



Discussion Guide to Responding to Focused Investment Area (E)(1) and Competitive Priority 3: Kindergarten Entry Assessment

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I. Introduction

The Guidelines for the Race to the Top–Early Learning Challenge (RTT-ELC) fund applications affirm the importance of collecting data on children’s progress as a means to ensure that early learning programs are of high quality. “Measuring Outcomes and Progress” is one of the five key reform areas stipulated in the guidance, which indicates “states will be rewarded for implementing kindergarten entry assessments statewide that provide information across all domains of early learning and development, inform efforts to close the school readiness gap, and inform instruction in the early elementary school grades” (page 9).

This Discussion Guide summarizes the RTT-ELC review criteria and guidelines for states that elect to address the Kindergarten Entry Assessment (KEA), and provides guidance on issues that should be considered when developing a plan for a KEA. First, however, the Discussion Guide provides a brief description of the kindergarten assessments that exist today and summarizes important principles that should guide planning for early childhood assessments.

II. The Field of Kindergarten Entry Assessments Today

II.A. The Status of Kindergarten Entry Assessments.

There has been substantial work within states and communities over the last two decades to assess what children know and can do at the time of kindergarten entry. The kindergarten period is a pivotal transition point for children as they move from early development and learning settings to the K-12 system; data collected at kindergarten entry serve both as a cumulative glimpse into how children’s early experiences have (or have not) supported their development and learning and offer a baseline for kindergarten instruction and for measuring future progress. What’s more, kindergarten entry is the first point in time when states can capture data regarding the status of a large percentage of a birth cohort. Therefore the KEA is an important point in time for children, and data from KEA are important for teachers, for program administrators and for policy makers.

In 2010, 25 states had established a KEA and four states were in the process of developing or implementing a system. Of the 25 states with KEAs, 21 required universal assessment of kindergarten students and three included a large percentage of their state’s kindergartners (Stedron & Berger, 2010).

One consistent challenge across the states that have developed a KEA has been defining and operationalizing the concept of school readiness. As a result, there is considerable variation in the areas of children’s development assessed within the 25 states that have KEAs. Several states (11) require schools to use specific instruments that cover the five Essential Domains of School Readiness. Slightly less than half of the states require specific instruments but evaluate only the domain of early literacy. Of the five states that do not require specific instruments, none require a comprehensive assessment that addresses all areas of children’s development and learning (Stedron & Berger, 2010).

The use of data from KEAs also appears to be a significant challenge for states. The majority (18) of states that have a KEA intend for data from the assessment to be used by teachers to guide their planning and instruction. Slightly under half of the states (12) indicate that the data from the KEA are used to track children’s status at kindergarten entry or make policy decisions. The systems for reporting data, however, vary greatly across states, with some states reporting data at the local level, some at the state level, and some at both (Stedron & Berger, 2010).

As the data above suggest, several states have invested significant resources into developing a KEA. There are also numerous assessments being conducted at the school- and district-level even if the state does not have a KEA (Saluja, Scott-Little, & Clifford, 2000). Therefore, although the RTT-ELC focuses exclusively on state-level KEAs, KEA activities at the local level may also be an important consideration when developing a state-level system.

II.B. Guiding Principles for KEAs

There is general consensus that assessments should not be used as a form of high stakes testing or to determine whether children should be enrolled or held back from kindergarten. The goals generally ascribed by states for conducting KEAs include: 1) to assess the degree to which children in the state are starting school “ready;” 2) to identify schools and populations of children for which additional efforts are most needed to ensure educational success; (3) to provide additional direction to kindergarten teachers in helping their students develop and learn; and 4) to inform parents about their child’s learning and development and provide an opportunity to engage parents in supporting their child’s learning. Results from the KEA also can be used to identify areas where additional professional development is needed for early educators and for kindergarten teachers. KEAs are being used in some instances to provide feedback to early learning and development programs on how their children performed and to give some evidence regarding how children participating in pre-school programs or other early childhood programs performed relative to similar children that did not receive services, although experts generally warn against attributing any causality or using a KEA as an accountability measure for program performance.

Although the National Research Council’s report on early childhood assessment (National Research Council, 2008) did not address KEAs specifically, the committee did outline principles and make recommendations that are applicable for KEAs. The full array of principles and recommendations articulated in the report are beyond the scope of this paper, but can be summarized as follows:

- Assessments are designed for specific purposes and decisions made about assessments should be guided by the purpose of the assessment.
- Assessments should be used in a manner consistent with their purpose.
- Assessments should meet the highest standards of evidence in three areas:
 - Psychometric properties;
 - Appropriateness for children from different ethnic, racial, language, developmental levels, and age;
 - Holistic in terms of the domains or areas of development and learning that are assessed.
- Assessments should be conducted within a coherent system of services.
- Considerable resources are needed to ensure that the data are collected and used appropriately and effectively, including:
 - Professional development to ensure the assessment is administered appropriately;
 - Professional development on how to use results to plan instruction and other services for individual children;
 - Careful and appropriate analysis and reporting of results;
 - Accurate and valid interpretation of the results.

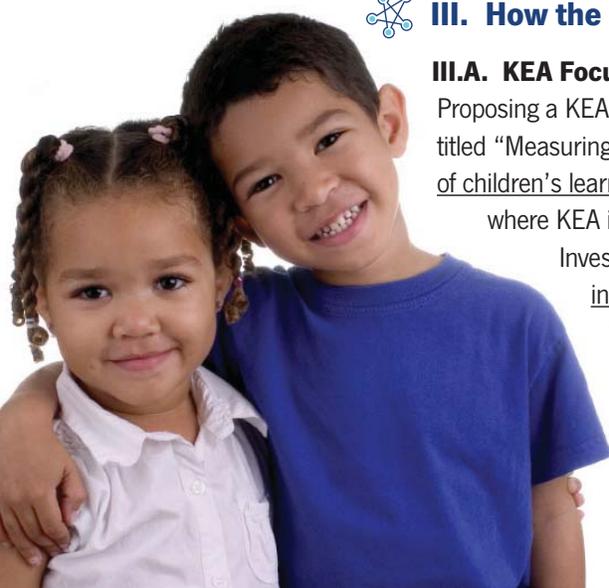
If results are being used in any way to make judgments or decisions about programs, there is an even greater need to ensure that the assessment upholds the principles outlined above.



III. How the RTT-ELC Guidelines Address Kindergarten Entry Assessments

III.A. KEA Focused Investment Area and Competitive Preference

Proposing a KEA is one of two options a state can address under the Focused Investment Area titled “Measuring Outcomes and Progress” (E). The option (E)(1) is titled “Understanding the status of children’s learning and development at kindergarten entry” (page 68) and is the primary area where KEA is addressed. The second option a state can elect to address within this Focused Investment Area is “Building or enhancing an early learning data system to improve instruction, practices, services and policies” (E)(2). States that elect to only address the KEA (E)(1) can earn up to 40 points. States that address both options can earn up to 20 points for their KEA plan. States that do elect to address the KEA option will earn 10 additional points under Competitive Preference Priority 3, provided they receive a score of at least seventy percent on their KEA section. Therefore, if states believe they can score at least seventy percent on Section (E)(1) (and it fits



into their overall plan), the scoring system provides a big advantage to doing so.

The RTT ELLCF Guidance provides the following **definition** (page 17):

“**Kindergarten Entry Assessment**” means an assessment that–

- (a) Is administered to children during the first few months of their admission into kindergarten;
- (b) Covers all Essential Domains of School Readiness;
- (c) Is used in conformance with the recommendations of the National Research Council¹ reports on early childhood; and
- (d) Is valid and reliable for its intended purposes and for the target populations and aligned to the Early Learning and Development Standards. Results of the assessment should be used to inform efforts to close the school readiness gap at kindergarten entry and to inform instruction in the early elementary school grades. This assessment should not be used to prevent children’s entry into kindergarten.”

**Quick Reference
KEA in the Application
Guidance**

KEA Definition – page 17
Past Commitment to KEA – page 27
Table describing the current status of the State’s KEA
(see Table (A)(1)-12) – page 38
KEA Selection Criteria & Narrative (E)(1) –
page 68-69
KEA Competitive Priority 3 – pages 72 & 73
Proposal scoring rubrics –
pages 106-110

See Appendix A in this Discussion Guide for definitions of additional terms that are related to Kindergarten Entry Assessments.

The **criteria** for the KEA Focused Investment Area (page 68) read as follows:

“(E)(1) Understanding the status of children’s learning and development at kindergarten entry.”

The extent to which the State has a High-Quality Plan to implement, independently or as part of a cross-State consortium, a common, statewide Kindergarten Entry Assessment that informs instruction and services in the early elementary grades and that–

- (a) Is aligned with the State’s Early Learning and Development Standards and covers all Essential Domains of School Readiness;
- (b) Is valid, reliable, and appropriate for the target population and for the purpose for which it will be used, including for English learners and children with disabilities;
- (c) Is administered beginning no later than the start of school year 2014-2015 to children entering a public school kindergarten; States may propose a phased implementation plan that forms the basis for broader statewide implementation;
- (d) Is reported to the Statewide Longitudinal Data System, and to the early learning data system, if it is separate from the Statewide Longitudinal Data System, as permitted under and consistent with the requirements of Federal, State, and local privacy laws; and
- (e) Is funded, in significant part, with Federal or State resources other than those available under this grant, (e.g., with funds available under section 6111 or 6112 of the ESEA).”

A state’s proposal can include

- a description of a currently existing/implemented Kindergarten Entry Assessment [entered in Table (A)(1)-12: Current status of the State’s Kindergarten Entry Assessment on page 38 and described in the Focused Investment Area (E) (1) narrative]

AND (if needed to meet the criteria)

- plans to revise an existing/implemented Kindergarten Entry Assessment to more fully address the RTT-ELC criteria [described in the Focused Investment Area (E) (1) narrative]

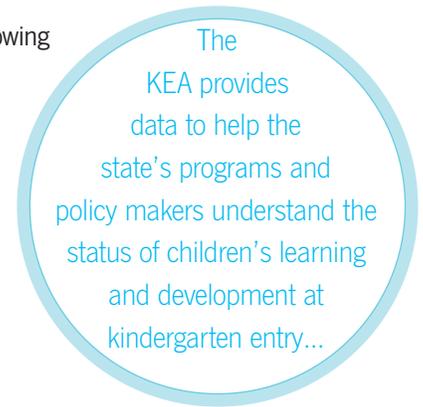
OR

- plans to develop a Kindergarten Entry Assessment.

¹ National Research Council. (2008). *Early Childhood Assessment: Why, What, and How*. Committee on Developmental Outcomes and Assessments for Young Children, C.E. Snow and S.B. Van Hemel, Editors. Board on Children, Youth, and Families, Board on Testing and Assessment, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Available at http://www.nap.edu/catalog.php?record_id=12446.

Reviewers will assign points for an implemented, revised, or planned KEA based on the following criteria (page 68):

- “whether each element of the selection criterion is implemented or planned;
- the quality of the implementation or plan; . . .
- the extent to which the different types of Early Learning and Development Programs in the State are included and addressed;
- and the extent to which the unique needs of the State’s special populations of Children with High Needs are considered and addressed.”



Under Competitive Preference Priority 3, states do not write additional narrative, but can receive 10 additional points if they (page 72):

- (a) Demonstrate that it has already implemented a Kindergarten Entry Assessment that meets selection criterion (E)(1) by indicating that all elements in Table (A)(1)-12 are met;

OR [emphasis added]

- (b) Address selection criterion (E)(1) and earn a score of at least 70 percent of the maximum points available for that criterion.”

“Applicants do not write a separate response to this priority. Rather, applicants address Competitive Preference Priority 3 either in Table (A)(1)-12 or by writing to selection criterion (E)(1).”

III.B. KEA and Other RTT-ELC Priorities

Although the KEA requirements are stipulated in the Focused Investment Area E and Competitive Preference Priority 3, there are opportunities to link a state’s plans for the KEA to other areas in order to provide for a stronger, more cohesive early learning and development system. Most notably, the KEA can be one strategy to address Absolute Priority 1—Promoting School Readiness for Children with High Needs. This priority requires that states “build a system that increases the quality of Early Learning and Development Programs for Children with High Needs so that they enter kindergarten ready to succeed” (page 71). The KEA provides data to help the state’s programs and policy makers understand the status of children’s learning and development at kindergarten entry and is, therefore, a key component of addressing the first absolute priority.

KEA can be related to other areas within the RTT-ELC. More specifically, the KEA can be considered as part of a state’s plans for:

- **Core Area Section A—Successful State Systems:** A successful state system may include the use of KEA data to understand the status of children’s knowledge and abilities at the time they enter kindergarten. Data related to a state’s current KEA are entered in Table (A) (1)-12 and how the KEA data are used (or plans for how they will be used) to further the state’s goals for improving child outcomes statewide and closing the readiness gap between Children with High Needs and their peers at kindergarten entry can be described in the state’s rationale for its early learning and development reform agenda (Section (A)(2)). A comprehensive KEA can provide key data to suggest areas where specific groups of children may be behind their peers and, over time, a tool for monitoring whether the state has made progress in improving the child outcomes in the areas identified.
- **Focused Investment Area (C)(2)—Supporting Effective Uses of Comprehensive Assessment Systems:** Although the KEA is addressed in a separate section within the RTT-ELC proposal, states may find it advantageous to view the KEA as a part of the state’s comprehensive assessment system. It stands to reason that the KEA should be consistent with, if not part of, a state’s comprehensive effort to promote the use of assessment data inform and improve early learning programs.
- **Focused Investment Area (E)(2)—Building or enhancing an early learning data system to improve instruction, practices, services and policies.** KEAs are data from one point in time that link the early development and learning system with the K-12 system. Therefore it should be an important data element in any early learning data system. States may vary as to whether it is included in the data system for early learning and development programs, the K-12 education system, or integrated into both, but if the state has a KEA (or plans for a KEA) and is addressing the data system Focused Investment Area, then the KEA should be included in plans for the data system.

- **Priority 4: Invitational Priority—Sustaining Program Effects in the Early Elementary Grades:** The KEA can be a strategy for sustaining program effects into the early grades. States with a KEA (or plans for one) could describe how this assessment at kindergarten entry sets the stage for more effective instruction in kindergarten, thereby contributing to an increase in the percentage of children who are at grade level in reading and mathematics at the end of third grade (Priority 4 (d)). States could also design a system to use the KEA data as a part of transition planning (Priority 4 (b)) and a strategy to promote family engagement (Priority 4 (c)).

In addition to these core areas where the KEA can be part of a systems-level strategy to use KEA data for program improvement, the KEA can also be integrated in state’s efforts to engage and support families (Focused Investment Area (C)(4)) and in efforts to support early childhood educators in improving their knowledge, skills and abilities (Focused Investment Area (D)(2)). An effective KEA that provides credible and useful information could inform and improve the state’s efforts to work with families and could be a basis for professional development provided to early educators. Integrating the KEA into various aspects of the early learning and development system could be a strategy to support improvements in multiple areas.

IV. Guide to Developing a “High-Quality” Kindergarten Entry Assessment Plan

Since the RTT-ELC proposals will be evaluated regarding the KEA provisions largely based upon demonstration of the capacity to design and implement a “High-Quality Plan” (either for a newly developed KEA or a revised KEA), the following section discusses how each of the components under the RTT-ELC Application Guideline for a “High Quality Plan” might be addressed as a state responds to Focused Investment Area E(1). Issues for consideration are also outlined within each aspect of a High Quality Plan.

IV.A. Setting the Context

States may find it helpful to provide contextual information that will enable reviewers to understand the state’s previous activities related to the KEA. States might want to discuss what they have done to develop early learning standards that reflect the five Domains of School Readiness and respond to language, culture, and disability concerns. States could also describe what they are doing to emphasize these domains in the early elementary years and efforts to create an aligned education system from pre-kindergarten into the early elementary years. States might also address what they have done in developing performance standards and benchmarks for preschool programs for four-year olds in particular (e.g. programs that immediately precede kindergarten entry). This type of contextual information demonstrates how the KEA “fits” within other initiatives within the state, and demonstrates capacity to implement systems-level efforts that are consistent with the priorities of the RTT-ELC.

It may also be helpful to describe how kindergarteners are currently assessed. For instance, states might describe their current KEAs and how well they currently match with the expectations of the RTT-ELC proposal guidelines. States could also describe current report cards and assessments used to provide parents with information about their child’s progress in kindergarten, and how the state is using results from these assessment tools to inform and support parents in

High-Quality Plan means any plan developed by the State to address a selection criterion or priority in the notice that is feasible and has a high probability of successful implementation and at a minimum includes–

- (a) The key goals;
- (b) The key activities to be undertaken; the rationale for the activities; and, if applicable, where in the State the activities will be initially implemented, and where and how they will be scaled up over time to eventually achieve statewide implementation;
- (c) A realistic timeline, including key milestones, for implementing each key activity;
- (d) The party or parties responsible for implementing each activity and other key personnel assigned to each activity;
- (e) Appropriate financial resources to support successful implementation of the plan;
- (f) The information requested as supporting evidence, if any, together with any additional information the State believes will be helpful to peer reviewers in judging the credibility of the plan;
- (g) The information requested in the performance measures, where applicable;
- (h) How the State will address the needs of the different types of Early Learning and Development Programs, if applicable; and
- (i) How the State will meet the needs of Children with High Needs, as well as the unique needs of special populations of Children with High Needs.” (page 16 & 17)

preparing their children for kindergarten. Finally, states may want to indicate what information (if any) they currently collect from families about their children and their experiences during the preschool years (e.g. participation in early childhood activities, parental education levels, presence of special health needs or conditions, etc.).

In providing this description, states should be able to lead into their plan for developing or revising a KEA by suggesting or identifying specific activities needed to design and implement a KEA that meets the criteria of the RTT-ELC criteria. They also may want to describe their current statutory authority for requiring a common kindergarten assessment in their state.

As stated earlier, it is important for states that elect to write to the E(1) Focused Investment Area to also consider how the KEA can be integrated into other portions of their proposal. If a state elects to address E(1) and describe a KEA, the KEA should be also discussed and integrated into other parts of the application. This includes the overall description under A(1) and A(2), and Focused Investment Areas C(2) regarding comprehensive assessments and C(4) for family engagement, and/or Priority 4, sustain and improve upon child outcomes associated with early development and learning programs. Therefore, as states are planning for their response on the KEA Focused Investment Area (E)(1) they may also want to briefly describe how the KEA will be integrated into other areas.

IV.B. Describing a High Quality Plan

The following section discusses each element of a “High Quality Plan” required in the Proposal Guidance and provides issues for states to consider as they develop their plan for a KEA.

(a.) The key goals of the plan. States should describe their own key goals for the KEA, certainly incorporating the goals specified in the RTT-ELC guidelines: to inform efforts to close the school readiness gap and to inform instruction in the early elementary school grades.

States may want to go into some detail on how they will use the information gathered at the time of kindergarten entry to inform their early childhood work by looking at how subpopulations of children (broken out by race, language, free-and-reduced meal participation or other measure of socioeconomic status such as parental education levels) have participated in early childhood programs. It will also be important to discuss how results from the assessments will be used to gauge how children from the state perform on measures of the different domains of school readiness. This can be helpful both in assessing overall progress in improving kindergarten readiness and in pointing to key areas of attention for making future gains in the state’s effort to close any school readiness gaps evident within the state.

States may also want to indicate how the KEA will be used to inform classroom instruction and, in a larger context, help to ensure that early elementary activities are aligned with the early learning and development standards. This can include how teachers conducting the assessment can use its findings to inform instruction and the degree to which the KEA is designed to be used in conjunction with other teacher assessments of students through the year.

When describing the goals of the KEA, states should give careful consideration to concerns about the use of assessment instruments for multiple purposes. Assessment instruments are designed for specific purposes and should be used for the purpose for which they were designed. Generally, these purposes can be described within the following categories:

- Benchmarking (tracking progress over time at a state, district, and/or school level)
- Screening
- Informing instructional decisions
- Tracking individual children’s progress over time
- Evaluating programs

States should carefully articulate the purpose of the KEA and ensure that the instruments selected are/will be designed for the stated purpose. If a state uses/proposes to use an instrument(s) that was not designed for the stated purpose, further evaluation of the assessment and/or tests of its psychometric properties may be needed to ensure that it is appropriate to meet the goals articulated by the state for the KEA. The RTT-ELC guidelines reference the National Research Council’s report, *Early Childhood Assessment: Why, What, and How*, that emphasizes caveats, in particular, on using such assessments for program performance evaluations. While focused upon assessments overall and



not KEA specifically (and therefore limited in its discussion of the use of assessments for benchmarking purposes), the report provides importance guidance to developing an assessment system and deserves reference in state applications.

(b.) The key activities to be undertaken; the rationale for the activities; and, if applicable, where in the state the activities will be initially implemented, and where and how they will be scaled up over time to eventually achieve statewide implementation:

Some of the key planning activities states may want to address include:

- *Developing a broad-based team to review existing resources and plan for the KEA.* States should consider including persons from different perspectives, such as kindergarten teachers, pre-kindergarten teachers, administrators, parents, persons with considerable expertise in assessment of young children, persons with knowledge of English Learners, persons knowledgeable of Children with High Needs, special education personnel, and representatives from higher education.
- *Reviewing resources that can inform plans for a KEA.* Examples of such resources include early learning and development standards, existing KEAs, kindergarten core competency and curriculum standards, and kindergarten student progress reports already being used in the state. The team may want to evaluate the existing resources for their specific ability to address the five essential domains in a culturally and linguistically competent manner and to include children with developmental disabilities and delays and English Learners.
- *Conducting a detailed cross-walk and analysis of current tools, resources, and practices related to kindergarten assessments* to determine areas of commonality and areas where there may be gaps in current tools, resources, and practices. This type of cross-walk may be helpful in describing and eventually aligning the state's work related to KEAs. Doing so within the framework of the five domains also may help to show how current tools and resources are aligned with (or have gaps in) those domains, particularly when they have not been organized previously according to the five domains.
- *Determining and taking action to make any necessary changes to state laws, regulations, and guidelines* needed to implement the assessment on a statewide basis. States may want to indicate their strategy for securing the necessary statutory and regulatory changes required here and throughout the guidelines, as many (if not all states) will need some statutory and/or regulatory changes to implement the requirements of the RTT-ELC.
- *Deciding what instruments will be administered, by whom and when:* The KEA team should carefully consider different instruments and select or develop instrument/instruments that:
 - Is/are age appropriate for kindergarten children and can accommodate children who exhibit less advanced and more advanced skills and knowledge;
 - Cover(s) all Essential Domains of School Readiness;
 - Conform(s) with the recommendations of the National Research Council ² reports on early childhood;
 - Is/are valid and reliable for the intended purposes for which the instrument will be used and for the target populations in the state, including English Learners and children with disabilities;
 - Align(s) with the state's Early Learning and Development Standards for pre-kindergarten children and for kindergarten children. One issue that states will face when aligning their KEA with kindergarten standards is the fact that the Common Core standards (around which K-12 education increasingly is being organized) focus exclusively on competencies in language and literacy and general cognition—through standards for English Language Arts and standards for Mathematics. Even in the early elementary grades, while the other domains are recognized as essential to achieving competencies in English Language Arts and Mathematics, they are not part of the Common Core standards and therefore may be less likely to be included in states' testing and measurement systems and curriculum content design. Therefore a KEA should be aligned with the Common Core standards for kindergarten but should not be limited to only addressing the domains included in the Common Core.

² National Research Council. (2008). *Early Childhood Assessment: Why, What, and How*. Committee on Developmental Outcomes and Assessments for Young Children, C.E. Snow and S.B. Van Hemel, Editors. Board on Children, Youth, and Families, Board on Testing and Assessment, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Available at http://www.nap.edu/catalog.php?record_id=12446.

- Is/are a good match for the knowledge and expertise of the persons who will administer the instrument;
- Is/are cost effective;
- Provide(s) data in a format that can be easily interpreted and used by classroom teachers and others.

The team may find that it is appropriate to use a combination of instruments to meet the goals and objectives of the KEA. If the team determines that they will develop their own state assessment (which may be something of a hybrid of existing assessments) the state will need to factor in the time, funding and expertise needed to develop an instrument that meets the criteria described above, particularly around testing for reliability and validity. If a state is planning to develop such an instrument and amenable to working with a cross-state consortium for this purpose, the state may want to indicate these plans in its application.

The team will need to decide who should administer the instrument(s) and when the data will be collected. States typically have relied on teachers (and parents for some information) to collect KEAs because they have the opportunity to observe the child in his/her natural setting and because it costs less than using assessors hired to complete the KEA. However, considerable training will be needed to ensure that teachers and parents administer the assessment(s) correctly.

The team will also decide when the KEA will be completed. It is possible to administer these instruments immediately prior to the start of school as part of registration, but it may be advisable to collect the KEA data within 6 to 12 weeks after school has started to give the children a chance to adjust to their new setting, and teachers a chance to get to know the children prior to the assessment. Most observational assessments are conducted after teachers have had substantial time to observe their kindergarten children.

- *Designing administrative procedures and training that will be needed to administer the instrument(s) correctly:* The team will need to carefully plan how the KEA will be carried out. This plan will need to include communication with all persons who will be involved in administering the instrument(s) and/or use the data from the assessment, the logistics involved with administering the assessment, and provisions to collect and analyze data from the assessment(s). Implementation procedures should include steps to ensure that everyone involved understands how to maintain confidentiality of the data. Finally, extensive training will be needed to ensure that the data are collected appropriately and consistently.
- *Pilot testing the instruments developed or adopted (e.g. alpha testing and beta testing):* The team should plan for the KEA to be pilot tested with a small but representative group of children and may, in fact, want to go through several iterations of pilot testing, including pilots to develop and test the instrument and the training materials provided to those administering the assessment. The plan may want to describe where and how the assessment will be piloted. The purpose should be both to ensure the measures themselves reflect the five domains and that the administrative processes and procedures produce valid and reliable data for the population of kindergarten children in the state. Formative data should be collected from persons who administer the assessment during the pilot, and the assessment data that are collected should be statistically analyzed to gauge whether the instrument appears to provide valid and reliable data.
- *Planning for the Kindergarten Entry Assessment to be used on a state-wide basis:* Based on results from the pilot testing, adjustments may be needed in the assessment and/or the procedures for administering the assessment and reporting the data. After careful consideration of results from the pilot testing, final plans for implementing the KEA on a wide scale should be finalized. It may be wise to phase the system in, collecting data first in a few regions and gradually extending the system until the KEA is administered on a statewide basis. Plans for going to scale should include provisions to test the data collected with the instrument(s) to ensure that the final assessment is “valid, reliable, and appropriate.” The implementation plans should also include provisions for continued formative evaluation of the assessment system to ensure that the data are being collected and reported correctly.
- *Reporting and Use of KEA Results:* In addition to planning for how the KEA will be administered, the team will need to plan how data from the assessment will be used and reported. These plans should include specifications for how the data will be used and reported at the site, district and (if applicable) state level. The state can strengthen plans for reporting and using the KEA data by discussing how the KEA data will be incorporated into the Statewide Longitudinal Data System. The plan should also address how the state will use the data on a regular basis both to track progress in

closing gaps in school readiness and to inform practice. This can include plans for reports that can be used at the school, school district level and state level.



(c.) A realistic timeline, including key milestones, for implementing each key activity.

States must implement the KEA by the 2014-15 school year. In developing a timeline for the activities, states will want to think about how they can make use of the 2012-13 and 2013-14 school years to test and perfect their assessment system. The plan should allow sufficient time for the planning team to make decisions, for the system to be tested, and then for training and other resources to be provided on a broad scale in order for the system to be implemented on a statewide basis. While it is not required that all public kindergarteners be assessed by the 2014-15 year (there can be some phased-in implementation), states may want to commit to having all students covered by the assessment

for some school year in the future and demonstrate that they are using all “deliberate speed” in doing so. If it is possible to ensure that all public kindergarten students are assessed by the 2014-2015 year, that may be the preferred choice, even if there will be continued adjustments made after that time.

(d.) The party or parties responsible for implementing each activity and other key personnel assigned to each activity.

States will want to ensure that the persons responsible for implementing each activity include persons with deep expertise in early childhood education and assessment. States will also want to describe how they will ensure that those responsible for administering and using the instrument are fully involved in developing the plan so they can market it to their peers. The plan should also specify how parents and representatives of diverse groups of young children will be involved in ensuring that assessments are culturally and linguistically appropriate and respond to any child’s special needs. The plan should describe how the state will ensure that local school districts are invested in the process and that the process helps build stronger connections between the early childhood community and the elementary school community. States may want to demonstrate a high level of commitment across the executive and legislative branches of government and show how this fits into other state efforts in educational reform.

(e.) Appropriate financial resources to support successful implementation of the plan. The KEA must be funded, in significant part, with federal or state resources other than those available under this grant. Therefore states will need to think carefully about how funds from the RTT-ELC can be leveraged with other funding sources to support the development and implementation of the assessment system. The budget for development and implementation of the KEA can be significant.

Costs will include:

- Planning and development costs for designing the KEA and/or acquisition costs for a commercial tool;
- Pre-testing and demonstration testing costs for developing and refining the KEA;
- On-going training costs for those who will be conducting the assessments, including manuals and training or professional development sessions;
- Costs for administering the assessment at the local level and entering the information from the assessment electronically;
- Costs for the assessment instruments themselves;
- Costs for quality assurance efforts to ensure the data collected are accurate and credible, which includes monitoring how the KEA is being implemented, how the data are recorded, how the data are entered, and how the data are summarized;
- Costs for reporting the assessment information to the state and for incorporating the assessment results into the Statewide Longitudinal Data System or other preschool systems at the state level; and
- Costs for analyzing and using the information, including the development costs for producing statistical summary information and reports at both the state and school and school district level.

Some of these costs will be very specific to the KEA itself, but others, such as reporting assessment information from local governments to the state or building the Statewide Longitudinal Data System, represent costs that largely must be considered as general data systems building costs. Other costs, such as those for training persons who will administer the assessments (particularly if the assessment is to be administered by kindergarten teachers) also may be considered as an integral part of their work, particularly as it informs instruction, and may become embedded in their professional development activities and work expectations rather than associated separately with the KEA. In fact, many of these latter costs may be considered for funding outside the grant funding itself, to demonstrate that a significant share of the funding is not coming from the grant funds.

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Because these costs will be significant, it is essential that the planning process include sufficient funds for the development, implementation, and use of the KEA data, and that the actual assessment be put to use, both at the state level in performance evaluation and targeting activities and at the district and school level in informing instruction.

The RTT-ELC specifies that the KEA must be “funded, in significant part, with Federal or State resources other than those available under this grant” (page 68). The guidelines specifically mention funds available under section 6111 or 6112 of the Elementary and Secondary Education Act (ESEA), which are grants provided to states through the U.S. Department of Education for the purpose of developing and refining state assessments. Other possible sources of funding include research grants from the U.S. Department of Education, funds that LEAs can contribute, and funds obtained to work on the Statewide Longitudinal Data System through the Institute of Education Sciences.

As states develop their budgets for the different elements of work in developing a KEA system, they may want to develop a spreadsheet that describes each of these areas and the costs for them, including: (1) in kind costs incurred by existing staff devoting their time and energy to development, (2) federal funding sources for assessment and data system development that they will be using for this purpose, (3) redirected funds that can be used for this purpose (such as data development or professional development funds already appropriated), (4) other expected embedded costs for maintaining the system developed (including local level costs for integrating KEA information into existing data systems and reports to the state), and (5) costs that will be borne by the grant, itself.

- (f.) **The information requested as supporting evidence, if any, together with any additional information the state believes will be helpful to peer reviewers in judging the credibility of the plan.** States may want to describe any previous work undertaken to develop wide-scale assessment systems (at the pre-kindergarten or kindergarten level), previous experience in utilizing data from wide-scale assessments to improve instruction and/or inform programs and services, and/or any unique or particularly relevant resources or expertise they have in their state that will be helpful in designing and implementing the KEA. States will want to reference their current work on developing their Statewide Longitudinal Data System and any emphases they have placed on incorporating early childhood data into that system, particularly any applications for funding they may have submitted through the Institute of Education Sciences. States also will want to reference how they have used assessment funding under ESEA (Sections 6111 and 6112) and what they have done to position themselves to use future funding for KEA work.
- (g.) **The information requested in the performance measures, where applicable.** States may want to go into more detail on how the KEA will be used. Specifically, states may want to describe how data from the assessment will be aggregated and disaggregated in order to determine early childhood services that may need to be expanded or examined with improvements in mind. Examples of how data related to performance measures will be used might include a description of how the KEA data could be used to strengthen program activities or expand the reach of programs to other Children with High Needs. States may also want to describe how this information will be used to further identify Children with High Needs in their state and to determine how different strategies are addressing the needs of both Children with High Needs and other children in their systems. They may want to indicate how this information may be able to inform other early childhood initiatives (such as implementing evidenced-based home visiting programs or implementing preventive health services to young children) and their work.

- (h.) **How the state will address the needs of the different types of Early Learning and Development programs, if applicable.** Careful consideration should be given as to how the data from the KEA will be used to address the needs of different types of Early Learning and Development programs. As stated above, data from the assessment can be used to determine areas where children are doing well and areas where, as a whole, children in the state demonstrate less competence or gaps in the services they have received. Therefore, plans should include a detailed description of how data from the KEA will be disaggregated to look at specific areas of children’s performance and shared with applicable Early Learning and Development Programs so they can use the data to inform plans for program improvements. At the same time, extreme caution should be given to using KEA’s as an outcome measure for early childhood programs, as the National Research Council’s caveats suggest. It can be used to point to areas for further exploration and examination. Additionally, states will want to consider how the use of data that may show specific groups of children scoring lower than their peers could lead to stereotyping of children and families from those groups. This means that disaggregation of data should be done carefully and reported within the context of how effective, well-resourced early learning and development programs can have significant impact on efforts to support the learning and development of the state’s most Children with High Needs who may score lower on the KEA.
- (i.) **How the state will meet the needs of Children with High Needs, as well as the unique needs of special populations of Children with High Needs.** States may wish to elaborate on how they define Children with High-Needs and, specifically, how they will define “low-income” children. They will also want to describe how they will draw upon the knowledge base regarding Children with High Needs as they plan and implement the KEA. For instance, a detailed description of how the needs of Children with High Needs will be considered when assessment instruments are developed or selected could be provided. The state might also describe how family factors known to be strongly related to educational development and success will be addressed. Parental educational status is the strongest demographic predictor of kindergarten readiness and school success. These research findings point to the importance of targeting children whose parents have not been successful educationally. If data on parent education are collected at the time of kindergarten entry, the data can be used as another way to help target attention and resources from early childhood programs.

V. Considerations Related to How Children’s Learning and Development are Measured in a KEA

Having summarized the general principles that should guide the KEA system and explained the RTT-ELC requirements for the KEA, we turn now to some additional considerations for states to keep in mind as they plan and implement a KEA. Specifically, this section discusses a number of considerations related to what areas of children’s development and learning are measured in the KEA and the types of measures used in the KEA.

The first consideration relates to how states have operationalized school readiness and the areas of children’s development and learning that are being/can be assessed. The Essential Domains of School Readiness specified by the RTT-ELC (see Appendix A for definitions) include social and emotional development, approaches to learning, physical well-being and motor development in addition to language and literacy and general cognition. To fully understand children’s early learning and developmental capacities, KEAs must address all of these areas. Although states’ KEAs may not be organized in the same five Domains of School Readiness deemed “essential” in the RTT-ELC, there are some examples of KEAs that cover elements in all five domains. For the purposes of RTT-ELC, however, it is a requirement to ensure that KEAs address all areas of children’s learning and development. Even states that have a comprehensive assessment may need to review and potentially adjust their assessment to ensure that it meets all the requirements set out in the guidelines.

Another consideration is the instruments or tools that will be used to collect data on children. Considerable attention has been accorded to ensuring that the instruments used to assess young children are appropriate. The RTT-ELC requires that KEAs are valid, reliable, age appropriate and appropriate for children from a wide range of backgrounds (English Learners, children with disabilities, and children from different cultural backgrounds). The field has made some progress in developing appropriate assessments for this age, but challenges remain. There are a number of validated tools for direct testing (usually through one-on-one administration of an instrument) children’s capabilities in language and literacy and in general cognition (including numeracy). While kindergartners in general are not reliable test takers, on an aggregate level such direct testing is useful for benchmarking purposes and can be of value in tracking individual children’s progress and initial screening for potential areas of need. A number of observational assessments have also been developed to provide data across these domains of children’s development and

learning. While there are more tools available to choose from than perhaps a decade ago, selecting an instrument or tool to address children’s language, early literacy and cognitive development remains a challenge for KEAs.

There are, perhaps, even fewer options for assessing the other Essential Domains of School Readiness. Reliable information on social and emotional development, approaches to learning, and general physical well-being may be best captured through observations conducted over time and/or through parent reports. A number of observational assessments have been developed to assess these domains, generally through kindergarten teachers completing assessments on each child in the kindergarten class after the teacher has become acquainted with the children (generally between eight and twelve weeks into the school year). Many states and districts have developed modified versions of commercially available assessments or selected commercially available ones. The number of different areas of development and skills that are assessed varies from assessment to assessment. Although these observational assessments do not always describe the different measures they employ in terms of the five domains, most can be reorganized to fit into the domains required in RTT-ELC. Some of the existing tools have been validated, although their level of reliability is dependent upon observers (e.g. kindergarten teachers) being well-trained on the tool and understanding its purpose. Even then, levels of inter-subjective reliability are below those for most direct assessments of language and literacy and general cognition.

The preceding suggests that states should consider including some observational assessment measures within their KEA, whether using an existing commercially available tool or one developed by the state. They may also want to consider complementing an observational assessment with some measures from direct assessments to collect data, and further augment these with some parental reporting, which also can address the parts of the guidelines related to parent engagement.

There have been efforts to make these assessments appropriate for English Learners and for children with disabilities, or at least recognize where specific measures are not appropriate, but this remains a challenge for the field. There has been significantly less work to explore how such assessments can best reflect issues of culture and potential different learning styles and objectives across different cultural groups. This is true as well for most state early learning and development standards, upon which KEAs must be based.

Some school districts collect information from parental surveys at the time of kindergarten entry, which may augment information collected from other sources. While there is limited analysis of the validity and reliability of parental reporting around the domains of school readiness, parental reports can provide additional insight into children’s skills and knowledge. In addition, parent questionnaires can also provide useful information related to schools being ready for children and can be a tool to engage parents in their child’s development and education. Parent questionnaires also provide the opportunity to collect other important demographic information (such as parental education level) and contextual information (such as the presence of special health care needs and prior participation in programs and activities in the preschool years) that can contribute to identifying Children with High Needs (see the definition in Appendix A). Parent responses can help states identify strategies to target resources and attention in the future toward young children and their families, as well as inform instruction and support in the early elementary years. Therefore, while parent surveys are not referenced within the application materials, states may want to include them as part of their KEA.

VI. Conclusion

States that propose a plan to develop and implement a KEA can earn a substantial number of points in the RTT-ELC competition. They also will be in a position to collect useful data that can help them better understand the status of children’s skills and knowledge when they enter kindergarten and (particularly to the extent that it is part of an ongoing assessment system throughout the kindergarten and early elementary years) inform instruction. Data from the KEA can, therefore, make an important contribution to a state’s efforts to improve the quality of their early education programs and services, and to better meet the needs of Children with High Needs.



References

National Research Council. (2008). *Early childhood assessment: Why, what, and how*. Committee on Developmental Outcomes and Assessments for Young Children, C.E. Snow and S.B. Van Hemel, Editors. Board on Children, Youth, and Families, Board on Testing and Assessment, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Available at http://www.nap.edu/catalog.php?record_id=12446

Saluja, G., Scott-Little, C. & Clifford, R. M. (2000, Fall). Readiness for school: A survey of state policies and definitions. *Early Childhood Research & Practice*, 2 (2). Available at <http://ecrp.uiuc.edu/v2n2/saluja.html>

Stedron, J. & Berger, A. (2010). *State approaches to kindergarten readiness assessment*. NCSL Technical Report. Washington, DC: National Conference of State Legislatures. Available at <http://www.ncsl.org/documents/Educ/KindergartenAssessment.pdf>

Appendix A

Definitions for Related Terms

The Guidelines provide definitions of many terms that are related to the design and implementation of a Kindergarten Entry Assessment:

- “Children with High Needs means children from birth through kindergarten entry who are from Low-Income families or otherwise in need of special assistance and support, including children who have disabilities or developmental delays; who are English learners; who reside on “Indian lands” as that term is defined by section 8013(6) of the ESEA; who are migrant, homeless, or in foster care; and other children as identified by the State.”
- “Early Learning and Development Standards means a set of expectations, guidelines, or developmental milestones that—
 - (a) Describe what all children from birth to kindergarten entry should know and be able to do and their disposition toward learning;
 - (b) Are appropriate for each age group (e.g., infants, toddlers, and preschoolers); for English learners; and for children with disabilities or developmental delays;
 - (c) Cover all Essential Domains of School Readiness; and
 - (d) Are universally designed and developmentally, culturally, and linguistically appropriate.”
- “Essential Domains of School Readiness means the domains of language and literacy development, cognition and general knowledge (including early mathematics and early scientific development), approaches toward learning, physical well-being and motor development (including adaptive skills), and social and emotional development.”
- “High-Quality Plan means any plan developed by the State to address a selection criterion or priority in the notice that is feasible and has a high probability of successful implementation and at a minimum includes—
 - (a) The key goals;
 - (b) The key activities to be undertaken; the rationale for the activities; and, if applicable, where in the State the activities will be initially implemented, and where and how they will be scaled up over time to eventually achieve statewide implementation;
 - (c) A realistic timeline, including key milestones, for implementing each key activity;
 - (d) The party or parties responsible for implementing each activity and other key personnel assigned to each activity;
 - (e) Appropriate financial resources to support successful implementation of the plan;
 - (f) The information requested as supporting evidence, if any, together with any additional information the State believes will be helpful to peer reviewers in judging the credibility of the plan;
 - (g) The information requested in the performance measures, where applicable;
 - (h) How the State will address the needs of the different types of Early Learning and Development Programs, if applicable; and
 - (i) How the State will meet the needs of Children with High Needs, as well as the unique needs of special populations of Children with High Needs.”