



ENSURING AND EVALUATING ASSESSMENT QUALITY

for Innovative Assessment
and Accountability Systems

July 2016



Acknowledgements

Thanks to generous support from the Nellie Mae Education Foundation, KnowledgeWorks, and the National Center for the Improvement of Educational Assessment (Center for Assessment) have partnered to help states better understand and leverage the new Innovative Assessment and Accountability Demonstration Authority authorized under the Every Student Succeeds Act (ESSA). The goal of this partnership is to help states identify and explore a set of readiness conditions that are critical to the development of a high quality application and implementation process under this new authority. While we share a history of advocacy for next generation assessments, our organizations each bring a unique perspective to this work. KnowledgeWorks focuses on policy development, partnering with states, districts, and educators to identify and remove policy barriers that inhibit the growth of personalized learning. The Center for Assessment specializes in the design of assessment and accountability systems, helping states, districts, and other entities improve the quality of these systems and maximize student success.

Thompson, J., Lyons, S., Marion, S.F., Pace, L., & Williams, M. (2016). Ensuring and Evaluating Assessment Quality for Innovative Assessment and Accountability Systems. www.knowledgeworks.org and www.nciea.org.

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Introduction

This is the second in a series of policy and practice briefs produced by KnowledgeWorks and the National Center for the Improvement of Educational Assessment (Center for Assessment) designed to assist states in thinking through the opportunities and challenges associated with flexibility provided under the Every Student Succeeds Act (ESSA).¹ These briefs help define “Readiness Conditions” for states considering applying for and successfully implementing an innovative assessment and accountability system as defined by the Demonstration Authority opportunity under ESSA. In addition to Brief #1 regarding the creation of a state vision and the current document, the briefs addressing the following topics will be released over the next few months:



Addressing Accountability Issues Including Comparability in the Design and Implementation of an Innovative Assessment and Accountability System



Supporting Educators and Students through Implementation of an Innovative Assessment and Accountability System



Evaluating and Continuously Improving an Innovative Assessment and Accountability System



Establishing a Timeline and Budget for Design and Implementation of an Innovative Assessment and Accountability System

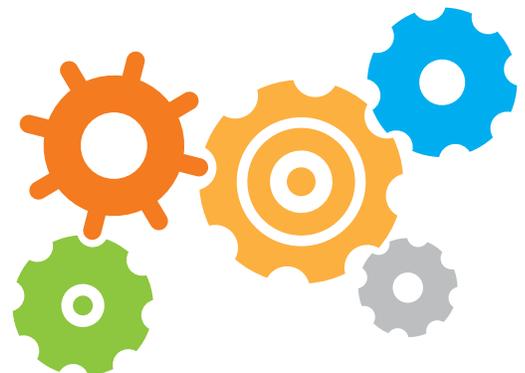


Building Capacity and Stakeholder Support for Scaling an Innovative Assessment and Accountability System

¹Brief #2 in a series of policy and practice briefs designed to help states prepare for the ESSA Assessment and Accountability Demonstration Authority. We are grateful to the Nellie Mae Foundation for their generous support of this project.

Overview

The Every Student Succeeds Act (ESSA) provides an opportunity for states to develop an innovative assessment and accountability system to evaluate student and school performance. While the nature of the assessments that comprise the system is flexible (e.g., competency-based assessments, curriculum embedded assessments), a state will need to ensure that the academic assessments administered in reading or English language arts, mathematics, and science are of high-quality. The Innovative Assessment and Accountability Demonstration Authority (herein known as the “Demonstration Authority” or “innovative pilot”) requires each participating state to demonstrate that its assessment system is comprised of high quality assessments that support the calculation of valid, reliable and comparable annual determinations and provides useful information to relevant stakeholders about what students know and can do relative to the learning targets. While Section 1111 of ESSA outlines the requirements for high quality assessments, that section of the statute focuses on individual assessments (e.g., 5th grade mathematics state assessments). Innovative pilots, on the other hand, will generally implement assessment systems, comprised of multiple sources of assessment information, to determine annual measures of student and school performance. States applying for an innovative pilot will have to demonstrate to reviewers how their proposed system, as a whole, and the resulting determinations of performance, will be of high quality. The quality of the assessment system not only rests on the quality of the assessments within the system, but also how well the assessments work together to provide for useful information that can serve the intended purposes and goals.



Alignment to the State's Theory of Action

The development of the assessment system must be aligned to the state's theory of action for teaching and learning.² This means that prior to a state determining the make-up of the assessment system, it is necessary to consider **how** the new system is intended to improve instruction and learning in the state. A few examples of how the innovative assessment system may help realize the state vision are provided below:³

- 1** — **Assessment development as a mechanism for change**—Through professional development, collaborative assessment design, and intensive calibration sessions, local educators' assessment literacy will improve and therefore positively impact their instruction.
- 2** — **Assessments as a mechanism for change**—Through participation in complex, rich, and engaging performance assessments throughout the year, students will gain deeper content knowledge that can be transferred and applied beyond the classroom.
- 3** — **Assessment results as a mechanism for change**—Assessments that are curriculum-embedded and given throughout the year will provide timely and useful data for educators to inform their instructional decision-making and differentiation.

Consequently, a state considering an application for the innovative pilot, should consider the questions below and the answers should become part of the Theory of Action:

- 1) What are the stated goals, purposes, and intended use of the assessments' results?
- 2) How will the design of the assessment system support these goals, purposes, and intended uses to come to fruition given the capacity of the state and districts?
- 3) How will the state provide support and training to district and school staff in order to implement the innovative assessment system and increase the probability of success in realizing the state vision?

²For more information on developing a Theory of Action, see *Creating a State Vision to Support the Design and Implementation of an Innovative Assessment and Accountability System*, Brief #1 in this series of policy and practice briefs.

³These examples are provided for illustrative purposes, each state will need to clearly articulate how the innovative assessment system aligns with its own theory of change.

State and Local Considerations for Ensuring High-Quality Assessments and Assessment Systems

Why should a state care about the quality of the assessment system? The quality of the system is strongly related to the efficacy of inferences made about student, teacher, school, and district performance. An assessment system is not simply a collection of assessment experiences for students, but instead a coherent system that has a planned flow for how information resulting from different assessments will work together to support the intended interpretations and uses.

*A state pursuing the innovative pilot should strive to build a system that is **comprehensive, coherent, and is continuous.***

These concepts of a high quality assessment system are not new, nor specific to a state pursuing the innovative pilot; but they are important for a state to reflect upon when engaging in this application process.⁴

- **Comprehensive**—A state’s assessment system should include a range of measurement approaches “to provide a variety of evidence to support educational decision making.”⁵ A comprehensive assessment system which allows students to demonstrate their competency in a variety of ways helps to ensure the validity and fairness of the inferences drawn from the assessments.
- **Coherence**—This component of a state’s assessment system has previously been considered when thinking about a theory of action. A coherent state assessment system for the innovative pilot relies on the assessments being compatible with the method of teaching and learning in the classroom, school, and district. This coherence also means that the assessment system, as a whole, reflects the breadth and depth of college and career ready standards and learning practices adopted by the state.⁶
- **Continuity**—Finally, a state assessment system should measure student learning over time. This element of an assessment system ensures that student progress can be monitored so that educators can make appropriate instructional decisions for students.

⁴See Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Editors) (2001). *Knowing What Students Know: The science and design of educational assessment*. Washington, D.C.: National Academy Press; Chattergoon, R. & Marion, S.F. (2016). Not as easy as it sounds: Designing a balanced assessment system. *The State Education Standard*, 16, 1, 6-9.

⁵Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Editors) (2001). *Knowing What Students Know: The science and design of educational assessment*. Washington, D.C.: National Academy Press.

⁶Herman, J. L. (2010). *Coherence: Key to next generation assessment success*. Los Angeles, CA: Assessment and Accountability Comprehensive Center.

Technical Quality

Individual assessments and the assessment system as a whole must be of high technical quality because they provide annual determinations of student and school performance that integrate into the state's accountability system. While it is not practical for every assessment within a state's innovative assessment system to go through a technical quality review, the state must develop a coherent and feasible plan for ensuring and monitoring quality to support the validity of the assessment results.

Planning for assessment quality within the design of the innovative pilot will be an essential part of the quality assurance process along with audits of assessment quality. Processes that promote assessment quality could include:

- 1) developing high-quality common assessments to not only be used in all participating districts to inform student annual determinations, but to also serve as models for local assessment design, or
- 2) providing professional development on assessment literacy to help local educators with assessment development and review.

In addition to assessment design processes, the state will want to engage in a number of quality assurance activities to monitor quality. These types of audits could include:

- 1) reviewing local assessment maps for full content coverage,
- 2) gathering a sample⁷ of local assessments and student work to be professionally reviewed for technical quality, or
- 3) engaging with a third-party vendor to conduct a formative evaluation of the innovative assessment system, including reviewing local assessment practices.

The criteria identified in *Standards for Educational and Psychological Testing*⁸ are appropriate for a state to use for making determinations about assessment quality, whether assessments are developed in collaboration with educators or selected from a vendor. In an application for a Demonstration Authority, states will need to demonstrate how their system will meet assessment quality requirements. The innovative assessment system eventually will be subject to a peer review process outlined in Section 1111 of ESSA. The assessment quality criteria outlined in the peer review guidance closely mirror the expectations of the *Standards for Educational and Psychological Testing*. Specific elements of technical quality that should be planned for within the assessment system are included on the following pages.

⁷We question the proposed ESSA regulations that would require each assessment to meet the quality requirements in Sec. 1111(b)(2). With multiple assessments, it is not practical for each assessment to cover the entire breadth and depth of the standards and it would require excessive testing to ensure each assessment meets that standard of reliability. The focus should instead be on an aligned system of assessments with high technical quality.

⁸American Educational Research Association, American Psychological Association, National Council on Measurement in Education (2014). *Standards for Educational and Psychological Testing*. Washington, D.C.: American Educational Research Association.

Alignment to the full breadth and depth of the state academic content standards:

- The academic knowledge and skills of the college and career ready standards being evaluated through the assessment should be identified and the expectations of the assessment should be aligned to the standards.
- The assessment should be administered to the grade level for which the academic knowledge and skills of the college and career ready standards are intended.
- The assessment task or items on the assessment fully address the relevant knowledge and skills described in the college and career ready standards.
- The cognitive rigor of the assessment task or items are as cognitively challenging as the upper limits of the college and career ready standards allowing inferences to be made about student understanding related to the full range of the standards.
- The assessment system must be evaluated for alignment to document that all of the standards are addressed appropriately rather than expecting every assessment to meet “two-way” alignment criteria to the learning targets. In other words, it is not enough to document that each test item is measuring a specific standard, but that all standards are covered at the appropriate breadth and depth by the assessment. In the case of the innovative pilot, this second part of the alignment criterion is not met by individual assessments, but by the assessment systems as a whole.

Validity or accuracy of the inferences drawn from the assessment scores about what students know and can do and the appropriateness of the assessment results for their intended uses:

- Because validity is the degree to which theory and evidence support the assessment results for their intended purposes, it will be critical that the state define both **the level of granularity of the reported scores** and all of their intended **interpretations and uses** in order to develop a coherent validity argument.

Note: ESSA has particular requirements related to what scores must be reported (e.g., summative annual performance determinations) and their intended uses (e.g., support the accountability system). However, states are not limited by these scores and uses and must consider what additional scores and uses, if any, can be supported by the innovative assessment system.

- The assessment system design and the scoring procedures should be coherent with the stated score uses. For example, the range of the measurement scale should be large enough to distinguish among students achieving at the specified number of performance levels.

- › The state will need to develop a comprehensive plan for collecting and synthesizing validity evidence to support the uses of the assessment system results. Sources of validity evidence include: evidence of alignment with the intended content; evidence of students' thinking (cognitive) processes as they engage with the assessments; evidence of the reliability of the reported scores (e.g., classification accuracy, generalizability); evidence of covariation with external variables (e.g., assessment system results correlate with the results of other academic achievement assessments); and lastly, evidence of the consequences for students after engaging with the assessment system. This last source of validity evidence may prove to be a particular benefit of innovative assessment and accountability systems in that they have the potential to alleviate some of the negative, unintended consequences associated with statewide standardized testing (e.g., narrowing the curriculum, test anxiety), and instead—depending on the state's theory of action—incentivize positive outcomes such as increased student engagement or an increased complexity and rigor in the quality of instruction.

Reliability or consistency of the scoring tools and the generalizability of the inferences about students' knowledge and skills:

- › The scoring guide should be fully aligned to the assessment task and/or items.
- › The performance levels should be clearly identified and defined, and should be coherent across levels. In particular, rubrics should not have so many performance levels that it is difficult to distinguish the qualities of one level from the other or too few levels that there will clearly be student work that falls between the levels.
- › The scoring guide and assessment should identify which aspects of the assessment will be scored using the scoring guide.
- › Calibration sessions among educators who are involved in the scoring of assessments should result in a common understanding of scoring criteria and a set of corresponding annotated student work samples to facilitate scoring consistency among the various raters.
- › Inter-rater consistency in scoring should be monitored.
- › The set of assessments must support generalizability inferences at levels appropriate for the intended purposes.

Comparability of the assessment results for students within the pilot districts and, while the system is not yet statewide, across pilot and non-pilot districts:⁹

- Because there will likely be local flexibility in the composition of the assessments given to students participating in the innovative pilot, planning for the comparability of the assessment results will be of paramount importance for any state considering applying for a demonstration authority.
- Like validity, comparability is inherently score-based and the nature of the evidence will rest on the granularity of the assessment system results. Depending on the grain-size of the scores resulting from the assessment system, the planned processes for promoting and evaluating comparability will differ.
- Regardless of the grain-size of the reported score, the state will need to design a system that ensures assessment results are comparable within pilot districts, among pilot districts, and across pilot and non-pilot districts. States will need to engage in *comparability by design* to promote and evaluate the intended claims.

Fairness of the assessments with regard to accessibility for all students and minimizing bias:

- Assessments should be designed using Universal Design for Learning (UDL) principles including visually clear and uncluttered, assessment prompts or questions that are presented in a straightforward way for a range of learners, and vocabulary and context(s) presented by the assessment are free from cultural or other unintended bias.
- A range of assessment accommodations and accessibility should be available and accounted for in the design of the assessments to allow for all students to demonstrate their knowledge and skills.
- When threats to fairness are not addressed, construct-irrelevant variance related to student characteristics compromises the validity of the assessment system results. The state should document the planned steps for ensuring test administration and scoring processes remove construct-irrelevant barriers (to the extent possible) for all students and subgroups.

⁹More detail on the definition of comparability in an innovative assessment system, and processes to promote and evaluate comparability will come in Brief #3: Addressing Accountability Issues including Comparability.

Additional Considerations for Overall Assessment Quality

When reviewing assessments for overall quality, the following items should be evident in the assessments, the specifications for the assessment design, and administration guides:

- Identification of the content area and grade level for which the assessment is appropriate.
- Description of the context, anticipated activities, products, and/or presentations, the necessary resources, texts, and/or materials needed, and what students are expected to demonstrate and the corresponding cognitive rigor of the demonstration.
- Description of the pre-requisite knowledge and scaffolding required prior to administration.
- Directions for the teacher to use in the administration of all aspects of the assessment.
- Directions for the student that describes all expectations.

Special considerations for text and visual resources

A high quality assessment should use resources that are appropriate for students and demonstrate the following expectations:

- Text and visual resources support the topic and the expectations of the assessment.
- Textual resources should be reviewed for their appropriateness of complexity or level of challenge, both quantitatively and qualitatively. Quantitative measures include examining the Lexile score and/or genre specific formulas for informational and narrative text (e.g., TextEvaluator) to ensure that the text is grade-level appropriate. A variety of qualitative rubrics are available for examining the levels of meaning and purpose, text structure, language conventionality and clarity, and knowledge demands of a text.
- The amount of text and visual resources should be appropriate not only for the grade level, but also for the time allotted for the assessment implementation.



STATE EXAMPLE

New Hampshire has initiated a competency-based education system under a waiver from the U.S. Department of Education. In New Hampshire local educators—both teachers and administrators—are involved in the development of the assessments in the Performance Assessment of Competency Education (PACE) project. One goal for PACE is to create a bank of high-quality performance tasks in grades 3–10 for English language arts, math, and science, specifically designed to assess student attainment of the New Hampshire competencies. Each district is expected to administer at least one common assessment from the bank each year as a calibration tool, however, the purposes of the high quality performance task bank goes beyond the need for establishing comparability. Two of the primary purposes of investing in educator capacity to develop high quality performance tasks are: 1) to increase the assessment literacy of the teachers and administrators in the participating districts; and 2) to create high quality tasks that can be used to serve local assessment needs as well as provide models for high quality assessment tasks and practices. The following outlines the key dimensions of the PACE process for achieving these goals.

Training

Educators from the participating pilot districts, who are developing these assessment tasks, have participated in New Hampshire's Quality Performance Assessment (QPA) Cohort over the past three years. Through their involvement with the QPA Cohort, these educators received comprehensive training in task design, quality assurance, analysis of student work, and calibrating the scoring of student work. Additionally, the model for building assessment capacity is shifting in the current 2016–2017 academic year to build teams of teacher leaders who receive advanced assessment coaching and will be responsible for leading much of the task development work with their fellow teachers. The advanced assessment knowledge that is cultivated with these teacher leaders goes beyond introductory content including discussions of validity theory and principled assessment design (e.g., Evidence Centered Design).

Task Design

A “backward design” model template¹⁰ was developed to provide guidance on the characteristics of a high quality task and PACE expectations. This template is used by educators to create performance tasks, which are designed to provide data on how students are progressing toward the New Hampshire competencies for English language arts, math, and science.

The administration of the performance assessments allows for multiple modes of implementation ranging from all work to be completed in class; a mixture of in-class and out-of-class work with, for example, research done off-site but with check-ins; and, feedback and instruction being provided in class on expectations that are not being scored on the assessment rubric. The PACE project allows flexibility for the development of a variety of task lengths and types ranging from standard performance assessments to complex projects and student designed assessments.

¹⁰Wiggins, G. & McTighe, J. (2005). *Understanding by Design*. ASCD: Alexandria, VA.

However, a main feature of these assessments is that they are embedded in the curriculum; in other words, they emulate the design of local classroom tasks. Despite the range of tasks within the PACE project, they are all designed to measure what students can do independently, without scaffolding or other instructional supports.

As the pilot implementation has evolved, a number of steps were taken in order to continue to build local assessment capacity and to improve the task design. A *Scaffolding Brief*¹¹ and *Think-Aloud Protocol*¹² were developed and disseminated, additional support was provided in content planning meetings, a formal plan was made to collect and analyze student work from field testing of newly developed tasks, and additional meetings were planned to provide supplementary assessment literacy.

Task Evaluation

All of the common tasks and a sample of local tasks administered in the 2015–2016 academic year underwent a rigorous vetting process. Common tasks were reviewed by local educators and content experts in New Hampshire, as well as assessment experts from the Center for Assessment. A review tool, the *PACE High Quality Assessment Review Tool*, was developed using the *Standards for Educational Psychological Testing* (2014) as accepted criteria for high quality assessments. This tool was used to identify areas of strength and need in the assessment, as well as to provide recommendations for revisions. Once the task revisions are made and the task is accepted, it is posted to the task bank as “Approved.”

In addition to the review and approval process, the common and local tasks are subject to a number of post-administration quality monitoring procedures. These procedures include audits of inter-rater consistency in score, generalizability analyses, comparability analyses, and, importantly, evaluations of student work.



¹¹Thompson, J. & Lyons, S. (2015). Scaffolding Guidelines for Independent Student Work Products When Using Performance-Based Assessments for Accountability. National Center for the Improvement of Educational Assessment. www.nciea.org.

¹²Marion, S. F. (2015). Cognitive Laboratory (aka Think Aloud) Protocols for Performance Task Development. National Center for the Improvement of Educational Assessment. www.nciea.org.

State and District Roles

As seen in the New Hampshire case study, a state pursuing an innovative assessment and accountability system will need to ensure that district leaders and educators are fully aware of the responsibilities of the state and the district. We believe that investing in the assessment and data literacy of educators will yield greater gains in student achievement than standardized assessments that allow for no local agency. However, there are many decisions that need to be made regarding roles and responsibilities to ensure assessment quality throughout the innovative pilot.

A major decision in this process will be determining the amount of control that state leaders will have within the assessment and accountability system relative to their districts and local communities. In Brief #1, we outlined some considerations for state leaders, specifically noting that state leaders “will have to learn to give up the control that is generally associated with a top-down approach to assessment and accountability.” The innovative assessment and accountability system provides a unique opportunity for districts to engage in the process of developing or selecting assessments. This, of course, comes with both state and district responsibilities. Nonetheless, specific decisions regarding the development and/or selection of the assessments will require a collaborative partnership between the state and districts regarding the following considerations in the table below.

Considerations for State and District Leaders

State Control	District Control
Standardization of assessment design or selection and approval (figuring out where to be “tight” and where to be “loose”)	District assessment design or selection
Common assessments for all pilot districts	Shared understandings of the standards or competencies addressed through local assessments
Quality assurance of the assessment system	Quality assurance of local assessments
Professional development delivery	
Release of teachers for development and review of assessments, calibrating the scoring of student work, and analyzing student work for assessment revision	
State and district funding resources to develop the assessment system	

Assessment Design or Selection

Because districts are likely accustomed to having complete authority over their local assessment systems, and states too are accustomed to garnering sole responsibility for the state assessment and accountability system, navigating a new partnership to balance the needs of both parties may be turbulent unless carefully planned with newly established lines for open communication. The state needs to articulate where the assessment system must be “tight” or strictly standardized in order to garner the necessary validity evidence to support the endeavor, and also where it can be “loose” to foster for local agency and innovation. It will be the state’s responsibility to clearly delineate the program guardrails and communicate the new responsibilities districts will face (along with the benefits of greater flexibility) upon entry into the pilot system.

Key Questions

Will the assessment development/selection be purchased from commercial vendors or locally designed?

Who is responsible for ensuring the quality of the assessments?

State Control:

- Will the state select nominated educators to be part of the decision-making process for determining which assessments will be used?
- How will the state determine which assessments and how often the districts will send for an audit review?

Local Control:

- How will local districts promote and evaluate the quality of their locally administered assessments?
- How will districts communicate about the quality of their local assessments to the state?

In addition, some considerations for the state and districts include determining: (1) who is responsible for the audit review; (2) how these individuals will be trained to review the assessments; (3) what tool will be developed/used to provide feedback on the reviewed assessments; (4) the timeline for modifications; and (5) the follow-up processes.

Professional Development

Decisions around the investment in professional development will have long-term implications for the success of the innovative pilot as building assessment capacity cannot come from a one-shot professional development session. For example, a state goal may be to develop capacity among educators to make decisions about assessment, and consequently about instruction and curriculum, which are skills that need to be practiced and coached over time.

Key Questions

What are the key competencies educators participating in the pilot will need to acquire in order for success?

Who will select the necessary professional development needed to understand assessment quality?

Will the identified professional development be delivered at the state, regional, or the local level?

Do the state and/or districts have the capacity to deliver the professional development?

Is an outside agency needed to provide the professional development for supporting assessment literacy, including the criteria of a high-quality assessment, analyzing student work, and calibrating the scoring of student work?

What is the best way to build systemic assessment capacity that will be sustainable for the success of the innovative pilot in the future?

Funding

Both the state and districts will need to restructure budgets to some extent to ensure that the work of building assessment capacity and ensuring assessment quality is ongoing and long-lasting.

Key Questions

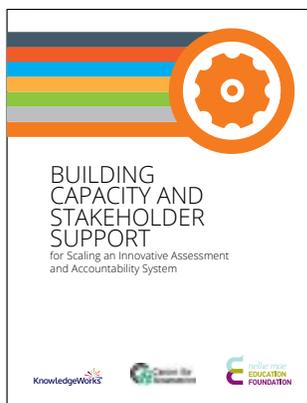
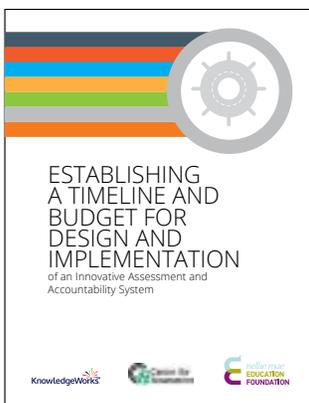
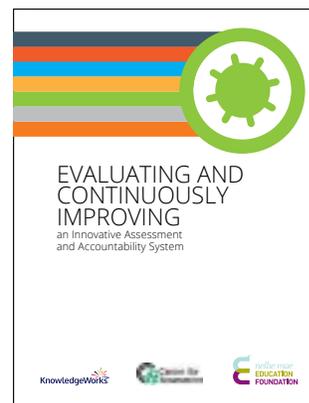
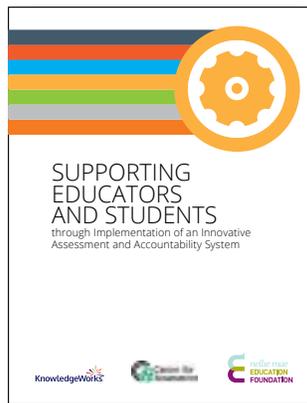
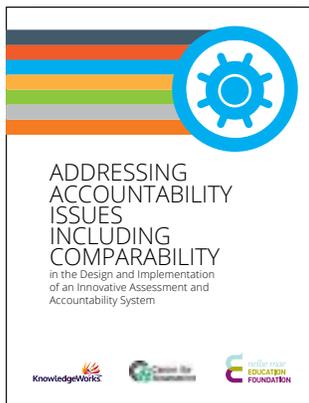
How will the professional development be funded?

How will teachers be released from their buildings/districts to engage in this thoughtful work?

On what resources will states and districts draw to support the evaluation of assessment quality?

Summary

This brief in our series of State Readiness Conditions publications is designed to help state leaders recognize the opportunities and challenges associated with the development and/or selection of high quality assessments when considering an application to the Innovative Assessment and Accountability Demonstration Authority. We believe that the opportunities for educators and students in the state outweigh the challenges associated with this endeavor. This brief is designed to help surface questions and subsequent decisions that will need to be made as part of the planning process for developing an application for the Innovative Assessment and Accountability Demonstration Authority. KnowledgeWorks and the Center for Assessment will continue to support states through the summer and fall with additional briefs on topics related to fleshing out the design of a Demonstration Authority application, including:



Additional Support

KnowledgeWorks and the Center for Assessment are available to help states as they explore, design, and implement next generation assessment systems. Contact information for our organizations is listed below.

KnowledgeWorks can help states, districts, and other interested stakeholders establish the policy environments to support personalized learning at scale. The organization's expertise spans the federal, state, and district levels, supporting states with strategies to leverage current policy opportunities, remove existing policy barriers, and develop new policies that will help states create an aligned policy environment to support personalized learning. To learn more, contact the following people:

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The **Center for Assessment** strives to increase student learning through more meaningful educational assessment and accountability practices. We engage in deep partnerships with state and district education leaders to design, implement, and evaluate assessment and accountability policies and programs. We strive to design technically sound policy solutions to support important educational goals. The Center for Assessment's professionals have deep expertise in educational measurement, assessment, and accountability and have applied this expertise to assessment challenges ranging from improving the quality of classroom assessments to ensuring the technical quality of state's large-scale achievement tests and ultimately to designing coherent assessment and accountability systems.

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About Us



KnowledgeWorks is a nonprofit organization dedicated to advancing personalized learning that empowers every child to take ownership of their success. With nearly 20 years of experience exploring the future of learning, growing educator impact and working with state and federal policymakers, our passionate team partners with schools and communities to grow a system-wide approach to sustain student-centered practices so that every child graduates ready for what's next. www.knowledgeworks.org



The National Center for the Improvement of Educational Assessment, Inc. (Center for Assessment) is a Dover, NH based not-for-profit (501(c)(3)) corporation that seeks to improve the educational achievement of students by promoting enhanced practices in educational assessment and accountability. The Center for Assessment does this by providing services directly to states, school districts, and other organizations regarding the design, implementation, and evaluation of assessment and accountability systems. As a non-profit organization committed to the improvement of student learning, the Center for Assessment maintains a strong "open-source" ethic in terms of distributing its many creations and inventions. For example, the Center has developed many tools related to alignment methodology, student growth analyses, student learning objectives, comparability methods for innovative assessment systems, and validity evaluation that it provides freely to its clients and other non-commercial entities. www.nciea.org



The Nellie Mae Education Foundation is the largest philanthropic organization in New England that focuses exclusively on education. The Foundation supports the promotion and integration of student-centered approaches to learning at the middle and high school levels across New England—where learning is personalized; learning is competency-based; learning takes place anytime, anywhere; and students exert ownership over their own learning. To elevate student-centered approaches, the Foundation utilizes a four-part strategy that focuses on: building educator ownership, understanding and capacity; advancing quality and rigor of SCL practices; developing effective systems designs; and building public understanding and demand. Since 1998, the Foundation has distributed over \$180 million in grants. For more information about the Nellie Mae Education Foundation, visit www.nmefoundation.org.