MIAMI-DADE IDEAS CONSORTIUM FOR CHILDREN

Research Brief IDEAS-05 (June 2023)

INTEGRATING DATA FOR EFFECTIVENESS ACROSS SYSTEMS

Florida preschool measure shows promise for building a population measure

Our research goal is to develop a Miami-Dade measure of kindergarten developmental skills that can be used to guide programs and policy at the community level. The rationale and context for this work are described in a companion brief (see more in Policy Brief, <u>IDEAS-04</u> June 2023).

Our pilot analyses of community-level school readiness measures utilized two datasets:

- Miami-Dade has baseline measures of school readiness available from IDEAS Consortium work using the Early Development Index (EDI). The EDI is a validated measure completed by kindergarten teachers assessing five domains of child development: physical health and well-being, communication skills and general knowledge, language and cognitive development, social competence, and emotional maturity. National research shows that EDI scores are associated with third grade outcomes.
- In our search to develop an annual population-based measure using existing assessments in Miami-Dade County, we turned first to Florida's Voluntary Pre-K (VPK) assessment. The VPK assessment is the most widely administered local test in Florida, presently given to all 4-year-old children enrolled in the Florida VPK program, measuring language and math skills.

Although the VPK assessment is not a comprehensive and holistic measure like the EDI, we used historical cohort data to explore associations between the VPK assessment and EDI subscale scores. Data from three kindergarten cohort years, from 2013-2016, were aggregated at the census tract level. We examined the value of using VPK scores as a community-level measure. Findings and cautions are described below.

A viable starting point. Preliminary findings from our historical datasets show that VPK scores can serve as a community-level measure of early literacy. VPK assessment scores are not a comprehensive measure of child development, as they only assess reading and math skills. However, VPK reading scores at the census tract level are associated with two of five domains of the holistic EDI assessment.

PRELIMINARY ANALYSES

As the EDI is a holistic measure shown to predict third-grade literacy, we explored associations between the VPK assessment and related EDI subscale scores using data from our pilot IDS work. Using VPK and EDI data from three kindergarten cohorts (2013-16). We used regression models, analyzing aggregated scores at the census tract level (N=434 census tracts across Miami-Dade County). We found:

- VPK print knowledge, oral language vocabulary, and phonological awareness scores at the beginning (p < .001; R² = .17), middle (p < .001; R² = .15), and end (p < .001; R² = .13) of preschool significantly predicted EDI Language and Cognitive Development scores.
- VPK oral language vocabulary and phonological awareness scores at the beginning (p < .001; R² = .15), middle (p < .001; R² = .15), and end (p < .001; R² = .10) of pre-school significantly predicted EDI Communication Skills and General Knowledge scores.

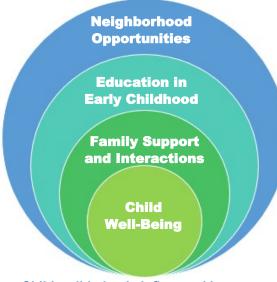
Specific Pre-K scores significantly predict specific kindergarten scores Kindergarten Preschool

Taken together, the results suggest that VPK data aggregated by census tract is a viable community-level measure of early literacy.

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Beyond academics: The broader context for child readiness

Florida's state-required preschool assessments measure academic skills and do not provide a holistic or comprehensive picture of school readiness skills, such as social and emotional skills, behavioral, or physical health. The VPK assessment, used in the 2022-23 school year, provides an academic baseline that can be layered with other assessment data to strengthen the population-based measure of school readiness.



Child well-being is influenced by many interacting contextual factors at the family, school, and neighborhood levels. This figure shows multiple contextual influences on child well-being such as family, education, and neighborhoodlevel factors that contribute to child well-being and student performance on academic assessments. Future analyses in this series will consider what other measures could be layered with Florida's preschool assessments. Forthcoming briefs will address data sources that can inform other domains of children's readiness, including both contextual factors and child achievement.

By developing a holistic, population-level measure of school readiness, we will be better positioned to inform policies about early childhood systems and the transition into elementary school. Future IDEAS Consortium analyses will refine measures of school readiness to build a better understanding of how local students are progressing through early childhood and beyond.

Recommendations: Initial mapping, considerations, and next steps

Aggregate VPK academic data at the census tract level. Because VPK and school readiness measures have changed to FAST assessments in Florida (Florida Assessment of Student Thinking), outcome data should be reviewed after the 2022-23 school year to determine if FAST will be of comparable value.

Conduct analyses with a whole-child approach. Further analyses should address potential non-academic child measures as well as family, education, and neighborhood factors affecting school readiness, to understand how to better support local kindergarten readiness.

Hold community and school conversations about initial results and next steps. Working through the IDEAS-to-Action learning community, baseline mapping should be shared with local and system partners to discuss how the evolving community-level measure can become an effective tool to improve early childhood service alignments and outcomes.

Future directions. Address how schools and communities can interpret and act on the findings. Explore additional local measures that could be utilized to develop a whole-child assessment of school readiness. Consider rationales for a limited deployment of EDI and/or the EDI parent-reported Childhood Experiences Questionnaire (CHEQ), in partnership with local sites for a smaller subsample of the population.

QUESTIONS?

contact Dr. Rebecca Bulotsky Shearer S rshearer@miami.edu



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