



# When Failure Is Not An Option: Designing Competency-Based Pathways for Next Generation Learning

Written by:

Chris Sturgis  
MetisNet

Susan Patrick  
International Association for K-12 Online Learning

## Introduction

*In a proficiency system, failure or poor performance may be part of the student's learning curve, but it is not an outcome.*

—Proficiency-Based Instruction and Assessment, Oregon Education Roundtable

Explorations into next generation learning are sweeping across the country. Technological advancements are opening up new educational opportunities that emphasize personalized, student-centered, performance-based, anytime, anywhere educational opportunities. This paper explores competency-based pathways, a necessary condition to realizing the potential of next generation learning.

The most important finding from this investigation is that competency-based pathways are a re-engineering of our education system around **learning**—a re-engineering designed for success in which failure is no longer an option. Frequently, competency-based policy is described as simply flexibility in awarding credit or defined as an alternative to the Carnegie unit. Yet, this does not capture the depth of the transformation of our education system from a time-based system to a learning-based system.

The following discussion draws on interviews and site visits with innovators and a review of the limited literature on the topic of competency-based approaches. The first section introduces a working definition for competency-based pathways that hopefully will be the beginning of creating consensus on the characteristics of a high-quality approach to guide policy. The second section explores the driving forces behind competency-based innovations and implementation issues. The last section highlights a number of challenges facing states and districts as they explore competency-based approaches.

## I. A Working Definition of Competency-Based Pathways

As we expand innovative competency-based approaches, it is important to build a working definition that can shape the characteristics of a high-quality, competency-based pathway that is focused on learning. The following outlines the critical design principles that can serve as a starting point for discussion:

- **Students advance upon mastery.** Students progress to more advanced work and earn credits upon demonstration of learning by applying specific skills and content.
- **Explicit and measurable learning objectives empower students.** Courses are organized into measurable learning objectives that are shared with students. Rigorous expanded learning opportunities connect academics with the real world. Students take responsibility for their learning, thereby increasing their engagement and motivation.

- **Assessment is a meaningful and positive learning experience for students.** The traditional approach to assessment and accountability “of learning” is turned on its head with assessments “for learning.” Formative assessments are aligned with learning objectives. Students receive immediate feedback when assessment occurs, which encourages students to return to difficult concepts and skills until they achieve mastery.

## II. Insights from Pockets of Innovation

Competency-based pathways are still in the early stages of innovation, with signs of early adoption beginning to take hold. The scan of the field found a limited number of innovators who have fully developed competency-based models but signs that there is a ripple of interest across the country. States leading the development of policies to allow competency-based pathways include New Hampshire, Oregon, Ohio, and Alabama, to name a few. Evidence from the early innovators—including Diploma Plus, Chugach Alaska School District, Florida Virtual School, Re-inventing Schools Coalition (RISC), and Equity and Achievement for Standards-based Learning Institute (EASL)—are encouraging. Yet, there is a dearth of formal documentation, research, or evaluation on competency-based approaches. A concern is that as districts and schools try their hand at competency-based approaches, they will have only a handful of knowledgeable technical assistance providers, most in relatively early stages of developing their organizational capacity and the technology to support it.

*The issue of language is always a challenge when new concepts or paradigms are introduced. Multiple phrases are used by foundations, innovators, and state policy to capture the practice of students progressing upon mastery: standards-based, outcomes-based, performance-based, and proficiency-based. The use of “competency-based” has been selected as it is has already entered federal policy with its inclusion in Race to the Top.*

### A. Drivers of Innovation

There are three forces that are driving the innovations in competency-based approaches. First, innovators consistently shared frustration that the time-based system is holding students back from accelerating their learning while also ensuring that others who are chronically behind will never master the materials needed to prepare them for college. Second, a growing interest in these innovations is being fueled by online learning, multiple pathways to graduation, budget deficits, and concerns about low-performing schools. Finally, innovators are finding a number of starting points for introducing competency-based models into the education system, including federal and state policy, whole district reform, new school models, turning around low-performing schools, and rethinking classroom practices. Yet, there is inadequate research to determine if any one starting point is more valuable than another.

### B. Keys to Success

Throughout the interviews, a number of issues were raised that are critical to effective implementation of competency-based pathways.

#### 1. Designing Effective State Policy Frameworks

There are two issues that should be considered in creating effective state policies. First, creating waivers for Carnegie units is an important first step, but it is inadequate for opening up innovative space for competency-based approaches to take root. It assumes that a competency-based approach is created by simply eliminating seat-time rather than creating a comprehensive learning-based approach. Second, it is clear that simply changing policy at the state level is not enough to catalyze competency-based systems. In Oregon, there was little uptake on the credit options until the Department of Education provided substantial leadership by establishing a Credit for Proficiency Task Force and invested in pilots. New Hampshire’s strategy includes setting up regional networks to provide technical assistance to districts and schools. States will need to create intentional strategies to work in partnership with districts and schools if they are to effectively expand competency-based practices and pathways.

## 2. Opportunity to Teach

In *Proficiency-Based Instruction and Assessment*, the Oregon Education Roundtable states, “In a proficiency-based system, teachers flourish as much as students.” The results from Chugach reinforce this. After three years of competency-based approaches, Chugach teachers asked the administration if their evaluations could be based around student performance. In Chugach, using competency-based learning significantly increased satisfaction and greatly reduced teacher turnover rates. Before moving toward competency-based learning in 1994, Chugach school district had a 55 percent annual rate of teacher turnover; this dropped to 12 percent after five years of competency-based reforms.<sup>1</sup>

## 3. Cultivating a Culture of Continuous Improvement

Competency-based approaches enable meaningful continuous improvement processes at a depth that has never before been seen in education. By breaking courses into discrete learning objectives and monitoring student learning trajectories supported by a student information system, principals are able to gather indicators of progress in a much more granular and timely way than end-of-course grades or summative testing. Thus, principals, as instructional leaders, can drive student learning toward excellence by keeping an eye on which areas teachers are having difficulty in supporting their students or identify any schoolwide patterns that are causing students to stumble.

## 4. Engaging Community Early and Often

The districts that converted to competency-based models heavily emphasized the importance of fully engaging stakeholders. One of the challenges was to prepare students and parents for the implications of having graduation dependent on mastery of a set of competencies. Schools would no longer grant diplomas to students that had been skating by with mediocre grades and large gaps in learning. Adams County 50, avoiding having to explain to parents that their students needed to remain in school longer while they completed their high school education, began their rollout of competency-based reforms at the elementary school level.

# III. Challenges in Designing

## CHALLENGE 1: Protecting High Levels of Proficiency

There is nothing inherent in competency-based approaches that guarantees that disadvantaged children will achieve at high levels. 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<sup>2</sup> is building substantial knowledge on the changes in the classroom that nurture a high-quality, competency-based program. It is also in the process of defining the attributes that are required for a competency-based approach at the classroom, school, district, and state levels. Oregon’s efforts are 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. Given the highly interdependent nature of the education system, a full implementation of a competency-based pathway is likely to require minor and major revisions throughout the system infrastructure. As we move forward, it will be important to determine the types of modifications needed, the complexity and cost of doing so, and the key leverage points in the system. Furthermore, the requirements needed to run two systems simultaneously—developing innovative competency-based metrics while also trying to improve the traditional system—may be too cumbersome to be realistic.

## CHALLENGE 3: Integrating Student Information and Learning Management Systems

Although competency-based approaches have been used in the past, the advances in information technology are enabling it for the first time to become truly operational. 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 benefits from linking the architecture of a student information system of data to a learning management system that maintains curriculum, standards, and competencies. With this integration, individual student learning plans can be developed, the student learning trajectory monitored to ensure progression, and a deeper understanding of what helps the student to succeed identified through real-time data.

## CHALLENGE 4: Aligning Incentives for Students, Educators, and Communities

Over time, competency-based approaches will require alignment of the incentive structures of policy, accountability, and funding to support customization. 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. Yet, redesigning funding is filled with its own pitfalls and obstacles. 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

At this stage, the growth of competency-based practices will most likely be organic. 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.


It is equally important to recognize the need for innovation space so that new efforts and adaptations may continue to develop their new approaches. It is no coincidence that two of the best examples of competency-based approaches, Florida Virtual School and Western Governors University, were designed in protected innovation space and supported by policies that allowed them to experiment without time-based constraints. Federal and state policymakers can support innovation space through pilot programs and evaluation to ensure that high-quality pathways are established.

## Concluding Remarks

The rapid decentralization that is shaking industries across the globe, so well described by Thomas Friedman in *The World Is Flat*, is now challenging fundamental aspects of our education system. Competency-based pathways are not a silver bullet; however, they are a critical element for unleashing the power of next generation learning, as well as our children's inherent hunger for learning. Practitioners and policymakers alike will need to be thoughtful in design and implementation so that old practices do not undermine the adaptations of competency-based practices. Yet, by sharing a laser focus on learning, we can redesign our education system around student success, classroom by classroom, school by school, state by state.

<sup>1</sup> R. DeLorenzo et al., *Delivering on the Promise* (Bloomington, IN: Solution Tree Press, 2009), p. 28.

<sup>2</sup> The Oregon Proficiency Project offers materials, including videos, available at the Center for Educational Leadership at [www.k-12leadership.org/professional-development/proficiency-project](http://www.k-12leadership.org/professional-development/proficiency-project).



**Nellie Mae  
Education  
Foundation**  
Opening Doors to Tomorrow

Failure Is Not An Option was made possible with funding from the Nellie Mae Education Foundation. The Foundation supports the promotion and integration of student-centered approaches to learning at the middle and high school levels. For more information, visit [www.nmefdn.org](http://www.nmefdn.org).

