



Assessing Deeper Learning

Topic Area Introduction

In a twenty-first-century world economy, it is no longer enough to know things. People must be able to do things with what they know. Students must possess skills that better prepare for them for the demands of college and the changing nature of the knowledge and abilities required for careers. At the heart of deeper learning is the delivery of rich core content aligned to rigorous standards. Instruction prepares students to know and master core academic content; think critically and solve complex problems; work collaboratively; communicate effectively; be self-directed and able to incorporate feedback; and develop academic mindsets necessary for learning.

One way educators ensure that students are prepared to apply their learning in high school and in the world beyond high school is by seeking feedback from students about what they currently know, want to know, and need to know in order to be successful. Carefully crafted and

meaningful assessments are one way to gather information about student learning.

In light of recent misperceptions and confusion about standardized assessments, it is even more important that assessment systems include college- and career-ready items, such as technical writing, real-world projects, and extended-performance tasks that are at the heart of deeper learning. Such assessments can promote an instructional climate that is engaging and collaborative, while placing student voice at the center. All students, including those who are traditionally underserved, stand to benefit from assessments that allow them to draw upon different ways to demonstrate learning, and to do so repeatedly over time.

All students need access to rigorous academic standards in order to be ready for postsecondary opportunities. If standards are rigorous and assessments are created to demonstrate deeper learning, the results show where

students have mastered challenging content, are able to apply that knowledge, and communicate their understanding effectively. These are essential competencies students need to succeed in an increasingly complex world. Such assessments not only measure whether students have developed those competencies, they also foster the enhancement and creation of deeper learning opportunities offered in schools.

When assessing for deeper learning outcomes, the goal is to determine if students have mastered the content being taught and the processes they used in learning it; it also is to see where students are in their learning progression toward deeper learning outcomes so they can keep improving their attainment of high-level skills. Students are successful when they extend their knowledge and skills beyond the classroom, connect them to other learning opportunities around them, and use their skills to learn new content in different contexts (e.g., workplace, military, college, etc.).

Strategies for Assessing Deeper Learning

Examples of strategies used to assess deeper learning include the following:

- **Competency-based assessments** are designed to measure specific skills that students have learned against a set of standards. Students demonstrate their knowledge and skills by engaging in multiple forms of assessment activities and experiences, often at a personalized pace. A student advances based on mastery of course content, not on the number of days spent in the classroom. These assessments can be given to measure progress during a course or unit, as well as at the end of a course or unit. Learn more about competency-based assessments at http://all4ed.org/?s=competency+based+&search_scope=site&submit
- **Performance assessments** can highlight student strengths in ways not always evident through traditional standardized tests. Performance assessments ask students to apply their knowledge and skills in creating some form of product, presentation, or demonstration. They provide students with opportunities to demonstrate their learning through various modalities and approaches that appeal to diverse styles and interests. Learn more about



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performance assessments at http://all4ed.org/?s=performance+assessment&search_scope=site&submit

- **Portfolio assessments** involve the systematic collection of students' work samples, records of observation, test results, and other artifacts collected over a period of time for the purpose of evaluating student growth and achievement. The Alliance's document, *The Deeper Learning Network* (http://deeperlearning4all.org/wp-content/uploads/2011/11/Deeper-Learning-Overview_Final.pdf) describes a national network of more than 500 schools, which calls for student portfolios—at both middle and high schools—to evaluate performance. Learn more about one type of portfolio in the textbox, High School Graduation Portfolios.
- **Project-based assessments** are cumulative in nature and offer students opportunities to apply a set of knowledge and skills to a topic, problem, or issue over time (e.g., creating new products, solving a community-based problem, or presenting data to highlight a need). Learn more about project-based assessments at <http://all4ed.org/deeper-learning-digest-using-project-based-learning-to-prepare-students-for-real-world/>

When used alongside other types of formative, interim, and summative assessments (e.g., multiple-choice tests and short-answer exams), these assessments measure deeper learning outcomes in a more comprehensive manner and provide a more accurate picture of where students are in their progress toward developing the knowledge and skills necessary for success in college, a career, and life. Assessments that measure deeper

learning also provide multiple opportunities for students to fine-tune their learning as they build and apply knowledge and skills systematically over time. They also help schools to identify and support a full continuum of student learning.

Aligning Assessments with Deeper Learning

When used systematically, assessment of deeper learning can serve as a significant part of a state's or district's

accountability system. State tests used for accountability purposes exert a strong influence on classroom practice, which, in turn, broadens opportunities for students to actively participate in directing their own learning path. Assessments that measure deeper learning make the expectations for learning concrete, and they signal to schools the type of learning conditions needed for optimal student attainment of skills that prepare them for college, a career, and life.

High School Graduation Portfolios

Graduation portfolios (or profiles) are one type of portfolio in which students select artifacts to support their reasoning that they have demonstrated competencies to be ready for college and a career. Students prepare their portfolios over time (e.g., ninth grade through twelfth grade) and present their final portfolios to reviewers who determine if they are ready to graduate from high school.

City Arts and Technology (CAT) is an example of how one high school uses graduation portfolios. CAT is part of a small network of schools called Envision Schools. Envision is a charter management company based in Oakland, California, that operates four college-preparatory public charter schools. At the heart of the school's approach to teaching and learning is the school's unique deeper learning assessment system.

CAT's student assessment requires students to demonstrate mastery not only in academic content knowledge but also in key deeper learning competencies. The senior year culminates with the presentation of a graduation portfolio that each student is expected to prepare and present successfully to a team of educators before they are allowed to graduate. The graduation portfolio contains artifacts that the student has produced during the course of four years. As part of the presentation, the student must explain why the artifacts demonstrate mastery of the content and prove his or her ability to succeed in college and a career.

Schools that use the graduation portfolio typically employ strategies such as engaging students in

project-based learning and using performance assessment. In many cases, the academic schedule is altered to provide longer blocks of time and might be modified to include cohort scheduling where groups of students work and travel together. If a high school wants to integrate project-based learning into the instructional program, the schedule must ensure that all students and teachers have access to adequate time for teamwork and collaboration.

Resources

What Does Deeper Learning Look Like? Graduation Portfolio (Video)

<http://deeperlearning4all.org/press-release/what-does-deeper-learning-look-like>

In this ten-minute video, students and teachers at CAT show how students develop their graduation portfolios.

Transforming Schools Using Project-Based Learning, Performance Assessment, and Common Core State Standards (Webinar) (March 10, 2015)

<http://all4ed.org/webinar-event/mar-10-2015/>

This webinar examines how the school network, Envision Schools, uses performance assessment and project-based learning. Panelists from Envision, including two graduates of the program, discuss the graduation portfolio and how school leaders redesigned the school system, curriculum, teacher professional learning, and assessment to support student success in college and career goals.

Some states and districts have undergone a systematic process of considering ways to make their assessments align with deeper learning. The Ohio Performance Assessment Pilot Project (OPAPP) is an example of how one state created a system of assessment that measures and promotes deeper learning competencies (for more information, see the Alliance webinar at <http://all4ed.org/webinar-event/jan-16-2014/>).

In some cases, states have formed steering committees to review deeper learning approaches and assessments. For example, Kentucky is implementing a performance-based assessment system on a larger scale through its Districts of Innovation initiative. The Rhode Island Department of Education launched the Scaling Up Proficiency Based Graduation in Rhode Island's Secondary Schools initiative and it recruits demonstration schools to pilot the initiative. The Maine Department of Education is implementing its Getting to Proficiency: Helping Maine Graduate Every Student Prepared initiative, which utilizes proficiency-based education.

The Programme for International Student Assessment (PISA) is an international assessment that measures how well fifteen-year-old students in more than seventy countries and economies perform at solving real-life problems in reading, math, and science. PISA provides an example of an assessment that includes skills associated with deeper learning outcomes. The textbox, Find Out More About PISA, identifies resources that may be helpful to learning more.

Opportunities in ESSA

The Every Student Succeeds Act (ESSA), signed into law in December 2015, includes several assessment provisions that support deeper learning. While the federal law does not explicitly make mention of deeper learning, the assessment flexibility and the examples of types of assessments in ESSA show a strong connection to deeper learning instruction and assessment for all student subgroups, some of whom have traditionally been underserved.

ESSA provides unprecedented flexibility for states to develop or use assessment systems that measure higher-order thinking skills and understanding and promote application of skills and content to demonstrate mastery.

Preparing students for college, a career, and life in general, requires educators to understand the skills needed for deeper learning (e.g., mastery of core content, critical thinking and problem solving, collaboration, communication, self-directed learning, and academic mindset), and to provide the conditions for students to learn and demonstrate them. State education agencies are tasked with supporting local education agencies through policy, budget, and sound practices and procedures for ensuring not only a learning environment that promotes deeper learning opportunities but also a system of assessment to demonstrate the learning. Learn more about ESSA opportunities in the ESSA and Deeper Learning toolkit.

Roles and Responsibilities of State and District Leaders

State and district leaders have a major role to play in supporting the development of assessment systems that measure college- and career-ready outcomes. Deciding on the policies, procedures, and practices that are most needed at any particular time, making good decisions, and acting purposefully to achieve the goals, are all actions that can create opportunities and success.

District leaders seeking to assess deeper learning should analyze the current status of the district's assessment system, determine gaps and areas of opportunity, develop or redesign policies to drive the change, allocate the resources where needed, and implement a system of support and compliance for the district. State leaders make changes in the assessment system, providing procedures and practices that strengthen local decisionmaking and capacity to ensure that districts are able to undertake assessment responsibilities with success.

District leaders seeking to improve the district's assessment system—including formative, interim, and summative assessments—and move it toward deeper learning competencies, should determine the best plan for providing equitable assessment opportunities and support for all students based on state policies, guidance, and resource opportunities. Assessing challenging state standards through deeper learning assessment means that classrooms are integrating authentic and purposeful assessment items daily, through end-of-course exams, interim assessments, and benchmark assessments. A school

district can promote deeper learning through its assessment system by

- knowing the level of rigor in an assessment system that measures deeper learning;
- providing training, assessment models, and other supports;
- building capacity to help schools do the work; and
- leading the districtwide effort toward assessments more aligned with college- and career-ready skills.

Ensuring quality is key as state and district leaders look to develop or enhance assessments to feature deeper learning outcomes. The textbox, Quality Principles in Assessment Policies, provides principles that the Alliance believes will ensure quality of assessments.

About the Assessing Deeper Learning Toolkits

There are two toolkits on the topic of assessing deeper learning. They provide an introduction to related issues

for state and district leaders as they plan for assessments that measure deeper learning.

- **Using Assessment Results.** State and district leaders have the responsibility for communicating the importance of assessment systems and assessment results to constituents. When moving from multiple-choice-type assessments to higher-level assessments that measure deeper learning, district leaders should involve building leaders, teachers, parents, community members, and students in the analyses of new assessment results and about changes the district will undertake to overcome underperformance. How results from assessments of deeper learning outcomes are accessed and used are major considerations for state and district leaders. For assessment results to be used effectively, they must provide useful information in a timely manner and in a format that is easily accessible to constituents.
- **The Every Student Succeeds Act and Assessing for Deeper Learning.** This toolkit provides an overview of the opportunities in ESSA that support assessing deeper learning outcomes. It offers tools and discussion questions that state and district leaders can use to familiarize themselves with the law.

Quality Principles in Assessment Policies

- **Measure what matters.** State end-of-year tests should measure a broad range of knowledge and skills that reflect standards aligned with what all students should know and be able to do by the time they graduate from high school in order to succeed in college, the workplace, and civic society. These tests should provide information on student attainment of deeper learning competencies, such as mastery of academic content and the ability to use knowledge to solve problems and think critically, communicate effectively, and collaborate with peers. When tests measure deeper knowledge and skills, they allow teachers to focus their instruction on them rather than on surface learning and test preparation.
- **Yield actionable information.** While teachers give tests to get a clear sense of how well students have mastered information and skills, state tests yield important information on school performance. They help district leaders evaluate program effectiveness and allocate resources to support teaching and learning. Most importantly, they help state officials identify schools that are low performing or that have significant achievement gaps, and thus target resources to schools that need them.
- **Ensure equity.** State assessment systems should ensure that all students in a state, regardless of where they live, are assessed according to the same standards. This allows parents and policymakers to compare results across school and district lines and to focus efforts and funding on schools and students falling behind. When multiple states use the same end-of-year test, added comparisons across states can occur in ways that further inform policy at the state and federal levels.

See: <http://all4ed.org/press/response-from-the-alliance-for-excellent-education-on-student-assessments-project-announced-today-by-council-of-chief-state-school-officers-and-council-of-the-great-city-schools/>

Find Out More About PISA

Resources

PISA Special Report with Bob Wise (Webinar) (April 1, 2014)

https://www.youtube.com/watch?v=WdE4vISrz2o&feature=youtu.be&utm_content=bufferdabdc&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

This webinar features Andreas Schleicher, deputy director for education and skills and special advisor on education policy to the OECD's secretary-general, on how American fifteen-year-olds performed on PISA with regard to problem solving and creative skills compared to their peers in top-performing nations. Schleicher discusses the report and its implications for U.S. education policy.

Reflections on PISA: Where We've Been and Where We're Heading (August 22, 2016)

<http://all4ed.org/reflections-on-pisa-where-weve-been-and-where-were-heading/>

This blog post explains what PISA is and compares the PISA results of the United States to other countries. The resource looks at how the 2012 findings from PISA highlight the need for improvement by the United States.

The Deepest Learners: What PISA Can Reveal About the Learning That Matters (December 2013)

<http://all4ed.org/wp-content/uploads/2013/12/DeepestLearners.pdf>

This report looks at the 2012 PISA results. It provides a summary of results across participating countries. By combining existing research with 2013 PISA data, the report offers four policy recommendations based on practices in high-performing countries.

Where Have All the Top Performers Gone? With Common Core and Aligned Assessments, United States Taking Action to Improve Future PISA Results

(December 16, 2013)

<http://all4ed.org/articles/where-have-all-the-top-performers-gone-with-common-core-and-aligned-assessments-united-states-taking-action-to-improve-future-pisa-results-wise-writes/>

This article discusses the declining proportion of U.S. students who score at PISA's top level and the implications to economic growth in the United States.

What Is PISA? Why Does It Matter? (June 5, 2014)

<http://all4ed.org/videos/what-is-pisa-why-does-it-matter>

This webinar summarizes what we have learned about high-performance school systems from the PISA assessment results.

PISA Day (December 6, 2016)

<http://www.pisaday.org/>

On December 6, 2016, the Alliance partnered with the OECD to share information on the latest PISA results and activities. This website offers updates and information on webinars, events, and reports.

Rio Olympic Video: The Next International Competition—One Involving U.S. Students (August 23, 2016)

<https://www.youtube.com/watch?v=mj8PVO1vnK8>

This news video focuses on the OECD's release of the 2015 PISA results. This year's results focus on science.

