Kindergarten readiness assessments (KRAs) can provide critical information regarding children’s level of preparedness for formal schooling. Using such assessments can help communities better understand the effectiveness of their early care and education systems, and determine where gaps might exist in particular areas of readiness or among particular groups of children in terms of their transition into Kindergarten. Assessment information about children’s readiness for school is also critical for teachers and families who are interested in promoting future success through school-family partnerships that support children as they transition into the public school system. Such information also allows stakeholders on multiple levels (policymakers, administrators, and classroom teachers) to make strategic decisions regarding appropriate interventions and targeted funding for the purpose of effecting the most change in the most efficient manner.

With valid, reliable information about young children’s readiness at Kindergarten entry, some important questions can be addressed, such as:

- Are Virginia’s children ready for Kindergarten?
- Where are there gaps in readiness across the state?
- Which interventions are most effective for promoting readiness?
- Are funds being used efficiently to prepare children for school?

What is Kindergarten readiness?
In its broadest sense, Kindergarten readiness describes not only individual children, but the system of care that children experience prior to Kindergarten entry, which may include the family, community, and any early care and education settings the child attended prior to formal schooling. In this way, assessing Kindergarten readiness gives information about what a child has been exposed to before entering Kindergarten, and not necessarily the aptitude or potential of an individual child. Nevertheless, an increased sense of accountability necessitates that we have information about the kinds of skills and abilities that children bring with them to Kindergarten, so that there is a deeper understanding about the effectiveness of various interventions, and for the purpose of designing meaningful instruction.

Nationally, Kindergarten readiness has been defined most recently by the U.S. Department of Education and the Department of Health and Human Services as spanning multiple domains of development:

1. Language and literacy
2. Cognition and general knowledge (including mathematic and scientific concepts)
3. Approaches to learning
4. Physical well-being and motor development
5. Social-emotional development

Virginia has outlined learning standards in these five areas through the Virginia Foundation Blocks for Early Learning, which describe what children should know and be able to do at the conclusion of the
prekindergarten year. Any KRA appropriate for Virginia would address some or all five domains of school readiness and be aligned with the state’s Foundation Blocks for Early Learning. In addition, the assessment should be culturally and linguistically sensitive for Virginia’s population.

**What information do we already have about Kindergarten readiness in VA?**
Project Child HANDS reports that there are a range of assessments used throughout Virginia over the course of the Kindergarten year. Currently, the Phonological Awareness Literacy Screening (PALS) is the only assessment used consistently across the state (99% of school divisions). PALS is a literacy screen designed to identify children who are in need of additional instruction by measuring whether children are meeting benchmarks in fundamental reading readiness skills. The use of PALS across Virginia is significant because it is the only benchmark of academic preparedness for Kindergarten children; however, there is no consistent, comparable measurement of the other domains of school readiness.

School districts throughout Virginia select and use additional assessments throughout the Kindergarten year to address this need; however, this network of varied assessments does not allow statewide comparisons regarding children’s readiness or examine the effectiveness of interventions to increase overall readiness for Virginia’s children. A more unified approach with a consistent and comprehensive assessment would facilitate a collaborative, statewide strategy to ensuring that all Virginia children are ready for Kindergarten.

**What are some considerations in the selection of a KRA for Virginia?**
A Kindergarten readiness assessment for Virginia should be:
- Comprehensive to address multiple domains of Kindergarten readiness and designed to complement the use of PALS, without overburdening young children with testing.
- Aligned with the Foundation Blocks for Early Learning to be developmentally, culturally, and linguistically appropriate for Virginia’s children.
- Part of a comprehensive standards and assessment system which outlines a continuum of learning and development from birth through the early elementary years.
- Meaningful for classroom teachers to guide instruction and decision-making, as well as building partnerships with families using this information.
- Carefully designed or selected so that implementation of the assessment is not overly burdensome or costly.
- Used purposefully to enhance kindergarten readiness prior to school entry and to meet children’s needs upon arrival, *not* to deny kindergarten entry or for other high-stakes purposes.

**Pathways to Kindergarten readiness assessment**
In deciding on a KRA, there are three alternatives: developing an assessment specific to Virginia, selecting a commercially available assessment, or modifying a commercially available assessment to align with Virginia’s needs.

While some states are choosing to develop their own assessments aligned with their state-specific early learning standards, a significant consideration for this decision is the cost of development and validation, which are far lower when states choose to adapt a commercially available assessment.
Kindergarten readiness assessments can be either naturalistic, where the child is observed over time with multiple opportunities to demonstrate abilities in regularly on-going activities, or standardized, where the child is usually assessed one-on-one by an adult presenting a series of tasks and scoring the child’s performance. Naturalistic assessment may be more accurate if conducted over time, given that young children are not always accustomed to the assessment context, and these assessments are typically most useful for individualized decisions about children’s learning. However, they can be less useful for drawing big-picture conclusions regarding group comparisons or program effects, when compared with standardized assessments. One reason for this difference is that standardized assessments generally have better agreement across the teachers who are administering the KRA, and there is less opportunity for bias to affect the assessment results. Determining the primary purpose of the assessment is a necessary first step toward selecting an assessment method.

An important consideration for Virginia’s use of a KRA is the benefit of an assessment that is similar in administration, data collection, and utility for instructional guidance to the PALS instrument. PALS is consistently used across school divisions and there is a strong, effective structure in place for training Kindergarten teachers to conduct and use the assessment. Because training teachers to implement new assessments, collect data, and develop skills in using the assessment to guide instruction and intervention can be costly, time-consuming, and sometimes burdensome, there is value in utilizing an existing structure of supports for an instrument that addresses additional domains and skills.

What are some commercially available KRAs?

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Developmental Skills Checklist (DSC)</th>
<th>Work Sampling System (WSS)</th>
<th>Teaching Strategies GOLD (GOLD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of assessment</strong></td>
<td>Standardized/norm referenced</td>
<td>Naturalistic</td>
<td>Naturalistic</td>
</tr>
<tr>
<td><strong>How information is collected</strong></td>
<td>Direct test (Social-emotional domain has an observation checklist)</td>
<td>Observation and checklists</td>
<td>Observation and documentation</td>
</tr>
<tr>
<td><strong>Scoring</strong></td>
<td>Observed or Unobserved</td>
<td>Not Yet, In Process, or Proficient</td>
<td>Levels 1-9</td>
</tr>
<tr>
<td><strong>Addresses all essential domains of Kindergarten readiness</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Available online</strong></td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

What types of KRAs are being considered nationwide?
<table>
<thead>
<tr>
<th>State</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>Desired Results Developmental Profile, customized for CA (naturalistic/observation) <a href="http://www.wested.org/desiredresults/training/form_drdp.htm">http://www.wested.org/desiredresults/training/form_drdp.htm</a></td>
</tr>
<tr>
<td>Colorado</td>
<td>Teaching Strategies GOLD <a href="http://www.teachingstrategies.com/content/pageDocs/Research-Foundation-GOLD-2010.pdf">http://www.teachingstrategies.com/content/pageDocs/Research-Foundation-GOLD-2010.pdf</a></td>
</tr>
<tr>
<td>Georgia</td>
<td>Plans to revise existing Kindergarten exit assessment, by developing task-based items aligned with GA Kindergarten readiness indicators</td>
</tr>
<tr>
<td>Illinois</td>
<td>Plans to adapt a commercially available on-going observational assessment</td>
</tr>
<tr>
<td>Kansas</td>
<td>Adapting current assessment (a customized version of the Qualls Early Learning Inventory) to better align with Kindergarten entry standards <a href="http://www.riversidepublishing.com/products/qeli/index.html">http://www.riversidepublishing.com/products/qeli/index.html</a></td>
</tr>
<tr>
<td>Maryland</td>
<td>Previously used a customized version of WSS, currently developing a performance-based computerized assessment in collaboration with Ohio</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Plans to select either WSS, GOLD, or High Scope COR (all naturalistic/observation)</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Plans to convene a task force to choose an assessment which aligns with state standards</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Plans to pilot five to seven assessments and select one or more based on results of pilot testing.</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Developing a new assessment</td>
</tr>
<tr>
<td>Ohio</td>
<td>Previously used a literacy-only performance based assessment, currently developing a performance-based computerized assessment in collaboration with Maryland</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Teaching Strategies GOLD, customized for RI</td>
</tr>
<tr>
<td>Washington</td>
<td>Teaching Strategies GOLD, customized for WA (also considered WSS and DSC)</td>
</tr>
</tbody>
</table>

**Technical team goals and process**

In response to these grassroots concerns, the Virginia Early Childhood Foundation has convened a technical team to explore and compare possible directions for selecting and implementing a Kindergarten Readiness Assessment for Virginia. As a public-private organization, VECF is in a strong position to provide leadership to guide this process and coordinate research and education experts both within Virginia and across other states at the forefront of this work. VECF can be responsive to the needs of local communities and school divisions, educators, and policymakers, while ensuring a high level of accountability for both public and private investors in the important venture of school readiness.

The team’s process has involved research on national trends in kindergarten readiness instruments, expert advice from leading researchers in this field, conversations with states who have implemented assessments under consideration and publishers of these assessments, and gathering input from school districts about the assessment contexts and needs they are currently experiencing.
A primary goal for the technical team has been the identification of a specific assessment or combination of assessments to recommend for piloting with Virginia school districts. In particular, the technical team was guided by the following parameters for decision-making:

- Should Virginia select a commercially available tool or consider development of a state-specific instrument?
- Would an assessment of social-emotional readiness be sufficient to supplement the existing readiness assessment efforts already taking place around Virginia, or is more comprehensive KRA needed?
- What is the primary purpose of assessing children in Virginia, and how does this guide the selection of assessment?
- Which format for assessment would best meet the needs of Virginia: an assessment of children in regular classroom activities, or a traditional standardized assessment administered by the teacher?

**Priorities identified by the technical team**

By engaging in conversations with other leading states, expert researchers in the field, publishers of tools, and stakeholders within Virginia, the technical team was able to make recommendations in the following areas:

1. **The technical team recommends purchasing a commercially available kindergarten assessment tool, rather than developing a state-specific instrument.**

   The cost of developing a state specific tool is considerable, and the process of establishing reliability and validity for a new instrument would be substantial. Several commercially available assessment tools are customizable so that alignment with state standards is a realistic possibility. Further, the technical team highlighted the importance of selecting an instrument with demonstrated reliability and validity, and that a critical review of the published technical report be conducted on any assessment under consideration for piloting.

2. **The technical team recommends piloting an approach which measures multiple domains of kindergarten readiness.**

   Because of the state’s interest in identifying gaps in kindergarten readiness as a comprehensive construct, it will be important to measure across multiple domains. Although the possibility of supplementing existing assessment efforts with a social-emotional instrument was considered, this would compromise the KRA’s potential for generating the type of accurate, consistent data across the state that would allow for identification of gaps within different communities or different domains of readiness.

   In order for the KRA to function as a meaningful link between early childhood systems and the K-12 system, it is essential for the instrument itself to be well-aligned with comprehensive learning standards for both preschoolers and kindergarteners. Further, it will be important to consider the impact of using multiple tools, given concerns regarding assessment fatigue of children, as well as the burden of training and administering multiple assessments.
3. The technical team recommends assessing children during regular classroom activities, rather than a one-on-one assessment task administered by the teacher.

Naturalistic assessments in which children are observed in their regular learning environment are appropriate for very young children because they provide multiple opportunities for children to demonstrate skills and abilities. Further, observational measures are better suited for assessing young children’s social-emotional development in particular, a domain of kindergarten readiness identified as extremely important to the technical team.

4. The technical team recommends consideration of tools that are primarily suited for informing classroom instruction, yet still valuable for strategic purposes by multiple stakeholders.

Although the technical team realized that a single tool cannot be relied upon to meet every purpose for assessment, it was strongly felt that the tool must be able to serve as an important piece of the puzzle to inform decision-making at multiple levels. The tool must be valuable to teachers and parents, districts and education leaders, and the policy-makers and systems-builders who are working to increase collaboration and efficiencies between early childhood and the K-12 schools. In particular, the technical team recommends a tool that can be administered at several points throughout the year, for the purpose of monitoring children’s progress over time.

**Identifying a promising assessment**

The technical team has identified *Teaching Strategies GOLD* as an assessment tool having great potential for piloting in Virginia, having met the above recommendations. Some unique strengths of the GOLD assessment are:

- *Teaching Strategies GOLD* is an assessment used during regular classroom activities, minimizing time spent away from instruction. Teachers observe children demonstrating skills and abilities and document evidence of their progress in multiple domains of development. Importantly, because GOLD is designed to be integrated into regular classroom activities, assessment information about children’s skills can inform a cycle of information-gathering and individualization on an ongoing basis.

- Instruments based on teachers’ observations of children’s skills and abilities can be prone to bias in administration, meaning that data may be less consistent across districts if teachers are not all implementing the tool the same way. *Teaching Strategies GOLD* offers inter-rater reliability activities at no charge to teachers as part of their online support system. Using this feature to be informed about teachers’ consistency will help Virginia feel confident in the data being collected using this tool.

- *Teaching Strategies*’ technical report gives extensive information about the psychometric properties of the instrument, including data from piloting with diverse groups of children in varied settings throughout the country.
This comprehensive assessment has the capacity to measure across multiple domains of children’s development, and is also customizable to align with Virginia-specific learning standards. In addition, this comprehensive approach should have the potential to reduce assessment fatigue for teachers by replacing some of the inconsistent means that districts have developed to learn about children’s readiness at school entry.

GOLD measures children’s abilities using “age-bands” to determine whether children's skills are developing in expected ways. These “age-bands” were normed using a large and diverse sample of children throughout the United States. This method is especially appropriate for identifying emergent skills, an important consideration in assessing very young children. Information on emergent skills provides richer information compared to a “yes/no” style checklist of what children know and can do at kindergarten entry, particularly since children have a range of experiences prior to the first day of school.

This assessment has the capacity to assess children up to four times throughout the kindergarten year, providing ample opportunity for classroom teachers to document the progress children make between kindergarten entry and the end of the school year. All data are stored in an online classroom portal, with the capacity to generate reports for classrooms, schools, or districts, and track progress over time.

Pilot considerations
While the pilot design is currently under development, we anticipate the following.

Size of pilot. At least 10-12 diverse districts will be selected to pilot the Teaching Strategies GOLD assessment in fall of 2013 to learn more about the assessment’s feasibility and effectiveness, and to inform decisions regarding training and support for teachers’ use of this assessment in their classrooms. Within districts who are interested in participating, at least two schools with four kindergarten classrooms each will volunteer to implement the assessment.

Training for teachers. Each kindergarten teacher would commit to attending a 2-day professional development session in August 2013 to prepare for the pilot.

Cost of pilot. Unit cost is approximately $9/child and includes year-long support for teachers’ implementation and working with parents. The Virginia Early Childhood Foundation would ensure coordination of the professional development session, as well as ongoing technical assistance during the pilot period.

Technical team members
Isabel Bradburn
Director of Research,
Child Development Center for Learning and Research
Thanks to Catherine Scott Little for her expert guidance and contributions to this effort.