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 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.

Traditional Diploma	Proficiency-Based Diploma
Students are promoted from one grade to the next based largely on credits, age, and the amount of time they have spent in school.	Students are promoted from one learning level to the next based entirely on their ability to demonstrate proficiency in meeting state-required learning standards.
Students learn at a pace that is largely determined in advance by the teacher and school schedule.	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.
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).	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.
Major learning gaps persist or worsen over time because grades are not directly tied to a single set of consistent expectations.	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.
Students who struggle academically often fall further and further behind with each passing year.	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.
Schools rarely have precise information about what standards students have met or not met.	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.
Learning expectations can be wildly uneven across courses, which undermines the validity and accuracy of student grades.	Standards enforce a minimum level of required proficiency that empowers schools to maintain high learning expectations across all courses, subjects, and grades.
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.	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.

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

ASSIGNMENTS	STUDENT 1	STUDENT2	STUDENT 3	STUDENT 4
Assessment #1	0	63	0	0
Assessment #2	0	63	10	0
Assessment #3	0	63	10	62
Assessment #4	90	63	10	62
Assessment #5	90	63	100	63
Assessment #6	90	63	100	63
Assessment #7	90	63	100	90
Assessment #8	90	63	100	90
Assessment #9	90	63	100	100
Assessment #10	90	63	100	100
TOTAL	630	630	630	630
AVERAGE	63	63	63	63
SEMESTER GRADE	F	F	F	F

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.