10 PRINCIPLES FOR BUILDING A HIGH-QUALITY SYSTEM OF ASSESSMENTS
we underscore our belief that if states and districts implement the enclosed ten principles for building and evolving a high-quality system of assessments, they will be taking impactful and much needed steps to bridge from current over-burdensome and incomplete assessment practices and policies to a system that puts each and every student’s learning at the center. Together, these principles lay out a vision for systems focused on continuous improvement and the full array of knowledge, skills, and behaviors needed for each student to succeed in college, career, and life. While individually our organizations and efforts may emphasize different principles, collectively we share the goal of advancing equity and success in college, career, and civic readiness. As such, we stand ready to support states, districts, schools, and their communities in working towards building and evolving systems that embrace all ten principles to foster high quality systems of assessments for all students.

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IN JOINING TOGETHER,

10 PRINCIPLES
for Building a High-Quality System of Assessments

ONE
Capture the array of knowledge, skills, and behaviors needed for college and career readiness (i.e., deeper learning)

TWO
Balance assessment of learning with assessment for and as learning through a comprehensive set of tasks and measures

THREE
Advance equity and are inclusive of and accessible to all students

FOUR
Build educator and school capacity for designing and using assessments

FIVE
Align assessments to support learning and avoid duplication of testing

SIX
Convey clear, coherent, and continuous data on student learning

SEVEN
Include meaningful, ongoing input and collaboration from local communities and diverse stakeholders in the development and continuous improvement of the system

EIGHT
Encourage cycles of review, calibration, and continuous improvement of assessments individually and as a collective system

NINE
Employ high standards of coherence, validity, reliability, and fairness

TEN
Protect data privacy
INTRODUCTION

No single assessment or piece of student work can provide educators, students, parents, and the public with information about what students know and can do. High-quality, comprehensive, and timely information on student progress is critical to ensuring that schools can prepare each and every student for success in school, college, careers, and life. Educators, students, parents, and the public use information from a variety of assessments of student learning to inform and empower educational decisions in real time and across each year. Many states and districts are working toward developing and implementing these high-quality assessment systems that align assessments with each other and to college and career readiness and a comprehensive set of higher-order thinking skills. While significant strides have been made in advancing the quality of individual assessments, there still remains much work across our country to improve and better align systems of assessment. States and districts have a critical moment under ESSA and as we engage in a national dialogue on testing to accelerate and further evolve their work toward comprehensive systems of assessments.

In order to support states and districts in this, the undersigned organizations and individuals offer the following 10 principles for advancing a high-quality system of assessments. While the primary audience for these principles is state and district leaders, we hope to follow this document with materials and tools that apply to schools, educators, and communities. The principles draw collectively on expertise developed over decades of studying and designing assessments and assessment systems, and efforts to advance the full array of college- and career-ready knowledge, skills, and behaviors for all students. (See resources in appendix.) They also build on existing principles for high-quality assessments and systems of assessments developed by our organizations over the past several years. We believe that—as part of comprehensive efforts to provide high-quality, robust, coherent, and timely information to educators, students, parents and stakeholders—those individuals and organizations leading state and district assessment efforts should accelerate their work toward a high-quality system of assessments using these 10 principles to guide that process.
Assessments allow teachers, school leaders, and other staff to understand college- and career-ready knowledge and skill levels at the beginning of a unit or school year, along the way, and at the end of the unit or the year, in order to make informed decisions on instruction, learning strategies, programming, and supports in response to assessment data for each individual student. College- and career-ready-aligned assessments designed and administered by educators or with educator and student input can increase educator and student engagement, and can increase the relevance of assessments to classroom teaching, learning, and continuous improvement.

When assessments are timely and the purpose and results are clear and understandable, they can help students understand how their knowledge, skills, and behaviors are developing and empower them to own and advance their learning. Assessments, such as performance assessments and projects, can themselves be a learning opportunity, so they become assessments for and as learning, not just assessments of learning.

Clear, timely assessment data that are comparable and aligned to college and career readiness can also provide each family with the information they need to understand and support their students’ progress toward college and career readiness, to support and advocate for improvement strategies at the school and district levels, and to select a good-fit school and district for their students.

Assessment data that are valid, reliable, and comparable across schools, districts, and states, and that are coherent across assessments, can provide key information to policymakers on whether district-, state-, or nation-wide policies and programs are having an intended impact on student progress, and where attention and resources may be most needed. These types of data can be obtained from performance assessments and other complex tasks when these tasks and scoring processes focus on clearly specified knowledge and skills, where common templates help create comparable tasks that are carefully reviewed and field-tested, and where trained raters score within a process that includes consistency checks and auditing.

Public disaggregated assessment data that are comparable, valid, and reliable are important for a variety of communities, including postsecondary institutions, education leaders, researchers, advocates, and businesses, to help understand current education progress and inform programmatic and policy decisions—for example, to what extent students are in fact prepared for success in postsecondary education, whether inequities in student opportunities and outcomes are increasing or decreasing from year to year and place to place, and whether additional supports and strategies are needed in schools, districts, states, and/or nationally.
States and districts will need to build high-quality systems of assessments, as drivers in our education system, and given what research now tells us is needed for students to be college and career ready and how they best learn information. A system of assessments can help states and districts improve teaching and learning, and provide clear data on student progress through an array of assessments from formative to summative. A high-quality system of assessments can be envisioned in two levels: 1) a variety of types of tasks to demonstrate and apply learning and understanding, and 2) a variety of assessments from the state and local levels, with each assessment playing a different role in service to advancing college and career readiness.

All assessment systems should be designed to evaluate a comprehensive set of higher-order thinking skills and include one or more of the following:

1. Performance items or tasks as part of traditional “sit-down” tests;
2. Curriculum-embedded tasks carried out in the classroom during the school year;
3. Portfolios or collections of evidence that display a broad set of competencies;
4. A combination of traditional sit-down tests, curriculum-embedded tasks, and portfolios and exhibitions leading to a student defense.

What these types of assessments have in common are their capacity to require students to construct an answer, produce a product, or perform an activity rather than simply identify a predetermined answer. They can include, for example, science experiments that students design, perform, analyze, and write up; computer programs that students create and test; and written or oral presentations about research topics. Because these assessments typically require students to integrate knowledge, analysis, and action, they are better than multiple-choice tests at measuring higher-order thinking skills. They are also better predictors of academic and vocational success in tasks requiring complex thinking and performance.

An assessment system that includes these types of artifacts of student work throughout a year, and perhaps valid measures of the other skills and behaviors needed for college and career success, can provide a more robust and cohesive picture of student readiness than most current assessments can today; it also can inform both classroom teaching and learning, along with accountability and more systemic decisions. Such a system can help ensure that assessments are aligned, are not duplicative, and meet the purpose for which they were designed. Additionally, when states include a variety of assessments from the state and local levels, with each assessment playing a different role, this allows the focus to shift to a fuller array of assessment types for instructional and public reporting purposes, rather than an overemphasis on high-stakes assessments at every level. Systems should include statewide comparable, valid, reliable, and fair assessment data for the public, and they should include assessments that inform instruction and student learning.

Creating a high-quality system of assessments requires a mindset and process shift in order to move from developing or selecting individual assessments to designing a coherent set of assessments that advances the full array of college- and career-ready knowledge, skills, and behaviors. While the 10 principles in this document are intended to inform state or district decisions about individual assessments and the collective set a district or state might adopt to form a balanced system of assessments, they also speak specifically to some of the mindset and process shifts that are involved in building or enhancing a comprehensive system of assessments.

While some states and districts have begun building systems of assessments, the quality and coherence of these systems is critical to student success, and many systems are still nascent. These leaders can use the 10 principles to examine and refine their assessment systems. These principles are grounded in the idea that a high-quality system of assessments is based in a theory of action that aims to capture complex knowledge and skills needed for success in college and career. This theory of action will shape the design and use of the system, and thus is critical.

As states and districts design and implement their systems, we recognize that they will need to address inherent challenges in developing a high-quality system of assessments, including:

- Different individuals and political entities within a system are typically responsible for creating, administering, developing, and using different assessments—such as at the state, local, or school levels—and mechanisms for regular coordination and deliberation are needed;
- States and districts need to design a system that explicitly serves and addresses the different information needs of multiple users and stakeholders, which requires a systems-thinking approach and a theory of action around serving these needs;
- States and districts may need to innovate in order to create or find appropriate high-quality assessments that are accessible to all students and are aligned to true college and career readiness;
- It is necessary to build educator capacity to create, administer, and interpret high-quality assessments to inform instruction;
- There must be regular auditing of assessment systems at the district and state levels to determine alignment and discontinue assessments that are duplicative, lower quality, or unaligned; and
- States and districts will need to create a variety of means to communicate in a coordinated manner with stakeholders about assessment.

We encourage those individuals and organizations leading state and local systems of assessment to seek out opportunities to collectively work with peers, technical experts, other organizations, policymakers, and stakeholders (including educators, parents, and community members) to address these challenges of high-quality assessment systems. We offer 10 principles for building a high-quality system of assessments to provide guidance and a common language as communities engage in this process.
A high-quality system of assessments should be anchored in and assess students’ deeper-learning knowledge, skills, and behaviors necessary for college and career readiness. These include the ability to master core academic content, think critically and solve complex problems, work collaboratively, communicate effectively, learn how to learn, and develop academic mindsets. Without assessments of these applied knowledge, skills, and behaviors, there is a risk that they will not be valued or explicitly taught in the classroom; and that students, educators, and parents lack information on whether students are on track to succeed in college and careers.

Academic assessments should be aligned to a state’s rigorous standards for college and career readiness and should also go beyond mathematics and English / language arts to measure other important knowledge, skills, and behaviors needed for success in college, careers, and life. A high-quality system of assessments should prioritize performance assessments and projects to capture deeper-learning outcomes in a robust way.

A high-quality system of assessments places a focus on incorporating a wide variety of assessments from the state and local levels to inform educational decisions, ideally with each assessment contributing a specific purpose and use within the coherent whole. This comprehensive array of measures not only informs accountability, but importantly allows educators and students to inform their future instructional, learning, and studying strategies (assessment for learning) and to learn from the process of their assessment experiences (assessment as learning). For example, a capstone project or assessments like those in the International Baccalaureate program are examples of summative assessments that are also performance-based and designed to advance teaching and student learning while providing information to students, educators, and the public. The system should elevate assessments to inform teaching, student learning strategies, and continuous improvement in a timely manner, while ensuring the set of assessments also informs public accountability and systemic improvement.

At the school and district levels, a high-quality system of assessments should advance equity by providing data that highlights learning outcomes and by providing learning experiences and information that support high-quality, college- and career-ready teaching and learning for each and every student and group of students. The array of data produced should include some information on college and career readiness that is comparable, valid, and reliable statewide, so that stakeholders have a sense of student learning across schools and districts and across groups of students. Each assessment within a high-quality system—and the totality of the assessments within that system—should be aligned to college and career readiness, and inclusive of and accessible to all students, including students with disabilities and English language learners. Assessments should provide accommodations for students with disabilities and English learners, be designed in a way that incorporates the principles of Universal Design for Learning, and should maintain high standards for all students. Assessments should be fair, as outlined in The Standards for Educational and Psychological Testing developed jointly by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education. Alternate assessments aligned to alternate achievement standards should only be administered where necessary and appropriate. Additionally, knowledge, skills, and behaviors assessed should be those that can be taught and mastered in the classroom so that assessments do not presuppose students coming to school with prior knowledge from particular contexts.

A high-quality system of assessments should be accompanied by efforts to build the capacity and resources needed to support the shift to a new system of assessments, which includes the work that teachers do every day to assess student learning. The system should also ensure that teachers and leaders are prepared with the tools, knowledge, and skills to develop, administer, and score assessments (where appropriate) and use information from the various assessments in the system. Teachers must also have opportunities to develop the skills to design meaningful assessment experiences—both formative and summative—so that when used together, educators, parents, schools, and districts have the complete set of information they need to support student learning. Finally, as teachers build these skills, tools, and practices, they should have the support of their school and district to take the time and training needed to become skilled in new assessment practices, and the culture should encourage some risk-taking and innovation in this area. These professional learning opportunities and tools are not standalone trainings but are built into the school culture, structure, and routines, enabling and empowering teams of educators (including teachers, principals, and other educators) to develop and use quality assessments to support teaching and leading for deeper learning outcomes. At the same time, students should be intentionally prepared for shifts in assessment practices to ensure that they are engaged and increasingly comfortable with new assessment formats that elevate deeper learning.
A high-quality system of assessments should be as efficient as possible for teachers and students, while recognizing the critical role that a variety of assessments play in a quality education system. Assessment systems should be organized around a theory of action that efficiently captures and encourages the full array of college- and career-ready knowledge, skills, and behaviors. The goal should not be to minimize time on testing solely for the sake of time—which could lead to eliminating some of the most important indicators of student learning, such as performance assessments. Instead, those selecting, designing, and aligning assessments should ensure that the system measures the highest-value knowledge, skills, and behaviors, such as deeper learning skills, and should ensure coherence among those assessments, while eliminating any duplicative assessments. For example, curriculum-embedded performance assessments, such as extended tasks, can help align and maximize assessment experiences because students and educators experience them as instructional time, and yet they are designed and scored to provide reliable disaggregated information on student learning and system performance. Audits of the system of assessments at the state, local, and school levels can help provide an initial check of what is presently in place, and help eliminate assessments that are poorly aligned, low-quality, or duplicative, in order to minimize testing time and maximize the use of assessment for learning. Ongoing communication mechanisms are needed to ensure that schools, districts, and states are coordinating around what information is being collected from assessments in the system.

Starting from the principles outlined in Knowing What Students Know, a high-quality system of assessments should enable complete, coherent, continuous, and clear pictures of student and school progress to college and career readiness, in a way that data from individual assessments is often found lacking. To demonstrate this coherence, assessments should align with curriculum and instruction (horizontal coherence) so that assessment results are in alignment with expectations and what students are being taught. Assessments should also align with each other within the system, so that formative assessments are coherent with summative and any other assessments, and so that, up and down the levels of classroom, school, district, and state assessments, the results provide a coherent picture (vertical coherence). Additionally, the assessment system should provide a picture of student learning over time (continuity), incorporating student learning progressions into the design of assessments across grade levels. Data tools built to accompany the system of assessments should be tailored to the needs of different data users, such as students, parents, teachers, community leaders, and policymakers, for interpreting assessment data and identifying needed educational changes as a result of the data. These data should capture progress on mastering the variety of knowledge, skills, and behaviors needed for college and career readiness, and assessment data should be disaggregated by groups of students to the maximum extent possible for transparency. High-quality information from the system of assessments should be timely, accessible, and clear for educators, students, families, schools, districts, and other stakeholders to support high-quality instructional shifts and engagement in the improvement process. This means that the various parts of an assessment system must work together across system levels. State and local data systems and data dashboards should also be updated to capture and display a fuller array of college- and career-readiness indicators.

A high-quality system of assessments should be developed and continuously improved with robust stakeholder engagement and clear communication to ensure that key users like educators, students, parents, employers, postsecondary institutions, and community leaders understand, find value in, and support the system of assessments. Engagement should include gaining input on how information from assessments can be shared in the most accessible and helpful way, as well as discussion of how assessments are used in an ongoing manner as part of the teaching and learning process. For example, audits of assessment systems can help key users of assessment data and stakeholders understand the types of information contributed by each assessment, whether there is good alignment to college and career readiness and alignment among assessments, whether there is duplication between assessments, whether there is an imbalance between formative and summative assessment, and other characteristics across a system. This process can prepare communities and stakeholders to productively engage in public conversations about a system of assessments.
A high-quality system of assessments should be aligned with a state, district, or community’s clear theory of action around preparing students for college and career readiness. It should employ high standards of validity, reliability, and fairness for all students for each assessment contingent on the use of the specific assessment (e.g., formative vs. summative), aligned with the theory of action for that system. The system should also demonstrate coherence among the assessments. Quality and validity take different forms, depending on the purpose and use of the assessment. Each assessment should be used in a manner that is consistent with its intended purpose and with the Standards for Educational and Psychological Testing, including for the purposes of informing classroom teaching and learning. The standards make clear that test scores should not be used alone for consequential purposes, but should be combined with other data about a student’s performance when high-stakes decisions are being made. Additionally, because processes for certifying the validity and reliability of full systems of assessment are still being developed and are continuously evolving, states, districts, and schools should examine the coherence of the system across all assessments in addition to the validity, reliability, and fairness of individual assessments.

High-quality student data is critical to empowering students, families, educators, and communities to learn more about educational effectiveness. Data must be transparent and as meaningful as possible for stakeholders in order to spur advances in educational quality and college and career readiness. At the same time, this data must be protected and secure. Data and privacy policies and practices should meet the criteria outlined in the Student Data Principles developed by the Data Quality Campaign and 33 other organizations, and should continually evolve to meet current assessment and data technology capabilities.


4. Universal Design for Learning is a framework to improve teaching and learning based on research into how people learn. The framework includes a set of principles for curriculum development and the development of flexible learning environments that draw from research in cognitive neuroscience. http://www.udlcenter.org/aboutudl/ (link broken)


APPENDIX A: RESOURCES

Principle 1
Capture deeper learning for college and career readiness


Principle 2
Balance assessment of learning with assessment for learning


Principle 3
Advance equity and are inclusive of and accessible to all students


Principle 4
Build educator and school capacity for designing and using assessments


Martinez, Adriana, and Jennifer Davis Poon. 2015. Innovation in Action: State Pathways for Advancing
10 PRINCIPLES FOR BUILDING A HIGH-QUALITY SYSTEM OF ASSESSMENTS

**Principle 5**
Align assessments to support learning and avoid duplication of testing


**Principle 6**
Clearly and coherently convey data on student learning

Andrade, Huff, and Brooke 2012.


**Principle 7**
Include meaningful, ongoing input and collaboration from local communities and diverse stakeholders

Conley and Darling-Hammond 2013.

**Principle 8**
Encourage cycles of review, calibration, and continuous improvement of assessments


**Principle 9**
Employ high standards of coherence, quality, validity, reliability, and fairness

The Standards for Educational and Psychological Testing 2014.

**Principle 10**
Protect data privacy

Student Data Principles. N.d. "10 Foundational Principles for Using and Safeguarding Students’ Personal Information." [link]

Student Data Principles. N.d. "Four Policy Priorities to Make Data Work for Students." [link]

**Photographs courtesy of Allison Shelley/The Verbatim Agency for American Education: Images of Teachers and Students in Action**