

Statewide Kindergarten Entry Assessments: Best Practices and State Profiles

Introduction

In 2012, United Way of Greater Philadelphia and Southern New Jersey (UWGPSNJ) was awarded grant from the Robert Wood Johnson Foundation to undertake a campaign aimed at establishing a statewide kindergarten entry assessment in Pennsylvania. To inform the campaign, UWGPSNJ asked the Economy League of Greater Philadelphia to prepare a report outlining the benefits of standardized assessments, explore lessons learned and best practices in states that have implemented assessments, and consider the context for implementation in Pennsylvania.

Understanding the Value of Kindergarten Entry Assessments

There is confluence of research that points to the need to better understand how prepared children are when they enter kindergarten. This research shows that children who start school behind their peers tend to stay behind, underscoring the importance of quickly identifying and assisting these children. Further, we now understand how crucial the years *before* kindergarten are to a child’s development and the impact that high-quality early childhood education can have on future success.

Assessments can provide information with clear value for parents, teachers and early childhood education providers. They can detect each child’s strengths and areas for additional attention, identify children who may have disabilities, guide the development of appropriate learning activities, help in understanding the characteristics of cohorts of children, provide information about how well early childhood education programs have prepared children for school and identify service gaps in the community. Assessing children can also help early childhood education providers improve curricula and provide a bridge between pre-K programs and k-12 schools to ensure children experience a smooth transition to formal schooling.

When this information is collected through a standardized system and format that allows for comparison across and within districts, it can be used more broadly to improve early childhood education outcomes at the community level. Using a common set indicators provides a shared definition of readiness and creates a platform for collaboration among all the actors involved in caring for and educating young children.

Considerations in the Assessment of Young Children

A broad consensus has formed among practitioners and researchers in early childhood education—including the National Association for the Education of Young Children (NAEYC)—that developmentally appropriate assessments can provide the information needed to strengthen high-quality early childhood programs and early elementary programming. However, while all can agree that children need to enter kindergarten “ready” to learn, well-founded concerns remain about what “readiness” means, how children are assessed, and how the results are used.

While the term “readiness” can imply that some children are ready for school and others are not, leading to fears that assessments might be used to grant or deny admission to kindergarten, experts are very clear in their recommendation that assessments not be used in this way. Instead they should be used to inform pre-K and kindergarten programs and curricula, individual instruction, and early childhood education policy.

Child development experts and early learning practitioners widely agree that the most effective assessments capture information across a broad range of interconnected developmental domains. These include:

- physical well-being and motor development,
- social-emotional development,
- approaches toward learning,
- language and emergent literacy, and
- cognitive skills.

There is also general agreement that assessments should be conducted in a classroom setting, utilizing every day work and behaviors rather than a traditional standardized test approach where children are asked to demonstrate a skill or knowledge on demand.

With these guidelines in mind, the specific design of the assessment should be dictated by the intended use of the information collected. Other important design considerations include age appropriateness, cultural and linguistic sensitivity, accommodations for children with disabilities, collecting information from multiple sources, and developing a tool and process for assessment that is realistic and reasonable for teachers.

Great care needs to be taken in adopting an assessment system. Beyond the selection/development of the tool, reliable procedures must be in place to properly administer the assessment, as well as a data management system that allows results to be used effectively and appropriately.

Approaches to Kindergarten Entry Assessments

Recognizing that to improve school readiness on a large scale, there need to be standardized, shared definitions of readiness, more than half of US states have implemented some type of standardized kindergarten readiness assessment or required districts to perform an assessment of their choice. In states without a standardized assessment, many school districts use some type of tool to assess children when they arrive at kindergarten.

There is wide variation not only in the systems states have established, but in how they define and measure readiness. In some cases, states only assess literacy skills, while others have adopted the broader definition of “readiness” and assessment design recommended by early learning experts. Assessments may be mandatory or voluntary, and in a few cases, sampling is used in place of universal assessments. Sampling is generally considered useful for program evaluation; however, it is not considered good practice if the results are to be used to inform instruction or to screen for developmental disabilities (Kyle Snow, 2011).

Utilization and reporting of the data also varies widely, with some states requiring that data stay at the district or school level to be used only to inform individual instruction. States that collect and analyze data across all districts use the information to create a statewide picture of readiness, to understand the impact of pre-K programs, and to track students longitudinally and understand how readiness at school entry correlates with later academic success.

Specific examples include Connecticut, where the data has been used to illustrate the value of early childhood education. In Wyoming, the results of assessments inform curriculum development, and in Minnesota, results are linked to a longitudinal data system and districts can use them to develop local literacy plans for kindergarten through third grade. The following section provides more details on these and other states' assessment practices.

State Profiles: Lessons and Best Practices

This section highlights lessons learned and best practices from states in various stages of implementing kindergarten entry assessments. States were chosen because the assessment model, administration, use of data, or overall assessment system provided particularly valuable information as we explore considerations and possible approaches for Pennsylvania. A table of all states with standardized or required kindergarten assessment is included in Appendix A.

Wyoming: Instructional Foundations for Kindergarten (IFK)

Key takeaways:

- Importance of collaborative process that engages stakeholders
- Focused on creating an observational, holistic tool
- Sensitivity to language, name of tool does not include “assessment” or “readiness”

Description of tool:

Instructional Foundations for Kindergarten (IFK) is an observational tool that examines nine developmental and academic areas. The nine domains are: (1) Representation, (2) Language, (3) Reading, (4) Writing, (5) Number Sense and Operations, (6) Geometric and Algebraic Math, (7) Science, (8) Relationships and Self-regulation, and (9) Social Problem Solving. Each child is rated on a scale of 1 to 5 on each domain.

Administration of tool:

IFK is a mandatory observational assessment used for 4- to 5-year-old children in publicly funded preschool programs and kindergartners in their first year of public education. Teachers rate children's performance on the IFK over a 10-week period based on observations in everyday classroom contexts. Both preschool and kindergarten teachers use the data to better understand the foundational skills that children demonstrate when they enter preschool or public kindergarten. By statute, the school readiness and academic performance of pupils who participate in preschool programs compared with those who do not participate is reported twice per year – once in the fall and once in the spring. The fall data collection includes kindergarten students who participated in preschool the previous year. The spring collection includes students currently enrolled in preschool.

How data is used:

Teachers use the IFK to communicate with families and early childhood programs about children making the transition from preschool to kindergarten and to reflect on how the curriculum supports children in the nine foundational areas.

The state uses these data to identify trends in the readiness of children entering kindergarten. Data are also intended to be used to inform professional development for early learning providers and improve transitions and, ultimately, outcomes for students entering kindergarten.

Background:

IFK was developed through a collaborative process that engaged preschool and kindergarten teachers, which helped allay concerns about how the assessments would be used. The state partnered with the University of Wyoming to conduct this outreach and help with the process. Teachers were brought in “as stakeholders in the creation of an instrument designed to share information about children between preschool programs, kindergarten teachers, families, and communities. This initial step in a multiphase process begins with collaboration among teachers and intends to involve families and communities during future stages of developing a statewide readiness system” (Johnson Giovacco and Buchanan, 2011).

Giving voice to teacher values and priorities for children during their transition to school proved to be a powerful tool in creating a shared understanding of kindergarten readiness and in shaping the construction and ongoing development of the statewide survey.

The name of the tool, “Instructional Foundations for Kindergarten”, acknowledges the difference between readiness to learn and readiness for school. The name “conveys a shared responsibility among teachers for giving children the foundations that they need for school success that goes beyond a narrow view of the child being ready (or not ready) for school” (Johnson Giovacco and Buchanan, 2011).

Trends/Findings:

According to the State of Wyoming IFK Preliminary Statewide Results report for the Fall 2009 assessment, 81% of entering kindergarteners were rated as “basic” or above across the nine focus areas, and 51% of those scored “proficient” or “advanced proficient”. A slightly smaller share (77%) were rated as “basic” or above in 2010.

Associated costs:

Wyoming operates on a biennial budget. For July 1, 2010 through June 30, 2012, the state agency allocated \$500,940 for the IFK. This amount funds the assessment of approximately 7,500 children per school year.

During the early years of the IFK’s development, University of Wyoming researchers conducted on-site observation, peer group and small group interviews with pre-K and kindergarten teachers, and data analysis through a large private research endowment, the Lantz Distinguished Professorship in Education award.

Connecticut: Kindergarten Entrance Inventory (KEI)

Key takeaways:

- Result of earlier publicly led studies
- Legislation stipulated the KEI may not be used to measure preschool efficacy in order to gain support from resisting schools
- State is using the KEI to demonstrate the value of publicly funded preschool

Description of tool:

The KEI is a mandatory, teacher-led assessment of students entering kindergarten in Connecticut. The tool focuses on six domains, with the teacher assigning a score of 1 to 3 for each one. The six domains are (1) Language, (2) Literacy, (3) Numeracy, (4) Physical/Motor Skills, (5) Creative/Aesthetic Skills, and (6) Personal/Social Skills.

Administration of tool:

The tool is designed to provide a statewide analysis of the skills of students who are new to kindergarten, based on teachers' observations of the students in their classes. The Fall KEI is administered in October of each year, providing instructors, administrators, and parents with a snapshot of their child's progress. The State also administers a Spring "Exit Inventory" to gauge the level of growth/improvement per child per year. The Exit Inventory assesses students across the same six domains, but uses different criteria under each domain to demonstrate growth. Both the Fall and Spring Inventories align with the Connecticut Preschool Curriculum Framework.

How data is used:

Results of the assessment are used by teachers to guide individual instruction; they are not designed to track students or recommend changes to their academic program. The KEI is not designed to measure the effectiveness of specific preschools or early childhood education programs. However, Connecticut is using the KEI to demonstrate the overall *value* of publicly funded preschool in readying children for kindergarten, particularly in distressed communities. To do this, the State Department of Education compared a sample of students entering kindergarten following a preschool experience with a sample of children without such experience.

Background:

The movement toward a statewide kindergarten entry assessment originated from Public Act 05-245. This Act required the Connecticut Commissioner of Education to develop and implement a statewide developmentally age-appropriate assessment tool that "measures a child's level of preparedness for kindergarten" by October 2007. To gain the support of educators and preschool administrators, the legislation specifically stipulated that the tool could not be used to measure preschool efficacy.

Though movement toward the KEI originated in state legislature, educators were recognized by the state as key stakeholders in the tool's development. A diverse committee of pre-K and kindergarten teachers and other stakeholders reviewed indicators from the Connecticut Preschool Curriculum Framework and State Curriculum Standards and recommended the most appropriate indicators.

Trends/Findings:

The DOE has found that children entering kindergarten *without* participating in a pre-K program beforehand struggled on the KEI, reflecting the value of preschool programs in preparing children for kindergarten. According to the Connecticut State Department of Education Fall KEI for 2010-2011, approximately 61% of incoming kindergarteners required substantial instructional support, indicating that they did not arrive with the skills or competencies needed for success in school.

Associated Costs:

Not available.

Minnesota: School Readiness Assessment Study (SRAS)

Key takeaways:

- Assesses a statewide representative sample of kindergarteners
- Assessment designed to help policymakers achieve “100% readiness” by 2020
- Research partnership with Federal Reserve of Minneapolis and University of Minnesota

Description of tool:

The SRAS uses Pearson’s Work Sampling System® to evaluate a sample of kindergarteners across 32 indicators within five domains. The five domains are (1) Physical Development, (2) Language & Literacy, (3) The Arts, (4), Personal & Social Development, and (5) Mathematical Thinking. Students are scored as “proficient,” “in process,” and “not yet” on each indicator.

Administration of tool:

Students included in Minnesota’s study are a representative sample of kindergarteners, and are assessed over a period of eight weeks. In contrast to the kindergarten entry assessments in other states examined in this report, SRAS remains a pilot program.

How data is used:

Minnesota has the stated goal of ensuring that all students are ready to achieve in kindergarten by 2020. The SRAS is designed to help reach that goal by informing teachers, parents, administrators, and policymakers of how students across the socioeconomic spectrum are performing.

The SRAS has also been used to assess the impact of kindergarten readiness on long-term academic success. Work conducted with the Human Capital Research Collaborative has found that success on the assessment “reliably predicts achievement” by the third grade.

As a part of new Race to the Top (RTTT) funding, Minnesota will begin planning to implement a new Kindergarten Entrance Assessment (KEA) statewide in 2014-2015. They will be able to link KEA scores to the state’s longitudinal data system. The state plans to convene a “task force” who will discuss how the current tool could be enhanced. Schools will be encouraged to utilize this data to assess their professional development needs and to develop their local literacy plan for children in kindergarten and 3rd grade.

Background:

SRAS grew out of a series of three annual studies developed by the Minnesota Department of Education in 2002 focused on obtaining a snapshot of school readiness. Following the initial success and popularity of the surveys, the Minnesota legislature approved funding to continue and expand the study on an annual basis. To determine the impact of kindergarten readiness on long-term educational outcomes, MDoE partnered with the Human Capital Research Collaborative—a joint venture of the Federal Reserve Bank of Minneapolis and the University of Minnesota.

Trends/Findings:

In a 2011 analysis the Human Capital Research Collaborative concluded that the results of the SRAS are predictive of long-term proficiency outcomes. The analysis also revealed that kindergarteners who did not attain overall proficiency on the assessment were twice as likely to have been in special education or retained by 3rd grade—even when holding constant gender, race/ethnicity, parent education, and income—compared with kindergarteners who did attain overall proficiency levels.

Associated Costs:

Currently, the annual cost of administering the pilot is \$280,000. Teachers are also incentivized by receiving an annual \$200 stipend for participating in the assessment. Given the upcoming changes associated with the Race to the Top Early Learning Challenge Grant, funding and process are likely to change in the coming years.

Maryland: Model for School Readiness (MMSR)

Key takeaways:

- Assessment is part of a larger instructional system (the Model for School Readiness) with a heavy focus on alignment between Pre-K and kindergarten
- State provides intensive training (2-year, seven-module program) to help teachers implement the model
- Results reported at a statewide level and across various subgroups
- Adoption of model was driven by state DOE (State Superintendent) and legislature
- Users and stakeholders are included and engaged in all steps of the process (planning-implementation)

Description of tool:

Maryland's assessment tool looks at five domains: 1) Social and Personal Development, 2) Language and Literacy, 3) Mathematical Thinking, 4) Scientific Thinking, 5) Social Studies, 6) The Arts, and 7) Physical Development and Health. The tool is an adaptation of the Work Sampling System®, and provides definitions of school readiness, learning standards, objectives, and indicators for pre-K and kindergarten.

The assessment is a component of the broader Maryland Model for School Readiness (MMSR), an instructional system designed to provide parents, teachers, and early childhood providers with a common understanding of what children know and are able to do when they enter school.

Maryland is currently developing a new assessment tool in partnership with Ohio using a federal Race to the Top – Early Learning Challenge grant. The new tool was piloted in 2013.

Administration of tool:

Children are assessed on multiple occasions. Typically, students' skills and abilities are evaluated two or three times during their kindergarten year.

Teachers go through a two-year professional development program to learn about implementing the model and using the Work Sampling System. This program involves three full days of training in year one and two days in year two. When originally implemented, teachers received five days of training in the first year and four days in the second. This decrease was the result of a reduction in the number of professional development days available for teachers.

How data is used:

As previously mentioned, results are shared with families and teachers. In addition, the state produces an annual report that provides school readiness results for children statewide, by subgroups (including ethnic, socio-economic, and those attending public pre-K), and for each local jurisdiction.

In 2007, Maryland established a unique K–12 student identifier, linking MMSR assessment data to the K–12 data system and allowing the longitudinal tracking of child outcomes. Beginning in 2010–11, the state was able to evaluate how readiness at school entry correlates with academic success, as measured by 3rd grade test scores. In addition, because information is disaggregated by type of prior care (e.g., Head Start, family child care) and by participation in programs (e.g., special education services), the state can use the results to improve state-funded early childhood programs.

Background:

MMSR began as a pilot conducted in seven school districts in 1997. In 2000, the Department of Budget and Management started to use this information for budgeting decisions.

There was resistance at the local school district level due to concerns that schools would be held accountable for children arriving at kindergarten “unprepared.” Ultimately, MMSR was enacted through a combination of state legislation and DOE regulation changes in the early 2000s.

To ensure that local districts are involved, state DOE staff meets with each of the local school system Early Learning Supervisors and Preschool Special Education Supervisors every spring to plan the MMSR professional development activities for the following school year. MSDE has also done its best to assure kindergarten teachers that the results of the MMSR will not be used to evaluate their performance.

MSDE has been conducting MMSR professional development for kindergarten, pre-kindergarten and preschool special education teachers for 13 years. As a result of the yearly training in which these teachers participate, MSDE has scaled back their professional development for more experienced teachers.

MSDE is currently working on professional development modules for the new readiness assessment that approximately 100 kindergarten teachers will be field-testing in the fall.

Trends/Findings

Since the MMSR was enacted in 2001-02, the state has reported significant gains in the share of children who are “school ready” – from 49% in 2001-2002 to 82% in 2012-2013.

Associated costs:

For the years 2010, 2011, and 2012, the State allocated approximately \$1.8 million annually to implement MMSR for a scope of 58,000 students. While the cost per site license, per student is only \$0.70, approximately \$1.5 million is allocated to 24 LEAs for MMSR grants and data management costs. \$150,000 is allocated to Coordinator and Project Support. Administrative costs, including printing and training, account for the remainder of the budget at \$98,000.

Kentucky: Kindergarten Screen

Key takeaways:

- Evaluation is a collaboration between teachers and parents
- Assessment takes into account “prior settings” as a baseline
- State funds all assessment materials and administration so parents and districts are unburdened
- Contracted with private company to develop Kindergarten Screen

Building on the MMSR System

As a part of new Race to The Top funding, Maryland and Ohio plan to implement new Kindergarten Entrance Assessments (KEAs), which will be piloted in 2013 and mandatory for public school systems in 2014.

Coupled with the new KEA will be the creation of constructive assessments for kindergarten and pre-k educators to help them tailor their instruction to individual students’ needs. Both states will support teachers’ transitions to the new system through professional development workshops, online tools and content to create professional learning communities, and development of a teacher certification process to ensure reliable administration of the new assessments.

Maryland and Ohio will share the costs for developing the KEA. When ready, the states will offer the tool to interested states for purchase.

Both states are a part of the Partnership for Assessment of Readiness for College and Career (PARCC) Consortium, which is receiving federal grant funding to establish state assessments that align to the Common Core Standards. The new kindergarten assessments will align with PARCC’s system.

Description of tool:

The Kindergarten Screen was developed in conjunction with Curriculum Associates, a private firm focused on educational assessments. The Screen measures proficiency across five domains including (1) Adaptive Skills, (2) Cognitive Skills, (3) Communication Skills, (4) Motors Skills, and (5) Social-Emotional Skills. It is administered by teachers, with assistance from parents both when students enter kindergarten and during the first weeks of school.

Students are measured at one of three levels of readiness; these levels—“ready, ready with support, and ready with enrichment” —were developed out of the initial pilot program with assistance from parents and other process stakeholders. Assessments also take into account prior settings for children before they entered kindergarten, including involvement in preschool, Head Start, child care, and home care.

Administration of tool:

Following a successful pilot program, the Kentucky Department of Education expanded its Kindergarten Screen program for the academic year beginning in the fall of 2013. While taking into account a baseline level of previous educational experience, the Kentucky DOE has made it clear that the screen will not be used to determine placement into kindergarten.

How data is used:

The tool is primarily designed to help educators, families, and policymakers determine the extent of the “school readiness gap” for each individual student. However, the regulation mandating the screen also permits data to be used to build policies around early learning, to set goals, and guide K-3 program review.

Background:

The Kindergarten Screen grew out of a pilot program administered by the State of Kentucky in the fall of 2012 that was developed by a committee of Fayette County teachers, principals, and district officials. The results of the pilot showed that only 28% of kindergarteners were fully “ready”, prompting additional action to improve readiness statewide.

This action came in the form of statewide regulation mandating the screen begin in the 2013 school year. The state pays for the costs associated with the assessment.

Parental backlash and public resistance to the Kindergarten Screen arose when the statewide assessment went from being voluntary to state-mandated. Concerns were addressed by required collaboration between teachers and parents before and throughout the assessment period.

Trends/Findings:

The state currently has just one year of data from the 2012 pilot, which showed that just 28% of children were “ready” for kindergarten. This means that 72% of children need some additional assistance to ensure their success in school. This is the first time the Kentucky will be able to provide reliable, comparable data to education officials, lawmakers, and the public for students attending kindergarten across the state.

In 2013-14, the first year of statewide implementation, the state will use an updated tool that fully aligns with Common Core standards. The state hopes that a greater focus on key readiness factors and skills will result in an overall increase in readiness among all children. Kentucky will “recalibrate” the criteria and standards for readiness as needed to make sure the information is useful in guiding instruction and leads to student success.

Associated Costs:

Currently, the cost to the state for the first year of implementation will be \$8.95 per student. In future years, they have budgeted \$3.95 per student for materials replacement.

Texas: Kindergarten Readiness System

Key takeaways:

- Evaluates children at both pre-K and kindergarten levels
- Uses data from reading diagnostic to assess efficacy of pre-K programs in preparing students for kindergarten and to designate “high achieving” pre-K programs
- Voluntary for the majority of pre-K programs (except those receiving certain grant funding)

Description of tool:

The Kindergarten Readiness System (KRS) is a reading-only assessment that evaluates children at two time periods—during a participating pre-K program, then again at the outset of kindergarten. Children are evaluated using a reading diagnostic, and the results are analyzed to determine the success of the pre-K program in preparing children for kindergarten.

Administration of tool:

The KRS is designed to assist parents, educators, and policymakers in evaluating best practices in pre-K education. By evaluating student readiness both during and after a pre-K program, the KRS helps identify those programs that are working best to prepare students across socioeconomic groups for their first years of school. No recommendations are made regarding curriculum or program development. Instead, the focus is exclusively on educational outcomes.

How data is used:

The Texas Education Agency uses the KRS to designate high-achieving pre-K facilities as “Pre-K Centers of Excellence.” These centers are “considered a gold standard in high-quality pre-K by the State of Texas.” Any school district Pre-K program, licensed child care provider center, or Head Start program currently serving pre-kindergartners can apply for this designation at no cost to them. Recognition by the KRS qualifies childcare providers for enhanced reimbursement rates since it is the state’s authorized school readiness certification system. Further, pre-K centers that apply for and do not receive this designation are not reprimanded by the Texas Education Agency. Instead, the purpose of the tool is to identify pre-K best practices throughout the state, with particular emphasis on those centers that perform well while controlling for socioeconomic factors.

Background:

The KRS (formerly the Texas School Readiness Certification System) was developed in the early 2000s to measure the efficacy of pre-K education statewide. Development was undertaken by the University of Texas Health Science Center, in cooperation with the Texas Education Agency and pre-K providers.

Impact of assessment:

Not yet available

Associated Costs:

For the 2011 fiscal year, the then-TSRCS program cost the state of Texas \$7.5 million. By 2012, the cost to administer the KRS, including pre-K Data Collection, Kindergarten Data Collection, and Certification, totaled \$5 million.

State Profile Summary

These state profiles offer diverse examples of how kindergarten entry assessments can be approached based on the goals of the state as well as the political climate and culture. As evidenced by the adoption of assessments in Wyoming, Kentucky, and Texas, even in politically conservative states that emphasize local control there is an understanding of the value of standardized assessments. The key is designing an assessment system that political leaders and stakeholders – teachers from pre-K through the early grades, parents, school district leadership, and others – see as a valuable tool in achieving better outcomes for young learners.

Pennsylvania Context

Most school districts in Pennsylvania already have some kind of assessment process in place to measure the readiness and/or specific skills of entering kindergartners. Typically, these are not comprehensive or holistic assessments, and because the tools, process, goals, and teacher training vary, there is no way to get a reliable picture of kindergarten readiness in the state. Further, there is no shared definition of “readiness.” Recognizing the value of a standardized assessment, the Pennsylvania Office of Child Development and Early Learning (OCDEL) developed an assessment tool, called the Kindergarten Entry Inventory (KEI), based on the following goals:

- Provide a standard tool to assess the status of children at kindergarten entry across a broad range of domains.
- Offer retrospective look back at early learning programming to target professional development and continuous quality improvement.
- Establish a baseline for instruction and reporting to families in each child’s kindergarten year.

The KEI is intended to be used to report to parents, guide teacher instruction, and inform policy by providing information on student outcomes across the Commonwealth. Information from the assessment is not intended to be used evaluate specific early childhood education programs. Currently,

OCDEL plans to make participation in the assessment voluntary; however, participation may be mandated for districts receiving certain types of funding from the state.

The current assessment tool considers 30 indicators across five domains: social and emotional development, English language arts, mathematics, approaches to learning, and health, wellness, and physical development. A summary of the KEI will be available as part of the upcoming report on the second pilot. The KEI was developed through a collaborative process including Pennsylvania-based kindergarten teachers, preschool and Head Start personnel, administrators, and content specialists in math and literacy. Development was also informed by a review of national trends and best practices in kindergarten assessments with a focus on those indicators that are most predictive of later success. In developing the tool, workgroup participants incorporated the Pennsylvania Learning Standards for Pre-Kindergarten and the Common Core Standards, which were adopted by the state in 2010. Data from the assessment will link to the Professional Education Record Management System (PERMS) and to the early childhood education data management system.

OCDEL is currently running a third pilot of the KEI for the 2013–14 school year. A report on the first pilot has been released, and a report on the second has been drafted. The tool has been refined based on results and feedback from the first two pilots. Given that OCDEL is confident in the tool itself, the third pilot is focused on gathering feedback on the development of a teacher training protocol and how data should be collected and used.

Participating teachers in the first and second pilots were provided cash incentives. The third pilot will not include an incentive, and so far, this does not seem to have significantly affected participation. Based on continued participation, direct feedback to OCDEL, as well as findings from interviews conducted by Pennsylvania Citizens for Children and Youth in the spring of 2013, teachers have generally responded positively to the tool, citing that the ability to link data across assessments and systems is of significant value.

Conclusions

There is a clear and compelling argument to be made for standardized kindergarten entry assessments. Not only do they provide information that can be used to improve early childhood education from a process and curriculum perspective, they can shine a spotlight on the importance of investing in high-quality early education. While Pennsylvania’s process of adopting statewide assessments will be unique, the approaches taken and lessons learned in other states should inform these efforts.

OCDEL has laid the groundwork by taking a research-based and collaborative approach to crafting the KEI, responding to feedback and results from two pilots, and planning for how the assessment will feed into existing data systems to create richer outcomes data on student progress and state investments in education.

To move toward the adoption of a standardized, statewide assessment, stakeholders and policy makers must buy into the concept. They need to understand why adopting a uniform assessment is important – that it ensures a shared definition of “readiness” so that everyone is working toward the same goal, that

it can improve pre-K and kindergarten instruction, and help to quickly identify those students who need additional assistance. Just as crucial as conveying a message about what an assessment can do is clearly conveying the message about what an assessment will not do – that they are not “high stakes” tests that will be used to track students or turn them away from kindergarten, and that results cannot be used to evaluate specific early childhood education programs.

As the state is leaning toward a voluntary process, buy in among districts that serve large numbers of children who don’t have access to high-quality pre-K education and experiences that help prepare them for school is particularly important. Results from these districts can highlight the urgent need for better early childhood education opportunities in specific communities.

Appendix A:

Summary of State Assessments

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
Alabama	All students assessed, reading only	Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	To plan instruction
Alaska	All students assessed across 7 domains: Physical Well-Being, Health and Motor Development, Social and Emotional Development, Approaches to Learning, Cognition and General Knowledge, Communication, Language and Literacy	Revised Alaska Developmental Profile (RADP)	Inform state policy decisions
Arizona	All students assessed, reading only	Locally determined, but encouraged to select from those approved by the state	Local reporting to monitor students' early learning progress and guide interventions
Arkansas	All students assessed, 6 domains: General knowledge, Oral communication, Written Language, Math Concepts, Work and Habits, and Attentive Behavior	Qualls Early Learning Inventory (QELI)	Local reporting, including to parents, in order to target instruction at the appropriate developmental level
California	Voluntary assessment, 5 domains. Tool is the Desired Results Developmental Profile – School Readiness (DRDP-SR)	Observational assessment designed to inform curriculum planning for individual children and assessment	The assessment was to be finalized in the spring of 2012 and ready for implementation on a voluntary basis by the 2014-2015 school year. California plans to develop training materials and web-based tools for teachers on how to use DRDP to support continuous program improvement.
Colorado	All students assessed, reading only	Tiered QRIS: Districts select from DIBELS; Phonological Awareness Screening (PALS); Dev. Reading Assessment (DRA2)	To plan instruction
Connecticut	All students assessed, 6 domains: Language, Literacy, Numeracy,	Fall Kindergarten Entrance Inventory	Included in state's Results Based Accountability (RBA) framework and

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
	Physical/ Motor, Creative/ Aesthetic, and Personal/ Social		reported at the district level
Delaware	All students assessed, multiple domains 1) Teaching Strategies GOLD (Pilot) 2) Family Questionnaire 3) Assessment to validate pilot of formative evaluation	1) Formative assessment 2) For policy and decision making (if appropriate based on evaluation)	Teaching Strategies GOLD is being piloted. Pilot will run for two years to help understand challenges and supports required for kindergarten teachers to utilize a formative, multi-domain assessment.
Florida	All students assessed, 7 domains: Language and Literacy, Mathematics, Social and Personal Skills, Science, Social Studies, Physical Health and Fitness, and Creative Arts	Florida Kindergarten Readiness Screener, consisting of ECHOS and portions of the Florida Assessment for Instruction in Reading (FAIR)	To determine statewide readiness rates and Pre-Kindergarten program evaluation
Georgia	All students assessed, 6 domains: English Language Arts, Math, Science, Social Studies, Personal/ Social Development, and Approaches to Learning	Georgia Kindergarten Inventory of Developing Skills (GKIDS)	To plan instruction and help determine first grade readiness
Hawaii	Voluntary with 100% participation, 6 domains: Approaches to Learning, Literacy, Math, School Behaviors and Skills, Social-Emotional Behaviors, and Physical Well-being	Hawaii State School Readiness Assessment (HSSRA), plus a separate individual school readiness assessment	HSSRA is used locally for school improvement plans, school transition plans, and planning instruction, and to track results statewide, while the individual readiness assessment is used to determine grade placement and advancement.
Idaho	All students assessed, reading only	Idaho Reading Indicator (IRI)	To guide individual interventions and as part of the state accountability system
Iowa	All students assessed, reading only	Districts select from: DIBELS, Phonological Awareness Test (PAT), Basic Reading Inventory, Early Literacy Assessments, Observational Survey, Texas Primary Reading Inventory (TPRI), or Yopp-Singer Test of Phoneme Segmentation	To inform state policy decisions and as a "mild accountability measure"

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
Kansas	All students assessed, reading and math	Determined Locally	To determine child's level of performance and guide instruction
Louisiana	All students assessed, multiple domains, varies based on instrument selected	Districts may use of: Brigance K-1, Chicago EARLY Assessment, Developing Skills Checklist (DSC), Developmental Indicators for the Assessment of Learning-Third Edition (DIAL-3), DIAL-Revised, Early Screening Inventory – Revised, or Screening Test for Education Prerequisite Skills (STEPS)	Local reporting including to parents, for “placing children within a regular kindergarten classroom setting and planning their instructional programs to meet identified needs”
Maryland	All students assessed, multiple domains. State is working with Ohio to develop new KEA building on existing adaptation of the Work Sampling System. Plans to align new instrument to Partnership for Assessment of Readiness for College and Career (PARCC) Consortium Assessment (in development).	Computer based, online formative assessments for Pre-K and kindergarten teachers, to help them tailor their instruction to individual student needs	Maryland and Ohio will share the costs for development of the KEA, and once ready, they plan to make it available to other interested states for purchase. The new assessment to be field tested in 2013. Also creating a professional development workshops for teachers on how to use the assessments and planning to develop online tools and content and create professional learning communities and establish a teacher certification process to ensure educators are able to reliably administer these assessments.
Massachusetts	Voluntary, will be a mandatory grant condition for certain programs starting AY 2014-2015, multiple domains Tool is selected at the local level from an approved list: <ul style="list-style-type: none"> • COR • Teaching Strategies GOLD • Work Sampling System • Any other approved. 	<ol style="list-style-type: none"> 1) Formative assessment 2) Statewide picture of children's readiness for kindergarten 	Participating schools required to use an approved formative assessment tool that covers all essential domains of school readiness. Also plans to develop its own statewide measure of children's school readiness by cross-walking the items on the three state approved assessments to find similarities. Reports will be developed on this process and outcomes.

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
Minnesota	Sample, 10% random sample of kindergarten students. Currently uses an adapted version of the Work Sampling System as its KEA.	Districts are encouraged to use KEA and other data to identify staff development needs and to inform their local literacy plans	Plans to expand and refine its KEA system, linking KEA scores to the state's longitudinal data system and convening a task force to enhance system. Planning to implement a new KEA statewide in 2014-2015.
New Mexico	All students assessed, reading only	DIBELS	"To determine placement at an instructional level and the effectiveness of" kindergarten programs
North Carolina	All students assessed, developing new KEA using RTT-ELC; will build on existing KEA.	Data used to help close the achievement gap and improve instruction through 3rd grade	<ul style="list-style-type: none"> Plans to broaden its current K-2 assessments to include all essential domains of school readiness and extend to third grade. North Carolina plans to fully implement the KEA during the 2014-2015 school year, beginning in schools with the largest number of high-need children. Also aligning to new standards.
North Dakota	All students assessed, domains vary based on the instrument selected	Locally determined	To guide instruction and assess the need for additional intervention
Ohio	All students assessed, reading only. Developing new multiple domain KEA with Maryland.	Computer based, online formative assessments for Pre-K and kindergarten teachers, to help them tailor their instruction to individual student needs	Intends to link KEA results to children participating in publicly funded preschool programs, as well as programs participating in the state's QRIS. Sharing costs for development with Maryland
Oklahoma	All students assessed, reading only	Districts must use one of DIBELS, Berkeley Evaluation and Assessment Research (BEAR) Assessment, or Literacy First	To guide instruction and intervention
Rhode Island	All students assessed, domains vary. School districts required to screen children prior to school entry to determine how prepared they are in literacy and math. Individual districts	Formative Assessment; Districts develop "personal literacy plans" for children who are reading below grade level	<ul style="list-style-type: none"> In December 2010, Rhode Island began planning for a statewide KEA, with an assessment work team as part of the Rhode Island Early Learning Council. The state plans to pilot its newly

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
	can choose their own screening tools.		<p>developed KEA in select districts during the 2014-15 school year. Additional school districts will be added, beginning with districts with the most high-need children, in the 2015 and 2016 school years.</p> <ul style="list-style-type: none"> • Costs of implementing this KEA are included in the state’s education funding formula • Received RTTT grant, using to develop or identify an appropriate assessment and develop training for teachers.
Tennessee	All students assessed, varies based on the assessment selected	Locally determined; must be “comprehensive”	To guide instruction
Texas	All students assessed, reading only	Districts can choose the TPRI or one of a number of other approved assessments	To guide individual interventions and to notify parents of a student’s reading skills. Also used to evaluate Pre-K programs.
Vermont	Voluntary, 5 domains: Social and Emotional, Development Approaches to Learning, Communication, Cognitive Development and General Knowledge, and Physical Health and Development	Ready Kindergarteners Survey	To track the portion of the students ready for kindergarten
Virginia	Voluntary, with 99% use, reading only	Phonological Awareness Literacy Screening (PALS)	To “identify children in need of additional instruction and to provide early intervention services to those students with diagnosed needs,” and by the governor’s office to track kindergarten readiness
Washington	Voluntary, multiple domains. Washington Kindergarten Inventory of Developing Skills (WaKIDS),	<ol style="list-style-type: none"> 1) Formative assessment 2) Engage families 3) Improve transition 	<ul style="list-style-type: none"> • Washington developed a needs assessment for KEA in 2010. Prior to full implementation for all kindergarteners (2014-2015) the state will host a series of professional development trainings

State	Plan for KEA	Type/Purpose	Implementation plans for KEA
			<p>for districts, schools, teachers, and support staff.</p> <ul style="list-style-type: none"> • State will introduce the public to the concept of KEAs. • The University of Washington will conduct two validity and reliability evaluations to ensure GOLD results are accurate. • The state will integrate WaKIDS data into its longitudinal data system and report results to the public.
Wyoming	All students assessed, 9 domains: Representation, Language, Writing, Reading, Geometry/ Algebra, Number/ Operations, Scientific Thinking, Self-Regulation, Social Problem-solving	Instructional Foundations for Kindergarten (IFK)	To identify “the status of young students and to establish a baseline and trends for data indicators on children entering kindergarten”

Source: Adapted from the Nevada Early Childhood Advisory Council’s report “Needs Assessment for Nevada’s Kindergarten Entry Assessment Project 2012” prepared by Social Entrepreneurs Inc.

References

General Background

“The Economics of Early Childhood Programs: Lasting Benefits and Large Returns”, March 2013
http://nieer.org/sites/nieer/files/Economics%20of%20ECE_Loyola_Nores.pdf

“Prepared for Kindergarten: What Does “Readiness Mean?”, 2005
<http://nieer.org/resources/policyreports/report5.pdf>

“Using Pre-K to Advance Education Reform: Opportunities for State Advisory Councils” 2011,
http://www.pewstates.org/uploadedFiles/PCS_Assets/2011/ECAC_brief_FINAL.pdf

U.S. Department of Education, National Center for Education Statistics, “Entering Kindergarten: A Portrait of American Children When They Begin School: Findings from The Condition of Education 200”, Nicholas Zill and Jerry West, NCES 2001–035, Washington, DC: U.S. Government Printing Office, 2001.
<http://nces.ed.gov/pubs2001/2001035.pdf>

Snow, K. 2011. “Developing Kindergarten Readiness and Other Large-Scale Assessment Systems: Necessary Considerations in the Assessment of Young Children.” Washington, DC: National Association for the Education of Young Children.
http://www.naeyc.org/files/naeyc/file/research/Assessment_Systems.pdf

Council of Chief State School Officers. 2011. “Moving Forward with Kindergarten Readiness Assessment Efforts.” Washington, D.C. http://www.ccsso.org/Documents/CCSSO_K-Assessment_Final_7-12-11.pdf

State Profiles

Connecticut

<http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&Q=320780>

Kindergarten inventory study showing, March 2013.
http://www.sde.ct.gov/sde/lib/sde/pdf/pressroom/kindergarten_inventory_study_032713.pdf

“The Evolution of the Connecticut Kindergarten Entrance Inventory.” PPT by Peter Behuniak, University of Connecticut.

<http://assessment.education.uconn.edu/assessment/assets/Conferences/2012-CAF/Behuniak%20-%20Evolution%20of%20the%20Connecticut%20KEI.pptx>

http://assessment.education.uconn.edu/assessment/assets/Conferences/2010-CAF/CAF%20Kindergarten%20Inventory_Addesso%20Goldein.pdf

Kentucky

Kindergarten Readiness Screener to Be Implemented

¹ <http://www.kentuckyteacher.org/news/2012/05/kindergarten-readiness-screener-to-be-implemented/>

Interpreting the 2012 Kindergarten Pilot Results

<http://education.ky.gov/curriculum/prim/Documents/Interpreting%20the%202012%20Kindergarten%20Screen%20Pilot%20Results.pdf>

<http://www.curriculumassociates.com/products/brigance-kindergarten-ky.aspx?statecode=KY&source=KENTUCKY>

Maryland

Maryland Model for School Readiness (MMSR) Description:

<http://www.mdk12.org/instruction/ensure/MMSR/MMSRpKFrameworkAndStandards.pdf>

MMSR Annual Report:

http://marylandpublicschools.org/NR/rdonlyres/BCFF0F0E-33E5-48DA-8F11-28CF333816C2/35516/MMSR_SY20122013_StateReport_.pdf

EXCELS information:

http://www.marylandpublicschools.org/MSDE/divisions/child_care/mdexcels.htm

National Conference of State Legislators Report

<http://www.ncsl.org/documents/educ/MDReport.pdf>

Minnesota

<http://education.state.mn.us/MDE/StuSuc/EarlyLearn/SchReadiK/>

http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=005512&RevisionSelectionMethod=latestReleased&Rendition=primary

“Assessing Kindergarten Children: What School Systems Need to Know”, 2001,

http://earlysucces.org/sites/default/files/website_files/files/2012-10-Inter-State-Dicsussion-Time-Doc-2.M.Boyajian.pdf

Human Capital Research Collaborative, “Assessing the Validity of Minnesota School Readiness Indicators”, 2011, http://humancapitalrc.org/mn_school_readiness_indicators.pdf

Pennsylvania

PA Costing-out Study

http://www.portal.state.pa.us/portal/server.pt/community/research_reports_and_studies/19722/education_costing-out_study/529133

The 2011 SELMA Pilot, March 2013

<http://www.ocdelresearch.org/Reports/Kindergarten%20Entry%20Inventory%20%28KEI%29/SELMA%202011%20Pilot%20Report%20FINAL.pdf>

Texas

<http://www.tea.state.tx.us/index2.aspx?id=4528>

http://www.tea.state.tx.us/index2.aspx?id=4528#Funding_Information

“The Kindergarten Readiness System Analysis: A Straightforward Approach to Recognizing Excellence in PreK”

<http://www.esc17.net/users/0212/docs/tm.KRS%20Analysis%20Final.pdf>

“Evaluation of the Early Childhood School Readiness Demonstration Projects and School Readiness Certification System.” 2011

http://www.lbb.state.tx.us/School_Perf_Review/Evaluation%20of%20the%20Early%20Childhood%20School%20Readiness%20Demonstration%20Projects%20and%20School%20Readiness%20Certification%20System.pdf

Wyoming

<http://www.ddehome.com/IFK/>

Giovacco, Tricia Johnson & Michelle Buchanan. 2011. “Constructing and Resisting the Development of a School Readiness Survey: The Power of Participatory Research” University of Wyoming

<http://ecrp.uiuc.edu/v13n1/johnson.html>

Wyoming Kids First: Wyoming’s Investment in Young Children During the 2011-2012 Biennium

<http://www.wyokidsfirst.org/wp-content/uploads/2011/04/WECP-Ready-Children-WY-Allocations-Report.pdf>

State of Wyoming: Instructional Foundations for Kindergarten (IFK), Preliminary Statewide Results. 2009

<http://www.ddehome.com/IFK/reportprelimFeb1.pdf>