Key Considerations to Assist States in Developing or Revising a Kindergarten Entry Assessment (KEA)

Abstract: This report is the result of a request from two states for technical assistance to support the selection and revision of the state’s Kindergarten Entry Assessments (KEA’s). Given that this is a nation topic of interest, the Center on Enhancing Early Learning Outcomes (CEELO) summarized what we gathered to provide other states with this relevant and useful information.
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Introduction

Two states approached CEELO with questions to inform the selection and revision of the state’s Kindergarten Entry Assessments (KEA). Each state is in the process of revising the state’s KEAs to meet the needs of state stakeholders. State policymakers in each state asked for the following information:

<table>
<thead>
<tr>
<th>Area</th>
<th>Key questions</th>
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<tbody>
<tr>
<td>Name</td>
<td>What should it be called - should the state call it a kindergarten entry assessment, a kindergarten readiness assessment, a kindergarten inventory, or something else? Does the name matter? How may stakeholders perceive the name (negatively or positively)?</td>
</tr>
<tr>
<td>Purpose and audience</td>
<td>How does the purpose and intended audience affect the cost, training, or reporting? How important is it to have consensus on the purposes and intended audiences of the assessment? Who should be included in determining the purpose and audience?</td>
</tr>
<tr>
<td>Who should be assessed and when</td>
<td>Do all children need to be assessed? When should they be assessed? When is it appropriate to use a sample of children instead of all children?</td>
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<tr>
<td>Implementation phase</td>
<td>What order or types of phases should state consider to increase buy-in of teachers, parents, districts, and other stakeholders?</td>
</tr>
<tr>
<td>Training</td>
<td>Do teachers and administrators need to be trained? If so, what needs to be included? Do independent data collectors need to be trained?</td>
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<tr>
<td>Reporting</td>
<td>What is needed for accurate, timely and appropriate reporting? What challenges exist? How can the state best address these challenges?</td>
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<tr>
<td>Costs</td>
<td>What should be considered in determining the costs? Do states pay for all of the costs of the assessment or only some of the costs? What needs to be considered in determining the cost of the assessment?</td>
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To address these questions, CEELO set up peer calls with experts in two states that have selected and revised kindergarten assessments, interviewed key informants who had revised kindergarten assessments, and reviewed existing documentation including but not limited to existing CEELO materials on the topic as well as a recently published document on KEA reporting from the Ounce of Prevention.

We summarize the findings in this report. We also developed an accompanying tool, Tool to Guide Decisions Regarding Kindergarten Entry Assessment Selection and Implementation, to assist state decision-makers in the selection and refinement of a KEA that aligns with the findings from this report.

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¹ For purposes of this document, we use the term Kindergarten Entry Assessment (KEA) to refer to what states currently name kindergarten entry assessments, kindergarten readiness assessments, kindergarten inventories and as well as other names for a system of collecting and reporting data on young children immediately prior to or during the first quarter of kindergarten
Name of the KEA

Key questions:

- What should it be called - should the state call it a kindergarten entry assessment, a kindergarten readiness assessment, a kindergarten inventory, or something else?
- Does the name matter? How may stakeholders perceive the name (negatively or positively)?

What we found:

Currently states use a range of names and terms to refer to assessments of young children immediately prior to kindergarten or in the early months of kindergarten. In some instances, the purpose of the assessment is articulated in state law or regulation, whereas in other cases the purpose is articulated by a state agency or through a consensus process.²

The most common terms currently being used are:

- **Kindergarten Entry Assessment** (Michigan, North Carolina)
- **Kindergarten Readiness Assessment** (Ohio, Maryland)
- **Kindergarten Inventory** (Connecticut, Georgia, Pennsylvania, Washington)
- **Profile or Something else** (California - Desired Results Developmental Profile, Indiana - I-Start-KR, Minnesota - Kindergarten Entry Profile)

Selected stakeholders from states using the term “inventory” reported that they found this name conveyed a developmentally appropriate system, which addressed perceptions by some stakeholders in the state held that the term “assessment” implied a pencil and paper test. However, a review of the names states use reveals that while there may be arrange of names and terms, there are limited differences in the actual assessments that are used. For example, Michigan and Washington both use Teaching Strategies GOLD but Michigan uses the term Kindergarten Entry Assessment (KEA) and Washington uses the term Inventory.³

For purposes of this document, we use the term Kindergarten Entry Assessment (KEA) to refer to what states currently name kindergarten entry assessments, kindergarten readiness assessments, kindergarten inventories and as well as other names for a system of collecting and reporting data on young children immediately prior to or during the first quarter of kindergarten.

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² Currently 25 states have laws mandating some type of kindergarten entry assessment. See for example, BUILD’s report: http://www.buildinnovative.org/TheIssues/EarlyLearning/StandardsAssessment/KEA.aspx

³ See for example this [CEELO KEA State Scan](#)
Purpose and Audience

Key questions:

- How does the purpose and intended audience affect the cost, training, or reporting?
- How important is it to have consensus on the purposes and intended audiences of the assessment?

What we found:

According to state specialists interviewed, the most important consideration in selecting or revising a Kindergarten Entry Assessment is to determine the purpose and the audience as an early step in the process. Several state experts who had been involved in the development and revision of their state’s KEA recommended the following.

It is important to set up process up front to assure consensus among stakeholders on the intended purposes and audiences. It is important to reach consensus on the desired purpose of the KEA as well as the intended target audience. One state specialist reported, “Purpose drives everything.” She noted that in her state, stakeholders had not articulated the purpose and as a result are now engaged in a wholesale revision of the KEA because it did not meet the needs of many stakeholders. Table 1 below illustrates the range of possible purposes and intended audiences of KEAs.

Table 1 Purpose and Intended Audience of KEA

<table>
<thead>
<tr>
<th>The purpose is to</th>
<th>Intended audience for use of KEA Data</th>
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</thead>
<tbody>
<tr>
<td><strong>Support transition</strong> into kindergarten by providing information about each child who has been in a formal early care or education setting prior to kindergarten</td>
<td>Classroom teachers and assistant teachers</td>
</tr>
<tr>
<td><strong>Inform instruction</strong> to tailor instruction to each child’s strengths and areas that are in need of attention through information about each individual child’s development at the beginning of kindergarten</td>
<td></td>
</tr>
<tr>
<td><strong>Inform instruction</strong> and support by providing information about how each child is progressing over the course of the academic year</td>
<td></td>
</tr>
<tr>
<td><strong>Screen young children</strong> to determine if more in depth assessments are required for determining developmental delay</td>
<td></td>
</tr>
<tr>
<td><strong>Determine</strong> if children are ready to enter school</td>
<td></td>
</tr>
<tr>
<td><strong>Engage families</strong> in a discussion about their child’s development at the beginning of kindergarten to support families’ support of their child’s strengths and areas that are in need of attention and</td>
<td>Families</td>
</tr>
<tr>
<td><strong>Support enhancements</strong> in classroom environment and developmentally appropriate instruction</td>
<td>School administrators and leaders</td>
</tr>
<tr>
<td><strong>Understand the needs</strong> of kindergarten teachers across districts in the state to better target funding, resources and supports</td>
<td>Policymakers including those overseeing education as well as those responsible for Kindergarten education funding</td>
</tr>
<tr>
<td><strong>Provide a snapshot</strong> of children’s readiness to understand trends over time</td>
<td></td>
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</table>

Table 1 Purpose and Intended Audience of KEA
The purpose is to

<table>
<thead>
<tr>
<th>Intended audience for use of KEA Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Understand the relationship between participation in specific early education and care programs and kindergarten readiness</td>
</tr>
<tr>
<td>• Understand differences in entry based on demographic, family and community characteristics</td>
</tr>
</tbody>
</table>

Although in some instances a KEA can be used for multiple purposes, but in some cases a KEA designed for one purpose cannot be used effectively to achieve another. For example, a KEA designed to provide formative data for ongoing instruction cannot and should not be used to evaluate the effectiveness of a program. Yet a number of states are currently using evaluations of preschool programs or other data to both evaluate the program and determine young children’s kindergarten readiness, and some schools use KEA data for screening. A 2016 report by Shields, Cook, and Greller found that of schools using KEAs, over 60 percent of schools use the assessments to identify students needing additional testing for learning problems, 41 percent for placement decisions, and 24 to advise parents about delayed entry.

The purpose and intended audience of a KEA affects the cost of the assessment, the training that is required and the reporting as well as the selection of a specific tool or set of tools. Whether a state is considering adopting a new KEA or revising a KEA, it is essential that the state stakeholders consider the intended purpose and audience—described more below. Finally, it is essential that all key stakeholders engaged in selecting or revising a KEA reach consensus on the purposes and intended audiences.

Who and When

Key questions:

• Do all children need to be assessed? When should they be assessed?
• When is it appropriate to use a sample of children instead of all children?
What we found:
Determining who should be assessed and when the assessment should occur is based on the purpose of the KEA and the intended audience. If the purpose is for teachers to understand children’s baseline school readiness, each child should be assessed. In contrast, if the purpose is to provide policymakers with a snapshot of the school readiness of children in the state, data from a sample of children could be collected. Table 2 below presents the options available to decision-makers regarding who should be assessed.

Table 2 Who Should Be Assessed and When by Purpose of the KEA

<table>
<thead>
<tr>
<th>Who and When</th>
<th>Purpose and intended use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each child attending preschool or community-based child care in the period immediately before children enter kindergarten</td>
<td>• Provide information about each individual child’s development prior to school entry to support transition into kindergarten</td>
</tr>
</tbody>
</table>
| Each child in the classroom immediately before or at the beginning of school entry | • Provide information about each individual child’s development at the beginning of kindergarten to inform instruction to tailor instruction to each child’s strengths and areas that are in need of attention  
  • Screen young children to determine if more in depth assessments are required for determining developmental delay  
  • Support developmentally appropriate instruction |
| Each child at the beginning of school entry and periodically throughout the year | • Provide teachers with information about how each child is progressing over the course of the academic year  
  • Engage families in a discussion about their child’s development at the beginning of kindergarten to support families’ support of their child’s strengths and areas that are in need of attention  
  • Ensure school leaders and administrators have information about what classroom enhancements can best support teachers and how to best support teachers’ developmentally appropriate instruction |
| A sample of children at a single point in time or all children at a single point in time | • Understand the needs of kindergarten teachers across districts in the state to better target funding, resources and supports,  
  • Provide a snapshot of children’s readiness to understand trends over time, and to capture differences in entry based on demographic, family and community characteristics. |

Determining who is assessed and when assessments occur affects costs and the training that is needed. For example, if data are only collected on a sample of children, primarily for the purpose of informing state policy, independent reliable data collectors can be hired and costs can be reduced. In contrast, if each child is assessed by teachers, state policymakers need to budget the cost of the assessments as well as teachers’ time.
Phases of KEA Design and Implementation

Key question:

- What order or types of phases should state consider to increase buy-in of teachers, parents, districts, and other stakeholder?

What we found:

It is important for state policymakers to consider a phased in approach to the design, implementation and revision of a KEA design. State stakeholders and document reviews reveal that successful design and implementation of a KEA occurs in six phases. These are described below.

Design

The design phase is critical to ensure that the purpose, target audience, timing, sampling, and uses of the KEA are clearly defined. Adequate planning that considers stakeholder perspectives and accounts for the racial, cultural, and linguistic diversity in the state can assure success of the KEA. In contrast, inadequate planning and preparation can result in resistance among districts, teachers, and parents. In some instances, this resistance has led states to halt their KEA implementation. Although some state stakeholders have voiced disappointment about this outcome, they also reported that if they hadn’t engaged in this phase, they would have spent significantly more time and money to implement a KEA that was not appropriate for the state context.

Preparation

During the preparation phase, stakeholders are responsible for ensuring that the KEA is aligned with the state’s early learning guidelines, addresses all key domains of early learning and development, is appropriate for the intended purposes and target audiences, and includes a plan for ensuring buy-in is designed and implemented. The plan for ensuring buy-in needs to consider the purpose, who will be assessed, how the data will be collected, how the data will be reported, and who will be using the data. Engagement of these key stakeholder groups is critical. Depending on the purpose of the KEA, the level of effort needed for buy-in will vary. For example, if the purpose is to smooth transitions, teachers in both preschool and kindergarten classrooms would need to be engaged and budgeting for training and time considered. In contrast, if the purpose is to provide policymakers with a snapshot of how children are performing at kindergarten entry, the intensity of engagement among the range of stakeholders would be less.

Pilot testing

Early childhood specialist reported that the pilot phase for the state’s KEA was useful in “working out the bugs,” and yielded important information about what steps the state needed to take to ensure buy-in. In the case of a state that had developed a KEA to both support teachers and inform policymakers, the pilot test yielded information indicating that teachers and school administrators had not been appropriately oriented and trained. In this state, the information led to policies changing the purpose of the KEA to a snapshot to inform state policy rather than formative data to support instruction. In a
second state, the pilot phase offered lessons learned to identify technical assistance and support needed for successful implementation of the full-scale KEA.

Implementation
Successful full-scale implementation of a KEA relies on the earlier phases of careful design and use of lessons learned from pilot testing. Several state stakeholders reported that the KEA implementation was not successful because the state did not engage in these phases. States reporting success indicate that they devoted adequate resources to the selection of the appropriate tool or set of tools, training of educators\(^4\) (not only in the administration of the KEA but also in developmental practice), and use of the data and how to report the information to different intended target audiences. Stakeholders also reported that implementation requires attention to school administrators and policymakers to ensure a solid understanding of how teachers can best support young children through developmentally appropriate practice.

Reporting and using KEA data
A robust process of supporting the reporting and use of KEA data ensures the intended target audience uses KEA data appropriately. KEAs intended for teachers but produce inadequate reports for their use will undermine buy-in and diminish the usefulness of the data. Several community stakeholders reported that the KEA is viewed as simply meeting state reporting requirements because teachers do not receive reports in a timely manner after entering the KEA data into the system that goes to the state. Others indicated challenges when the KEA’s purpose is to provide teachers and parents with regular information about children’s growth and development, but the reporting timeline is inconsistent with the school’s report card. In such cases, teachers complete the KEA and school report card separately, which makes them view the KEA as burdensome. Thus, careful consideration is necessary to determine what data will be reported, when it will be reported, how it will be reported, and who will be using the results. For more information, see: Uses and Misuses of Kindergarten Readiness Assessment Results.

Refinements
KEA implementation is a process of learning and, as such, effective KEA design and implementation includes a phase of refinement based on successes and lessons learned. Several state stakeholders are redesigning KEA systems that are no longer meeting the needs of all of the key stakeholders. Rather than scrapping previous systems wholesale, it is recommended that states consider what worked well and what challenges the state experienced to inform any revisions. Moreover, state stakeholders who report successful KEA design and implementation, such as those involved with the California Desired Results Developmental Profile and the Vermont KEA, report that they engage in a regular process of revision to ensure that the training and reports meet the needs of stakeholders in the state.

\(^4\) Details on training are provided in the training section of this resource.
Training

Key questions:

- Do teachers and administrators need to be trained? If so, what needs to be included? Do independent data collectors need to be trained?

What we found:
Training for successful KEA implementation should be tailored to the KEA purpose and intended audience. The scope of the training can range from targeted and specific to more robust training designed to support the use of the entire KEA system. Stakeholders interviewed reported that a common shortcoming of KEA design is insufficient attention to robust training. Below, in Table 3, are the topics that states report covering through the training and the target audiences. This list is not comprehensive but represents the range of trainings that states are currently offering.

Table 3 Types of Training with Description

<table>
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<tr>
<th>Topic</th>
<th>Description</th>
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<tbody>
<tr>
<td>Orientation to the overall system</td>
<td>At a minimum, an orientation to the KEA needs to be provided to state policymakers, school district leaders, schools, and kindergarten teachers. The orientation should describe the goals and overall purpose of the KEA, the pilot testing and implementation timeline, and the plans for reporting. Specific information should be provided for each stakeholder group responsible for KEA implementation or affected by it.</td>
</tr>
<tr>
<td>Introduction to the KEA data collection instrument(s)</td>
<td>This training should include information about the intended purpose and scope of the instrument or instruments used and should specify the limitations of the KEA. No single instrument used in isolation can adequately assess all domains of development and therefore it is important that any introduction describe strengths and limitations of the system. Training on the instrument should be provided to those responsible for allocating time and resources for the data collection as well as to those who will be using the data. For example, district leaders need training so they can support principals and teachers in professional development regarding KEA implementation and use of its data; principals need information so they can effectively support developmentally appropriate teaching practices; teachers need information so they can effectively collect data in a manner that supports quality teaching and use data to support student learning.</td>
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| Data collection                            | Sufficient training addresses two different aspects of data collection—how to collect reliable data and how to engage in pedagogically appropriate practices using the tool. Multiple states including Illinois have developed
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<tr>
<th>Topic</th>
<th>Description</th>
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<tbody>
<tr>
<td>Training modules for teachers on observing and documenting for the KEA. These modules are designed to prepare teachers to observe, assess, document, and report on children’s development using the assessment tool. A follow up module addresses the practical issues teachers face in collecting and reporting data in a format that differs from many traditional kindergarten report cards. Such a training should address how to work with other teachers—such as physical education teachers or librarians—to collective capture data on some domains, how to manage the data entry in a manner that doesn’t distract from teaching, and how to use the process to support quality instruction.</td>
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</tr>
<tr>
<td>Training on developmentally appropriate practices</td>
<td>Training on developmentally appropriate practices is needed if the KEA is an observational measure that requires an understanding of early childhood development. Multiple stakeholders reported that they believed such training is very important but was not provided to teachers. As a result, many teachers and administrators were flummoxed by the KEA. Rather than using the tool to support their practices, a number of stakeholders reported that teachers devoted teaching time to completion of the KEA as a checklist for each student. One district superintendent reported she observed a teacher who asked the entire class to hop on one foot for a long period of time as she scored each child’s gross motor skills on the KEA. This superintendent reported that because she had a background in early childhood, she was able to coach the teacher in practices that were appropriate.</td>
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<tr>
<td>Principal and administrator training</td>
<td>To support successful KEA implementation, principals and school administrators need training on developmentally appropriate instruction and on the requirements of the KEA for teachers in their schools. The training should address what is required of teachers, focus on the benefits of the KEA, and squarely state the requirements for school teachers. For example, if required specific teacher training is not clearly communicated in advance it can create logistical and practical problems for school leaders as many principals plan the building-wide professional development schedule for the entire academic year during the spring of the previous year.</td>
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<tr>
<td>Coach training</td>
<td>Some states such as Illinois, Minnesota, and Rhode Island engage coaches to support teachers who are collecting and using KEA data. To ensure all coaches are providing consistent supports to teachers, it is important to develop trainings to orient the coaches to their role, the KEA, promising practices and challenges in KEA administration, and in using KEA data to improve instruction. For example, according to Golan and colleagues (2016),</td>
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<td>Topic</td>
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<td>the Maryland State Department of Education provided training to staff identified by districts who had skills and knowledge in assessment of young children and adult learning strategies. These staff attended a three-day state-hosted KRA training session and two days of face-to-face training (or blended face-to-face and online training).</td>
</tr>
<tr>
<td>Family engagement</td>
<td>Training on how to engage families in conversations about their child’s kindergarten readiness is a critical component of children’s school success and is critical for buy-in of any KEA. Yet, Golan et al (2016) report that in four states with robust KEAs, most teachers do not share KEA data with parents even in states that have family engagement training. One challenge is that most states have not yet developed timely reporting mechanisms leaving teachers without information to share with parents during regular parent-teacher conferences.</td>
</tr>
<tr>
<td>Using KEA data to support children’s school transitions</td>
<td>A goal of some KEAs is to support school transitions. Golan and her colleagues report that in their case studies of four states, many teachers and administrators expressed an interest in using KEA data to smooth school transitions. No example trainings were found but stakeholders reported that training is important to achieve this goal.</td>
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</table>

Engaging and training stakeholders is an important approach to avoid backlash against a KEA. Some opponents of KEA report that teachers who are required to participate do not receive adequate training and parents are resistant because they view it as a method of tracking their children. Others report that teachers do not know how to balance quality teaching with data collection and that principals are not properly oriented and therefore are resistant. Although the full range of training can be costly, stakeholders report that lack of robust training can undermine the KEA.

The range of training formats and types are described in a recent CEELO FastFact. Additional information about a range of trainings for different target audiences, can be found on the Illinois’ KIDS website.

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5 See for example: https://www.nccivitas.org/2015/kea-big-government-comes-to-kindergarten/
Accurate, Timely and Appropriate Reporting

Key questions:

- What is needed for accurate, timely and appropriate reporting?
- What challenges exist? How can the state best address these challenges?

What we found:

Designing a system for accurate, timely and appropriate reporting of KEA data is critical to its success. Many states develop a report for state policymakers yet few are providing timely data to teachers. To achieve the intended purposes of supporting teachers’ use data for continuous quality improvement, timely reporting is needed. Yet, insufficient attention to designing a reporting plan that achieves the articulated purpose of the KEA has been reported by some researchers. Golan and her colleagues (2016) report that from their case study that:

“The majority of district administrators and teachers interviewed across the selected states reported several obstacles to using the KEA results, one being that they could not easily access or interpret the data in a timely manner for instructional decisions.”

A different study by Shields, Cook, & Greller (2016) found that 93% of those using KEAS reported that the purpose of the KEA was to inform instruction, yet the researchers found no correlation between KEA use and students’ spring assessment scores in reading and math. Since other studies have shown teachers do not have access to timely and useful assessment data, it is not surprising that despite the stated purpose of improving instruction, no improvements in spring achievement was observed.

According to those interviewed and a review of existing documents, to assure accurate, timely and appropriate reporting, the following is needed:

- **Training, processes, and procedures for ensuring data are accurate and reliable.** As noted above, training that addresses reliability and data collection is essential for ensuring accurate data collection. In addition, detailed processes and procedures regarding data entry, cleaning, coding, and quality assurance are needed for data to be useful, regardless of the intended purposes.

- **Reporting plans that detail the target audiences, timeframes, and data elements.** To avoid the problem of delayed reporting data to teachers that precludes the use of the data to inform instruction, states should develop a detailed plan that lists each intended purpose, target audience, timeframe and data element. The plan should include sufficient detail regarding what will be included in each report. To be useful for Kindergarten teachers, the reports need to be provided rapidly and in a language and format that is accessible to educators who are not psychometricians. Similarly, to be useful to parents, district stakeholders, and the public, the design, language, and format need to account for the range of background knowledge of those

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reading it. Finally, to be useful to educators, it is important that the timing of the reports is consistent with district report cards and other regular reporting schedules.

- **Reports in a range of formats that address target audience needs.** Reports designed for policymakers and researchers may contain technical language a level of detail that is not appropriate for the public at large. Rather than developing a single report, it is important that any KEA reporting system disseminate reports tailored to each specific target audience.

- **Online interfaces that are easy to navigate.** Some states have developed online interfaces to allow for access to KEA data. To be useful to educators, the interface must be easy to navigate and produce clear reports. Moreover, state decision-makers need to take into account who will have access to the reports. In the absence of granting permission to educators to access the reports, the system will simply add to teachers' workload rather than providing them with information that could be used to tailor educational supports to children.

- **Guidance on appropriate and inappropriate use of KEA data.** It is important that any reporting system be linked with a continuous quality improvement plan and be clear about what is and is not appropriate regarding use of KEA data. As Regenstein and colleagues note (2017), a number of states are using KEA data in appropriately to evaluate programs, teachers, or children. Any solid reporting system should include guidance to minimize the risk that data will be misused.

### Determining the KEA Cost

**Key questions:**

- What should be considered in determining the costs?
- Do states pay for all of the costs of the assessment or only some of the costs?
- What needs to be considered in determining the cost of the assessment?

**What we found:**

Each phase of the design, pilot testing, implementation, reporting, and revision of a KEA has costs for associated activities. Weisenfield (2017) KEA and Golan et al (2016) report that that states use a combination of federal, state, and private foundation funds to support design and implementation of KEAs.

Districts and schools also pay for some of the costs of a KEA. For example, Golan et al, 2016 reports that in four states, “local funds were used to reduce burden on teachers by providing aides to monitor the classroom during KEA administration, coaching support, or technology resources to make data submission easier and faster.” At the same time, school and district stakeholders report that additional costs are incurred by schools for KEA training, administration. Moreover, the Minnesota Department of Education reports that it pays for the KEA tool but that districts are responsible for costs incurred for KEA training, including teacher travel time, hotel, mileage and meals as well as for teacher salary or substitute teachers when sending teachers for training.
Each phase of KEA design and implementation has associated costs. We interviewed key informants and reviewed documents to compile a list of the key questions to consider in determining costs. The first question is for the stakeholder group to ensure that the budget for the KEA is sufficient to engage in each phase of the design, implementation and revision process. Inadequate attention to any phase will lead to cost overages and can result in revisions that could have been avoided with adequate budgeting up front.

**Design phase cost questions**

- Has the state budgeted for a design phase for the KEA? Is the budget and timeframe sufficient for completing all steps of the design phase?
- Who is paying the salaries of the state and stakeholder salaries and time devoted to overseeing the design? (e.g., If district leaders, teachers, or parents are engaged in the design, who is paying for their time? Who is paying for state agency leader’s time?)
- If the design of the KEA is contracted out, is the scope of the contract sufficient to achieve the desired purpose of the KEA? What is the cost of the state staff person responsible for overseeing the contract?
- In designing the KEA, has a budget been developed for the costs of the creating and/or tailoring an assessment instrument? Conversely, has the state designed a budget for an entire assessment system? When faced with budget constraints, does the state prioritize a robust KEA system over inexpensive data?
- Does the design budget support a KEA that reflects racial, cultural, and linguistic competence?
- Does the design phase include costs associated with engaging districts, teachers, and parents to ensure early buy-in?
- Does the design budget reflect an iterative process of stakeholder engagement that requires an ongoing process of engagement?
- Does the design budget reflect that the KEA system must be adapted to the state context and needs?

**Preparation**

- Has the state budgeted for a preparation phase for the KEA? Is the budget and timeframe sufficient to address all steps needed for preparation?
- Who is paying the salaries of the state and stakeholder salaries and time devoted to overseeing the preparation?
- Does the budget for the KEA reflect the stated purpose and target audiences? If not, what changes should be made in the budget, purpose or both?
- If the KEA is to be contracted out, does the scope of the contract reflect all aspects of a strong KEA system? What is the cost of the state staff person responsible for overseeing the contract?
- Does the budget support a KEA that reflects racial, cultural and language competence?
- Does the preparation phase budget include costs associated with engaging districts, teachers and parents to ensure early buy-in?
• Does the preparation phase budget reflect that stakeholder engagement is an iterative process that requires an ongoing process of engagement?
• Does the budget reflect a level of effort sufficient for buy-in of key stakeholder groups?

Pilot testing costs
• Has the state budgeted for a pilot testing phase? Is the budget and timeframe sufficient to carry out all steps?
• Who is paying the salaries of the state and stakeholder salaries and time devoted to overseeing the pilot test?
• Does the budget for the pilot test reflect the stated purpose and target audiences?
• What is the scope of the pilot test contract? What is the cost of the state staff person responsible for overseeing the pilot test contract?
• Does the budget support a pilot test of a KEA that reflects racial, cultural and language competence?
• Does the pilot test budget support adequate training of all of those engaged in the pilot? If the training being piloted at the same time the KEA, is there a budget for ensuring revisions to the training are made prior to going to scale?
• Does the pilot test budget include costs districts, schools and teachers incur while participating in the pilot?
• Does the pilot test budget reflect collection of stakeholder data that is sufficient to capture perspectives regarding engagement?
• Does the pilot test budget reflect accurate collection, reporting and use of the data?
• Does the pilot test budget reflect costs associated with refining the KEA?

Implementation
• Has the state budgeted for all aspects of implementation? Is the budget and timeframe sufficient to carry out all steps?
• Who is paying for all aspects of the implementation? What costs are incurred through state salaries and stakeholder volunteer time, by districts, schools and teachers?
• Does the budget for full implementation reflect the stated purpose and target audiences?
• What is the scope of the implementation contract? What is the cost of the state staff person responsible for overseeing the contract?
• Does the budget ensure full implementation reflects racial, cultural and language competence?
• Does the implementation budget include sufficient funding for all aspects of KEA ensure early buy-in?
• Does the budget for full implementation reflect the range of orientations and trainings that are aligned with stated purpose and target audiences?
• Does the pilot test budget reflect a system of reporting that reflects the stated purposes and target audiences?
Reporting and use

- Has the state budgeted for a robust system of reporting that is tailored to the purpose? Is the budget and timeframe sufficient to meet the desired purpose and target audience needs?
- Who is paying for all aspects of reporting? What costs are incurred through state salaries and stakeholder volunteer time, by districts, schools and teachers for reports that are matched to the desired purpose? Has the state selected a “cheap” instrument that requires large costs to produce useful reports or prioritized a system of collection and reporting that supports the stated purposes and uses?
- Does the state contract with vendors or a single to support an online interface or reports that meet the needs of different target audiences? What is the scope of each contract and are they clearly aligned or defined? What is the cost of the state staff person responsible for overseeing the contract?
- Does the budget ensure reports reflect racial, cultural and language competence?
- Does the budget reflect the state’s desire that data will be used for the stated purposes? For example, if the stated purpose is for teachers to use data to inform instruction, does the budget include coaching and supports for teachers to use the data for the stated purpose?
- Does the budget account for reports that will be most useful to schools, districts and parents by aligning timeframes for reporting with district report cards, even if costs are higher?
- Does the reporting budget account for costs associated with revision of report designs and formats?

Refinements

- Does the overall budget include costs associated with refinements and enhancements to the overall system?
- Does the budget reflect staff time and costs associated with revisions?

Conclusion: Promising Practices, Lessons Learned, and Recommendations

State stakeholders reported that their states had devoted substantial time and money as well as goodwill among educators to the adoption of a KEA that subsequently required substantial revision. Lack of clarity regarding the purpose was a common problem reported by those who are currently revising their KEAs. In some instances, the KEA was selected without consideration of the purpose. In other instances, stakeholders presumed a single instrument would be able to meet everyone’s needs, without careful consideration competing purposes among those calling for a KEA. For example, in one state some stakeholders believed the intended purpose of the KEA was to provide a snapshot of children’s readiness to inform policy but others wanted an assessment that could inform instruction. Only later did these stakeholders realize that the resources that were allocated, training that was offered, and buy-in strategies were inadequate to address all of the intended purposes.
These experts recommended the following:

- **Establish and use an advisory committee comprised of experts in assessment as well as each intended target audience.** The advisory committee should reflect the range of stakeholders who will be implementing and using assessment data. It is important to ensure facilitation of the meetings so that any assumed differences are voiced. For example, some states report that the committee agreed on general principles and a framework but did not explicitly address questions regarding how the different purposes of the assessment would be supported. As a result, these states are in the process of revising their assessment systems, devoting substantial resources that could have been better spent if they had achieved clarity earlier in the process.

- **Consider the costs of the overall assessment, training, and reporting requirements for each intended purpose and target audience and carefully.** The costs of collecting and using data, training and reporting differ depending upon the intended purpose. The previous sections of this brief describe these in detail.

- **Develop a strategy for assuring buy-in from all key stakeholders.** Failure to adequately engage the range of intended audiences can lead to strong resistance among educators, families, and other stakeholders whose buy-in is necessary for successful implementation of a KEA.

- **Avoid retrofitting an existing assessment or selecting an instrument primarily to contain costs, in the absence of considering purpose and audience.** Using an existing assessment instrument or system used by a different state can be a cost-efficient way of collecting KEA data. However, if a tool is used for expediency with no consideration of the purpose or intended audience, the ultimate costs could be higher.

- **Ensure the branding of the KEA conveys the purpose and audience.** For state stakeholders who are not bound by the term used in legislation, it is important to use a term that conveys the purpose and intended audience of the assessment. For more information about the naming of a KEA, see Considerations for ‘Rebranding’ Kindergarten Readiness Assessment.

- **Account for racial, cultural, and linguistic diversity in the state.** Any KEA must account for the racial, cultural, and linguistic diversity of those collecting the data and the children being assessed. Failure to account for such differences could lead to results that are not valid for some populations. For example, Golan et al (2016) reported that, even with written guidance, teachers expressed concerns that inconsistent administration practices and a lack of access to translators and use of accommodations could jeopardize the tool’s accuracy of findings with these populations.

- **Implement the assessment as part of an overall system.** State leaders recommend that rather than considering a KEA as a single tool, states develop a KEA system. This is consistent with the following recommendation from the Council of Chief State School Officers, “In order to effectively aid teachers in their instruction, monitor student progress, communicate the learning needs of children in a state or community, and guide program planning, kindergarten assessments must be implemented within a comprehensive system of supports for teachers, families, and programs.” It is important for states to recognize that in some instances multiple tools that collectively provide data that addresses the range of intended purposes of different audiences is useful.
Methods

To address state early education specialists’ questions about how to design, revise, or implement a Kindergarten Entry Assessment, CEELO compiled information from a number of sources. Since 2014, CEELO technical assistance providers engaged in a number of activities to better understand state questions and issues related to KEA, challenges that states have experienced, and the promising approaches states have taken in KEA development. This report draws on information from the following sources:

- Three meetings of state education agency stakeholders that were focused on KEA issues. Participants included individuals overseeing assessment and evaluation in state education agencies, early childhood specialists and those overseeing Race to the Top—Early Learning Challenge (June 2014, September 2014 and July 2015).
- Peer-to-peer calls between state specialists seeking advice from other states to inform the revision of the state’s KEA’s. These calls included state specialists, research partners, and assessment specialists.
- Interviews and informal conversations with state specialists conducted between 2014 and 2016 including interviews with those overseeing the design and implementation of KEAs conducted to inform reports on state Race to the Top—Early Learning Challenge projects.
- Reviews of research reports including those developed with funding from the U.S. Department of Education and with support from state agencies.
- State Kindergarten Entry Assessment websites and technical documents.

The analytic framework used in this report is based on the questions and issues expressed by state education specialists responsible for KEA design and implementation. Authors of this report are grateful to Deborah Wise, Cecelia Fisher-Dahms, and the many early childhood specialists in state departments of education who shared their questions, experiences and wisdom with us.
Selected References


**ABOUT CEELO:**

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