Teach all students what they need to know. Make sure they have learned it. Give them the best possible chance to succeed in life. It’s that simple. Learn more about the New England Secondary School Consortium.

What Is a Proficiency-Based Diploma?
For more than a century, American high school students have earned “credits” for passing courses. When they accumulate enough credits, they receive a diploma. The problem with this approach is that credits do not always equal competency. Every year, students across the country graduate knowing calculus, while others struggle with basic arithmetic. Some leave with strong writing and research skills, while others are only minimally literate. Clearly, a high school diploma means very different things for different students.

To make sure that every high school diploma certifies strong preparation for college, work, and life, the old system needs to change. In today’s world, a high school diploma has to mean something. That’s where the proficiency-based diploma comes in.

How It Works

✓ Learning standards enhance course credits. In the traditional high school system, one student may earn an A-plus while another earns a D-minus—and yet both students receive credit toward graduation. It’s possible for a student to earn only Ds and still graduate. But is this student prepared for adult life? How do we know what the student has learned or not learned? Unfortunately, many high schools simply cannot answer these basic questions—but a proficiency-based diploma will.

✓ Standards ensure consistent learning expectations. In many high schools, each teacher decides how grades will be awarded. The result? Some courses are very demanding, while others have few requirements. Grades may be based entirely on the quality of a student’s work, while others consider attendance, class participation, and homework completion. Without consistent learning expectations, schools cannot make sure that all students acquire the essential skills they need.

✓ Students demonstrate learning before moving on. In a proficiency-based system, every student must demonstrate what they have learned—by writing a paper, delivering a presentation, or completing a challenging project—before they pass a course, move on to the next grade, or graduate from high school. Learning standards establish a minimum level of proficiency, based on common high expectations, that all students must meet before moving on.

✓ The focus is on learning, not time. In most high schools, students are expected to attend class for a certain amount of time every day and graduate in four years. The time students spend in school is consistent, but what they learn is often extremely inconsistent. In a proficiency-based system, learning expectations remain constant while time is variable. One student may graduate in three years, while another graduates in five—but every student graduates prepared for future success.

✓ A proficiency-based diploma certifies readiness for life. Employers and college-admissions officers want to know exactly what graduates can do and how well they can do it. They want to know if students have strong writing, public-speaking, or computer-programming skills, for example. A proficiency-based diploma not only tells us what students have done, but what they can do.

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What is a Proficiency-Based Diploma?

Simply put, a proficiency-based diploma is a graduation decision based on students demonstrating what they have learned. In practice, it means that every student must show—by writing a paper, delivering a presentation, or completing a challenging project, for example—that they have acquired a minimum level of proficiency and competence when it comes to mastering the essential knowledge and skills they need to succeed in college, work, and life.

For more than a century, American high school students have earned “credits” for passing courses. When they accumulate enough credits, they receive a diploma. The problem with this approach is that credits do not always equal competency. Every year, students across the country graduate knowing calculus, while others struggle with basic arithmetic. Some leave with strong writing and research skills, while others are only minimally literate. Clearly, a high school diploma means very different things for different students.

Something to Think About

The modern high school credit system dates back to the late 1800s and early 1900s, when America was struggling to create a formal public education system and standardize teaching across the country. Modern course credits are based on the century-old “Carnegie Unit,” a time-based measurement promoted by industrialist Andrew Carnegie that reflected the era’s fascination with the efficiency of the factory assembly line and its ability to standardize the production of consumer goods. A “credit” typically equals 120 hours of contact time with a teacher (1 hour/day x 5 days/week x 24 weeks). Yet this 120-hour standard did not achieve widespread adoption by schools and colleges until the Carnegie Foundation, which was established in 1906, began to provide retirement pensions for university professors—with the stipulation that participating universities must adopt the Carnegie Unit system. As a result, by 1910 nearly all the colleges and secondary schools in the United States were using the 120-hour course credit to determine progress toward graduation. In other words, the creation of the credit system had very little to do with learning.

During a speech in 1993, Ernest L. Boyer, then president of the Carnegie Foundation for the Advancement of Teaching, made the following statement: “I am convinced the time has come to bury, once and for all, the old Carnegie Unit. Further, since the Foundation I now head created this academic measurement a century ago, I feel authorized this morning to officially declare the Carnegie Unit obsolete.” Boyer later wrote: “I urgently hope we can move beyond the old Carnegie Units. I find it disturbing that students can complete the required courses, receive a high school diploma, and still fail to gain a more coherent view of knowledge and a more integrated, more authentic view of life.”

Despite a century of elapsed history, and mounting evidence that the Carnegie Unit has long outlived its utility, traditional course credits are still being used by most of America’s high schools, colleges, and universities.
Letter Grades vs. Learning Standards

Given that traditional letter grades have been around for more than a century, it’s often difficult for people to accept that, in many cases, the grades awarded in our high schools don’t mean what we think they mean. Letter grades are so deeply recognizable and familiar that we just assume an A always stands for exemplary learning and accomplishment, while a D or an F represents poor performance or a failure to learn. It’s a comforting belief, but it’s also misleading and often inaccurate.

To better illustrate this point, let’s consider a hypothetical example: one Algebra teacher is extremely demanding and only awards a few As every semester, but his colleague down the hall, who teaches the same course to different students, tends to give most students As. Clearly, a good grade in the first math teacher’s class will likely mean something very different than the same grade awarded in the second teacher’s class. Or consider an A earned in an “honors math” class and an A earned in a “basic math” class. Are those two As comparable? Did both students acquire the same knowledge and skills? We can only assume they did not, and yet both students earned an A and course credit that moves them closer to graduation.

If grades and credits are not directly tied to consistent standards—which describe, in detail, what students need to know and be able to do—there is no way to make sure that students have learned what they need to learn. Expectations can change dramatically from one teacher or course to another, and high schools will struggle to maintain high standards and ensure quality from class to class or year to year.

It’s a surprising—if not alarming—fact, but the reality is that most high schools can’t tell you precisely what their graduates have learned or not learned. How is this possible, you might ask? It’s because they literally don’t know. And it’s not because their principals and teachers don’t work hard or care enough—they absolutely do—but it’s because the existing system is flawed, limited, and outdated. Traditional grading and reporting systems do not keep track of detailed information on student learning.

You may be able to interview every teacher a student has had over the four years she was in high school, and perhaps cobble together a general idea of what the student can do, but is that realistic? Is it useful to a college admissions office or a potential employer? When students receive traditional letter grades and course credits that are not explicitly tied to consistent learning standards, we simply have no way of knowing what those letters and numbers actually stand for. We can only trust that the high school has educated its students well, but we have no assurance that every student is prepared for collegiate learning or success in an entry-level job.

The good news is that every state requires—by law—that high schools enforce strong learning standards in every class. And the Common Core State Standards, which have been adopted by forty-two states and counting, have the potential to bring an even greater degree of consistency to teaching and learning across the country. With a single set of standards in place, teachers can not only focus more of their time on refining and improving their lessons, but they can share the best teaching resources and projects with colleagues across the country, since everyone will be following the same set of learning guidelines and expectations. That said, only the end goal of a high school education will be established—teachers will still be able to innovate and be creative in their individual classrooms. Now that we have a common set of standards in place, the next step is to make sure every diploma awarded in our high schools certifies strong preparation for college, work, and life.

In today’s world, a high school diploma has to mean something.
Comparing Learning Experiences: Then and Now

The table below presents some of the major differences between a traditional credit-based graduation system, which remains the dominant approach used by a majority of American high schools, and a proficiency-based or standards-based system. Since each system can be remarkably complex (particularly when you compare unique, homegrown systems from school to school), the comparisons below have simplified certain concepts to make them understandable to non-educators. In practice, both systems can be highly complex and educators spend decades acquiring the specialized expertise required to fully understand the technical distinctions between each one.

<table>
<thead>
<tr>
<th>Traditional Diploma</th>
<th>Proficiency-Based Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are promoted from one grade to the next based largely on credits, age, and the amount of time they have spent in school.</td>
<td>Students are promoted from one learning level to the next based entirely on their ability to demonstrate proficiency in meeting state-required learning standards.</td>
</tr>
<tr>
<td>Students learn at a pace that is largely determined in advance by the teacher and school schedule.</td>
<td>Students learn at their own pace and, when they fall behind, are given the extra time and support they need to achieve learning standards—learning determines the amount of time required; time does not determine how much a student can learn.</td>
</tr>
<tr>
<td>A one-size-fits-all approach to learning typically focuses on predetermined tasks (such as tests and quizzes) and compliance (turning in homework on time, for example).</td>
<td>Students have more control over their education and—since the focus is on acquiring specific concepts and skills, not executing specific tasks—they can learn in ways that work best for them. Students may execute different tasks or co-design projects based on their individual interests, but learning expectations always remain the same.</td>
</tr>
<tr>
<td>Major learning gaps persist or worsen over time because grades are not directly tied to a single set of consistent expectations.</td>
<td>Achievement gaps are minimized or eliminated across courses, grades, and—critically—minority and lower-income populations because all students are held to the same learning expectations.</td>
</tr>
<tr>
<td>Students who struggle academically often fall further and further behind with each passing year.</td>
<td>Learning needs are continually monitored throughout the school year and students receive the extra support they need to catch up with their peers and achieve the expected standards.</td>
</tr>
<tr>
<td>Schools rarely have precise information about what standards students have met or not met.</td>
<td>Schools have precise information on what standards every student has achieved, only partially achieved, or not achieved, and teacher feedback and report cards describe learning progress in detail.</td>
</tr>
<tr>
<td>Learning expectations can be wildly uneven across courses, which undermines the validity and accuracy of student grades.</td>
<td>Standards enforce a minimum level of required proficiency that empowers schools to maintain high learning expectations across all courses, subjects, and grades.</td>
</tr>
<tr>
<td>A diploma may or may not certify that students have met state-required standards or that they are prepared for success in college, work, and life.</td>
<td>Every diploma is based on demonstrated proficiency in meeting state-required standards, which are based on what students need to know and be able to do to succeed as college students, employees, and citizens.</td>
</tr>
</tbody>
</table>
How Traditional Grading Works

Despite the fact that averaging numerical grades can distort and misrepresent learning, particularly significant learning progress made over the course of a semester or year, most high schools continue to average assessment scores and award letter grades based on those averages. The chart below, which was adapted from Ken O’Connor’s excellent book, How to Grade for Learning (p. 155), shows four widely discrepant sets of assessment scores leading to the same end-of-semester grade:

Assessment Scores and Grades for Ten Assignments

<table>
<thead>
<tr>
<th>ASSIGNMENTS</th>
<th>STUDENT 1</th>
<th>STUDENT 2</th>
<th>STUDENT 3</th>
<th>STUDENT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment #1</td>
<td>0</td>
<td>63</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Assessment #2</td>
<td>0</td>
<td>63</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Assessment #3</td>
<td>0</td>
<td>63</td>
<td>10</td>
<td>62</td>
</tr>
<tr>
<td>Assessment #4</td>
<td>90</td>
<td>63</td>
<td>10</td>
<td>62</td>
</tr>
<tr>
<td>Assessment #5</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>63</td>
</tr>
<tr>
<td>Assessment #6</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>63</td>
</tr>
<tr>
<td>Assessment #7</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>Assessment #8</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>Assessment #9</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Assessment #10</td>
<td>90</td>
<td>63</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>630</td>
<td>630</td>
<td>630</td>
<td>630</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>SEMESTER GRADE</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
</tbody>
</table>

As you can see, the practice of number averaging does not provide an accurate representation of learning or learning progress. In the example above, Student 2 failed every assignment and test, while Student 4 made significant, undeniable learning progress over the course of the semester—yet both received the same failing grade. Student 1 earned strong scores on all her completed assignments, but her failure to turn in three assignments at the beginning of the semester led to zeros and, consequently, a failing grade for the semester. Is this system fair? Does it accurately capture what these students have learned or not learned?

In a proficiency-based system, students can overcome failure. Progress and hard work are recognized and rewarded. But in many traditional grading systems, a single failure can haunt a student for an entire year, or perhaps even their entire high school career. If you ask most adults, they will tell you that failures—and learning to overcome failures—can be among the most important lessons in life. And yet our high schools are intentionally designed to penalize failure, often turning it into a source of shame instead of an opportunity to learn and grow. Is this the lesson we want our students to learn?

Still Want to Know More?

If you are interested in the foundational research behind many of the ideas discussed in the Leadership in Action series, we recommend our Global Best Practices Research Summary, which is available on the New England Secondary School Consortium website or the engaging report Changing the Odds for Student Success: What Matters Most by McREL and the Stupski Foundation.

LEADERSHIP IN ACTION
is a new england secondary school consortium resource
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Different students. Different needs. Different learning opportunities. It’s that simple.
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What Are Personalized Learning Pathways?

For decades, high schools have offered students more or less the same traditional selection of choices: this class or that class, a higher-level course or a lower-level course, an academic program or a technical program. All of these learning choices combine to become a particular student’s pathway to a high school diploma.

Yet because high schools tend to offer only a narrow range of potential pathways, student learning has largely been limited to the handful of educational options provided by the school. But should learning be limited to a small selection of predetermined options or a ninety-minute class? Or should learning be customized to individual needs, interests, and aspirations of students?

Personalized learning pathways empower students to pursue their passions while encouraging them to take more responsibility for their education. Students work with their teachers to blend a variety of educational experiences that satisfy graduation requirements and meet state-required standards, such as career-and-technical, college-level, and online courses, in addition to internships, apprenticeships, and volunteer opportunities that are intentionally designed to integrate with a student’s academic learning.

How It Works

✓ The community becomes a classroom. For more than a century, the traditional classroom has been seen as the only place where students learn. But a room with a chalkboard is not always the best setting for learning about marine life, business, or history, for example, when real oceans, companies, museums, or archeological sites may be located right down the street. When schools embrace the idea that learning can happen beyond the school walls, the entire community becomes a classroom.

✓ Learning can take place anytime. Why should learning be limited to the handful of hours students spend in class every week? New online education programs, for example, allow students to catch up with their peers if they fall behind or tackle challenging lessons whenever their schedule allows, while learning internships can give students opportunities to earn academic credit on weekends or during school breaks. The school’s structure and schedule no longer need to be an obstacle to learning.

✓ Students can design their own education. Each student is unique. Some are more interested in science, others in math. Some excel at multiple-choice tests, while others are better at writing essays. Some love to read, while others prefer hands-on learning. Some “get it” right away, while others need more time or encouragement. Instead of forcing every student to learn in the same way, personalized pathways are customized to the needs, interests, and aspirations of individual students.

✓ Learning is integrated, not disconnected. In many schools, students have to choose between a traditional academic program, for example, and a technical program. But why not blend these and other options? Students could take an engineering or robotics course at their regional technical center, English and math at their high school, a science course at the local community college, and an online course that isn’t offered by their school. If all students are held to the same learning expectations, but are allowed to achieve those high standards in more creative and personally meaningful ways, every student can design a personalized pathway to graduation that prepares them for life.

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Personalized learning pathways empower students to pursue their passions while encouraging them to take more responsibility for their education. Students work with their teachers to blend a variety of educational experiences that satisfy graduation requirements and meet state-required standards, including career-and-technical, college-level, and online courses, in addition to internships, apprenticeships, and volunteer opportunities that are intentionally designed to integrate with a student’s academic learning.

The foundation of every personalized learning pathway is an education system that requires students to demonstrate proficiency (see the Leadership in Action briefing What Is a Proficiency-Based Diploma?). Without consistent learning standards in place, and consistent ways to determine if students have met those high expectations, schools cannot offer alternative pathways while making sure that students are learning what they need to learn. One reason why high schools have been slow to expand learning options is that the classroom allows for greater quality control—teachers know what has been taught and can utilize established methods for assessing it. But if schools embrace a true proficiency-based approach to learning, students can show that they have met learning standards in a variety of ways, including maintaining a portfolio of work or creating an “exhibition” of learning that demonstrates what knowledge and skills they have acquired. When options such as portfolios or student exhibitions are used, teachers use assessment instruments, often called “rubrics,” to consistently evaluate and score these academic products. So it doesn’t matter if one student writes a research paper and gives a slide show, while another student creates a video documentary and conducts a question-and-answer session following a public viewing—both students are evaluated against the same high standards for research, creativity, communication, and public speaking, for example.

Another common strategy that schools use when offering multiple learning pathways is an option called the “personalized learning plan.” In a nutshell, students create, in collaboration with their teachers and parents, a detailed plan that maps the learning pathway they intend to pursue. Every student is required to show how his or her plan meets expected learning standards before it is approved, and teachers and guidance counselors track progress and help students revise their plans as needed. One of the great benefits of a personalized learning plan is that it forces students to sit down, think deeply about their education, and make choices about what they want to learn and how they want to learn it. It also encourages students to plan ahead; in many cases, personalized learning plans take into consideration the student’s collegiate and career aspirations, thereby helping the student to select courses, internships, and other learning experiences that will prepare them for success in college, careers, and life.
Something to Think About

Did you know that the basic structure of the modern high school course of study was created by a group of ten people in 1892? The Committee of Ten, as it came to be known, was a group of ten college presidents, college professors, and secondary administrators who were tasked with developing recommendations for standardizing secondary education in the United States. Following a series of nine subject-area conferences—which included educators and experts in English, Latin, natural history, mathematics, and other disciplines—the Committee of Ten compiled the recommendations from these working groups and produced the Report of the Committee of Ten on Secondary School Studies: With the Reports of the Conferences Arranged By Committee. In their final report, the Committee recommended a four-year high school curriculum that included English, math, social studies, and civics every year (in addition to Latin!), and three years of science: biology, chemistry, and physics, in that order. Do these recommendations look familiar? They should, since American public high schools have largely followed this same general course of study for more than a century. Despite countless world-changing innovations in technology, communications, political systems, and human knowledge, many of which have radically changed the way we live, think, and work, the standard high school curriculum has remained largely intact, just like the basic configuration of the typical classroom—the iconic room filled with rows of desks arrayed before a chalkboard can be seen in today’s high schools and in archival photos of the one-room schoolhouses of the 19th century. Perhaps the time has come to reconsider and redesign how students learn and where they learn it? The table below is the actual Committee of Ten recommendations from a second printing of the report in 1894.

Table II. exhibits the total amount of instruction (estimated by the number of weekly periods assigned to each subject) to be given in a secondary school during each year of a four years' course, on the supposition that the recommendations of the Conferences are all carried out.

<table>
<thead>
<tr>
<th>1ST SECONDARY SCHOOL YEAR</th>
<th>2ND SECONDARY SCHOOL YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>Latin</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>English Literature, 3 p.</td>
<td>Greek</td>
</tr>
<tr>
<td>3 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td>Composition, 2 p.</td>
<td>English Literature, 3 p.</td>
</tr>
<tr>
<td>2 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>German or French</td>
<td>Composition, 3 p.</td>
</tr>
<tr>
<td>4 p.</td>
<td>2 p.</td>
</tr>
<tr>
<td>Algebra</td>
<td>Algebra*</td>
</tr>
<tr>
<td>5 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td>History</td>
<td>History</td>
</tr>
<tr>
<td>3 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>25 p.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>3RD SECONDARY SCHOOL YEAR</th>
<th>4TH SECONDARY SCHOOL YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>Latin</td>
</tr>
<tr>
<td>5 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>Greek</td>
<td>Greek</td>
</tr>
<tr>
<td>3 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td>English Literature, 3 p.</td>
<td>English Literature, 3 p.</td>
</tr>
<tr>
<td>2 p.</td>
<td>2 p.</td>
</tr>
<tr>
<td>Rhetoric</td>
<td>Composition, 3 p.</td>
</tr>
<tr>
<td>1 p.</td>
<td>5 p.</td>
</tr>
<tr>
<td>German</td>
<td>Grammar*</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>French</td>
<td>French</td>
</tr>
<tr>
<td>4 p.</td>
<td>4 p.</td>
</tr>
<tr>
<td>Algebra*</td>
<td>Algebra*</td>
</tr>
<tr>
<td>3 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td>Geometry</td>
<td>History</td>
</tr>
<tr>
<td>3 p.</td>
<td>3 p.</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>2 p.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>35 p.</td>
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</tr>
</tbody>
</table>

* Option of book-keeping and commercial arithmetic.
Comparing Learning Experiences: Then and Now

The table below presents some of the major differences between the traditional ways in which students are taught in a typical American high school and a personalized, student-centered system. Since each system can be remarkably complex (particularly when you compare unique, homegrown systems from school to school), the comparisons below have simplified certain concepts to make them more accessible and understandable. Several elements in the table were adapted from a similar chart featured in Innovate to Educate: System (Re)Design for Personalized Learning (p. 13), a report on the 2010 Innovate to Educate symposium.

<table>
<thead>
<tr>
<th>Traditional Education System</th>
<th>Personalized Learning System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mass production:</strong> schools are based on an industrial-age, assembly line model and all students move through the same series of learning experiences at the same pace.</td>
<td><strong>Mass customization:</strong> schools are organized to prepare students for a knowledge-based economy that demands ingenuity, creativity, and high levels of education and skill; students pursue a variety of customized learning experiences while working at their own pace.</td>
</tr>
<tr>
<td><strong>One-size-fits-all instruction:</strong> the school determines in advance what is taught, when it will be taught, and how it will be taught, and only minor modifications are made throughout the school year.</td>
<td><strong>Personalized instruction:</strong> students and teachers make decisions throughout the school year about what standards need to be met, how they will be met, and where they will be met in response to learning needs and academic progress as measured against the same high standards that are applied to every student.</td>
</tr>
<tr>
<td><strong>Time is constant and learning is variable:</strong> all students attend high school for roughly four years, but they graduate with different levels of knowledge and skill.</td>
<td><strong>Time is variable and learning is constant:</strong> all students are expected to meet the same challenging learning expectations, but how they achieve standards is variable; all students graduate having demonstrated attainment of the same demanding learning standards.</td>
</tr>
<tr>
<td><strong>Institution-centered education:</strong> schools are organized to facilitate non-learning needs, such as scheduling, staffing, and operating concerns.</td>
<td><strong>Student-centered learning:</strong> schools are organized to facilitate student learning first and foremost, and major decisions, programs, and expenditures prioritize student-learning needs above other concerns.</td>
</tr>
<tr>
<td><strong>Subjects taught in isolation:</strong> learning largely occurs in the classroom using printed texts, videos, and teacher-directed instruction and lectures.</td>
<td><strong>Concepts and skills learned in context:</strong> learning occurs in school-based and real-world contexts using a variety of resources, from interactive digital applications to first-hand observations of the world to long-term projects, and students design learning experiences in collaboration with teachers.</td>
</tr>
<tr>
<td><strong>Informal learning disconnected from formal learning:</strong> outside-of-school learning is not connected to the formal learning that occurs in classrooms.</td>
<td><strong>Informal learning integrated with formal learning:</strong> outside-of-school learning—whether it takes the form of an online course, internship, community-service project, college course, or apprenticeship—is connected to classroom lessons and established learning expectations.</td>
</tr>
<tr>
<td><strong>End-of-course assessment:</strong> learning is typically assessed at the end of lessons, projects, courses, or semesters, and information on student learning is rarely used to modify lessons or instruction.</td>
<td><strong>Ongoing assessment:</strong> learning is continually assessed throughout the school year, and student progress toward meeting required standards is monitored so that teachers can modify lessons and teaching strategies, and provide extra help to make sure every student succeeds.</td>
</tr>
</tbody>
</table>
State Programs Supporting Personalized Learning Pathways

Many states across the country—including the five Consortium states—have recently adopted legislation or created state programs to enable and support personalized learning options in public high schools. Below are brief descriptions of state legislation and programs from the Consortium partner states:

**Connecticut**

In Public Act No. 10-111, An Act Concerning Education Reform in Connecticut, recent legislative revisions allow for more flexibility at the local level when awarding academic credits that satisfy high school graduation requirements. In addition to explicitly adding online courses and credit-recovery options as alternatives to more traditional learning pathways, the revised act allows for “board examinations,” a system by which students may opt to complete a series of examinations to satisfy graduation requirements and demonstrate mastery of state-required learning standards. Other provisions, such as the expansion of Advance Placement accessibility across the state, also seek to multiply available pathways options for students.

**Maine**

In 2009, the Maine legislature approved changes to the state’s high school graduation requirements, which opened the door to the creation of more personalized learning pathways in the state’s public schools. Selected text from the legislation:

> Elementary and secondary schools shall provide students with opportunities for learning in multiple pathways that may include the following: career and technical education, alternative education programs, apprenticeships, career academies, advanced placements, online courses, adult education, dual enrollment, or gifted and talented programs (Title 20-A, Section 4703: Instruction for Individual Students). Also: Students may demonstrate achievement of the standards through multiple pathways as set out under section 4703 and multiple opportunities. Achievement may be demonstrated by evidence documented by course and learning experiences using multiple measures, such as, but not limited to, examinations, quizzes, portfolios, performances, exhibitions and projects (Title 20-A, Section 4703: High School Diploma Standards).

**New Hampshire**

The New Hampshire Department of Education supports and encourages local school districts to adopt policies that encourage “extended learning,” which can be defined as the acquisition of knowledge and skills through instruction or study outside of the traditional classroom, including apprenticeships, community service, independent study, online courses, internships, performing groups, and private instruction. Several districts and schools across the state are already creating extended learning opportunities and personalized pathways, while the state’s online charter school, the Virtual Learning Academy Charter School, has developed the Personalized Pathways (P2) project, which helps high school create online and experiential learning opportunities for students. For more information, visit the Department of Education’s Extended Learning Opportunities website.

**Rhode Island**

Rhode Island’s Office of Multiple Pathways is a consolidated department of education office that is developing a statewide system of personalized pathways and aligned learning opportunities designed to support all students as they work to achieve their educational and career goals. Rhode Island’s pathways include high school course work, virtual learning opportunities, career-and-technical programs, apprenticeships and internships, adult learning programs, charter schools, flexible scheduling, and other innovative strategies. The state’s secondary regulations—specifically its proficiency-based diploma system (Title L, Chapter 6, High School Design)—addresses the personalization of learning. Every student enrolled in Rhode Island public schools has the right to an individualized and optimized opportunity to achieve proficiency for graduation in a manner that is conducive to the future success of that student in the world of work or further education beyond the secondary level.
Vermont

Act 176 of 2006 created Vermont’s High School Completion Program (Sec. 42, 16 V.S.A. § 1049a), which requires the creation of personalized learning pathways to satisfy local and state graduation requirements. Any individual between the ages of 16 and 22, whether enrolled or unenrolled in school, can request an individual graduation plan for obtaining a high school diploma. Eligibility is determined in part based on competency levels in reading, writing, and math. Individual graduation education plans take into consideration unfulfilled graduation requirements, student skill levels, and long-term student goals. Educational services may be provided by a high school or approved provider (or a combination of the two), and school districts will award a high school diploma to students who successfully complete their approved graduation education plan. The High School Completion Program is administered through Learning Works, Vermont’s adult education and literacy system.

Additional Reading

Much of the available reading on personalized learning pathways takes the form of detailed professional reports, which are not always the most accessible texts for non-educators. Still, the reports listed below have a lot of information about personalized, proficiency-based learning pathways that will be interest to diverse audiences.

When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning (November 2010), by Chris Sturgis and Susan Patrick.

Clearing the Path: Creating Innovation Space for Serving Over-Age, Under-Credited Students in Competency-Based Pathways (December 2010), by Chris Sturgis, Bob Rath, Ephraim Weisstein, and Susan Patrick.

Multiple Pathways to Student Success: Envisioning the New California High School (2010), a report prepared for the governor and state legislature of California to support multiple pathways legislation.

Innovate to Educate: System [Re]Design for Personalized Learning (2010), a report on the 2010 Innovate to Educate symposium.


Still Want to Know More?

If you are interested in the foundational research behind many of the ideas discussed in the Leadership in Action series, we recommend our Global Best Practices Research Summary, which is available on the New England Secondary School Consortium website or the engaging report Changing the Odds for Student Success: What Matters Most by McREL and the Stupski Foundation.
What Are Learning Standards?

There has been a lot of national discussion recently about “learning standards.” Yet there has been significantly less discussion about what learning standards specifically are, what they are not, how they actually work in schools, or why they even matter.

In brief, learning standards are concise, clearly articulated descriptions of what students should know and be able to do at a specific stage of their educational journey. For example, here is a fifth-grade reading standard taken from the Common Core State Standards, which have been adopted by 45 states: Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. And here is a high school writing standard: Produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.

To varying degrees, educators have been using standards to guide lesson designs and instruction for years. But simply ensuring standards are taught by teachers is only the first step—the next step is to make sure they are being learned by students.

What You Need to Know

✓ Standards are not a prepackaged curriculum or course of study—although this is a common misperception. Standards are a fundamental set of academic, intellectual, and skill expectations for students, but it’s school boards, administrators, and teachers who decide how they get taught. Learning standards such as “determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes” do not tell teachers what texts to assign, how to teach students about metaphors or similes, or even how to determine they have achieved the expected standard. Learning goals are consistent and common, but teaching remains a local decision.

✓ Standards draw a line in the sand. In effect, standards stipulate that students must learn a particular selection of critical skills and concepts before they can be considered prepared for the next step in their education. Teachers can teach students more, even far more, but not less. In other words, standards establish a common baseline for what it means to be an educated person in the United States, regardless of where students live, what school they attend, or how advantaged or disadvantaged their families are. And the stronger the standards the more students will learn.

✓ Without some form of standards, we end up with no standards—or, at best, widely uneven and unevenly applied standards. Without a common set of learning standards, we have no consistent or comparable way of determining what is being taught in our schools or gauging how well our teachers and students are doing. Before the Common Core State Standards were created, all 50 states had different learning standards. And before states developed standards, there was almost no consistency in learning expectations throughout the country.

✓ Standards facilitate greater collaboration and innovation. With common standards, teachers can share the lessons they develop, the instructional strategies they use, and the learning materials they create. In fact, there are now several national online exchanges have been launched that allow teachers share their best lessons, ideas, and teaching materials. Common standards also make it easier and less expensive to develop textbooks, learning software, and other educational resources. Standards do not stifle teacher creativity—in fact, they can give rise to even greater innovation through the power of collaboration, sharing, and collective thinking.

Want to Learn More?

Visit the Leadership in Action website and download I Want to Know More, a selection of information and resources for those interested in reading more about how today’s students learn.
I Want to Know More

A Leadership in Action Supplement

*I Want to Know More* is a selection of information and resources for education leaders, parents, and community members who want to learn more about the teaching and learning strategies taking place in today’s most innovative high schools.

**What Are Learning Standards?**

Since the second half of the nineteenth century, educators, elected officials, policy makers, and others have been trying to improve the quality of public schools by encouraging or requiring greater consistency in education. In the 1890s, for instance, the so-called Committee of Ten put forward a standard high school course of study that remains largely intact in most schools to this day. In the early twentieth century, the Carnegie unit was introduced, creating a standard definition for the modern course credit, which also remains widely used in schools today. Later on, the “comprehensive high school” became the dominant model for secondary education, and the vast majority of public high schools built in the latter half of the twentieth century followed the same general educational, organizational, and operational template. And the advent of the “standardized test” introduced a new large-scale method to test students consistently across schools, districts, and state lines.

While learning standards are also an attempt to promote greater consistency in education, there is one critically important difference between today’s learning standards and many previous attempts to “standardize” education: learning standards define the goals of education—what students need to learn—not the processes of education—how schools are structured and how they operate.

Thousands of high-performing schools across the country and the world have taught us an important lesson: no two good schools need to look the same. The most effective schools come in a wide variety of sizes, configurations, and philosophies. But successful college students, skilled and reliable workers, and educated citizens share a specific selection of common attributes: they can read, write, and communicate well; they can think critically and solve problems; they understand math and can use it in their lives; they can comprehend and evaluate basic scientific concepts; they know about economics, American history, and how our government works; and they can use a computer and acquire new technical skills.

When it comes to the fundamental knowledge, skills, and dispositions that our students need to succeed in life, there is no mystery: some things are just so important that they are simply not optional. That’s where learning standards come in. By establishing clear educational goals—while not telling schools how to meet those goals—standards establish consistency in learning while still allowing for a tremendous amount of flexibility, creativity, and innovation in teaching.

**Something to Think About**

In his book *Results Now: How We Can Achieve Unprecedented Improvements in Teaching and Learning*, the educator and author Mike Schmoker describes—in alarming detail—the unruly randomness of learning expectations in most schools. Citing decades of studies based on thousands of observations of classroom teaching across the country, Schmoker paints a disturbing picture.
“What do we see in the vast majority of classrooms? We find startling amounts of busy work, with no connection to important standards or a common curriculum...most of what we see is at odds with good practice.”

“In most cases, neither teachers nor students can articulate what they are supposed to be learning that day. They can describe only the activity or assignment, which is often chosen because it keeps kids occupied. Irrelevant worksheets and activities often predominate. Catching students learning the most vital reading and writing standards is heartbreakingly rare. And in defiance of what every educator has learned, there is a glaring absence of the most basic elements of an effective lesson.”

“Robert Marzano points to numerous studies demonstrating that two teachers working with the same socioeconomic population can achieve starkly different results on the same test: in one class, 27 percent of students will pass; in another, 72 percent—a life-changing difference.”

“David Berliner’s team of researchers found that within the same school and grade level, chaos reigns. One teacher taught 28 times as much science as a teacher down the hall, and no one knew this until the researchers went in.”

“Similarly, a research group investigated which standards were actually taught in hundreds of schools and compared the list against state-assessed standards. There was almost no correspondence. They found redundancy and inconsistency at every grade level; what did get taught was taught down. By 5th grade, most students were being given 2nd and 3rd grade material.”

While the findings are alarming, the good news is that Schmoker firmly believes these shortcomings can be quickly and effectively addressed in every state and school. He points out that researchers have already identified one of the biggest problems—a lack of consistent learning standards. “Happily,” he writes, “...historic advances can result from acting on what we already know.” He also points out that the critical components of effective schools are “not a mystery.” He describes one teacher who dramatically improved the reading and writing skills of his students by doing “nothing unusual—nothing any teacher couldn’t do or hasn’t already learned.” The problem, according to Schmoker, is simply that teachers are not using a consistent set of strong learning standards, they are not applying those expectations consistently in their day-to-day teaching, and they are not intentionally and purposefully using the fundamental instructional techniques they have learned or could easily acquire. In Schmoker’s view, radically improving student learning won’t require schools to do anything radical.

How Learning Standards Work

While standards systems vary in both content and design, most systems—including the Common Core State Standards and the majority of state-required standards throughout the United States—share a lot of common attributes. Perhaps the biggest potential source of confusion, though, is the terminology used to describe certain features of a standards system. While there is a great deal of consistency in design and intention, there is a staggering degree of inconsistency in how various systems are described and presented. While standards systems are generally highly sophisticated, they are nevertheless easy to understand once you get past the technical descriptions and jargon. This section provides a simplified explanation of learning standards and how they work. (Or click HERE to download a single-page, ledger-sized graphic of this section.)
Learning Standards
Learning standards are concise, clearly articulated descriptions of what students should know and be able to do at a specific stage of their educational journey. Standards describe learning objectives—that is, where students should be at the end of a course, grade level, or grade span, not the methods that should be used to get them there. The following “College and Career Readiness Anchor Standards,” taken from the Common Core State Standards, provide useful examples of standards that have been specifically developed to promote stronger preparation for college, work, and adult life:

**Reading:** Interpret words and phrases as they are used in a text, including determining the technical, connotative, and figurative meanings, and analyze how word choices shape meaning or tone.

**Writing:** Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

**Language:** Demonstrate command of the conventions of standard English grammar and usage when writing and speaking.

Content Areas
Learning standards are organized into broad content areas such as English, mathematics, science, social studies, health and wellness, fine and performing arts, etc. Most standards systems use the same general subject-area categories that schools have been using for decades, so they will be quite familiar and understandable to most people. While content-areas standards are specific to an academic discipline, they also reflect the kinds of knowledge, skills, and dispositions that—if taught and cultivated over the course of a student’s educational journey—will culminate in high school graduates who embody important long-term learning goals.

Learning Goals
Most standards systems include some form of long-term learning goals—the big important things that students should know and be able to do when they have completed school. These learning goals are the kinds of things that teachers should be thinking about and cultivating in stages throughout a student’s educational journey. The basic idea is that at the culmination of pre-adult education—graduation from high school—students will be equipped with the most important knowledge, skills, and personal attributes they will need to succeed in life. Examples: Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others. Use technology and digital media strategically and capably. Understand other perspectives and cultures.

Learning Progressions
In each content area, standards are also organized by grade level or grade span—they establish learning expectations for students at a specific age, grade, or stage of learning. There are two important things to know about learning progressions: (1) the standards described at each level specifically address the learning needs and abilities of students at a particular stage of their intellectual, emotional, social, and physical development, and (2) they represent clearly articulated learning sequences—that is, each grade-level standard is purposefully designed to prepare students to meet standards at the next grade level. Learning progressions provide a road map for schools—the basic idea is to make sure that students are not only learning age-appropriate material, but that teachers don’t inadvertently repeat material that was taught in earlier grades or teach material that’s either too advanced or not advanced enough. The following examples of elementary reading standards show how learning progressions work, and how each standard builds on the previous one, and how they increase in complexity as students advance from one level to the next:

**Kindergarten:** Identify the front cover, back cover, and title page of a book.

**First Grade:** Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate facts or information in a text.

**Second Grade:** Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

**Third Grade:** Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.

**Fourth Grade:** Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
## How Standards Work in Schools

In schools, educators develop systems to connect what is taught in the classroom to the standards that students need to learn, as well as systems that help them track learning progress over time.

### Performance Benchmarks

Typically, teachers will develop a system of intermediate or transitional benchmarks—sometimes called indicators—that help them gauge learning growth over time. Since students are expected to meet a selection of standards by the end of a course or grade level, teachers use performance benchmarks as a way to evaluate student learning as they progressively work toward meeting a standard. During a yearlong course, for example, teachers will use scored assignments, tests, and other forms of assessing student learning growth and achievement to determine if students are meeting expected benchmarks and moving closer to demonstrating mastery of a learning standard (a process generally called “formative assessment” in education parlance). At the end of a course or at established intervals during a course, teachers may require students to demonstrate in some way—by completing a project, for example—that they have indeed achieved the expectations and acquired the skills described in learning standards.

### Performance Descriptors

School leaders and teachers may also create a set of descriptions to guide the evaluation of student performance. While learning standards describe what students need to know and be able to do, performance descriptors define the level or quality of student work, learning acquisition, and skill mastery that needs to be attained to be considered proficient. For example, a common performance-descriptor system might have four tiers: not proficient, partially proficient, proficient, and advanced. Schools will develop short descriptions of what students can or can’t do at all four levels. Teachers then use these descriptions—typically called “rubrics”—to guide their evaluations of student work and determine which level of proficiency students have achieved. When they have reached proficient or advanced—performance that is typically comparable to B- or A-level work—students are deemed to have “met the standard.” Performance standards help schools ensure that teachers are evaluating academic performance in a consistent, comparable, and reliable way—i.e., that the same learning expectations and performance standards are being applied to all students.

### Learning Objectives

In some schools, teachers also develop what are sometimes called “learning objectives” or “daily learning targets”—basically, brief descriptions of what the teachers expect students to learn on a given day or during a particular unit of study. Learning objectives are often written on a blackboard or posted on a classroom wall, and they are intended to make lesson expectations completely explicit and clear to students. In effect, they say: By the end of today’s lesson, I expect you to have learned X, Y, and Z. While similar to learning standards, they are much more specific and narrowly focused—for example, if a writing standard requires students to produce clear and coherent writing appropriate to the task, purpose, and audience, a learning objective may stipulate that students will learn how to properly use commas, colons, semicolons, and periods, and be able to explain the differences among them. In effect, learning objectives are the component parts of a standard—that is, they are a big-picture standard that has been broken down into a series of progressive steps and digestible chunks. Learning objectives are also a way to make the educational process more transparent and understandable. When students know precisely what they are expected to learn on a given day, it becomes easier for them to focus on those objectives and feel a sense of accomplishment when they have achieved them.
What Are the Common Core State Standards?

When first announced in 2009, the Common Core State Standards were met with—and still continue to be haunted by—a fair amount of apprehension and misunderstanding. Some worried that the federal government was trying to nationalize what is taught in public schools (not true), while others worried that teachers would be forced to teach in rigidly prescriptive ways (also not true). Still others worried that the content and quality of the standards wouldn’t be strong (a valid concern before the actual standards were created), while some felt that a new set of learning standards simply wouldn’t change schools for the better (to be determined). There are many arguments that could be put forward in response to these concerns, but perhaps the best and surest way to cut through all the talk about the Common Core State Standards is to actually sit down and read them. After a few minutes, it’s likely that any apprehension will evaporate. The standards are easy to understand and they reflect straightforward, commonsense learning expectations that few educators, parents, college professors, employers, or elected officials would not see as vitally important for students to learn. The Common Core State Standards are simply an attempt to keep schools focused on teaching—and making sure students learn—the most important knowledge, skills, and dispositions they will need to succeed in life. Even if they are not perfect, they are a solid place to start if the goal is to prepare our young people to succeed in college, thrive in their careers, and lead lives of active, engaged citizenship.

Here are a few important things to know about the Common Core State Standards:

1. The standards were developed by a committee of educators, content experts, researchers, and representatives of national education organizations, and the final versions reflect feedback received from the general public, teachers, parents, business leaders, states, and content-area experts. In other words, they represent a pretty strong consensus about what matters most—at least as much of a consensus as anyone is likely to achieve on an issue as emotionally charged as learning expectations for students.

2. The standards were also informed by (a) the learning standards used in countries throughout the world with relatively high-performing education systems, (b) the standards already in place throughout the United States, and (c) college and workforce expectations—that is, what students will need to know and be able to do to succeed in higher education and modern careers. The research and evidence supporting the standards is, again, as solid as anyone is likely to see in a set of learning standards.

3. While states were incentivized to adopt the Common Core if they chose to apply for Race to the Top funding through the American Recovery and Reinvestment Act of 2009 (to be eligible for a grant, states had to agree to adopt “internationally benchmarked standards”), all the states that adopted the standards did so voluntarily. The process for adoption requires state board or legislative approval, so the standards were adopted in the same manner that state regulations are created and laws are passed.

The following section—What Is Not Covered in the Standards—is taken from the introduction to the Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects, and it provides a solid overview of what the standards are and what they are not. For more detailed summary information on what’s in the Common Core State Standards, we also recommend reading Key Points in English Language Arts and Key Points in Mathematics.

What Is Not Covered by the Standards

The Standards should be recognized for what they are not as well as what they are. The most important intentional design limitations are as follows:

1. The Standards define what all students are expected to know and be able to do, not how teachers should teach. For instance, the use of play with young children is not specified by the
Standards, but it is welcome as a valuable activity in its own right and as a way to help students meet the expectations in this document. Furthermore, while the Standards make references to some particular forms of content, including mythology, foundational U.S. documents, and Shakespeare, they do not—indeed, cannot—enumerate all or even most of the content that students should learn. The Standards must therefore be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document.

2. While the Standards focus on what is most essential, they do not describe all that can or should be taught. A great deal is left to the discretion of teachers and curriculum developers. The aim of the Standards is to articulate the fundamentals, not to set out an exhaustive list or a set of restrictions that limits what can be taught beyond what is specified herein.

3. The Standards do not define the nature of advanced work for students who meet the Standards prior to the end of high school. For those students, advanced work in such areas as literature, composition, language, and journalism should be available. This work should provide the next logical step up from the college and career readiness baseline established here.

4. The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom. However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students.

5. It is also beyond the scope of the Standards to define the full range of supports appropriate for English language learners and for students with special needs. At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post–high school lives. Each grade will include students who are still acquiring English. For those students, it is possible to meet the standards in reading, writing, speaking, and listening without displaying native-like control of conventions and vocabulary.

The Standards should also be read as allowing for the widest possible range of students to participate fully from the outset and as permitting appropriate accommodations to ensure maximum participation of students with special education needs. For example, for students with disabilities reading should allow for the use of Braille, screen-reader technology, or other assistive devices, while writing should include the use of a scribe, computer, or speech-to-text technology. In a similar vein, speaking and listening should be interpreted broadly to include sign language.

6. While the ELA and content area literacy components described herein are critical to college and career readiness, they do not define the whole of such readiness. Students require a wide-ranging, rigorous academic preparation and, particularly in the early grades, attention to such matters as social, emotional, and physical development and approaches to learning. Similarly, the Standards define literacy expectations in history/social studies, science, and technical subjects, but literacy standards in other areas, such as mathematics and health education, modeled on those in this document are strongly encouraged to facilitate a comprehensive, schoolwide literacy program.

Still Want to Know More?
If you are interested in the foundational research behind many of the ideas discussed in the Leadership in Action series, we recommend our Global Best Practices Research Summary, which is available on the New England Secondary School Consortium website.
How Does Proficiency-Based Learning Work?

How is it possible that a student can graduate from high school and yet be unable to read or write well, do basic algebra and geometry, identify major countries on a map, understand how our political system works, or explain the scientific method? While it may be difficult to believe, countless students graduate from high schools every year without the fundamental knowledge and skills they will need to earn a college degree, succeed in the modern workplace, or contribute meaningfully to their communities. How is this possible?

The answer is that many schools do not use teaching, testing, grading, and reporting methods that require students to prove they have actually acquired the most critically important knowledge and skills. In fact, high schools give out thousands of grades, report cards, and diplomas every year, but many of them would not be able to tell you what their students have specifically learned or not learned.

Luckily, there’s an alternative option for today’s schools: proficiency-based learning.

How It Works

✓ All students must demonstrate what they have learned before moving on. Before students can pass a course, move on to the next grade level, or graduate, they must demonstrate that they have learned what they were expected to learn. If students fail to meet learning expectations, they are given more support and instruction from teachers, more time to learn and practice, and more opportunities to demonstrate progress. Until they acquire the most essential skills and grasp the most important concepts, students do not move on to the next level.

✓ Teachers are very clear about what students need to learn. In every class, students know precisely what teachers expect—no guesswork required. The learning expectations for the course are clearly described and communicated, and students will know precisely where they stand throughout the course—for example, a student will know that she has achieved three of six expected learning standards, but that she needs to work harder to achieve the last three before she can pass the course. Importantly, her parents will also know precisely what she’s learned and what she may be struggling to learn.

✓ Common, consistent methods are used to evaluate student learning. In many schools, different learning expectations are applied from course to course, and different methods and criteria are used to evaluate what students have learned. Consequently, one Algebra I course in a school may be very challenging, for example, while another Algebra I course may be comparatively easy—and a B earned in the “difficult” course might actually represent stronger learning achievement than an A in the “easy” course. Proficiency-based learning applies the same standards to all students, while teachers use consistent methods of evaluating and reporting on student learning—everyone knows precisely what grades stands for and what each student has learned. As a result, grades mean the same thing from course to course, and schools can certify that students are prepared when they move on.

✓ While learning expectations are fixed, teachers and students have more flexibility. Even though learning expectations and evaluation methods are common and consistent, teachers can be given more flexibility in how they teach and students can be given more choice in how they learn. For example, teachers don’t need to use the same textbooks, assignments, and tests—as long as their students learn what they need to learn, teachers can develop new and more creative ways to teach. Similarly, students can be given an assignment—research an American president, for example—but they can choose which president to study or how they want to show what they’ve learned (one student may write an essay, while others may create a short documentary using archival photos or an audio podcast in the style of a presidential address). As long as students meet the course expectations—demonstrate a strong understanding of the election system, the executive branch of the federal government, and the role of the American president—teachers can teach and students can learn in the ways that work best for them.

newenglandssc.org/leadership_in_action
I Want to Know More
A Leadership in Action Supplement

I Want to Know More is a selection of information and resources for education leaders, parents, and community members who want to learn more about the teaching and learning strategies taking place in today’s most innovative high schools.

“The big idea behind a proficiency-based system is that failure is no longer an option and that students must demonstrate proficiency before advancing on to the next lesson—A, B, or try again.”

―Susan Patrick, THE Journal interview
“Beyond Seat Time: Advancing Proficiency-Based Learning”

How Does Proficiency-Based Learning Work?

First, let’s address a potential point of confusion: proficiency-based learning may be called many different things from state to state or school to school, including standards-based education, competency-based learning, performance-based learning, mastery learning, outcome-based education, and other things. Educators tend to use a lot of different terms to describe similar educational strategies, which frequently—though inadvertently—generates unnecessary confusion.

In addition, proficiency-based systems may appear difficult to understand because they are designed differently, schools may report grades differently, and educators may be doing it more successfully or less successfully. Like any specialized professional system, proficiency-based learning may be sophisticated in practice, but the concept is actually extremely practical and easy to understand: make sure all students are taught the most important knowledge and skills they will need to succeed in adult life, and then make sure they have actually learned it before awarding them a diploma. It’s really that simple.

Schools that use proficiency-based learning systems often look like any typical American high school. The difference is that teachers, students, and parents know precisely what students have learned or not learned, and students don’t move on to the next lesson, course, or grade level without demonstrating that they have learned the knowledge and skills they are expected to learn. Again, it’s that simple.

Something to Think About

The great irony is that proficiency-based learning—while an unfamiliar concept to many people—is relatively simple and easy to understand; it’s the existing systems of traditional report cards and letter grades that are nearly impossible to comprehend. Why? Because only the teacher awarding a letter grade knows precisely what it stands for and why it was awarded. In most cases, the student, the student’s parents, the other teachers in the school, the principal, and the college-admissions officers who read a student’s transcript simply don’t know what the letter grades actually mean. They have to take it on faith that the grades stand for something—and, at best, all that can be said is that most grades represent strong, average, or weak performance in one teacher’s view.
While it's not easy to build a really good proficiency-based learning system, it's certainly easy to understand why it matters: making sure that students are prepared for college, work, and adult life is extremely important. That's why we have public schools, why our country invests so much in education, and why polls consistently show that the quality of our education system is a top concern among Americans. At the same time, we also have countless high school graduates who are barely literate, companies bemoaning the scarcity of skilled workers, and college professors complaining about the absence of basic academic skills among undergraduates.

So it's deeply ironic that the more familiar mechanisms of schooling—A through F letter grades, having "tough" and "easy" teachers, handing out high school diplomas to students who earned all As and to students who earned only Cs and Ds—are actually exponentially more confusing and difficult to understand. Why? Because we really don't know what students were taught, what they learned, or what they are now capable of doing as a result.

Grades are only meaningful when you know what they stand for.

In our traditional system, schools are often black boxes—students go in and come out and no one will ever be entirely sure what they learned or failed to learn. But in a proficiency-based system, every school becomes a glass box. Parents can look in and see what teachers are teaching, what progress their child is making, and what the child is excelling at or may be struggling with. And at the end of each student's journey, schools can tell us what was learned by every student. So which system makes more sense in today's world?

A Definition of Proficiency-Based Learning

In 2011, the International Association for K–12 Online Learning brought together educational experts from around the country to develop a definition of proficiency-based education (for a more detailed explanation of the definition, see It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit and When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning). Here’s the definition with some additional explanation:

1. Students advance upon mastery. Students demonstrate learning acquisition before moving on. Failure is no longer an option for students—they either earn the equivalent of an A or B or they have to try again until they achieve the required learning standards. (For more information on standards, see What Are Learning Standards?)

2. Competencies include explicit, measurable, transferable learning objectives that empower students. In this case, competencies are merely a synonym for learning standards. Explicit, in this context, means clearly described standards that are clearly communicated to students and parents. Measureable means that learning progress can be evaluated and measured in practical, repeatable, and reliable ways. And transferable means that students can apply what they learn in a course to other subject areas, and that what they learn prepares them for the next grade level and for success in college and modern careers.

3. Assessment is meaningful and a positive learning experience for students. In other words, assessments—all the things teachers do to evaluate and measure what students have learned—need to be designed to facilitate and improve learning, and they have to measure the most important knowledge, skills, and work habits that students will need to succeed in college, future careers, and every area of adult life. In addition, assessments should not be designed to punish poor performance or discourage learning; they should reward learning progress and encourage students to work harder.
4. **Students receive timely, differentiated support based on their individual learning needs.**

   When students are struggling to learn certain concepts and skills, the school provides a variety of personalized assistance or modified teaching strategies to help them achieve learning expectations—that’s the basic idea behind a wide variety of instructional and academic-support strategies broadly known as **differentiation** or **differentiated instruction**. For example, students may be given more time to learn and practice skills, they may be moved on to more challenging material when they are ready, they may be given more choices in their education to help engage and motivate them, or they may be provided with a variety of support services intended to address specific learning gaps.

5. **Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.** Learning standards need to go beyond facts and figures—they must also intentionally address the critical skills, understandings, personal dispositions, and habits of work that are required for success in college, careers, and adult life. For example, critical thinking, problem solving, analytical reading and writing, oral communication, research skills, technological literacy, personal responsibility, self-reliance, work ethic, or planning and organizational skills would be the kinds of things that schools should evaluate in a proficiency-based system.

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**Proficiency-Based Learning in New England**

In November 2012, CompetencyWorks and the Nellie Mae Education Foundation released *Making Mastery Work: A Close-Up View of Competency Education*, a report that investigated ten New England schools using proficiency-based-learning systems: Big Picture Rochester (Rochester, VT), Big Picture Depot Campus (Storrs-Mansfield, CT), Boston Day and Evening Academy (Boston, MA), Casco Bay High School (Portland, ME), Brockton Champion High School (Brockton, MA), Charlestown High School (Charlestown, MA), E-Cubed Academy (Providence, RI), Gray-New Gloucester High School (Gray-New Gloucester, ME), Medical Professions and Teacher Preparations Academy (Hartford, CT), and Vergennes Union High School (Vergennes, VT). The report offers one of the first comprehensive, on-the-ground profiles of New England schools that are successfully using proficiency-based approaches to teaching and learning.

The Maine Department of Education’s Center for Best Practices recently released a series of three case studies of Maine school districts that have moved to proficiency-based systems of teaching, learning, and reporting. Detailed information about the three districts—Kennebec Intra-District Schools, Messalonskee and China Schools, and Massabesic Schools—can be found on the Center’s website, including videos, interviews, and materials that describe how proficiency-based learning works in the districts.

In May 2012, the Maine Legislature passed *An Act To Prepare Maine People for the Future Economy*, which was signed into law on May 21, 2012. The legislation made Maine one of the first states in the country to require public high schools to award diplomas based on demonstrated proficiency—not passing grades and course credits. While Maine is one of the first states to require a proficiency-based diploma, at least 36 states have legislation that supports proficiency-based learning, according to the National Governors Association Center for Best Practices and the Education Commission of the States. In addition, states such as New Hampshire and Oregon are actively supporting proficiency-based schools and building statewide support systems, and thousands of districts and schools across the country have used proficiency-based strategies successfully for decades.

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