

Research Brief

Proficiency-Based Education

Question: What is proficiency-based education? What are the benefits and challenges of launching proficiency-based education? How does it work?

In a Nutshell

Proficiency-Based Education is a contemporary instructional model that grew out of the competency-based education movement of the 1980's and 90's. It is based on the premise that TIME is flexible and that students work at their own pace until they have mastered necessary content and skills. As students demonstrate proficiency, then move on to more challenging content or higher levels of skill performance. This model is seen as replacing the old Carnegie Unit plan where students earned high school credits for "seat time," the amount of time they spent studying specific content, rather than their mastery of it. Widely supported by business and legislative interests, this model is seen as more efficient, more equitable, and, ultimately, more economical since it eliminates the need for expensive remedial programs in higher education settings.

Summary of Findings:

Proficiency-Based Education is a contemporary instructional model that grew out of the competency-based education movement of the 1980's and 90's. Among high school reform advocates, it is a logical replacement for the old Carnegie Unit plan for awarding high school credit that has dominated high school curriculum and organization since 1908. Under the Carnegie Unit plan, high school credit is awarded for "seat time," the amount of time that a student receives instruction in a subject. In this system, 120 hours of instruction is normally required to earn one high school credit. Thus, for most of us, high school schedules consisted of daily 45 to 60 minute "periods" of instruction in each subject that totaled 120 hours over the course of one academic year. It's a model that still dominates high school organization, although recent reform initiatives have called for the elimination of the Carnegie Unit as the yardstick for determining how much schooling a student receives.

As originally conceived, students in competency-based programs were to demonstrate and apply what they had learned through real-world projects and applications. According to the National High School Center (2009-2010), a competency based program has several advantages worth pursuing:

- *Flexibility*: Students can shorten the time needed to meet graduation requirements (e.g., by placing out of a course or mastering the required skills in a reduced timeframe) and take advantage of extra-curricular learning opportunities such as interdisciplinary and independent studies, dual enrollment programs, and internships;
- *Multiple assessments*: Educators can look to multiple measures of what students actually know and can do rather than rely solely on large-scale, standardized, norm-referenced achievement tests that are predominantly multiple-choice; and

- *Responsiveness to individual student needs:* Competency-based instruction allows English language learners and special education students alternative mechanisms to demonstrate their proficiency in a content area.” (National High School Center, 2009-2010).

More recent manifestations of proficiency-based education, conceived in the climate of mandated high stakes testing, have come to minimize the use of complex, authentic and alternative assessments, which are often difficult to implement on a large scale, in favor of performance on the mandated tests.

The principle remains essentially the same, however. Students receive instruction until they master the content – or demonstrate proficiency – in some commonly accepted way. Once they have demonstrated proficiency, they move on to the next level of difficulty or to different content altogether.

Benefits of Proficiency-Based Practice

Proficiency-Based Instruction and Assessment, a publication of the Oregon Education Round Table, presents one of the most complete and optimistic views of the future of PBE in Oregon schools and across the nation. Quoting from the report, the benefits of PBE are:

“Everyone is expected to succeed. Proficiency-based practice holds the promise of leveling the playing field, expecting all students to be successful and giving them an equal chance to achieve at high levels. Because learning is interdisciplinary and often made more relevant by hands-on projects, students achieve a better grasp of material both conceptually and contextually.

Learning itself is a valued skill. Because students know explicitly the skills and knowledge they must achieve, and because they take more responsibility for their progress, they learn better *how to learn*.

Everyone does succeed. Because students don’t move on until they have demonstrated proficiency, they are fully ready for the next level of study. There should be no graduates of a proficiency-based program who need remedial instruction in postsecondary education. This alone would prevent high schools from sending unprepared graduates to the next level, give more first-year postsecondary students a strong start, and relieve taxpayers from the burden of paying for the same instruction twice through remedial programs.

Standards-based education is good for mobile students. Standards-based curriculum...has the potential to maintain equity and access in curriculum and instruction for that 10 to 20 percent of students who frequently move among school districts. These students, often from low-income families, frequently have the most trouble adapting to different curriculum and instruction in new settings.

Proficiency-based practice supports Oregon’s [and the nation’s] direction in personalized learning. Proficiency-based practice, which lends itself to both in-classroom and out-of-classroom learning, is especially well suited to support personalized learning[:] 1) students have an education plan and profile to guide them toward their goals, 2) students participate in real world experiences in the workplace, community or school that connect to classroom learning, 3)

students have an “extended application” experience that calls for them to apply thinking and problem solving skills to tasks related to their interests, and 4) students develop a good work ethic and a range of essential and career-related process skills such as reading, writing, applying mathematics, making oral presentations, and working well in team settings.”

Characteristics of Proficiency Based Instruction

According to the Oregon Education Roundtable’s white papers, *Taking Promising Practices to Scale* (2008) and *Proficiency Based Instruction and Assessment* (2009), the characteristics of proficiency-based education can be summarized as follows:

“It’s student centered. First, it consciously puts the student at the center of the learning process. In doing so, it rejects the notion that some students will succeed and some will not. Proficiency-based instruction expects that *all* students will achieve at a proficient level and move on successfully. In effect, it does away with the bell curve.

It’s standards-based and focused on student proficiencies. Standards form the foundation for proficiencies that students can demonstrate and that teachers can assess in a variety of formats such as tests, written papers, oral presentations, individual or group projects, collections of evidence, and performance in a work or service setting. Assessments may be diagnostic (to form a baseline of where students are before they start a learning program), formative (an ongoing part of the learning process), or summative (to determine what students have gained as a result of the learning program).

Ongoing assessment is integral to instruction and learning. [F]ormative assessment drives instruction and therefore has primacy over summative assessment. The teacher employs assessment as part of a daily and weekly learning feedback loop to determine what a student still needs to learn to achieve proficiency. In addition to quizzes and tests, teachers use informal questioning, observation, discussion, and student presentation to gain a better understanding of each student’s progress in gaining pertinent skills and knowledge. The student works at gaps in proficiency until they are closed.

Students know where they’re going, propel themselves, and take various paths. The teacher makes it clear from the beginning precisely what proficiencies they are expected to master and what they will have to be able to do to demonstrate that they have attained those proficiencies. Then the teacher (or the teaching team) gives them ample support and allows them to move at their own pace in a variety of learning activities. Proficiency practitioners report that this changes the student mindset and vocabulary. Students speak of proficiencies they have acquired or have yet to acquire, rather than points or grades.

Instruction and learning break out of the [frontal model]. Proficiency-based practice typically goes beyond direct or frontal instruction – knowledge dispensed by the teacher in a lecture format, often with teacher moderated discussion and drills, seatwork, and reliance on textbooks. Proficiency-based instruction balances a variety of approaches that also include hands-on learning activities (in and beyond the classroom), student-led discovery, group projects, and use of online resources. Textbooks are used sparingly if at all. Learning activities often integrate knowledge from different subjects. The nature of the learning activities typically call on students to improve their skills in planning and organizing, working in teams, taking personal responsibility for

assignments, finding and analyzing data, documenting their work in writing, and presenting findings.

Teaching flourishes. In this setting the teacher deploys a broader array of learning tools, engages students in a wider range of formats, and gauges student progress daily and weekly on well defined competencies. Practitioners... report that the degree to which learning is individualized in proficiency practice makes the student-teacher relationship far more rewarding.

Professional learning communities enhance student success and enrich teaching practice. The creation and maintenance of a professional learning community...is also a frequent corollary to proficiency practice, creating a continuous means of improving curriculum, instruction, and assessment, developing teacher capabilities, and improving staff cohesion. A professional learning community typically consists of teachers, and often counselors and administrators, who are organized in smaller teams around grade levels, academic subjects, or other common factors to improve student learning and teaching practice. A good basic site on the concept is <http://www.allthingsplc.info>.”

Where Are They Doing It?

Successful Proficiency-Based Education programs can be found in Alaska, Rhode Island, Oklahoma, Wisconsin, Florida, Colorado, and dozens of other communities across the U.S. Recently, there has been a great deal of CBE development in Oregon, and several communities have launched ambitious initiatives: Redmond High School, Scappoose HS, Beaverton School District, Southridge HS, Westview HS, Health and Science HS, Terra Nova HS, Greater Albany Public Schools, and Gresham-Barlow School District.

Details on these programs can be found in the Oregon Education Roundtable’s publication, *Proficiency-Based Instruction and Assessment*.

Challenges for Proficiency Based Education

In *Success is the Only Option*, the International Society for K-12 Online Learning (INACOL) outlines some of the challenges facing schools attempting to implement proficiency-based programs:

Challenge 1: Protecting High Levels of Proficiency

The biggest risks are that proficiency on learning objectives is set too low or that resources are not directed toward students that are struggling to demonstrate proficiency. The Oregon Proficiency Project is forming an initial base of knowledge to guide districts and schools in establishing excellence in competency-based practices.

Challenge 2: Re-Engineering for Student Learning

A full competency-based pathway requires re-engineering around student learning. The current policy environment that emphasizes accountability and compliance may be a substantial constraint in designing practices and management information systems that fully support principals and teachers.

Challenge 3: Integrating Student Information and Learning Management Systems

Competency-based pathways generate massive amounts of data about student learning. Without adequate technology, the paperwork involved can be overwhelming. A high-quality,

competency-based approach required linking the architecture of a student information system of data to a learning management system that maintains curriculum, standards, and competencies.

Challenge 4: Aligning Incentives for Students, Educators, and Communities

Given that competency-based approaches are designed to produce outcomes in student achievement, reward systems may need to be focused, at least partially, on attainment. Competency-based pathways will also raise the question of how to engage and reward the organizations or people outside of the classroom, such as after-school programs, that help students progress.

Challenge 5: Nurturing Organic Expansion and Innovation Space

More innovators and early adopters are expected to enter the field as competency-based policy platforms are established, other innovations will be modified to include competency-based practices, and some early adopters will branch off with alternative approaches. For now, top-down approaches may be difficult primarily because of the small pool of innovators and limited technical assistance capacity available to schools.

Conclusion

Proficiency-based education is a way of responding to the increasing diversity of American schools and the changing demands for accountability for all students' learning. It is also seen as an effective and economical way to assure that every student has a chance at a successful future. As new technologies emerge, particularly for instructional management, information delivery and assessment, this approach is becoming more viable for most of the nation's schools. However, a great deal of professional development is required to assure that teachers are both confident and proficient in managing a new kind of instructional delivery that represents a fundamental shift in the way schools function.

References

International Association for K-12 Online Learning (n. d.). *When Success is the Only Option: Designing Competency-Based Pathways for Next Generation Learning*. Vienna, VA: Author. Retrieved from the Internet, March 10, 2011. http://www.inacol.org/research/competency/docs/iNACOL_SuccessOnlyOption_ExecSumm011111-lr.pdf

National High School Center (2009-2010). "Implementing Competency Based Instruction in High Schools," *Handbook on Effective Implementation of School Improvement Grants*. Lincoln, IL: Center on Innovation and Improvement. Retrieved from the Internet: March 7, 2011. http://www.centerii.org/handbook/Resources/7_N_Implementing_Competency_Based_Instruction_hs.pdf

Oregon Education Roundtable (October, 2008). *Taking Promising Education Practices to Scale*. Portland, OR: Oregon Education Roundtable, Oregon Business Council. Retrieved from the Internet: March 8, 2011. <http://www.orbusinesscouncil.org/docs/BestPracticesWhitePaper-Final.pdf>

Oregon Education Roundtable (March, 2009). *Proficiency Based Instruction and Assessment: A Promising Path to Higher Achievement in Oregon Education*. Portland, OR: Oregon Education Roundtable, Oregon Business Council. Retrieved from the Internet: March 8, 2011.
[http://www.ode.state.or.us/superintendent/yat/meetings/proficiency-based-education-white-paper-oregon1-\(2\).pdf](http://www.ode.state.or.us/superintendent/yat/meetings/proficiency-based-education-white-paper-oregon1-(2).pdf)

Resources

BEC Proficiency Website

http://www.becpdx.org/proficiency/bec_leads_proficiency.html

With a growing body of evidence, proficiency-based teaching and learning promises a different trajectory as it dramatically raises the bar on expectations, transforms the classroom experience and delivers student achievement. Oregon Business Education Compact's proficiency website will bring you important information and research that will help bring this practice to every classroom.

Capturing True Student Performance Through Proficiency-Based Grading in Mathematics

<https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/10098/ProficiencyBasedGrading.pdf?sequence=1>

An outstanding graphic illustration of how to use proficiency grading for mathematics in high school. This is an excellent and succinct introduction to the concept that can be applied to other disciplines as well.

Competency Based Education and Training

By Jocelyn Right, *eHow*

http://www.ehow.com/about_6563726_competency_based-education-_amp_training.html

A good overview from a somewhat unusual source.

Credit for Proficiency

<http://www.ode.state.or.us/search/results/?id=35>

This website, from the Oregon Department of Education, provides policy, guidance and resources for establishing a "credit for proficiency" system in the state's high schools. It is a good model for schools in other states that are experimenting with the concept as well.

"Portland-area Schools Debate Proficiency Based Education"

Betsy Hammond, *The Oregonian*, February 24, 2010.

http://www.oregonlive.com/education/index.ssf/2010/02/portland-area_schools_debate_p.html

An interesting news story on the challenges of implementing proficiency based education, with some commentary and insights from schools that have started to make the switch.

Proficiency-Based Center

<http://www.p-bcenter.com/>

An Oregon-based consulting firm specializing in providing resources, training and materials for schools moving toward Proficiency-based education.

Proficiency Based Instruction and Assessment: A Promising Path to Higher Achievement in Oregon Education

[http://www.ode.state.or.us/superintendent/yat/meetings/proficiency-based-education-white-paper-oregon1-\(2\).pdf](http://www.ode.state.or.us/superintendent/yat/meetings/proficiency-based-education-white-paper-oregon1-(2).pdf)

This white paper from the Oregon Education Roundtable is one of the most comprehensive resources on the subject of proficiency-based education in Oregon and elsewhere. It's companion white paper, *Taking Promising Education Practices to Scale*, is equally comprehensive and offers a broader view of promising practices for high school improvement.

<http://www.orbusinesscouncil.org/docs/BestPracticesWhitePaper-Final.pdf>

Proficiency Based Teaching and Learning: A Primer

<http://opas.ous.edu/Work2009-2011/InClass/0912%20proficiency%20primer%20presentation.pdf>

This presentation from the Oregon Business Education Compact points out the most important aspects of PBE for schools to consider as they launch their own planning.

Redmond (OR) Proficiency Academy

<http://www.rpademy.org/content/redmond-proficiency-academy-first-us-proficiency-based-charter-school-its-kind>

Home page of the first proficiency-based education charter school of its kind.

Research Base for Proficiency-Based Instructional Practices

<http://www.k-12leadership.org/proficiency-project/research-base>

From the Center for Educational Leadership, this brief bibliography provides references that comprise the research evidence base for launching and sustaining proficiency-based education practices in schools.

“Seven Reasons for Standards-Based Grading”

By Patricia L. Scriffiny, *Educational Leadership*, October, 2008.

http://www.ascd.org/publications/educational_leadership/oct08/vol66/num02/Seven_Reasons_for_Standards-Based_Grading.aspx

Standards-based grading is one of the central components of competency-based education. This article provides a good overview of this practice.

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