “fade out” as the student proceeds through Kindergarten (Huang, Invernizzi & Drake, 2012). This case study will identify the factors that contribute to closing the achievement gap in Kindergarten and serve as a first phase of a continuing research agenda to identify barriers to continued student success through Kindergarten.

BACKGROUND
The cornerstones of Columbus City Schools’ (2009) Early Childhood Education Program are:
(1) a guiding philosophy that every child can learn and schools must work with children in the context of their families,
(2) a commitment to implementing developmentally appropriate practices,
(3) interagency collaboration, and
(4) partnerships with parents.

The Columbus City Schools currently operates a Pre-Kindergarten program in thirty of the district’s elementary schools. Collectively the program serves approximately 800 students each year who are four years old on September 30th of that school year. Selection is based first on geographic assignment to the elementary school and second on order of application.

The program is an all-day program that charges tuition on a sliding scale based on household income and number of people living in the household. Breakfast is available as a free option and lunch is provided as part of the program. A teacher with state licensure in early childhood education and one instructional aide staff each classroom. Class sizes range from twelve to twenty students based on the size of the classroom and state guidelines. Students receive instruction in pre-literacy and pre-numeracy skills with the goal of preparing them to enter Kindergarten prepared to be successful in the districts Kindergarten curriculum. The specific content of the current curriculum is based on state and national standards and is uniform across the district.

RESEARCH DESIGN
The primary goal of this case study research is to determine the effects of preschool on the academic success of public school students in Kindergarten and to identify key factors that contribute to academic success. The first phase of the study will focus on building a longitudinal model on historical data obtained from the Columbus City Schools. We are interested in identifying preschool factors for the 2011-2012 student cohort that predict student academic success in Kindergarten the following year (2012-2013). Academic success will be measured by the DIBELS, KRA-L, Get It, Got It, Go and ASQ assessment tests. Potential predictors include, student- (gender, outcome measures), familial- (socio-economic status, number of siblings), and teacher-level...
classrooms for 2012-2013 with respect to academic performance holding other factors equal.

The second phase of the study will be comprised of classroom observations and interviews conducted by the Strategic Research Group (SRG). The Success Case Method (Brinkerhoff, 2003) will be employed to find out how well the 2013-2014 preschool cohort is being prepared for Kindergarten. SRG will identify and explain the contextual and environmental factors that differentiate the top and bottom five classrooms identified by the first phase of the study.

Together with the site observations and interviews, Columbus City Schools will identify non-academic study level attributes to include in the study. As an in-kind contribution they will select a sample of students representing a range of classrooms and achievement levels and conduct interviews with teachers and possibly parents regarding their preschool experiences.

References


Suggested Citation