A data-driven approach to kindergarten readiness and the importance of the preschool years: A partnership between researchers and stakeholders

IMPORTANCE
Each year, over 3.6 million children enter public kindergartens across the United States. Kindergarten entry is recognized as an important transition period and a time at which academic trajectories with lasting implications for continued achievement may be established. Ohio’s Race to the Top Early Childhood Challenge grant specifically aims to strengthen alignment between prekindergarten and elementary programming, in terms of learning standards and assessment. Kindergarten readiness assessments provide a link between prekindergarten and elementary programming, and have been used to monitor and inform pre-kindergarten services, in increased recognition of the importance of early childhood education for preparing children for formal school success. Thus, this research project seeks to combine and utilize data from the Ohio Education Research Center (OERC) to identify and answer pressing questions in regards to children's kindergarten readiness, and to provide the resulting information to stakeholders and community members.

RESEARCH DESIGN
This research process has been a working collaboration between education stakeholders and researchers. Project meetings described in depth the issues of importance in the Ohio education community. Input from researchers in the area of education and early childhood development informed the discussion from the context of what is known in the research literature in those areas, while statistical experts reviewed how these questions could be asked of the data available through the OERC and their partnerships. These meetings resulted in the identification of three research questions that address areas of importance for education policy, that are informative for the early-childhood education research base, and that use state-of-the art research design and statistical methods. These questions will be addressed in the remainder of the study.

- First, we will evaluate the extent to which kindergarten readiness (as an indicator of preschool experience) is predictive of third grade reading skills, and whether there are particular aspects of kindergarten readiness that are more predictive than others.
- Second, we will examine how the pre-literacy skills of children in prekindergarten are related to both kindergarten readiness and later scores on the third grade reading test.
- Third, we will characterize student growth in reading skills from kindergarten to third grade, and determine whether it varies as a function of their prekindergarten experiences, such as preschool attendance and the academic readiness of their peers.
DATA

Based on the identified research questions, the research team has requested access to state-level data from the Education Management Information System (EMIS). Specifically, we have asked for access to the academic performance records of all students who attended either prekindergarten or kindergarten between 2004 and 2011. We have asked for a longitudinal database, such that we have the academic information on these students as they progress through kindergarten, first, second, and third grades. We have also requested some basic demographic information on the students, to help better describe the acquired sample.

PRELIMINARY FINDINGS

Once data analysis is complete, we anticipate broad dissemination activities including white papers, presentations and roundtable discussions with educational stakeholders, and presentation to education professionals. Finally, we hope that this partnership will begin a tradition of data-driven decision making for questions in early education.