

New Hampshire's Journey Toward Competency-Based Education

State lifts barriers to innovation, allowing districts and charters to personalize learning



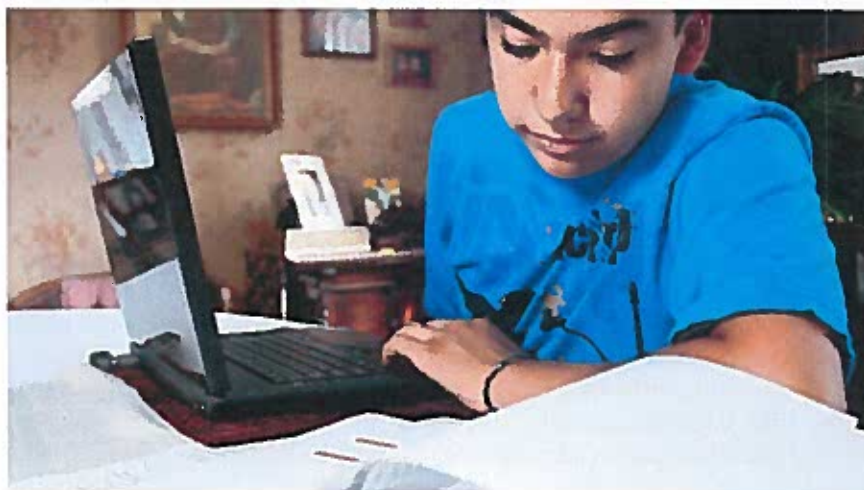
By [Julia Freeland Fisher](#) 02/01/2015

State and federal policymakers are increasingly talking about “competency-based learning” as the way of the future. In a competency-based system, students advance upon mastery. This model marks a sharp departure from the school system’s traditional metric: hours spent in the classroom studying a specific subject.

At the turn of the 20th century, in an effort to standardize high school curricula and college admissions, a committee at the National Education Association determined that a satisfactory year’s work in a given high-school subject would require no fewer than 120 one-hour instructional periods. In 1909, the Carnegie Foundation for the Advancement of Teaching codified this standard as the Carnegie unit, or credit unit. Since then, the education system has measured student progress in terms of instructional hours, not student learning. So long as a student logs the necessary hours and receives a passing grade, he can move on to the next course, regardless of gaps in his understanding. And a passing grade may be based in part on non-academic factors like attendance, extra credit, and good behavior, rather than demonstration of mastery.

Today, the Carnegie unit is showing its age, as more educators recognize that the time-based measure leaves students susceptible to moving on to material before they are ready, or remaining mired in a subject that they have already mastered. In addition to introducing flexible pacing, competency-based education attempts to import newfound rigor to the concept of “mastery.” In this new system, “competencies” describe what students should *know*, as well as what they should be able to *do*. Competency-based assessments aim to test students’ ability to demonstrate what they can do in real-world applications and across a variety of contexts.

Policies that allow institutions to measure student progress in terms of mastery rather than credit hours are beginning to take hold in K–12 and higher education. The U.S. Department of Education recently committed a wave of Experimental Sites Initiative funding to supporting competency-based approaches in postsecondary education, and more than 300 institutions are lining up to be among the approved experimenters. In K–12 education, states are following suit: 42 states have granted schools the flexibility to incorporate competency



COURTESY VIRTUAL LEARNING ACADEMY CHARTER SCHOOL

approaches in some form or fashion. Among states promoting K–12 efforts, New Hampshire has been a trailblazer.

In 2005, New Hampshire began to build a competency-based education policy and has eliminated the Carnegie unit in its high schools. As the first effort of its kind, New Hampshire’s example demonstrates both the power and limitations of statewide competency-based education policy.

The state's move has enabled many innovative schools to transform the schooling experience for students. But spreading competency-based practice has also proven challenging in a state with a strong tradition of local control. One superintendent captured the wider sentiment when he said in an interview last year, "Frankly, a lot of superintendents don't like the state telling them what to do in their districts."

The state has struggled to balance a culture of autonomy with furnishing school districts with supports and guidance to move away from time-based practices. "The state is supportive in theory," a New Hampshire school leader said. "They like the idea of competencies. I don't think they've really thought through what has to happen for those things to be viable." The challenge of providing meaningful supports is made more acute by the fact that the field at large is still attempting to research and understand exactly what is required—logistically, pedagogically, and culturally—to transition to a fully competency-based system. As a result, the state has found itself tasked not only with providing what districts say they need, but also with identifying still-emerging best practices in how to transition from time- to competency-based systems and structures.

Today, some New Hampshire school systems have embraced the flexibility that the state policy offers, whereas others remain tied to time-based practices. To support those early adopters and move those that are further behind, the state continues to develop and hone the guidance and infrastructure that can ease the transition. New Hampshire's experience offers valuable lessons in what policies and practices stand to loosen the stronghold of the Carnegie unit on the nation's approach to education.

Paving the Way

New Hampshire's commitment to competency-based education grew out of more than two decades of conversations at the state and district levels about what and how New Hampshire students ought to be learning. In particular, parents and educators were concerned with how to ensure real-world relevance in New Hampshire's curriculum and assessment. These conversations culminated in statewide meetings starting in 2003–04, during which students, parents, educators, and administrators proposed guiding principles that would refocus the school system on students' needs.

In 2005, the New Hampshire Department of Education codified these principles in amendments to the state's core education regulation, the Ed 306 Minimum Standards For Public School Approval. Among other things, under the new regulations New Hampshire required districts to create their own competencies and begin measuring high school credits in terms of mastery of those competencies by the start of the 2008–09 school year. Because local control rules the day in the "live free or die" state, New Hampshire's districts and charter schools were free to interpret and implement this mandate as they saw fit. Unsurprisingly, in the years since, the state has seen extensive variation in how this policy bore out in practice.

In-depth interviews with 13 schools across the state during the 2013–14 school year show that schools are implementing a range of educational models in response to the state regulations. Although the 13 schools surveyed do not provide a representative sample of statewide progress, their array of approaches suggests the autonomy that New Hampshire's schools and districts have exerted in complying with the state's 2005 mandate.

About half of the schools have invested deeply in building competency-based models—creating opportunities for students to move at a flexible, personalized pace; providing supplemental content for students who are struggling or who want to move ahead; and making assessments more frequent and formative, with a focus on demonstrating mastery in real-world examples and settings. Other schools have remained tethered to time-based practices such as end-of-unit summative assessments and fixed, whole-class pacing. Students at these schools still move through material as a class, rather than at a flexible pace based on their individual mastery. Consequently, they still stand to accumulate gaps in learning that the state's competency-based policies were intended to prevent.

Varied Implementation

At the schools that have made the transition, competency-based education is part and parcel of their overall approach to educating students, rather than a strategy adopted in a spirit of compliance. For example, North Country Charter Academy, a competency-based alternative high school in northern New Hampshire, serves high school dropouts who arrive with a wide range of existing credits and levels of mastery. Students move at a flexible pace through online

courses provided by Edmentum, with face-to-face support from teachers who track their progress by analyzing Edmentum data as well as through pen-and-paper assessments and quizzes. Competency-based education aligns well with the school's reliance on the online content-delivery platform, which allows students to work at their own pace on computers. It also fits into the school's broader philosophy of meeting each individual student where he is when he enters, graduating students throughout the year, and providing sufficient flexibility to keep students engaged by allowing them to work on the subjects of their choosing each day.

Similarly, Manchester School of Technology (MST), a four-year vocational-technical high school in Manchester, adopted a competency-based approach to support its overarching mission, which is to offer project-based career and technical education. MST teachers work together to create school-wide competencies and then design cross-disciplinary projects to fulfill those competencies. Teachers give students who are able to demonstrate mastery more quickly more complex tasks within the same project. Students whose projects do not demonstrate mastery of particular competencies may be assigned additional face-to-face tutoring or online practice exercises at the school's learning lab to fill in those gaps before they move on to new projects.



VLACS graduating class of 2014

Competency-based education is also part of the organizational fabric at the Virtual Learning Academy Charter School (VLACS). Founded in 2007, VLACS was New Hampshire's first statewide, online charter school. VLACS partners with every high school in the state and offers a wide range of online courses, which are aligned to competencies in English language arts and math that were created by New Hampshire state officials, which schools are allowed, but not required, to adopt. Students move through VLACS courses at a flexible pace from home or at school. To pass a VLACS course, students must demonstrate at least 85 percent proficiency against each individual course competency. VLACS receives state funding based on students' completion of these competencies; in other words, when a student has mastered 10 percent of the course, VLACS receives 10 percent of the funding. In addition to entire courses, VLACS offers high schools shorter online modules, used for "competency recovery." Within these modules, targeted lessons help students master competencies with which they are struggling.

Other schools arrived at competency-based learning as part of reform and school improvement efforts. For example, Milan Village School, an elementary and middle school in northern New Hampshire, turned to competency-based education as one component of a fundamental redesign. Although the elementary school was not subject to the original 2005 high school mandate, David Backler, the principal of Milan Village, wanted to prepare his students for the new economy by infusing technology into instruction. In his words, "In the past, all our high school programs were geared toward the idea that 80 percent of students would go work at the mill [Milan and the surrounding area were home to a number of sawmills throughout the 19th and 20th centuries]. That's completely changed. Blended learning is at the core of what these kids need to become engaged learners." Backler led his teachers in designing a blended curriculum to meet these new needs. For example, math students in grades 2 through 6 use online playlists and off-

line projects at the discretion of their teachers. Students in a single classroom may be working on entirely different portions of the curriculum depending on their level of mastery. For Backler and his team, competency-based education undergirds the flexible pacing that is inherent in their particular blended-learning model.

Other schools in New Hampshire have been slower to convert to fully competency-based approaches. Because regulation requires that all school districts adopt competencies, at a minimum all high schools have taken the initial step of defining the competencies. But at a number of schools, the extent of transformation does not move much beyond this.

Schools' weak or partial commitment to competency-based education can take a variety of forms. For example, as of the 2013–14 school year, teachers at Windham High School have created competencies but have not fundamentally altered their teaching methods to align with competency-based progressions. The school does not grade or assess students according to a competency-based model and does not allow students to move through the curriculum at a flexible pace. At Bedford High School, leaders have taken steps to align teacher practice around competency-based grading. Students don't simply receive an average score on a math test; instead, they receive discrete scores on each competency that a given test is assessing. Still, at Bedford, students move through course material at a classwide pace, rather than advancing upon individual mastery. At a third high school, even creating competencies and translating them into consistent practices proved challenging because teachers have not bought into a coherent definition of competency-based education. As one teacher explained, "There's still overall no agreement on what competencies should be. Even within the school building and across the district level, there are differences of opinion."

The Role of the State

One interpretation of the range of practice in New Hampshire is that the state has effectively lifted barriers to innovation. Rose Colby, a competency-based education consultant, says that is a good thing. "I think the advantage we [New Hampshire] have is that we have much broader policy so that as different schools are talking about doing different things, there's nothing that stops them," Colby said. She has worked extensively with a subset of school systems eager to embrace the new policy to aid in their implementation of competency-based learning.

But the freedoms in the regulations also seed uneven implementation. While local districts were told that they could create the competencies, in keeping with local control and flexibility, some feel they lack the tools to do so. Deputy Commissioner Paul Leather, who has shepherded the state's transition away from the Carnegie unit since the 2005 regulations passed, noted that district autonomy and state support can stand in tension. He said, "Ever since the deal was cut that we wouldn't have state-level competencies, education leaders have been coming to the state saying, 'Why are you making us build our own competencies?'"

Responding to growing calls for help, the state has taken an increasingly active role in providing technical assistance. The state calls this effort the "New Hampshire Network" approach. The network includes seven professional learning networks focusing on areas like professional development and performance assessment, as well as online tools to connect educators and administrators to resources and one another. As one school leader in the performance assessment network said, "I give the state a lot of credit. We're a small enough state that many schools can come to the table...the state provides think tank-like opportunities for districts."

Although the state aims to arm school districts with the tools they need to transform themselves, some schools are turning to outside help. Consultants like Colby have been hired to lead wholesale change at some larger traditional high schools—among them Kingston's Sanborn Regional High School and Rochester's Spaulding High School—that may find coordinating change more unwieldy. Colby plays the role of a facilitator or coach to help the district clarify its vision, create the strategic plan, and then continually monitor progress toward goals, typically working with administrators, leaders, and teachers for a total of 20 to 30 days. For larger districts operating comprehensive high schools, this level of high-touch support may be a necessary supplement to the states' technical assistance offerings.

Destination Personalized Learning?

The department has also attempted to bolster the incentives and requirements laid out in policy. "We realized that our competency-based policies were not urging schools to focus on personalized learning to the degree we had hoped," Leather said. "Schools were articulating competencies and awarding diplomas based on mastery, but in many

classrooms, instruction still looked similar to the old, time-based system.” As a result, in early 2014, the department further amended its regulations to mandate that districts solidify their competency-based approaches.

The regulations place renewed emphasis on districts’ targeting of individual students’ needs. “The latest regulations include more levers to encourage schools to offer multiple pathways to competency and more forms of assessment, in order to meet different learners’ needs,” Leather said.

Specifically, the state now requires districts to create local policies that ensure that they are “meeting the instructional needs of each individual student” and to show that they provide alternative means of demonstrating achievement such as extended learning opportunities, career and technical education courses, and distance education.

The *Keene Sentinel*, a local newspaper, said the changes in the regulations “completed the state’s shift toward competency-based education.” But at least two barriers still stand between the vision of the policy and practice on the ground. First, local control still allows districts to interpret these additional mandates to their liking. Districts may still follow loose interpretations of the new amendments that could reify rather than depart from time-based practices. Second, scaling the state’s vision of personalized competency-based education will require new academic tools and processes that arm teachers and students with real-time feedback and enable students to move through content at a flexible pace. Even those schools that are currently committed to fully implementing flexible pacing based on individual mastery face infrastructure challenges. There is a dearth of solutions to fill this gap in the competency-based technology infrastructure market, particularly learning management systems (LMS) and student information systems (SIS) that break from course- and credit hour-based metrics. As Leather said, “The current SIS infrastructure does not support student- or teacher-rich task work leading to successive formative assessments, nor does it connect to summative scoring in a competency-based environment. Several commercial developers are working in this space, but the results are inconclusive to date. It is crucial for this technological support to be in place if we are to expect scaling of personalized competency education.”

As a trailblazer in competency-based education, New Hampshire offers more than a decade of policy development and bright spots of innovative practice that other states should not ignore. Advocates’ calls for competency-based education are growing louder, particularly as online and blended learning unlock new opportunities for students to move through material at their own pace. But for state policymakers looking to advance K–12 schools beyond outdated time-based paradigms, if New Hampshire’s example is any indicator, the road to competency-based education will be long and winding.

Julia Freeland is education research fellow at the Clayton Christensen Institute. This article is adapted from two reports authored by Freeland and published by the institute in 2014: “From policy to practice: How competency-based education is evolving in New Hampshire” and “Blending toward competency: Early patterns of blended learning and competency-based education in New Hampshire.”

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