## **EXECUTIVE SUMMARY**

Students at the Center

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# A NEW ERA FOR EDUCATIONAL ASSESSMENT

By David T. Conley



It is commonly argued that in order to succeed in today's postindustrial society, all young people need to complete a rigorous academic curriculum that focuses on advanced content knowledge, critical thinking, and problem solving. Nonetheless, most U.S. schools continue to measure students' progress by testing them on a narrow set of discrete reading and math skills. Indeed, these are just about the only indicators of student achievement that "count" in federal and state accountability systems.

In this paper, David T. Conley, well-known for his influential research on college readiness, draws on a wealth of recent research to argue that the time is ripe for a major shift in educational assessment, from an overreliance on standardized tests of math and reading, which tell us little about readiness for college and careers, to the use of multiple measures that together can help gauge progress in learning the broad range of content and skills that truly matter after high school.

Conley concludes with recommendations for state and federal policymakers to support and build on effective practices that have long been used in many schools and districts, but which have been crowded out, in recent years, by standardized testing.

Key findings include:

> College and career readiness
depends on more than just academic
knowledge and skills. Students also
need to develop an array of personal
and interpersonal competencies, as
well as practical knowledge about the
transition to life after high school.
Examples include time management,

- perseverance, goal setting, selfadvocacy, and even financial planning.
- Schools can assess—and teach—a much wider range of competencies. Research shows convincingly that student motivation, persistence, selfdiscipline, problem solving, college planning, and other critical elements of college and career readiness can be assessed and taught effectively.
- > Traditional state tests are convenient but not very informative. Standardized, multiple-choice reading and math tests are reliable, familiar, affordable, and easy to administer. Unfortunately, they do not provide much useful information about students' progress toward long-term goals.
- The new Common Core assessments are good but limited. Early reviews show that the Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC) assessments offer significant improvements over existing state tests, especially in asking students to analyze complex texts and respond to

challenging writing prompts. But they, too, fall short of gauging true readiness for college and careers, since they focus only on language arts and math, and they offer no information about other critical indicators.

- > States are taking a new look at performance assessments. Today, a number of states are returning to performance assessments (which gauge students' capacity to analyze high-level texts, write persuasive essays, give presentations, and otherwise demonstrate what they have learned) in order to get a better read on college and career readiness.
- College and career readiness are best measured through a combination of assessments. Multiplechoice achievement tests have their uses, but so too do diagnostic tests, performance tasks, informal assessments, and other means of checking on student progress. No single measure is sufficient both to judge schools' performance and guide instruction.

### WHY IT'S TIME FOR A CHANGE

The nation's educators have access to a vast array of assessment methods and resources—everything from informal questionnaires and after-class meetings to formal writing assignments and commercially published diagnostic tools—that they can use to gain insight into students' learning across multiple subjects. The problem is that few schools take full advantage of this wealth of resources, given pressures (whether real or perceived) to improve student performance on high-stakes, standardized tests that do not, in fact, provide much useful information about student progress.

The current state of educational testing in the U.S. has much to do with a longstanding preoccupation with *reliability* (the ability to measure the same thing consistently) over concern for *validity* (the ability to measure the right things). Over the past several decades, this has led to the creation of tests made up many discrete questions, each one pegged to a particular skill or bit of knowledge, pitched at a particular level of difficulty. This enables test designers to come up with more or less equivalent questions year after year, ensuring that tests are reliable over time. However, it does so at the expense of validity. Too little thought is given to whether those questions assess what is most important for students to learn.

Further, such tests encourage schools to divide complex subject matter into isolated fragments. In order to prepare students to do well on these tests, educators have treated literacy and numeracy as though they were nothing more than a collection of distinct pieces to be mastered, with little attention to students' ability to put the pieces together or apply them to other subject areas or real-world problems.

Recent advances in cognitive science, which have yielded important new insights into how humans organize and use information, strongly recommend a shift toward assessments that measure and encourage more complicated ways of thinking. One critical finding is that the brain makes sense of input by determining its relevance to information it already knows and by creating a "big picture" of its meaning. Assessments, therefore, should provide opportunities for students to demonstrate their conceptual understanding, to relate smaller ideas to bigger ones, and to show that they grasp the overall significance of what they have learned.

Equally powerful is the growing body of evidence showing that students' attitudes toward learning—and the effort they are willing to exert—is at least as important as their initial aptitude. This contradicts the claim by generations of test designers that they can measure students' "true" ability levels in order to steer them into academic and career pathways that match their talents and capabilities. Further, it suggests that tests can have a powerfully negative effect on students' achievement over time, since low scores can discourage them from making the sustained efforts that would allow them to succeed.

Recent research also has greatly clarified what it means to be college and career ready. In previous decades, many educators were content to help students become eligible for postsecondary education (e.g., by helping them pass their required courses and attain a high school diploma). But in today's economy, that's no longer enough. If one hopes to earn a decent living and pursue a satisfying career, one can't just get through high school and enroll at college. One must actually be prepared to meet the demands of college and to complete a degree program.

Conley's own research, derived from information about tens of thousands of college courses at a wide range of postsecondary institutions, highlights four main factors that contribute to readiness to succeed in college: key cognitive strategies, key content knowledge, key learning skills and techniques, and key transition knowledge and skills. In order

to make sure that students become truly ready for college, high schools should assess their progress, and support their development, in each of these areas. At present, though, few schools do so.

## **TOWARD A SYSTEM OF ASSESSMENTS**

Assessments can be described as falling along a continuum, ranging from those that measure isolated pieces of student content knowledge to those that seek to capture deeper understanding in more integrated and holistic ways (as shown in Figure 1).

In the early 1990s, a number of states attempted to move toward the right side of that continuum, by adopting and experimenting with the use of "performance assessments," requiring students to show that they truly grasp the significance and complexity of the material they study, and to show their ability to use what they've learned, such as by writing persuasive essays, completing challenging projects, and solving complex math problems. While some states struggled to implement such assessment systems, others made good headway, creating high-quality tests that prompted students to write extensively, or requiring students to collect "portfolios" of their best work, in order to demonstrate their progress in high school. With

the 2002 enactment of No Child Left Behind, however, those experiments in performance assessment mostly withered on the vine, as emphasis shifted toward the use of standardized tests.

Once again, though, the winds appear to have shifted, and a number of states are now taking a serious new look at adopting various forms of performance assessment. A dozen years into NCLB, not only are educators and the public clamoring for better assessments, but new research and technology promise to solve the managerial problems that states encountered in the 1990s, as they struggled to gather, store, and analyze the large amounts of information that performance assessments tend to generate.

Further, the implementation of the Common Core State Standards present an opportunity for states to move toward assessment models that not only meet their accountability needs, but also provide students, teachers, schools, and postsecondary institutions with valid information that empowers them to make wise educational decisions. Two consortia of states (PARCC and SBAC) are developing tests of the Common Core standards, and both have been touted for their potential to overcome many of the shortcomings of NCLB-inspired testing. They offer well-conceived test items, as well as carefully designed performance tasks,

Figure 1.

#### Continuum of Assessments THE BIG PICTURE PARTS AND PIECES Teacher-developed Standardized Multiple-choice Standardized Project-centered multiple-choice performance tasks performance tasks open-ended items tests of basic skills **FXAMPLE EXAMPLE FXAMPLE FXAMPLE FXAMPLE** Traditional on-demand Common Core tests Ohio Performance ThinkReady Envision Schools, NY tests (SBAC/PARCC) Assessment Pilot Assessment System Performance Stan-Project (SCALE) (EPIC) dards Consortium. International Baccalaureate Extended Essay

that require valuable writing skills and problem-solving capabilities. In short, these assessments should help signal to students that they are expected to engage deeply in learning and to devote serious time and effort to developing higher-order thinking skills.

The new Common Core assessments have shortcomings, as well. Not only do they continue to rely on items that focus on discrete bits and pieces of knowledge—rather than measuring students' understanding of larger concepts—but they focus only on math and language arts, and they address only some of the deeper learning skills that matter to students' long-term success.

But there is no reason why educators can't practice more than one kind of assessment at a time. Indeed, a number of states are now creating school assessment models that combine elements from multiple approaches, some of which are meant only to guide instruction and not to evaluate students or their teachers. In the short run, Conley argues, states should be able to make real progress toward what he calls a "system of assessments," providing comprehensive (and not necessarily high-stakes) information about student progress in all of the areas that contribute to college, career, and life success.

And in the long run, Conley adds, it may be possible for states to create an even more sophisticated assessment system, one that allows students to collect and share much more specific and nuanced information about what they know and are able to do. Ideally, the old-fashioned high school transcript would give way to something like an online personal profile, including familiar data such as high school courses and GPA, but also providing links to one's research papers and capstone projects, self-assessments, teachers' reports, examinations passed, and other evidence of one's knowledge, skill, and growth in key areas.

## **CHALLENGES**

Although some states, researchers, and testing organizations are seeking to develop new methods to assess deeper learning skills, none have yet cracked the code to produce an assessment that can be scored reliably at costs in line with current tests. Indeed, cost-efficient scoring may be the holy grail of performance assessment. Unless states find ways to evaluate complex student work at scale, or until they become willing to make the necessary investments, it's likely that they will continue to

emphasize the use of simpler, machine-scored tests, at least for accountability purposes. And as long as the primary purpose of state-sponsored assessments is to reach summary judgments about the performance of students and schools (and, increasingly, teachers), validity will continue to be trumped by reliability and efficiency.

Thankfully, though, one important lesson to emerge from No Child Left Behind—and its decade-long rush to judge the quality of individual schools—is that not all assessments should be used for accountability purposes. While it will always be important to know how well schools are teaching foundational skills in language arts and mathematics, many educators and policymakers have come to understand that the pursuit of deeper learning will require a much greater emphasis on formative assessments that let teachers know what kinds of support they will need to provide in order to help students become ready for college and careers.

## **RECOMMENDATIONS**

Many issues will need to be addressed in order to bring about the fundamental changes in assessment practice necessary to promote and value deeper learning. The question is: Can policymakers sustain their attention to this issue long enough to enact the policies necessary to bring about necessary changes?

The recommendations offered here are meant to serve as a starting point for a process that likely will unfold over many years, perhaps even decades. (For a complete list of recommendations, see the full paper, available at <a href="https://www.studentsatthecenter.org/topics/new-era-ed-assessment">www.studentsatthecenter.org/topics/new-era-ed-assessment</a>.)

- **1.** Define college and career readiness comprehensively.
- 2. Adapt federal education policy to allow greater flexibility in the types of data that can be used to demonstrate student learning and growth.
- **3.** Look for ways to improve the Common Core State Standards and related assessments so that they become better measures of deeper learning.
- **4.** Build a strong base of support for a comprehensive system of assessments, including new measures of deeper learning.
- Determine the professional learning, curriculum, and resource needs of educators to implement a new system of assessments.



Jobs for the Future works with our partners to design and drive the adoption of education and career pathways leading from college readiness to career advancement for those struggling to succeed in today's economy. We work to achieve the promise of education and economic mobility in America for everyone, ensuring that all low-income, underprepared young people and workers have the skills and credentials needed to succeed in our economy. Our innovative, scalable approaches and models catalyze change in education and workforce delivery systems.

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Students at the Center—a JFF initiative—synthesizes and adapts for practice current research on key components of student-centered approaches to learning that lead to deeper learning outcomes. Our goal is to strengthen the ability of practitioners and policymakers to engage each student in acquiring the skills, knowledge, and expertise needed for success in college, career, and civic life. This Jobs for the Future project is supported generously by funds from the Nellie Mae Education Foundation and The William and Flora Hewlett Foundation.

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