

# Race to the Top – Early Learning Challenge

## Kindergarten Entry Assessment Pilot

### Phase One Executive Summary

#### Background

Minnesota was awarded federal American Recovery and Reinvestment funding in the amount of \$45 million in a Race to the Top-Early Learning Challenge Grant (RTT-ELC), through the US Department of Education, to provide more children with high needs access to high-quality early learning and development programs.

The grant work includes the revision of Minnesota's school readiness measurement. To that end, the Minnesota Department of Education's Office of Early Learning has created a series of pilot studies (called School Readiness Study 2.0) to create a menu of acceptable instruments to measure children's knowledge, skills and dispositions at kindergarten entry.

#### Minnesota's commitment to standards

Minnesota is committed to ensuring that every child enters kindergarten ready to learn. In order to make that happen we have focused School Readiness Study 2.0 efforts on providing support to districts, schools and teachers in implementing high quality learning experiences that are meaningful to the children they serve and fit within their curriculum. The intended long term outcome of this pilot is to ensure high quality assessment practices and data by encouraging school districts to choose and use a valid and reliable instrument that aligns with the Early Childhood Indicator of Progress and the kindergarten academic standards. Included in this outcome are sufficient supports, training and technical assistance on tools to ensure they are implemented with fidelity. Therefore, the School Readiness Study 2.0 explored a menu of assessment tools that align with the Early Childhood Indicators of Progress (ECIPS), Minnesota's early learning standards, and the kindergarten academic standards and tested the tools to see if their reliability and validity are maintained with Minnesota's population of kindergarten students. By aligning multi-domain assessments to what is currently the yardstick of children's knowledge at the end of the school year, we hope to lessen the burden of multiple tests placed on districts while providing them a choice from a menu of tools.

#### Phase One Pilot Study

Phase one of the School Readiness Study 2.0 pilot was designed to test the alignment of the assessments to the standards and ensure usability of chosen instruments for kindergarten teachers, principals and administrators in Minnesota. This required a series of activities to examine the gaps in current literature and statistical reliability and validity related to each of the chosen tools. Therefore selected schools were asked to choose an assessment from a menu of options, complete the required training on the tool and subsequently implement the assessment twice in the first semester of kindergarten and concurrently complete surveys related to each child's performance on the ECIPs and kindergarten standards. Simultaneous with classroom data collection, crosswalks between the standards and assessment tools were completed in order to provide a map, or model, by which to statistically test the alignment.

One contract was awarded to perform the statistical alignment analysis between the standards and assessment tools via a competitive RFP process. The analysis plan included the following steps and procedures; (1) Intended claims and psychometric properties of each tool using selected *Standards for Educational and Psychological Testing* (1999), (2) data integrity analysis, (3) descriptive analysis of each measure, (4) measurement quality evidence and alignment procedures specific to each assessment tool.

### Preliminary Observations

While the final reports are still in draft form and will be disseminated in the coming weeks, there are notable findings which provide useful insight into the functionality of the assessment tools in phase one. Assessment tools that underwent review and analysis in phase one included the; Beginning Kindergarten Assessment (2013) and Social Skills Improvement System (2008), Brigance Inventory of Early Development 2<sup>nd</sup> edition (2010), Desired Results Developmental Profile – School Readiness (2012), Early Learning Scale – Kindergarten (2012), Teaching Strategies Gold 2<sup>nd</sup> edition (2013) and the Work Sampling System – MN Adapted version (2006).

Technical reviews were conducted to gather evidence of each instrument's primary claims and technical adequacy. While each instrument purported some similar claims (tool can be used for instructional decision-making, results from validation studies may be generalizable, assess school readiness, guides professional development), the evidence provided across tools was inconsistent and often claims were made with no evidentiary support.

The following tools exhibited acceptable internal consistency (>.8) across each measure at the domain level for the Work Sampling System, Teaching Strategies Gold and Desired Results Developmental Profile. The Beginning Kindergarten Assessment and Early Learning Scale internal consistency results ranged from .5 to .91 depending on domain and data collection point measured. Correlational analysis was conducted on the Brigance and resulted in large effect sizes among the domains within the instrument. Confirmatory factor analysis on all tools resulted in reasonable to good fit based on absolute and relative fit indices (RMSEA, CFI, TLI)<sup>1</sup>.

Measurement quality and alignment procedures resulted in differing relative difficulty among assessment items when linked statistically to the ECIPS and kindergarten standards.

If you have questions regarding the design of the School Readiness Study 2.0 or analysis and results, please contact Megan Cox at [megan.cox@state.mn.us](mailto:megan.cox@state.mn.us) or 651-582-8263.

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<sup>1</sup> Confirmatory factor analysis was not completed on the Early Learning Scale due to insufficient sample size.