Time-based systems, also known as “seat-time” requirement systems, still form the basis of today’s traditional schools. The prevailing assumption has been that state policies for seat-time requirements constrict schools and hinder attempts to innovate. However, **far more flexibility exists than originally thought.**

New research by ExcelinEd examining seat-time requirements for awarding credit and graduation reveals that **all 50 states and Washington, D.C., have either fully or partially authorized the awarding of credits based on mastery in lieu of seat-time.**

Furthermore, ExcelinEd’s 2019 report *State Progress Toward Next Generation Learning: A National Landscape* notes that 33 states and Washington, D.C., have already established general innovation or pilot programs to explore next generation learning, which includes a broad range of innovative learning models and approaches. Most next generation program statutes offer the ability for schools to apply for flexibility or waivers from policies including seat-time requirements.

**Seat-Time Requirements v. Mastery-Based Learning**

In the traditional system, Carnegie units (based on time) plus passing credits are the basis for issuing credit—regardless of whether key content and skills were mastered. Using predetermined time blocks in learning forces students to adapt to someone else’s learning schedule. Advanced students may have to slow down or struggling students move on before they are ready to advance.

Mastery-based learning focuses on students’ mastery of knowledge and skills rather than seat-time. This approach allows students to progress at a flexible pace so they can move on when they have mastered the material.

“Personalized learning [also known as next generation learning] at scale will likely require a massive rethinking of how schools use time. In some cases, this means looking for new instructional approaches that slice and dice time differently; in others this means seeking out automation and efficiencies; and in other this means wholly rethinking the structure of the school day.”

**Julia Freeland Fisher, Director of Education Research, Clayton Christensen Institute**
The Challenge of Promoting Mastery-Based Systems in a Seat-Time-Centric World

Next generation learning systems should be student-centered and empower schools to maximize learning opportunities. Students should be allowed to progress, accumulate credit and graduate when they demonstrate mastery of key content and skills, regardless of the time spent in class—or even without having enrolled in a class offered by the school or district.

Mastery-based systems are sometimes discussed as a mechanism to accelerate learning, but more schools seek to design these systems to increase rigor and build robust, innovative extended learning opportunities. The goal is not to remove time requirements rather to have the flexibility to make time more meaningful and simultaneously remove the security blanket of time and barely passing grades.

A teacher in a New York City school implementing mastery-based learning noted, “We are working hard to slow things down so students can learn more deeply. That doesn't always match the pace of learning expected by the district and state.”

Seat-Time Flexibility in Action

At Whittier Community School in Alaska, the primary goal is deeper learning, not faster learning.

“Varied pacing can mean that students who are proficient in certain standards are encouraged to engage in ways that lead to greater depth of knowledge and multiple ways of demonstrating competency. Varied pacing does not imply that there is a single learning pathway that students simply navigate at different speeds. Each student’s pace of progress matters, with schools actively monitoring progress and providing more instruction and support if students are not on a trajectory to graduate by age 18 or soon after.”

Understanding the Current Landscape

ExcelinEd first examined steps states have already taken to expand mastery-based learning and then identified policy recommendations and examples that illuminate a range of viable approaches.

RESEARCH METHODOLOGY AND CATEGORIZATION

The report 50-State Scan of Course Credit Policies (2014) by the Carnegie Foundation for the Advancement of Teaching has spurred dialogue about the ways in which state policymakers can provide districts and schools flexibility in awarding course credit. During the summer of 2019, ExcelinEd in partnership with Foresight Law + Policy completed a scan of state policies—including state code, administrative rules and regulations and non-regulatory guidance. This research built upon the Carnegie Foundation's findings and deepened the focus on how states have changed credit accumulation policies to promote demonstration of mastery. Using criteria described below, each state and Washington, D.C., were categorized into one of the following three groups in order to provide additional insights to stakeholders to: *

- Mastery Fully Authorized
- Mastery Authorized but Limited
- No Flexibility from Seat-Time

*As this was a legal analysis, categories were defined based on the actual statutory and regulatory language and recognize some states and districts may have different interpretation of the language.
Mastery Fully Authorized

A state is included within this category if:

- Our analysis of existing authority indicates that the state allows districts to award credit through the demonstration of mastery of content and skills rather than on the basis of seat-time, or has authorized district-developed policies that do so.
- There is evidence that the existing authority is being interpreted by state or local leaders to allow course-wide or school-wide use of demonstration of mastery in lieu of seat time for purposes of awarding credit.

Demonstration options include the use of performance-based assessments, as an alternative to conventional testing, or exhibitions, projects or other activities that require the use of skills, such as inquiry and synthesis to truly demonstrate mastery. Credit flexibility is afforded to all students; ideally, students are promoted upon mastery as well.

Mastery Authorized but Limited

A state is included within this category if our analysis of existing authority indicates that the state has established some opportunities for districts to award credit through the demonstration of mastery rather than on the basis of seat-time, but these opportunities are limited in one or more ways, including the following:

- Students have to ask for approval to use mastery in lieu of course participation—often on a case-by-case/course-by-course basis and subject to eligibility criteria.
- Demonstration of mastery is equated with or requires that a student achieve a minimum score or level of performance on a conventional assessment.
- Mastery-based flexibility appears designed primarily for academically gifted learners or those seeking an accelerated path to graduation.
- Schools or districts may implement a mastery-based approach on a limited or systemwide basis but only after getting authorization from a state education authority such as a state board or department of education.
- Demonstration of mastery may only be used to advance students to a higher level of learning, not as a means to earn credit in lieu of course participation.

No Flexibility from Seat-Time

The state requires that school districts use the Carnegie Unit model or minimum instruction/seat-time to award credit, including for graduation.
Promoting Mastery for Credit: Efforts Across the U.S.

Thirty-two states have fully authorized the use of demonstration of mastery to issue credit.

Eighteen states and Washington, D.C., have taken significant steps to allow districts and schools to use demonstration of mastery as an alternative to traditional course completion, but have stopped short of clearing away all existing restrictions (or have even created new ones) that keep most learners anchored in seat-time centered environments. These limitations, particularly those that position demonstration of mastery as an alternative only available to students wanting an accelerated pathway to graduation, stand in the way of district and school efforts to raise the bar on the learning opportunities afforded to all students.

This map provides a visual of the states grouped by the extent to which districts have been authorized to award credit through the demonstration of mastery of content and skills rather than based on seat-time. It is intended only to reflect state law and policy foundations. It does not attempt to describe the status of program implementation.
Rhode Island’s diploma system includes a course credit component and a performance-based diploma assessment component—neither of which is tied to seat-time. In fact, the 20 courses required for graduation must include demonstration of proficiency, as defined by each district.

Idaho’s Middle Level Credit System and minimum graduation requirements are both tied to the state board’s definition of credits. (One credit equals 60 hours of instruction.) However, while the traditional credit-based approach is the default, provisions allowing waiver of the 60-hour rule and mastery-based alternatives essentially mean that all students can opt to demonstrate mastery of content rather than completing credits.

Connecticut has a vision of mastery-based learning that “requires students to demonstrate mastery of the aligned competencies in order to move ahead...pushes schools to create powerful learning experiences for every student regardless of his/her past learning history and allows students to demonstrate mastery through a body of evidence.” The state education agency has also developed extensive guidelines for mastery-based learning implementation. Districts are fully authorized to use students’ demonstration of mastery in lieu of traditional credit accumulation requirements, but they have significant discretion in determining eligible credits and the approaches students may use to meet state identified standards and local competencies.

Authorization ≠ Implementation

This research provides a legal analysis to determine what flexibility is permitted or allowed in each state for schools to issue credit based on mastery. ExcelinEd is unaware of any attempt to quantify the number of schools optimizing their flexibility. However, given how pervasive the myth of seat-time is, we suspect it is low. Moreover, how mastery-based learning is implemented also varies at the local level, even within the same state. This element of local control and decision making is a great strength, but varied implementation strategies make it much harder to evaluate success or progress.
“...The implementation of competency-based education practices was neither comprehensive nor uniform, varying greatly across and within both groups of schools. This suggests that the distinction between competency-based and more traditional models is not as sharp as expected, and that practices may fall along a continuum, even across classrooms within a school.”

Looking Under the Hood of Competency Based Education  
– American Institutes for Research

Seat-Time Flexibility in Action

In Minnesota, Pioneer Ridge Middle School is utilizing and continuously iterating a flexible scheduling process.

“Scheduling takes place during a daily morning meeting when teachers describe the seminars and small-group instruction sessions that they will offer throughout the day. Students can schedule themselves for these activities or other types of individual or student group sessions.

“Teachers also have the ability to assign students to specific activities in a way that’s either locked in or just suggested. There are ways for teachers to automate aspects of the scheduling, such as locking all students who haven’t taken a particular summative assessment into a block where that material is being addressed. The process of creating these types of efficiencies has been ongoing for seven years, in collaboration with the programmer who developed the scheduling software.

“Flexible scheduling also enables important opportunities for providing student supports.”

Seat-Time Requirements Roots Run Deep

It is also important to note that the requirements that have historically tied districts and schools to time-based systems tend to be woven throughout state law and policy. These include regulations and procedures for calculating per-pupil funding, taking attendance and even standards for accreditation. seat-time requirements may be found in reporting and auditing requirements and may be built into existing data reporting structures.

The complexity of these interrelated requirements can serve as a barrier to innovation. As a result, it is possible that one or more states in the Mastery Fully Authorized category has not yet made all the changes necessary to truly support districts and schools in the transition to mastery-based systems. Local leaders may find, for example, that they still must report data to the state using a state-designed reporting system or are tied to a state funding formula that uses seat-time requirements.
Recommendations

Assess the Flexibility Already Afforded
States can take action to ensure schools and districts are aware of what flexibility opportunities are available, understand how these flexibilities can be utilized and develop a process to evaluate and communicate outcomes. To address this, ExcelinEd provides recommendations in a Flexibility Guide that outlines a process for states to take action.

Provide Clear Guidance
If mastery has already been fully authorized—or even authorized with some limitations—but the state finds that districts and schools have been slow to embrace it, there could be a need for clear guidance to explain the degree to which credit can be awarded for a students’ demonstration of mastery.

Support Implementation
Implicit in this work has been an assumption that policy is the primary obstacle. Having permission is an important step, but it is just a part of what is needed from states to make next generation learning a reality. How much direction and what it could look like will vary from state to state. In Utah, for example, the State Board of Education adopted a Competency-Based Education Framework and a state Portrait of a Graduate (Talent MAP) to help support the Competency-Based Education Grant program.

Identify Next Steps
In undertaking the analysis needed to assign each state to one of the three categories described above, ExcelinEd found several states with some degree of ambiguity in their laws and policies. Ambiguity may be contributing to the perpetuation of the myth of seat-time requirements. It might also serve as a barrier to district action.

Additional questions to consider include the following:

- Do the state’s efforts to free districts from these types of constraints limit options for the demonstration of mastery to designated courses or allow them only to be used in special situations?
- Does the state unnecessarily stifle efforts to truly reimagine learning by equating mastery with proficiency on a conventional assessment or by making credit-by-examination the preferred alternative?
- What steps are required to put in place the foundations needed to support students’ demonstration of mastery?

What’s Next?
We hope this report and our previous report, State Progress Toward Next Generation Learning, result in states communicating and identifying both the existing and needed opportunities that schools require to transition to next generation learning models.

Visit ExcelinEd.org for more information and resources.