

## State Strategies for Awarding Credit to Support Student Learning

### Executive Summary

Research has called into question the ability of America's education system to produce the highly skilled workforce demanded by a 21<sup>st</sup> century economy. Reforms to increase student readiness for college and careers are hampered, in part, by an underlying education system that dictates inputs such as the amount of time students are required to complete a course (commonly known as "seat time"). States may not be able to realize the full potential of education reform until the system's focus shifts from time-based inputs to student learning outputs tied to the mastery of content and skills.

A total of 36 states currently have policies that provide school districts and schools with some flexibility for awarding credit to students based on mastery of content and skills as opposed to seat time. However, many states have policies that explicitly prohibit or overly restrict alternative methods of awarding credit. In nearly all states, rigid funding formulas work against school districts and schools that want to implement flexible policies for awarding credit. Moreover, the common practice of housing student-level data in incompatible systems prevents educators from accessing all relevant information to evaluate student learning.

As state policy leaders, governors are critical drivers in overcoming these and other large-scale challenges to building an education system that awards credit based on students' mastery of content and skills. Governors can lead efforts to overcome existing policy barriers by working to:

- Build flexibility into state policy to allow students to earn credit based on demonstrating mastery in the classroom and in expanded learning opportunities;
- Modify school funding formulas to allocate resources based on student mastery of content and skills as opposed to enrollment;
- Ensure that data systems are linked across state agencies and education providers; and
- Require public institutions of higher education to accept student transcripts with credits earned by demonstration of mastery.

The shift to an education system based on student mastery will require collaboration and support from a broad array of stakeholders. States may want to consider a phased-in implementation strategy through the use of task forces and pilot projects. States will also need to work with local school districts to identify student competencies that must be mastered to earn credit and provide professional development for educators.

Accountability systems will need to remove most time-based requirements in favor of a stronger emphasis on mastery. Credit-bearing expanded learning opportunities, such as after-school programs and internships, will need to be held to high standards to ensure quality and rigor sufficient for academic credit.

### Why Crack the Carnegie Unit?

Research has demonstrated that the U.S. education sys-

tem is struggling to produce the highly skilled workforce demanded by a 21st century economy.<sup>1</sup> Reforms such as the Common Core State Standards, which aim to increase student readiness for college and careers, are hampered, in part, by an underlying education system that dictates inputs such as the amount of time required of students to complete a course (commonly referred to as “seat time”).

The corresponding credit(s) a student earns when he or she has completed the seat time and basic academic requirements for a course is called a Carnegie Unit. Seat time requirements were designed to ensure that students were present for a set amount of classroom instruction, but they do not take into account the varied pace at which students learned. That is because the number of seat hours required to complete a course is standardized across schools without regard to an individual student’s prerequisite knowledge and skills.

Furthermore, the basic level of proficiency required to earn credit for a course (often the grade of a “C” or higher) means that students may advance through the grades without learning critical content and skills and may later require remediation. For example, educators working to implement the Common Core in their classrooms will need to work within a predetermined amount of time—the set length of a course—to help students meet the new, more rigorous standards. This will require educators to deliver instruction at a pace that may hold back advanced students while simultaneously moving too quickly for struggling students.

In the current system, a student with a “C” average is promoted in the same manner as a student with an “A” or “B” average even though there is a significant difference in their levels of mastery of the course material. This is a major concern given the current high cost of remedial education, which is largely driven by students who advanced through the grades before mastering required content and skills. In 2010 alone, states spent roughly \$3.7 billion on providing remedial education services to students. During a time

of constrained budgets, this represents a significant amount of money could be repurposed if students progressed through the grades when sufficiently prepared. In a system that based student progression on mastery, students would be able to learn more rigorous material when it was clear they were prepared to do so.

### **Implications for State Policy**

By shifting the education system from focusing on inputs such as seat time and the number of days in a school year to outputs such as student mastery of academic skills and knowledge, states could realize gains in student achievement. To do this, governors may want to enact systemic policy changes to:

- Build flexibility into state policy to allow students to earn credit based on demonstrating mastery in the classroom and expanded learning opportunities;
- Modify school funding formulas to allocate resources based on student mastery of content and skills as opposed to enrollment;
- Ensure that data systems are linked across state agencies and education providers; and
- Require public institutions of higher education to accept student transcripts with credits earned by demonstration of mastery.

### ***Build Flexibility into State Policy to Allow Students to Earn Credit Based on Demonstrating Mastery in the Classroom and Expanded Learning Opportunities***

Flexibility in state policy for districts and schools to award credits flexibly is a key policy change for states interested in transitioning to a focus on outputs such as student mastery. Governors can work with state boards of education, state agencies, and the legislature to implement policies that require school districts to allow students to earn credit based on demonstrations of mastery both in and out of the classroom.

To date, 36 states have policies that provide school districts and schools with some flexibility in meeting state

seat time requirements.<sup>2</sup> For example, **Oklahoma** requires high schools to allow students, upon request, to earn credits toward graduation based on demonstrations of mastery. Students demonstrate mastery by submitting a portfolio of work, thesis, other project or performance, or by taking a test.<sup>3</sup> Yet, state policies that do allow credits to be earned flexibly often only apply to a limited number of credits or content areas. For example, some states allow schools to award credit based on mastery of content knowledge and skills for physical education, art, and health classes but not for core courses such as: English, math, history, and science.

Credit flexibility can be addressed in state policy through a number of strategies. One way is to allow students, on a case-by-case basis, to receive a limited waiver from seat time requirements. Another, more comprehensive credit flexibility option allows students to earn credit in multiple ways for any one course. For example, the Credit Flex policy in **Ohio** requires districts and schools to provide multiple pathways for earning high school credit. High school students may earn credit through a variety of programs, including distance learning and expanded learning opportunities (ELOs) such as after-school programs, summer programs, and internships.<sup>4</sup>

**New Hampshire** has taken credit flexibility a step further by requiring all public high schools to base credit attainment on student mastery rather than seat time. Similar to the policy in Ohio, students may earn credits in school-approved settings outside of the classroom, such as ELOs and community service.<sup>5</sup> For example, schools may allow students to earn credits for physical education through participation in athletics.

### ***Modify School Funding Formulas to Allocate Resources Based on Student Mastery of Content and Skills as Opposed to Enrollment***

Governors can work with chief state school officers and state legislators to put in place budget policies that provide incentives to districts and schools to adopt credit flexibility.

Most states use enrollment counts as the basis of their school funding formula.<sup>6</sup> An “enrollment count” refers to the number of students in a classroom for the entire school day on a particular date or range of dates. With that formula base, schools do not receive funding allocations for students who are out of the classroom for the entire school day or a significant part of the day on the date the count is taken. Students participating in learning experiences outside of the classroom such as work-force certificate programs, virtual courses, and blended courses, may not be present for the full school day, resulting in a lower count and less funding per pupil.<sup>7</sup>

Modifying school funding formulas to allocate resources based on student mastery can remove the financial barriers that often make moving toward a competency-based system challenging. For example, **Florida**’s online Florida Virtual School (FLVS) awards credits to students based on their successful mastery of content and skills as opposed to seat time.<sup>8</sup> In 2003, the Florida Legislature voted to require a funding mechanism for the FLVS that is based on student accumulation of credits tied to the successful mastery of the specified content and skills as opposed to enrollment. By linking funding to student mastery, the school has an incentive to focus on and support student learning. As a result of the strong focus on student learning outcomes, with constant internal evaluations to ensure rigor, FLVS is one of a handful of virtual schools whose core course curriculum is approved by the National Collegiate Athletic Association (NCAA).

In a system based on student mastery, it is likely that some students may master the curriculum at a faster pace. For example, some students may complete the requirements for a high school diploma in fewer than four years and enroll in college courses ahead of their peers. School funding formulas should not penalize schools for a drop in enrollment due to the early progression of advanced students. **Arizona** schools are required to include early graduates in their enrollment class until their peers graduate from high school. Schools receive partial per-pupil funding based on how

early the student graduates from high school.<sup>9</sup> Schools in **Utah** receive per-pupil funding for early graduates once the students have successfully completed their first year of college coursework.<sup>10</sup>

### ***Ensure That Data Systems are Linked Across State Agencies and Education Providers***

Linking student performance data across agencies and providers—to enable access to all information relative to student learning—is a key component of an education system based on student mastery. Governors can support the linking of data systems by working with agency heads and the legislature to remove barriers that prohibit agencies and organizations that provide ELOs from sharing data.

Improving access to and the availability of data across state agencies and education providers will ensure that educators, parents, and students have all available information on student progress toward mastery. Currently, data on student performance in school and in out-of-school credit-bearing opportunities are housed within different, often disconnected databases. In some cases, state policies related to data privacy explicitly prohibit the linking and sharing of student data across agencies and databases. Some state data systems were built in a silo and, as a result, are not technically compatible. Educators need access to all the relevant student learning data to evaluate mastery and award credits. For example, if an educator cannot review data on a student's work in an ELO, they will not have sufficient information to justify awarding credit.

At the school district level, Strive Cincinnati in **Ohio** has partnered with Cincinnati Public Schools (CPS), area after-school programs, and others to create a "Learning Partner Dashboard." The dashboard combines academic data from CPS, college access services, and mentoring and tutoring programs with nonacademic data such as health services. Because the data is housed in one place, educators are able to identify

which services are available to students, the extent to which the service has a positive impact on student performance, and the areas where additional support is needed.<sup>11</sup>

### ***Require Public Institutions of Higher Education to Accept Student Transcripts with Credits Earned by Demonstration of Mastery***

To transition to a system based on student mastery, it is critical that institutions of higher education (IHEs) accept student transcripts with credits earned by demonstration of mastery. Governors can work with state higher education leaders, K–12 policymakers, and state boards of education to reach agreement on higher education admissions policies that allow for applications with credits earned by demonstration of mastery as opposed to seat time.

Governors have experience using collaborative entities to promote the ownership and engagement required for large-scale reforms that connect K-12 and higher education. Governors in **Arizona, Colorado, Delaware, Kansas, Maryland, Maine, New Hampshire, Rhode Island, Virginia, Washington, and West Virginia** have used executive orders to create P-16 or P-20 councils. These councils are able to recommend and, in some cases, drive a phased-in implementation of systemic reforms on a scale similar to the transition to a competency-based education system.

In addition, IHEs will need to understand how students are awarded credits; how student mastery is measured; and how to interpret demonstrations of mastery such as essays, portfolios, and/or descriptions of learning demonstrated in ELOs. In **Colorado**, former Governor Bill Ritter convened state policymakers, higher education leaders, and the business community to serve on the Governor's P–20 Education Coordinating Council. Based on the council's recommendations, the Colorado Legislature passed a bill that established descriptions of academic readiness for higher education and the workforce, standards for

student career and academic plans, and standards for a Web portfolio of student work that provides evidence of mastery. Because of their involvement in the process to establish the descriptions of academic readiness and the standards for student portfolios, the state's IHEs were comfortable aligning their admissions requirements to accept the Web portfolios as part of student application packages.<sup>12</sup>

## **A Look Ahead: Implementing a Competency-Based Education System**

Allowing for credit flexibility has implications for all parts of a state's education system—from data-collection policies to school funding formulas. By phasing in implementation, states can thoughtfully address large-scale changes and build support and understanding of the new system with districts, schools, educators, parents, and students. Educators will need professional development on providing differentiated

instruction and on shifting focus from time to mastery. States may need to develop or create new standards and guidelines to evaluate mastery, including different assessments, guidelines for student portfolios, and rubrics to help educators define and evaluate mastery. Existing assessment system calendars may need to adjust to give teachers the flexibility to test students when they are ready. Accountability systems will need to remove most time-based requirements in favor of a stronger emphasis on mastery. Credit-bearing expanded learning opportunities will need to be held to high standards to ensure rigor sufficient for credit.

The shift to a competency-based education system will not be easy. It will require collaboration, ownership, and support from a broad array of stakeholders. Governors can use their strengths as policy leaders to overcome obstacles to this key reform. In doing so, they will be taking a major step to advance student achievement and create an American workforce ready to meet the demands of the 21st century economy.

*Contacts:*

*Tabitha Grossman, Ph.D.  
Program Director, Education Division  
202/624-5312*

*Stephanie Shipton  
Policy Analyst, Education Division  
202/624-7857*



## Endnotes

- 1 By 2018, a projected 68 percent of jobs will require some form of postsecondary education. However, only 23 percent of high school graduates who took the ACT in 2010 were ready for college-level coursework. For additional information, see Anthony Carnavale, Nicole Smith, and Jeff Strohl, *Help Wanted: Projections of Jobs and Education Requirements Through 2018* (Washington, DC: Georgetown University Center on Education and the Workforce, 2010), <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/fullreport.pdf> (accessed Jan. 18, 2011).
- 2 States with policies related to decoupling seat time from credit attainment include Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. For additional information, see Education Commission of the States, “Additional High School Graduation Requirements and Options,” *StateNotes*, June 2011, <http://mb2.ecs.org/reports/Report.aspx?id=740>.
- 3 Additional information is in the Oklahoma state statutes and administrative code, available at [http://www.oar.state.ok.us/oar/codedoc02.nsf/fmMain?OpenFrameSet&Frame=Main&Src=\\_75tnm2shfcdnm8pb4dthj0chedppmcqb8dtmmak31ctijujrgcln50ob7ckj42tbkdt374obdcli00\\_](http://www.oar.state.ok.us/oar/codedoc02.nsf/fmMain?OpenFrameSet&Frame=Main&Src=_75tnm2shfcdnm8pb4dthj0chedppmcqb8dtmmak31ctijujrgcln50ob7ckj42tbkdt374obdcli00_) and <http://www.oklegislature.gov/osstatuestitle.html>.
- 4 The Ohio Department of Education implemented a range of professional development resources for districts and teachers to support effective implementation of Credit Flex. State-provided resources included the identification of assessments of student mastery; the creation of an appeals process; the formation of an information and resource clearinghouse; and the provision of professional development for educators, based on materials created and disseminated in collaboration with professional associations. For additional information, see <http://www.ode.state.oh.us/GD/Templates/pages/ODE/ODEDetail.aspx?page=61>.
- 5 For additional information, see [http://www.education.nh.gov/innovations/hs\\_redesign/index.htm](http://www.education.nh.gov/innovations/hs_redesign/index.htm).
- 6 “Enrollment counts” refer to the number of students enrolled in a school at a particular time or across a particular number of days. To be included in a school’s enrollment count, students must be in classrooms for the entire school day.
- 7 “Blended courses” deliver instruction both online and in a classroom setting.
- 8 Schools are also prohibited from limiting access to the FLVS, and they are required to accept virtual course credit earned outside of the school day. For additional information, see <http://www.flvs.net/pages/default.aspx>.
- 9 Schools receive full per-pupil funding, minus \$2,200 for students graduating one year early and \$1,700 for students graduating one semester early. For additional information, see Jennifer Dounay Zinth, *Helping Students Get a Head Start on the ‘Real World’: State Strategies for Early High School Graduation* (Denver, CO: Education Commission of the States, May 2010), <http://www.ecs.org/clearinghouse/86/05/8605.pdf> (accessed Jan. 18, 2012).
- 10 For additional information, see <http://www.schools.utah.gov/CURR/gradinfo/Demonstrated-Competency.aspx>.
- 11 For additional information on Strive, see <http://www.strivetogether.org>.
- 12 Janet Lopez, “Colorado’s P–20 Education Coordinating Council: 2007–2010,” [http://www.colorado.gov/governor/images/GOVR\\_Nov\\_10/P\\_20FinalReport.pdf](http://www.colorado.gov/governor/images/GOVR_Nov_10/P_20FinalReport.pdf) (accessed Jan. 18, 2012).