Implementing a Kindergarten Entry Assessment (KEA) System

GG Weisenfeld, EdD

March 2017

INFORMATION REQUEST
A state department of education requested information about other states’ efforts implementing Kindergarten entry assessments (KEAs).

State’s Goal
Reviewing experiences from other states implementing KEAs will help inform stakeholder discussions and decision points as they procure a KEA tool; specifically, identifying key data points and reporting; and understanding what teacher and administrator supports and conditions are necessary.

What We Know
States are at varying stages of KEA implementation, ranging from statewide implementation to piloting a tool or just beginning the conversation. The five states (Colorado, New Jersey, New Mexico, Maryland, and Washington) selected for this profile (see Table 1) provide a detailed understanding of the mandate of the KEA and its purpose within each of these states, as well as challenges, and considerations that need to be made when implementing a KEA, such as how KEA data are accessed, used, and reported.

Purpose of the KEA
State context and regulation determine whether the KEA is mandated or voluntary and the goals the state sets for its use. Participating in the KEA is required by statute in Colorado, New Mexico, Maryland, and Washington, however states have elicited and responded to concerns by stakeholders in the state in terms of the selection of objectives, dimensions, and the requirement that all or on a sampling of students participate. In addition
to Washington’s KEA (WaKIDS) being legislatively mandated as part of state-funded, full-day Kindergarten initiative, a WaKIDS Legislative Workgroup was formed to respond to concerns about the time required to learn the assessment tool and observe students over the first weeks of Kindergarten, including the number of items included in the assessment tool’s objectives and dimensions. One outcome of the WaKIDS Legislative Workgroup recommendations was a survey of kindergarten teachers to determine which objectives and dimensions were most useful in individualizing instruction and connecting to the state’s learning standards. As a result, the objectives and dimensions were reduced further. In Maryland in spring 2016, the teachers’ union pushed hard to cut back on all required assessments. As a result, school systems can decide to assess just a sample of students or have all students participate in the KEA. In 2016-2017, one-third of Maryland school systems assessed all students and two-thirds assessed a random sample of students in each classroom to get a representative result. The state decides how many children need to be in the sample for a valid and representative result, ranging from 10 to 30 percent of students in each classroom. Individual schools and teachers still have the option of assessing all students.

New Jersey does not require schools to participate in the KEA, however few districts have opted out. The state attributes the high rate of participation to “the best practice PD (professional development) that keeps them in and builds the relationship. Without that, it’s only a tool, a vendor, and an assessment.”

States are typically using KEAs in multiple ways. However, the three main purposes include:

- **Understanding or reporting Kindergarten readiness.** Maryland developed its KEA to be used during the first day of school through November 1st. In Colorado, the KEA is to be completed in the first 60 calendar days of the school year. Only the initial KEA data in Colorado will be reported to the state, although some districts have chosen to continue using the kindergarten school readiness assessment throughout the school year which serves as their kindergarten report card. Colorado’s reporting system is intended to provide baseline data for measuring improvement in students’ knowledge and skills over time. New Mexico strives to “better understand the readiness of the state’s kindergartners and increase their chances of success in school.” In New Mexico, the KEA is only used during the first 30 days, all data must be entered by October 15 as specified in state statute.

- **Improving instruction and practice in Kindergarten.** New Jersey referred to this as a “best practice initiative” vs. an “assessment initiative.”

- **Supporting the transition of children into Kindergarten.** In Washington, two state agencies coordinate efforts around the KEA: Office of Superintendent of Public Instruction (OSPI, the state’s SEA) and Department of Early Learning (DEL). In addition, Thrive Washington, works collaboratively with the state and local stakeholders in implementing WaKIDS which is described on the WaKIDS website as a “transition process that helps to ensure a successful start to the K-12 experience and connect key adults in a child’s life.”
Funding the KEA
Adequate funding for the tool, training and other incentives for professional development impacts buy-in and effective use of KEA data for improving instruction. The federally funded Race to the Top: Early Learning Challenge (RTT-ELC) grant supported all five states in developing or supporting KEA implementation. Colorado’s Achievement Plan for Kids (CAP4K) was passed in 2008 with the goal of aligning Colorado’s preschool through postsecondary education system. Even though legislation passed in 2008, there was no funding until 2012 when Colorado received RTT-ELC funding.

In 2013, Maryland was awarded an Enhanced Assessment Grant. This funding brings together four RTT-ELC partners and additional states: the departments of education in Maryland (MSDE), Ohio (ODE), and Connecticut (CSDE) are partnered with the Johns Hopkins University School of Education’s Center for Technology in Education (CTE) and WestEd. School districts in Tennessee, South Carolina, and Michigan also administered the KRA in 2016-2017. The funds are allocated to revise and enhance Kindergarten Readiness Assessments and develop the formative Early Learning Assessment component of the system.

As RTT-ELC funding comes to an end, the challenge for the states will be to find funding streams to continue the KEA work; for example, the Washington legislature allocated funding to support training for teachers new to the KEA, but did not allocate funding to deepen understanding for returning teachers. New Jersey has figured out a way to reduce costs; the state does not reimburse for substitute teachers to cover the costs associated with teachers attending KEA trainings, instead local districts or schools pay those costs.

Protecting the KEA Data
It is helpful to have written policy or guidance on how data are used and by whom at the state level, and to ensure confidentiality. All five of the states we reviewed have protocols for who has access to individual student data.

In New Mexico, teachers have immediate access to all data via a secure log-in. They can look at both student-level and classroom-level data. District level personnel can see data below (school and classroom levels), but not up (state-level). In New Jersey, the KEA manager at the state department has access to child level data so that teacher coaching is targeted and can support the teacher’s ability in meeting the individual needs of his or her students. Colorado’s state department does not have access to student level KEA data. Data are submitted at the aggregate level by district and by school.

Washington describes its role as controlling “access and training to assure the professionals collecting the data are collecting it accurately and reliably, state-level messaging to explain in public ways what the data is conveying, and accuracy to assure that the published data has been ‘cleaned’ and accurately reflects school and district results. We can’t control the meaning people attach to the data or assure that it won’t be used in ‘detrimental or punitive manners’.”
Sharing the KEA data
How the five states share KEA data varies. New Mexico is still in the planning stage, “most people are excited that we are using KOT [Kindergarten Observation Tool],” however the challenge becomes whether or not the “data are being reported appropriately.” Concerns include that data shared represents the “whole child,” not just certain domains. The next steps for New Mexico include establishing cut-scores and updating the state’s current Kindergarten readiness definition.

Colorado is required by statute to adopt a system for reporting school readiness data. In March of 2016 the State Board of Education voted to adopt a system that calls for districts to submit only aggregate readiness information not by domain but by the number of domains in which students demonstrate readiness. Beginning in 2017, an annual report will be produced aggregating data for the district; and disaggregating by school, free or reduced lunch eligibility status, ethnicity and gender.

Washington provides data in four formats to various stakeholder groups:
- Teachers and principals get data directly from GOLD®;
- The school districts get raw data from the Washington Management System that is pre-cleaned for report cards and own analysis;
- In January, the state report card data is released to the school districts and general public; and
- Starting in 2017, OSPI performance measure analytics (such as attendance and WAKIDS measures, rank order the districts), will be available to the public.

Washington’s decision to report the data publicly on the state report card confirmed the importance of the KEA. At the same time, state officials “recognized the paradox of reporting formative assessment data in a summative presentation, and landed on multiple ways to accurately portray the data. We opted not to use a single, composite ‘readiness’ score, and instead reported ‘readiness’ in each of the six areas assessed. One of the things we have done in the past two years is reporting out GOLD® results for Pre-K on the same scale as OSPI (our state department of education) reports out GOLD®... Now we can really show what happens when kids leave pre-K to when they enter K.”

Maryland shares the kindergarten readiness assessment data of state kindergarten children overall for each of Maryland’s 24 school districts, and by subgroups (gender, ethnicity, ELL, children with disabilities, free/reduced lunch status, and prior care) both statewide and by school district.

In New Jersey KEA reports are not shared publicly. Data are entered into the state’s longitudinal data system (SLDS) twice a year: Teaching Strategies, the vendor for GOLD®, organizes the data, they send to a data steward in DOE, who then uploads into the SLDS. Data are intended to be used by teachers in a formative nature and by principals for teacher professional development.

States also share the KEA data with families. For example, in Colorado, all publicly funded kindergarten students receive an Individual School Readiness Plan. The Individual School Readiness Plans are informed by a State Board approved school readiness assessment. Many districts use the reports
available in GOLD® then share students KEA data with families. In about 50 school districts, parents are given GOLD® generated reports as the kindergarten report card.

**KEA as Part of a Continuum**

It is important to consider the overall quality of Kindergarten experience, including instruction, teacher competencies, and family engagement, as the KEA is implemented and used. Further, the KEA is one piece of the birth to 3rd grade continuum from an early childhood system perspective. All five states that we spoke to discussed how they were approaching this continuum.

When New Mexico designed its KEA, the state wanted to “align the KEA within the system, including the [New Mexico Early Learning Guidelines](http://www.ceelo.org) and the pre-K assessment being used in state funded pre-K [NM PreK Observational Assessment Tools](http://www.ceelo.org).” In order to align the assessments, the KEA had to look at the whole child, therefore the observational needed to include components in which children were observed in more areas than just math and literacy.

Colorado also acknowledged “looking at the whole child has been a paradigm shift for Kindergarten teachers and administrators. As we have shifted to looking at best practices, we have been able to help teachers think about all of the GOLD® domains and how critical it is to understand the ‘whole child’ not just an academic focus.” Furthermore, Colorado is trying to weave use of the KEA into a P-3 approach, as opposed to only a Kindergarten assessment process. Colorado has used the Every Student Succeeds Act (ESSA) process to identify P-3 strategies at the state and school district level. This is similar to New Jersey, where the emphasis is not on the “assessment” nature of the KEA, but rather on a [systemic approach](http://www.ceelo.org) to implementation of a KEA, considering the pre-K to Grade 3 continuum, and particularly to Kindergarten quality.

States are also thinking about how their ESSA plans can support their KEA work within the K-3 continuum. For example, in Maryland, state leaders are thinking about ways to help principals and district administrators understand what quality instruction looks like in Pre-Kindergarten to 2nd grade, beyond data.

**Professional Development**

Most importantly, teachers and administrators need sufficient and sustained professional development (PD) in both the effective use of the tool selected, and how to use the data collected to inform instruction and communicate with parents. In the five states we examined, PD occurred via coaching; workshops, typically offered over several days; materials; and creation of train-the-trainers modules.

In Colorado, the KEA PD was phased in over years. The process included collecting teacher feedback through regional meetings, offering regional trainings, and offering customized trainings for schools and districts. One of the biggest challenges was the difference between Kindergarten and pre-Kindergarten classrooms (e.g. student-teacher ratios, class size, number of teachers) and the impact that has on conducting child observation assessments.
Washington’s OSPI contracts with nine Educational Service Districts (ESDs), who hire or contract with a WaKIDS coordinator and trainers to serve all the schools in their region, including coaching and technical assistance for district leaders, principals, and teachers. The total contract with ESDs in 2016-2017 was $550,000; each ESD receives a $20,000 flat amount plus a percentage based on the current number of WaKIDS teachers in the region.

**Train-the-trainer.** The Johns Hopkins Center for Technology and Education developed all of the PD for Maryland. They conduct the training for the “train-the-trainers.” Each of Maryland’s 24 school districts sends a representative to get trained as a trainer who then goes back to his or her respective school and trains within the district. The current training model builds capacity for a cadre of master trainers who have been certified to conduct KRA teacher trainings throughout the state after attending a multi-day Train-the-Trainer workshop. These trainers have access to a trainer site of materials and resources to support teacher trainings, as well as an online community of support throughout the training and testing window. As part of the training, individual teachers must also successfully complete a content assessment and a simulator of Kindergarten student performances to be scored in order to ensure inter-rater reliability.

New Mexico also has a train-the-trainer model, but provided by the state. The state trained a host of trainers, targeting larger school districts. The people trained were typically district level coaches and reading specialists by region. From the state level there was “lots to manage, including teacher stipends.” In total, there are 189 trainers. In order to work on inter-rater reliability and “to make sure that all teachers are interpreting the objectives in the same way,” trainers watched videos of K children, gave ratings, then scored for inter-rater reliability. WestEd conducted an analysis between master scorers (80% agreement) between teachers and master scorers.

**Content.** Teacher trainings ranged from workshops that last one day to three days. Topics covered in the KEA trainings tend to include:

- Overview of the KEA,
- How to use the child assessment tool,
- Technology that supports or is required for the KEA, and
- Other resources available.

In addition, Washington includes a family section during the KEA training that supports teachers in understanding the KEA meeting with parents is not a school orientation, but a listening exercise. New Mexico discusses the appropriate and inappropriate use of KEA data.

In Colorado, the training initially was more focused on the assessment tool and using it. However, over time the state realized is a significant need to address the following during teacher trainings:

- What does quality Kindergarten look like?
- What is authentic appropriate assessment?
- How do Kindergarten children learn and develop across all areas?
New Jersey addressed many of these questions in its regional, five-part seminar series that addressed the KEA, but primarily focused on implementing best practices in the Kindergarten year. In addition, Kindergarten teachers participating in the KEA must not only attend training on the assessment tool, but also the “Kindergarten Seminar, designed to support best practices in the Kindergarten year.”

**Format.** States are moving beyond face-to-face trainings and developing webinars or online modules and in Colorado, the School Readiness team has hosted “virtual office hours.” The virtual office hours have included support for the “implementation of the KEA, support with completing checkpoints and running reports, and tips for collecting documentation and observations throughout the year. The virtual office hours have all included time for participants to ask questions and share their experiences.”

In addition to teachers, administrators are included in state KEA trainings. Colorado explained, “when we started to do training on GOLD®, we heard teachers saying, ‘please talk to our principal.’ The importance of principal and school leadership cannot be overstated.” Colorado has begun providing training and technical assistance for principals and other school leaders on developing and supporting a P-3 approach to early learning, assessment and use of data. Colorado and New Jersey developed PD for school principals. New Jersey requires both teachers and administrators to participate in its KEA seminars.

**Involving Stakeholders**
Transparent and frequent communication, with all stakeholders, including teacher unions, parents, legislators, educators and others is important to ensure a broad understanding and support for the KEA.

**Timing.** Involving stakeholders in the beginning of the KEA discussion has been useful in all five states. New Jersey formed Steering Committees from the start with members including district superintendents because it was considered “critical to work with leadership from a central, state level or the efforts will be short-lived.” Colorado brought people together from the school level, district level, and preschools to form an advisory group in the early stages of implementing school readiness. Colorado has included stakeholders in the school readiness assessment review process and will continue to do so as assessment tools are reviewed every six years.

**Using input.** In Maryland, involving stakeholders included focus groups that developed KEA items and multiple surveys after field testing and piloting. Based on the feedback received, the state was able to make enhancements with the technology associated with the KEA and reduce the length of the assessment from 63 items to 50. In 2015, GOLD® objectives in Washington were reduced from 36 to 31 based on feedback from 700 Kindergarten teachers and learning and teaching staff. OSPI administers annual surveys to teachers and principals, and in 2016, administered a survey to District Assessment Coordinators on their experiences with KEA implementation. All of these data are used by OSPI for continual improvement. In 2015, GOLD® objectives for the KEA in Colorado were reduced. School districts, schools and teachers have the ability to utilize the remaining optional objectives as they see fit.
Early learning providers. In addition to involving teachers and school leaders, Washington requires all districts receiving state funding to establish relationships with early learning providers, such as Head Start, state-funded pre-K, and Family Child Care. The schools and school districts are able to get a list of all the early learning providers through Child Care Aware so they can reach out, establish relationships, and hold joint Kindergarten readiness activities. The WaKIDS Early Learning Collaboration Framework was created “to increase communication and build connections between Kindergarten teachers and early learning providers to promote smooth and successful transitions to Kindergarten for kids.”

Teachers’ union. In retrospect, if there had been more opportunities for communication between the teachers’ union and the state education department in Maryland as to the value of the data and how it can be used for instructional planning, the decision to sample only a selection of students for the KEA might not have occurred. As one state leader describes it, the importance of transparency and “keeping the teacher’s union at the table so they understand its purpose helps them to be a support and not a roadblock.”

Conclusion
Some states have expanded the definition of KEAs as an assessment tool used throughout the school year to improve kindergarten instruction. Based on the experience of five states who have implemented KEA systems, the following considerations should be addressed for other states interested in a KEA system:

- As federal funding is ending, states are beginning to look at sustainable sources of revenue to support their KEAs;
- In order to protect the rights of students, states must establish protocols for accessing KEA data;
- Whether to publicly report KEA data and what should be included and the connection to the state’s kindergarten readiness definition is often a complicated discussion, involving many stakeholders;
- Involving stakeholders form the inception of the KEA and continually throughout the process has been a vital element to success in the states we reviewed; and
- Finally, having a PD plan that support teachers and administrators in using and understanding the KEA data is critical.
### Figure 1. KEA Implementation in CO, NJ, NM, MD, And WA

<table>
<thead>
<tr>
<th>Name of KEA</th>
<th>Colorado</th>
<th>Maryland</th>
<th>New Mexico</th>
<th>New Jersey</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components of KEA</td>
<td>There are currently three approved K assessment tools: GOLD®; Riverside Early Assessment of Learning (REAL); or DRDP-K. Most school districts selected and use GOLD® (97%). REAL will no longer be an option and is being phased out by the developer. Colorado requires all six of GOLD® domains be observed, but not all of the objectives within each domain.</td>
<td>The KRA measures four domains of learning deemed to be the most strongly linked to school readiness:  - Language and Literacy  - Mathematics  - Physical Well-Being and Motor Development  - Social Foundations</td>
<td>There are six developmental domains in the KOT:  - Physical Development, Health, and Well-Being  - Literacy  - Numeracy  - Scientific Conceptual Understanding  - Self, Family, and Community  - Approaches to Learning</td>
<td>The assessment tool is GOLD®. The state utilizes a scaffold approach that has educators focus on Social-Emotional, Literacy, and Math domains in year one. Educators expand to other domains in subsequent years</td>
<td>WaKIDS contains three components:  1. <strong>Family Connection:</strong> families meet with teachers prior to the start of school, or shortly thereafter.  2. <strong>Child Assessment:</strong> TS GOLD®  3. <strong>Early Learning Collaborations:</strong> feedback from the early childhood center the child attended.</td>
</tr>
<tr>
<td>Administering the KEA</td>
<td>The initial assessment is to be completed within the first 60 calendar days of the school year. Teachers may complete the initial assessment by using the GOLD® KEA Survey for the first checkpoint.</td>
<td>Based on a combination of teacher observations and student responses to selected-response questions and performance tasks (17 of 50 items are on an APP for students). A few performance tasks are connected to a book. The administration window is open from the first day of school through October 1st.</td>
<td>All areas are observed via observation. Teachers are given many ways to observe, but they must enter the data into a database within the first 30 days of school; all data must be entered by October 15 as specified in state statute.</td>
<td>K teachers use GOLD® throughout the whole year. There are 3 collection periods: first 8 weeks (KEA period), then 14 week intervals.</td>
<td>By October 31, teachers observe and record each child’s developing skills in six areas: social-emotional, physical, cognitive, language, literacy, and mathematics.</td>
</tr>
<tr>
<td>KEA Participation</td>
<td>All students in a publicly funded kindergarten are assessed using a state approved school readiness assessment. In 2016-2017, One-third of school systems assessed all kindergarten students; two-thirds only assessed some students to get a representative result. The state decides how many children need to be in the sample, ranging from 10 to 30 percent of the students in each classroom.</td>
<td>In 2016-2017, 40 teachers and focused on process and comparing KOT to the pre-K tool. Following this stage, there were focus groups discussions with teachers. The next year there were 351 teachers (Fall 2015). This phase included not only looking at the process, but also state-level data. Another round of focus groups and feedback occurred prior to statewide implementation (Fall Pilot year: It was piloted in 8 districts; year 1 of implementation: 29 districts; year 2: added 51 districts, year 3: added 11 districts. There was a slower increase in Year 3 to ensure that the GOLD® platform revisions worked. Currently, 91 districts, over 800 teachers, and 300 administrators are participating.</td>
<td>Pilot year: It was piloted in 8 districts; year 1 of implementation: 29 districts; year 2: added 51 districts, year 3: added 11 districts. There was a slower increase in Year 3 to ensure that the GOLD® platform revisions worked. Currently, 91 districts, over 800 teachers, and 300 administrators are participating.</td>
<td>In 2010-2011, 51 districts, 63 schools, 116 teachers, and 1,760 students participated in WaKIDS. Since that time participation has steadily increased, in 2016-2017; 95% of all schools participate and 77,314 students have WaKIDS data.</td>
<td></td>
</tr>
<tr>
<td>State Supports for Implementing KEA</td>
<td>Resources for Kindergarten Teachers and School Leaders are provided on the CDE website. In addition, there are recorded webinars, and information about assessment choices and school readiness plans.</td>
<td>The Ready for Kindergarten: Maryland’s Comprehensive Assessment System includes online professional development modules and resources, including instructional support in each domain. <strong>Supporting Every Young Learner: Maryland’s Guide to Early Childhood Pedagogy, Birth to Age 8</strong> provides resources for teachers, principals, and ECE programs. Johns Hopkins Center for Technology and Education provides FAQs and technical support contacts for KRA and ELA.</td>
<td>There are a series of KOT webinar trainings and FAQs and manuals for administering the KOT. <strong>Five kindergarten seminars</strong> were conducted in 2015-2016. The New Jersey Kindergarten Entry Assessment (NJKEA): Information Packet: 2016-2017 outlines the background, participation requirements, registration instructions, and contact information for the NJ KEA. There are a variety of state support and resources for WaKIDS, including teacher checklists and guidance; recorded webinars; and information flyers directed at principals.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Resources and Links

Case Studies of the Early Implementation of Kindergarten Entry Assessments. (2016). This is a case study on Maryland, Oregon, Pennsylvania, and Washington’s KEA.

Fast Fact: Assessment Tools Used in Kindergarten Entry Assessments (KEAs) STATE SCAN. (2017). This State Scan identifies the 16 states that are implementing a Kindergarten entry assessment (KEA) that are using a commercially developed tool as part of their KEA system; the three state consortia funded through the EAG are developing a Kindergarten measure; and the 13 states that have created their own KEA, sometimes in conjunction with a commercially made tool.

Fast Fact: Information and Resources on Developing State Policy on Kindergarten Entry Assessment (KEA). (2014). This Fast Fact provides information on how states are approaching the development and implementation of KEA as part of a comprehensive assessment system. Includes links to states’ KEA policies and resources.

How Kindergarten Entry Assessments are Used in Public schools and How they Correlate with Spring Assessments. (2016). This study examined how public schools used Kindergarten entry assessments, what types of public schools used Kindergarten entry assessments, and whether the use of Kindergarten entry assessments was correlated with student early learning assessment scores in reading and math in spring of the Kindergarten year. This brief summarizes the study’s findings.

Using Teaching Strategies GOLD® within a Kindergarten Entry Assessment System. (2016). This Fast Facts describes how states are using GOLD® as part of their KEA.
ABOUT CEELO:
One of 22 Comprehensive Centers funded by the U.S. Department of Education’s Office of Elementary and Secondary Education, the Center on Enhancing Early Learning Outcomes (CEELO) will strengthen the capacity of State Education Agencies (SEAs) to lead sustained improvements in early learning opportunities and outcomes. CEELO will work in partnership with SEAs, state and local early childhood leaders, and other federal and national technical assistance (TA) providers to promote innovation and accountability.

Permission is granted to reprint this material if you acknowledge CEELO and the authors of the item. For more information, call the Communications contact at (732) 993-8051, or visit CEELO at CEELO.org. For other CEELO Policy Reports, Policy Briefs, and FastFacts, go to http://ceelo.org/ceelo-products.

Suggested citation:

This FastFact was originally produced in whole or in part by the Center on Enhancing Early Learning Outcomes, with funds from the U.S. Department of Education under cooperative agreement number S283B120054. The content does not necessarily reflect the position or policy of the Department of Education, nor does mention or visual representation of trade names, commercial products, or organizations imply endorsement by the federal government.

The Center on Enhancing Early Learning Outcomes (CEELO) is a partnership of the following organizations: