
Redesigning Systems of Assessments for Student-Centered Learning

Issue

This issue brief discusses opportunities for states under the Every Student Succeeds Act (ESSA) to redesign systems of assessments to support student-centered learning. In addition, this brief introduces *balanced systems of assessments and assessment literacy* as two key concepts required for long-term sustainable systems transformation to student-centered learning.

There is a need to rethink the purpose and role of assessment in education systems. Assessment is essential for understanding what students have learned and for providing transparency and fairness when it comes to certifying mastery of knowledge and skills. Assessment can provide timely feedback to educators on where students are in their learning and to inform the supports that they need to succeed. It also plays an important role for educational leaders to evaluate the effectiveness of learning models, on achievement toward curriculum frameworks and for policymakers to understand the effectiveness of policies and use of public funding. In redesigning systems of assessments, state policymakers should consider what is needed to make assessment more meaningful and integrally linked to student learning.

The challenge ahead for policymakers is to reshape policies to enable student-centered teaching and learning. This will require creating balanced systems of assessments focused on students demonstrating mastery including through authentic performance, and creating evidence to:

- » Support individual student learning and achievement outcomes that matter;
- » Empower educators to facilitate student progress, deeper learning and growth toward a new, more comprehensive definition of success;
- » Provide feedback on depth and breadth of learning, as well as valid reporting on progress;
- » Provide timely supports so that no student falls through the cracks;
- » Support a personalized, competency-based system which recognizes that students can learn anytime and everywhere; and
- » Serve as an equitable and transparent mechanism to certify student mastery of the knowledge and skills they need to succeed.

Background

The current policy landscape offers many opportunities for states to engage in assessments systems redesign. Systems of assessments that align to student-centered learning are an important element for the transformation to personalized, competency-based education systems that prepare all students for success. Assessments systems redesign efforts that effectively support student-centered learning should consider advancing balanced systems of assessments and assessment literacy.

OPPORTUNITIES FOR REDESIGNING STATEWIDE SYSTEMS OF ASSESSMENTS UNDER ESSA

Thanks to the Every Student Succeeds Act (ESSA), states now have much more flexibility to redesign state systems of assessments to better align to student-centered learning, allowing educators to focus on meeting students where they are so all can succeed.

States can now include a variety of assessment and item types in their new systems of assessments, including:

- » Adaptive assessments to pinpoint more accurately where students are in their learning progressions;
- » Formative assessments to determine if students are ready to demonstrate mastery on interim or summative assessments;
- » Interim assessments to measure individual student growth and knowledge gained over a given period of time;
- » Summative assessments to provide a determination or certification of learning; and
- » Performance assessments to measure complex demonstrations of mastery and integrate multiple points of learning evidence.

These distinct elements can work in concert within systems of assessments to provide both transparency on student learning and support teaching and learning.

While some states are beginning to take advantage of the flexibility in ESSA around their systems of assessments, many others may face capacity challenges or the political will to do so. It is important to note that state policymakers may ask the U.S. Department of Education at any time for permission to amend their ESSA state plans.

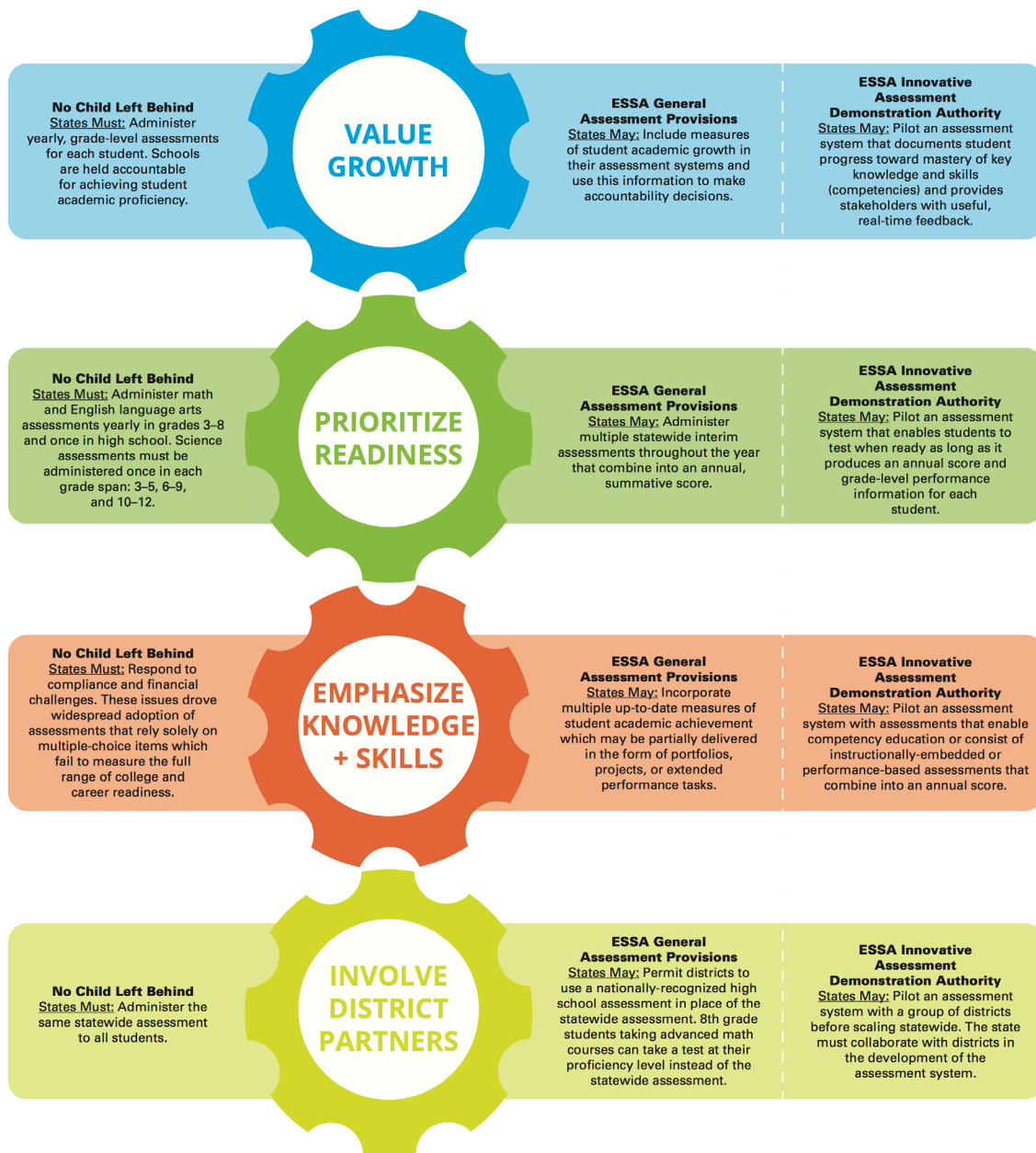
There is also an opportunity for states to begin partnering with local districts leading the way with innovative assessments that support student-centered learning, under the Innovative Accountability and Assessment Demonstration Authority in ESSA.

The following graphic provides a comparison of ESSA's general assessment provisions and Innovative Accountability and Assessment Demonstration Authority to the framework in No Child Left Behind that states are now beginning to move away from.

Four Critical Opportunities for States Under the Every Student Succeeds Act (ESSA)

A Better Approach to Assessment

States now have the opportunity to develop student-centered assessment systems that have the potential to increase engagement, provide real-time feedback on student learning, and improve equitable outcomes across our education system.



THE INNOVATIVE ACCOUNTABILITY AND ASSESSMENT DEMONSTRATION AUTHORITY IN ESSA

State pilots of new and innovative systems of assessments will be able to apply to participate in a new U.S. Department of Education program, the [Innovative Accountability and Assessment Demonstration Authority](#) (“Innovative Assessment Pilot”).

The Innovative Assessment Pilot makes it possible for states to partner with a portion of its local districts to develop innovative systems of assessments and to use the determinations from these assessments in accountability.

It provides states with flexibility from ESSA’s requirement that they use the same assessments for all students statewide for accountability purposes.

Moreover, the Innovative Assessment Pilot gives states and districts a chance to work together to develop aligned, coherent education models with assessments that support student-centered learning.

The U.S. Secretary of Education could initially approve up to seven states¹ to participate. The Innovative Assessment Pilot will allow new models of assessment to take root in districts, and build the human and systems capacity necessary to implement at scale. To participate, a state (or consortium of states) must meet the criteria for a high-quality application, which include but are not limited to:

- » Demonstrating technical quality and validity of the innovative assessment;
- » Producing determinations of student performance that are comparable to the determinations of student performance made by the statewide assessment;
- » Providing a logical plan for scaling statewide that includes consideration of how the state will “make progress toward achieving high-quality and consistent implementation across demographically diverse LEAs,” and how the districts as a whole will reflect the demographic diversity of the state.

At the time of this writing, the U.S. Department of Education is expected to announce applications for the Innovative Assessment Pilot in late 2017.

BALANCED SYSTEMS OF ASSESSMENTS

Balanced systems of assessments are an essential component to ensure students attain the knowledge, skills and dispositions they need to succeed after high school. These systems can give educators the tools to check for understanding in real-time, to track student progress, to design personalized interventions, and to assess mastery of standards and competencies. Personalized, competency-based learning models designed for equity require systems of assessments that rely on multiple forms of evidence against common standards and expectations.

¹ The Secretary may approve up to seven states in the first three years of the program. After the third year of the Demonstration Authority, the Secretary may lift this cap.

Next generation systems of assessments serve many purposes for a variety of stakeholders, providing multiple forms of evidence on student learning. Chattergoon and Marion (2016)² assert that as states redesign assessments, they should pursue balanced systems of assessments that meet the following three criteria:

- » **Coherent systems:** “The assessments in a system must be compatible with the models of how students learn content and skills over time” and “curriculum, instruction, and assessment must be aligned to ensure that the entire system is working toward a common set of learning goals”;
- » A well-articulated **theory of action** that articulates how each part of the system relates to the others. In other words, what purpose does the system as a whole serve, what different needs does it meet for different stakeholders, and how does it meet them? “A set of assessments, even if they cohere, will not fulfill the intended purposes if the information never reaches the intended user”; and
- » Assessment **efficiency** means that systems are providing stakeholders with the full range of information that it is intended to provide. “For example, if a state wants to give educators information to help them adjust instruction, its assessments must be tied to the curriculum that is being used. These assessments should in turn yield timely, detailed information about the knowledge and skills being assessed at the local level.”

States could take a leadership role working with districts and schools to set conditions for more balanced systems of assessments, with multiple measures, aligned to student-centered learning.

ASSESSMENT LITERACY

Advancing next generation education models with personalized, competency-based learning will require attention to building educator capacity for assessment literacy. Assessment literacy is “the possession of knowledge about the basic principles of sound assessment practice, including its terminology, the development and use of assessment methodologies and techniques, and familiarity with standards of quality in assessment.”³ Assessment literacy includes knowing which assessments are appropriate, and for what purpose.

Assessment literacy becomes essential as systems move away from singular, overly-narrow measures of grade-level proficiency, to assessing mastery based on multiple forms of evidence using student work. In the United States, as compared to high-performing education systems internationally, assessment literacy is not prioritized in pre-service training or in professional development for teachers. Without developing this capacity, our current structure and processes over-rely on the use of standardized tests to ensure that the results are comparable. This need not be the case: a serious conversation about building capacity for valid and reliable assessments that are part of the teaching and learning process, including performance assessment, is long overdue. Increased assessment literacy throughout the system for educators, students and practitioners alike could:

² Chattergoon, R., Marion, S. (2016). Not as Easy as It Sounds: Designing a Balanced Assessment System. National Association for State Boards of Education. Retrieved from: <http://www.nasbe.org/wp-content/uploads/Chattergoon-Marion.pdf>.

³ Assessment Literacy. New Zealand Ministry of Education. Retrieved from: <http://assessment.tki.org.nz/Assessment-in-the-classroom/Assessment-for-learning-in-practice/Assessment-literacy>.

- » Improve systems quality;
- » Support the development of new learning processes and collaborative models that provide increased reliability across evaluating student work;
- » Increase trust;
- » Build capacity for high-quality education experiences for adults and students within education systems; and
- » Help all students succeed through personalized pathways that prepare them for their futures.

Practitioners working deeply in competency-based education quickly realize how current K-12 education systems lack mechanisms for calibrating the quality of student work to ensure consistency in defining mastery of learning outcomes across schools and systems. Redesigned systems of assessments with performance assessments will require professional development, structures and processes to build educator capacity to make valid and reliable comparisons of students' progress through performance assessments against commonly understood outcomes using evidence and common rubrics.

In competency-based education systems, educators collaborate to develop reliability and consistency through moderation and calibration. Calibration involves groups of educators working together to compare and develop consensus around expectations by developing rubrics for consistent scoring of student work. The calibration process makes scoring consistent and reliable through the alignment to the standards — comparing student work against a common set of expectations. In addition to providing increased reliability in scoring student evidence, calibration must also include processes to activate equity strategies⁴ — including mitigating implicit bias — and to hold student performance to a consistent set of expectations.

Professional development of educators to assess evidence of student learning using calibration processes and developing rubrics to evaluate performance tasks is central to transformation at scale to personalized, competency-based education.

⁴ Lopez, N., Patrick, S. and Sturgis, C., Quality and Equity by Design: Charting the Course for the Next Phase of Competency-Based Education, 2017. <https://www.inacol.org/resource/quality-equity-design-charting-course-next-phase-competency-based-education/>.

ASSESSMENT FOR LEARNING PROJECT: PROMISING EXAMPLES ACROSS THE U.S.

State policymakers can look to the work of the [Assessment for Learning Project](#) across the United States to learn about next generation models of assessment, accountability system design and programs to build educator assessment literacy and professional judgment. The National Center for Innovation in Education (CIE) and Next Generation Learning Challenges (NGLC) [Assessment for Learning Project](#) provides funding for schools, districts, state agencies and nonprofits for “advancing our understanding of assessments’ essential roles in the learning process, as learning models become more personalized, less cohort-restricted, more competency-based, and student-centered.”⁵

New Hampshire has led the way in creating state policy conditions to enable richer, deeper assessment practices. New Hampshire is currently piloting the [Performance Assessment for Competency Education \(PACE\)](#) system. In School Year 2016-2017, eight school districts and one charter school participated in the program. New Hampshire Learning Initiative’s (NHLI) Assessments for Learning Project, No Grades, No Grades (NG2) is piloting multi-age groupings and competency-based progressions in schools.

To ensure comparability of student learning determinations, PACE districts administer the Smarter Balanced assessment once in elementary school, once in middle school and the SAT in high school. In all other years, these districts administer standards-aligned, common and local performance assessments developed by the districts themselves, and validated at the state level.

The performance assessments are:

- » Designed to assess the broader set of knowledge and skills students need to succeed after high school;
- » Aligned with competency-based learning approaches; and
- » Much more integrated into students’ day-to-day work.

Critical to this work is New Hampshire’s tiered system of educator networks and supports, including a wide range of technical assistance activities to build educator capacity to effectively implement PACE assessments coherently within local instructional systems.

The [Colorado Education Initiative \(CEI\)](#) is working with multiple districts to create rigorous performance-based pathways to meet Colorado’s new proficiency-based graduation requirements. The new graduation policy offers a [menu of ways](#) that students can demonstrate proficiency to graduate. The project is designing grades 9-12 pathways

5 Assessment for Learning Project. (2016). Next Generation Learning Challenges. Retrieved from: <http://nextgenlearning.org/assessment-learning-project>.

culminating in portfolios of capstone projects as a way to demonstrate proficiency. It will draw on CEI's work supporting teachers to develop learning progressions and the work on collaborative design of curricular units and assessments in the Common Assignment Study. School and district systems are developing a shared vision for the performance-based pathways with the goal of implementing course progressions, curriculum redesign, instructional practices and district supports and policies to enable schools to prepare students to demonstrate proficiency through capstones or portfolio defenses in 12th grade.

The **Center for Collaborative Education** project, [Micro-credentials for Performance Assessment](#), aims to empower teachers to have greater agency in their own professional learning on performance assessment and to embed this learning more directly in curriculum and instruction. They are partnering with four districts across Rhode Island, Kentucky and Georgia to investigate how micro-credentials can enhance existing state or district systems including how to:

- » Use micro-credentials to meet evaluation requirements;
- » Secure graduate credit for micro-credentials for re-certification;
- » Adopt micro-credentials to satisfy district professional development requirements; and
- » Incorporate micro-credentials into school goals and professional learning communities.

The **California Performance Assessment Collaborative (CPAC)** is focused on building a broad coalition of districts, networks and schools in Los Angeles, Oakland and Pasadena to become proof points for district-level scaling of performance assessments. Each district has a policy for expanded performance assessment linked to local graduation requirements, and central office champions. The districts will deepen support for performance assessment and integrate strategies across departmental silos. The Learning Policy Institute (LPI) will provide teacher training and central office capacity building to incorporate performance assessments into their graduation requirements.

Two Rivers Public Charter School in Washington, D.C. is working with the [CityBridge Foundation's equityXdesign](#) program to hold up a critical lens to the processes by which performance assessments are designed and implemented (e.g., inclusion of marginalized voices in process, analyzing task content and scoring for bias, and developing an inquiry for equity protocol with cohort schools.⁶

⁶ Assessment for Learning Project. Center for Innovation in Education (CIE) and Next Generation Learning Challenges (NGLC). Retrieved from: <https://www.assessmentforlearningproject.org/>.

Recommendations for State Policymakers on Redesigning Systems of Assessments for Student-Centered Learning

Redesigning state systems of assessments should be done in collaboration with local stakeholders and support building educator capacity, with state leaders engaging those who will implement and benefit from the new systems of assessments.

The following are action steps state policymakers can take to begin to transform their state systems of assessments to support student-centered learning:

- » Support stakeholders working with communities to redefine student success and create more holistic graduate profiles that articulate the knowledge and skills students will need for success in college, career and civic life.
- » Explore what graduation guidelines and graduate profile concepts mean for systems of assessments locally and at the state level. Engage stakeholders working on new profiles of a graduate to transform teaching, learning and assessment to create a strategy for aligning state systems of assessments to focus on competency-based progressions, student growth and attainment of a broader set of student success outcomes.
- » Create a working group on examining and auditing the systems of assessments that are being used in the state to determine “fit for purpose” for student-centered learning, and to develop recommendations to improve system coherence.
- » Collaborate with willing districts and schools to explore possible approaches to piloting new, innovative systems of assessments, such as with a subset of districts under the [Innovative Accountability and Assessment Demonstration Authority](#) (ESSA Sec. 1204).
- » Prioritize educator assessment literacy in:
 - Pre-service training;
 - Educator certification and licensure requirements; and
 - Professional development.

Finally, here are some key questions for policymakers to explore on their journey to create systems of assessments that align to student-centered learning for success:

- » Does the assessment model support teaching and learning best practices by identifying where students are in their learning and adequate pacing and growth, providing data in real time to support learning and effective pedagogy to meet the needs of every student?
- » Does the current assessment system provide transparency on student growth and learning?
- » Is the assessment system aligned to support student-centered learning and equity strategies? How is the state rethinking the role of assessment for equity to move beyond a technical tool for measuring existing achievement gaps toward policies and practices actively working to disrupt patterns of inequity, bias and exclusion?

- » How might more holistic profiles of a graduate inform changes in the accountability system?
- » What are the needs for districts and schools moving to systems of assessments with performance assessments and practices culminating in portfolios or exhibitions?
- » Does the state need to amend its ESSA plan or apply for the Innovative Assessment Pilot?

Conclusion

In the United States, the term “assessments” is often conflated with end-of-year standardized state tests used for state and federal accountability, based on limited definitions of student success. This narrow focus on “assessments as accountability” can lead to teaching and learning that are geared toward limited outcomes. It is time to consider how we can decouple the concept of assessment in K-12 education from state accountability, while maintaining transparency, rigor and equity.

In the context of new graduation guidelines, schools and districts are beginning to lead and carry out a shared vision for performance-based learning with competency-based progressions, new curriculum designs, anytime and anywhere learning, new instructional and assessment practices, system supports and policies to enable schools to prepare students to demonstrate proficiency through performance assessments and portfolio defenses. State-level enabling policies, and local changes in school cultures and structures focused on new learning measurement and growth, are important first steps to transform learning for all students.

REDEFINING SUCCESS FOR MEANINGFUL OUTCOMES

A key consideration for next generation systems of assessments is how to support the development of the full range of knowledge and skills that students need to succeed in college, career and civic life. It will be important for state leaders to engage with stakeholders to create new definitions of student success that reflect more holistic outcomes for graduation. A new definition of success can provide a helpful foundation for developing *graduate profiles* that encompass necessary outcomes. Graduate profiles should include mastery of content knowledge as well as skills needed for success in the workplace and civic life, such as: communication, collaboration, problem solving and emotional intelligence. As states begin to address a more holistic vision of student success, assessment models need to align to provide valuable feedback throughout the process of teaching and learning that is meaningful for students, as well as provide transparency on attainment.

Definitions

Assessment Literacy is the collection of knowledge and skills associated with appropriate assessment design, implementation, interpretation, and, most importantly, use. A critical aspect of assessment literacy is that educators and leaders know to create and/or select a variety of assessments to serve different purposes such as improving learning and teaching, grading, program evaluation, and accountability. However, the most important component of assessment literacy is the degree to which educators and others are able to appropriately interpret the data coming from assessments and then take defensible instructional or other actions.

Calibration is a process of adjusting results based on a comparison with a known standard or “calibration weight” in order to allow defensible comparisons of student assessment results; for example, across different entities (e.g., schools, districts, states). In order to define a calibration weight, we need to have something in common, either the same students taking different assessments or different students taking the same assessments. The latter is generally more practical, so common performance tasks have been administered to students in different schools, and district performance assessments serve as a “calibration weight” to evaluate the extent to which teachers in different locales evaluate the quality of student work similarly.

Comparability is defined as the degree to which the results of assessments intended to measure the same learning targets produce the same or similar results. This involves multiple levels of documentation and evaluation starting from the consistency with which teachers in the same schools evaluate student work similarly and consistently, to the degree to which teachers in different schools and districts evaluate student performances consistently and similarly, and finally the degree to which the results from students taking one set of assessments can be compared to students taking a different set of assessments (such as comparing pilot and non-pilot districts). A determination of “comparable enough” for any type of score linking should be made based on clear documentation for how comparability is determined and that it is defensible.

Competency-Based Learning is a system of education in which:

- » Students advance upon demonstrated mastery;
- » Competencies include explicit, measurable, transferable learning objectives that empower students;
- » Assessment is meaningful and a positive learning experience for students;
- » Students receive timely, differentiated support based on their individual learning needs; and
- » Learning outcomes emphasize competencies that include application and creation of knowledge along with the development of important skills and dispositions.⁷

7 Sturgis, C., Patrick, S. & Pittenger, L. (July 2011). *It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit*. iNACOL and CCSSO. Retrieved from: <https://www.inacol.org/resource/its-not-a-matter-of-time-highlights-from-the-2011-competency-based-summit/>.

Moderation is a process used to evaluate and improve comparability. The process involves having teachers (or others) work to develop a common understanding of varying levels of quality of student work. Moderation processes are often used as part of calibration, but moderation is a way to evaluate comparability while calibration is the adjustment based on these findings.

Personalized Learning is tailoring learning for each student's strengths, needs and interests — including enabling student voice and choice in what, how, when and where they learn — to provide flexibility and supports to ensure mastery of the highest standards possible.⁸

Student-Centered Learning is defined by four key principles:

- » Learning is personalized.
- » Learning is competency-based.
- » Learning takes place anytime, anywhere.
- » Students have agency and ownership over their learning.⁹

Resources to Learn More

- » iNACOL — *Fit for Purpose: Taking the Long View on Systems Change and Policy to Support Competency Education*
- » CompetencyWorks — *Quality and Equity by Design: Charting the Course for the Next Phase of Competency-Based Education*
- » iNACOL — *Meeting The Every Student Succeeds Act's Promise: State Policy to Support Personalized Learning*
- » Center for Collaborative Education (CCE) — *Quality Performance Assessment*
- » Center on Innovation in Education (CIE) — *Assessment for Learning Project*
- » KnowledgeWorks — *Innovative Assessments: Helping States Build a Pathway to Innovative Assessment and Accountability Systems*
- » KnowledgeWorks, National Center for the Improvement of Educational Assessment and the Nellie Mae Education Foundation — *Addressing Accountability Issues Including Comparability in the Design and Implementation of an Innovative Assessment and Accountability System*
- » Learning Policy Institute (LPI) — *Developing and Measuring Higher Order Skills: Models for State Performance Assessment Systems*
- » OECD — *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*
- » Stanford Center for Assessment, Learning and Equity — *Scoring and Evaluation*
- » William and Flora Hewlett Foundation Assessment for Learning Working Group — *Principles for Assessment Design and Use to Support Student Autonomy*

8 Powell, A., Kennedy, K., & Patrick, S. (Oct. 2013). *Mean What You Say: Defining and Integrating Personalized, Blended and Competency Education*. iNACOL. Retrieved from: <https://www.inacol.org/resource/mean-what-you-say-defining-and-integrating-personalized-blended-and-competency-education/>.

9 Student-Centered Learning. Jobs for the Future. Retrieved from: <http://www.jff.org/initiatives/students-center>.

Contact Information

For more information or technical assistance, contact the authors of this issue brief:

- » Susan Patrick, CEO, iNACOL and Co-Founder, *CompetencyWorks*: spatrick@inacol.org
- » Maria Worthen, Vice President for Federal and State Policy, iNACOL: mworthen@inacol.org
- » Dale Frost, State Policy Director, iNACOL: dfrost@inacol.org



November 2017

The mission of the International Association for K-12 Online Learning (iNACOL) is to catalyze the transformation of K-12 education policy and practice to advance powerful, personalized, learner-centered experiences through competency-based, blended and online learning. iNACOL is a non-profit organization focusing on research, developing policy for student-centered education to ensure equity and access, developing quality standards for emerging learning models using competency-based, blended, and online education, and supporting the ongoing professional development of school and district leaders for new learning models. [Visit our website](#), [like us on Facebook](#), [connect with us on LinkedIn](#) and [follow us on Twitter](#).



Please refer to this paper as Patrick, S., Worthen, M. & Frost, D. Redesigning Systems of Assessments for Student-Centered Learning, iNACOL, 2017. Content in this report is licensed under a Creative Commons Attribution 4.0 International license.