



Mastery-based Learning
in Washington State

INTERIM REPORT

Mastery-based Learning Work Group

December 2019

PREPARED BY:

*The Washington State
Board of Education*

Authorizing legislation: [Engrossed Second Substitute House Bill 1599, Chapter 252, Laws of 2019](#)

MASTERY-BASED LEARNING WORK GROUP INTERIM REPORT

Overview of the Interim Work Group Report

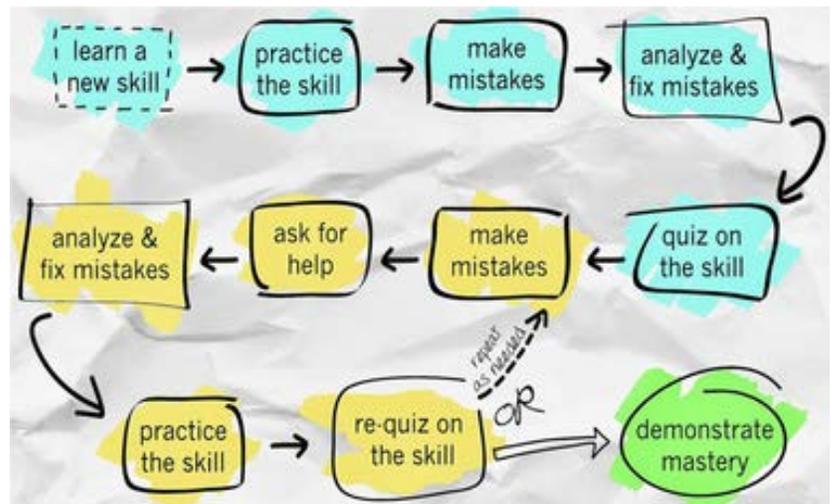
This report provides the work group’s vision for mastery-based learning in our state, activities of the work group this year, preliminary findings, and areas for further exploration during 2020. For context, the report also has appendices on definition of terms and the state of mastery-based learning (MBL) in Washington as well as national and international examples. A final report will be provided, detailing all findings and recommendations of the work group by December 1, 2020.

WHY DO WE NEED MASTERY-BASED LEARNING IN WASHINGTON?

The state of Washington, through the Mastery-based Learning work group,¹ is embarking on an exciting journey to reimagine our state’s education system. The work group believes that mastery-based learning (MBL) is a way to transform our education system—with this approach, teaching methods are designed to equitably engage each and every student in ways that best support the individual student’s learning journey. Additionally, through the focus on student voice and choice in learning, MBL prepares all students for the workforce of the future by allowing them to experience ownership over their own learning process.

The key to MBL is the focus on the individual student and providing them an opportunity to receive an education experience tailored to their personal interests. The work group believes strongly in the importance of the state learning standards—but

believes a state framework for MBL, would benefit students individually and collectively, by providing richer and deeper learning experiences. With an MBL approach, the learning process to demonstrate mastery of a skill or standard could follow the process in the graphic.² In this process, students learn at their own pace, and learn from other students working on the same skills,



reinforcing teamwork and good communication. Making mistakes and asking for help is part of the process, so students practice self-advocacy, resilience, and persistence in a safe and

¹ Established in [E2SHB 1599](#) section 301

² <http://soltanimath.weebly.com/assessment-and-learning-process.html>

supportive environment. Within a well-developed system of MBL, both students and educators would have “the freedom to fail,” leading to learning and innovation.

Within MBL, there is a role for authentic assessments that are tied directly to the learning standards. Demonstration of mastery would not be limited to standardized assessments. Demonstration of mastery of the standards could be through portfolios, demonstrations, and presentations. The development of such authentic assessments could help facilitate the development of culturally responsive projects within curricula.

Through work group members’ own experiences with MBL in Washington and across the world, and after hearing from Washington students regarding their experience with MBL, our collective “why” calls for a transformation from a traditional system to an MBL approach because this enables:

- A focus on meeting the needs of each individual student.
- Students to enjoy relevancy, engagement, and choice in their learning.
- Freedom to actively embrace inclusivity—compassion and belonging for students.
- A culture of celebrating the learning and innovation that comes from failure and values knowledge and skills that students already have.
- Each student’s learning progresses at their own pace.
- A way to get rid of labels and create a system that recognizes that each student’s learning happens differently for each subject.

Activities of the Work Group This Year

SBE has created a [web page](#) to host all materials for the work group. This year, the work group has focused on understanding the world of possibilities within MBL and creating a vision for MBL in Washington. Some of the activities supporting this work have included:

- Creating a preliminary vision of the work group as well as preliminary definitions.
- Discussing the landscape of MBL in Washington currently (see Appendix 2 for more information on Washington as well as across the nation and internationally).
- Holding a webinar focused on MBL in other states.
- Hearing both a district perspective and state view on how the High School and Beyond Plan could support MBL.
- Holding a meeting to hear from several local schools currently employing a variety of mastery-based learning models.

DEFINING TERMS

The field of mastery-based learning has many terms that are confusing. Some terms are used interchangeably, even when the meaning of the terms are not, or should not, be interchangeable. One of the communication challenges of the work group is to come to a collective understanding of terms. This is essential so that work group members can consistently

and precisely identify the work that needs to be done, as well as effectively communicate about the progress and final recommendations of the group. As a work group, we believe one of our most important roles is to talk about mastery-based learning in a unified manner—in order to help the Washington State public understand mastery-based learning. One way this can be accomplished is by using shared terms to define what we mean by certain educational terms and approaches.

Appendix 1 defines some of the terms that have arisen in work group discussion. The work of developing a shared understanding of terms is likely to be on-going. This initial list of definitions will be added to, and some of these definitions may be refined as the group progresses in its work.

MASTERY-BASED LEARNING

The work group believes that the principal work of the group, mastery-based learning, is effectively defined in legislation (per E2SHB 1599 Sec. 301):

- a) Students advance upon demonstrated mastery of content;
- b) Competencies include explicit, measurable, transferable learning objectives that empower students;
- c) Assessments are meaningful and a positive learning experience or students;
- d) Students receive rapid, differentiated support based on their individual learning needs; and
- e) Learning outcomes emphasize competencies that include application and creation of knowledge along with the development of important skills and dispositions.

PRELIMINARY VISION OF THE WORK GROUP

The work group members engaged in a thorough discussion about their vision for the mastery-based learning in Washington, as well as how their work over the next year will make progress toward their shared vision. Our vision of a mastery-based learning system is one that:

- Equity is celebrated and every student feels a sense of belonging in their school community
- Empowers students to advance upon demonstrated mastery of content, rather than seat time or age
- Enables students to direct their own learning and serves each student based on their personalized needs
- Honors the assets students bring and engages students through their diverse cultures and communities
- Students' innate creativity shines through in their learning
- Welcomes learning experiences that take place in environments outside the classroom
- Facilitates students' voices and transition to higher education and careers
- Supports both students and educators as lifelong learners; provides the freedom to fail and celebrates the resulting learning

- Demonstrates flexibility and responsiveness in our changing world

WEBINAR ON MASTERY-BASED LEARNING IN OTHER STATES

Presenters included:

- Jason Swanson, Director of Strategic Foresight, KnowledgeWorks
- Lillian Pace, Vice President of Policy and Advocacy, KnowledgeWorks
- Stephanie DiStasio and Lauren McCauley, Office of Personalized Learning, South Carolina Department of Education
- Marita Diffenbaugh, Instructional Support for Student-Centered Learning, Idaho State Department of Education

Information shared from the two webinar states is described in Appendix 2. KnowledgeWorks is a non-partisan organization that focuses on the future of learning by helping states and educators deliver personalized, competency-based education to students. As shared on the webinar, KnowledgeWorks believes that “education’s role in supporting the healthy development of young people, effective lifelong learning and community vitality will be increasingly crucial.³”

Because one must take a different approach to learning and instruction in mastery-based education, it is easier under this system to focus on human-centered learning. In human-centered learning, “educational design principles for crafting learning cultures, experiences, assessments and physical environments guide educators in supporting learners’ healthy development...formative assessments support students in developing their full intellectual, emotional, social, physical, creative and civic potential and in building the foundation for lifelong learning.⁴”

When designing a new education approach, “stakeholders cannot assume that equity will automatically be a byproduct of adopting new approaches; institutional and cultural barriers are too strong.⁵” The work group has discussed equity at the center of their vision for a mastery-based learning approach, and how an MBL approach is needed because of the ways our traditional system has not served certain populations of students well. To ensure the success of a state MBL approach, further discussion will be needed to determine strategies that will uphold the interests of systemically marginalized groups of students.

Another critical component of the future of learning includes ensuring that renewed definitions of success for the education system are based on both current and future workforce needs.

³ Prince, K., Swanson, J., & King, K. (2018). *Forecast 5.0 – The Future of Learning: Navigating the Future of Learning*. KnowledgeWorks. Retrieved from <https://knowledgeworks.org/resources/forecast-5/>

⁴ Ibid, 19

⁵ Ibid, 28

Common state policy barriers to a mastery-based learning education system, as identified by KnowledgeWorks and with some applicability to the Washington state context, include accountability (when the state's measures of success don't align with a mastery-based learning approach), assessment (if tests don't support the learning process), educator workforce (if educators aren't available with the skill set to teach in an MBL system), and funding models (when per-pupil funding is based on seat-time).⁶

HIGH SCHOOL AND BEYOND PLAN (HSBP) PRESENTATION

At the September meeting, members had a chance to engage with the Director of Career and College Readiness at Everett Public Schools around the High School and Beyond Plan (HSBP). At Everett Public Schools, they have a HSBP District Coordinator who spends one day a week in each of the comprehensive high schools. She also builds connections with community partners. The rest of the HSBP program work falls to the individual school counselor. Everett's online platform for the HSBP program is Naviance, a common platform used by many districts around the state. Naviance has the capability to push out alerts to students based on their identified interests (e.g. a college visit alert). In Everett, they are working to bring in more general education educators to be able to work with their students on their HSBPs (special education educators are already highly invested).

The discussion focused on the varying levels of implementation of the High School and Beyond Plan across the state and how while some districts are doing exceptional work with the HSBP, for many districts, it is simply a "check box." It was acknowledged it is hard for most districts to provide a robust HSBP program with the current counselor to student ratio, as generally the HSBP is delivered by counselors (either in classes or small groups, less often due to time constraints is counselor delivery 1-on-1). Other delivery options of the HSBP to students are via their homeroom/advisory class or to have components of the HSBP delivered in a core class (which would meet learning standards). For the homeroom or class delivery options—the school counselor trains the educator on the HSBP requirements before the educator then delivers the lessons to students.

Additionally, most parents are unaware of the HSBP. To ensure relevance for students, the HSBP should be able to follow the student as a transportable tool into postsecondary education and beyond.

Work group members want to ensure that in a mastery-based system, the HSBP becomes a key tool used by all educators to track changing student interests and goals and thus inform their

⁶ Jenkins, S., Olson, A., Pace, L., & Sullivan, T. (2019). *State Policy Framework for Personalized Learning*. KnowledgeWorks. Retrieved from <https://knowledgeworks.org/get-empowered/policy-resources/state-policy-framework-personalized-learning/>

individual learning plan accordingly (rather than a tool only used by counselors, as is common in the current system).

MASTERY-BASED LEARNING: PERSPECTIVE FROM THREE WASHINGTON SCHOOLS

At the November meeting, work group members heard from school leaders and students from schools employing a variety of mastery-based learning models: Avanti High School, Gibson Ek High School (a waiver school under RCW 28A.230.090), and Odyssey Middle School and Discovery High School. All three schools shared a focus on student mastery of the state learning standards, as demonstrated through project-based learning and other personalized learning strategies, allowing students to progress in their learning at their own pace.

Selected quotes from the student speakers at this meeting:

- Actively embrace inclusivity.
- Celebrate different identities.
- Comprehensive high schools are built for one type of student. Almost all of the students left out of the comprehensive high school can be served by a project-based learning, MBL model.
- We cannot wait for the perfect program. With the world changing, we have to change how we do education too—but students have to be given the freedom to do so.
- You do not have to change your entire curriculum to make students feel like they are doing well. Students need to feel like they can explore and enjoy learning.
- Give us the freedom to fail so we can have the groundwork for success.

Work Plan

This work plan was developed in response to discussion at work group meetings about the most critical topics for the group to understand as well as what realistically could be accomplished during the statutorily allotted time for the work group to convene.

Date	Activities	Topics	Outcomes/Deliverable
September 23, 2019	<ul style="list-style-type: none"> • Plan and hold September meeting of the Work Group • Location: Hearing Room A, O’Brien Building, State Capitol, Olympia 	<ul style="list-style-type: none"> • Vision • Work Plan • Deliverables for the Interim Report • High School and Beyond Plan (HSBP) 	<ul style="list-style-type: none"> • Shared vision of Mastery-based Learning (MBL) • Identification of content topics in Interim Report • Shared understanding of the requirements and delivery models of the HSBP • Discussion of HSBP as a tool for Mastery-based Learning

October and November (Submit in December 2019)	<ul style="list-style-type: none"> • Staff will develop a draft based on September meeting discussion • Work Group members review and provide feedback • Create final report and submit to the Governor and Education committees 	<ul style="list-style-type: none"> • Topics identified in September meeting 	<ul style="list-style-type: none"> • Interim Report with preliminary findings <ul style="list-style-type: none"> ○ Staff will send a draft of the report (via email) to members by Oct. 24. Members will need to provide feedback to staff by Nov. 7, in order to bring an updated report to members at the Nov. meeting
November 14, 2019	<ul style="list-style-type: none"> • Plan and hold November meeting of the Work Group 	<ul style="list-style-type: none"> • School-level mastery-based/personalized learning • Student panel • Review draft Interim Report 	<ul style="list-style-type: none"> • Feedback on Interim Report
January	<ul style="list-style-type: none"> • Webinar 	<ul style="list-style-type: none"> • Higher education models 	<ul style="list-style-type: none"> • Shared understanding of components of MBL from higher education that could translate to the K-12 system
Winter or Spring	<ul style="list-style-type: none"> • Update to EOGOAC on the vision and work plan of the mastery-based learning work group 		<ul style="list-style-type: none"> • Identify ways the work group and EOGOAC can collaborate around building shared understanding of the state's vision for MBL
February 27, 2020	<ul style="list-style-type: none"> • Plan and hold September meeting of the Work Group 	<ul style="list-style-type: none"> • High School Transcript and Postsecondary admissions • Course level mastery models (e.g. World Language, or WL) 	<ul style="list-style-type: none"> • Begin to build guidelines and recommendations for recording mastery-based learning on transcripts
April 16, 2020	<ul style="list-style-type: none"> • Plan and hold April meeting of the Work Group 	<ul style="list-style-type: none"> • Educator preparation • High School and Beyond Plan (HSBP) 	<ul style="list-style-type: none"> • Build recommendations for supporting educators in professional development around MBL • Creating recommendations around how HSBP can support MBL
Mid-June		<ul style="list-style-type: none"> • Framing a mastery-based diploma 	<ul style="list-style-type: none"> • Begin to develop draft guidance for schools on how to offer a completely

		<ul style="list-style-type: none"> System level MBL models 	mastery-based program that results in a high school diploma <ul style="list-style-type: none"> Identification of issues to be addressed in policy
Summer retreat		<ul style="list-style-type: none"> Further exploration of previously covered topics or new topics, as needed 	<ul style="list-style-type: none"> Begin developing themes and possible recommendations for the final report
Summer webinar		<ul style="list-style-type: none"> Webinar for partner orgs to report on work of the work group? 	<ul style="list-style-type: none"> Work group members reinforce relationships with partner organizations <ul style="list-style-type: none"> Identify challenges and ways of collaborating around MBL
Mid-August		<ul style="list-style-type: none"> ID key themes / issues 	
Mid-October		<ul style="list-style-type: none"> Recommendations 	
Mid-November		<ul style="list-style-type: none"> Final meeting online or in-person 	
Final Report: Submit by December 1, 2020			<ul style="list-style-type: none"> Staff will develop a draft based on September meeting discussion Work Group members review and provide feedback Create final report and submit to the Governor and Education committees

Areas for Further Exploration

The work group has identified quite a few topics that are deserving of future discussion and study. The work plan addresses the most critical of these areas. In addition to the work laid out above, the work group believes it is also important to come back and discuss the following topics.

FURTHER AREAS OF EXPLORATION:

- What happens to our testing system? What changes, and what goes away?
- 24-credit graduation requirement—does this stay the same? Is it reconfigured in any way?

- Alignment/relationship between credits and mastery-based learning
- All of Washington’s 295 districts have different contracts—would these allow mastery-based learning?
- What professional development supports are needed for educators to be able to teach in a mastery-based system?
- Communication plan on how do we publicize a system of mastery-based learning so that it is success? Many people will be relieved that we understand how big of a shift mastery-based learning would be—that we understand things are tough out there, and work group has your back.
- Need another meeting/discussion on the High School and Beyond Plan (HSBP) and making it more robust.

AREAS DESERVING OF MORE STUDY

- Funding—how funding might need to change to accommodate a mastery-based learning system, including consideration of additional staffing needs.

Appendix 1: Preliminary Definition of Terms

This initial list of definitions will be added to, and some of these definitions may be refined as the group progresses in its work.

MASTERY-BASED LEARNING

The work group believes that the principal work of the group, mastery-based learning, is effectively defined in legislation (per E2SHB 1599 Sec. 301):

- f) Students advance upon demonstrated mastery of content;
- g) Competencies include explicit, measurable, transferable learning objectives that empower students;
- h) Assessments are meaningful and a positive learning experience or students;
- i) Students receive rapid, differentiated support based on their individual learning needs; and
- j) Learning outcomes emphasize competencies that include application and creation of knowledge along with the development of important skills and dispositions.

COMPETENCY-BASED LEARNING

Competency-based learning is a similar term to mastery-based learning. The choice of using the term mastery-based learning appears a deliberate choice of the Washington Legislature to emphasize that students advance upon *mastery* of content. In a mastery-based learning experience, teachers and students might work together to define what mastery looks like.

Work group members and others should be aware that in some other states, the term “competency-based learning” is defined essentially identically to how mastery-based learning is defined in Washington’s legislation. When communicating with people from other states or looking at material from other states, it is important to verify the definition of competency-based learning.

PERSONALIZED LEARNING

The concept of personalized learning is foundational to mastery-based learning. Mastery-based learning *must* be personalized learning. But the two terms are not interchangeable. Personalized learning is a broader concept, and may describe different types of learning experiences as well as be used to describe programs, educational approaches and strategies. Personalized learning is intended to address individual student interests, needs, cultural backgrounds and learning styles. Personalized learning is the opposite of one-size-fits-all learning. For a more in-depth discussion of the convergence of mastery-based learning with personalized learning, see Table 2

in *Mean What You Say: Defining and Integrating Personalized, Blended and Competency Education* (p. 23)⁷.

PROJECT-BASED LEARNING

Project-based learning is an instructional method or learning experience typically or ideally characterized by students engaging in:

- Personally meaningful projects over an extended period of time.
- Projects that address problems that are authentic and real-world.
- Active, inquiry-based, hands-on learning, often across content areas.

Project-based learning may support mastery-based learning.

PROFICIENCY-BASED LEARNING

Proficiency-based learning is a term similar to competency-based learning and mastery-based learning, and like these terms indicates that students advance upon demonstration of proficiency in learning objectives. There are shades of meaning in the words competency, proficiency, and mastery. The words “competency” and “proficiency” indicate a high level of knowledge, skill or ability, but “mastery” suggests a level higher still. The choice of using the term mastery-based learning appears a deliberate choice of the Washington Legislature to emphasize that students advance upon *mastery* of content.

LEARNING STANDARDS

Learning standards “identify the knowledge and skills all public school students need to know and be able to do.” (RCW [28A.655.070](#)).

STANDARDS-BASED EDUCATION

Standards-based Education is a system of education (including instruction, assessment, grading, reporting and other aspects of a system of education) that is based on students demonstrating the explicit knowledge and skills of the standards as they progress through their education. Mastery-based learning is standards-based education, since the explicit, measurable, and transferable learning objectives that characterize mastery-based learning is based on learning standards.

CREDIT

According to [WAC 180-51-050](#), “high school credit” means:

- (1) Grades nine through twelve or the equivalent of a four-year high school program, or as otherwise provided in RCW [28A.230.090](#)(4):

⁷ Patrick, S., Kennedy, K., & Powell, A. (2013). *Mean What You Say: Defining and Integrating Personalized, Blended and Competency Education*. iNACOL. Retrieved from <https://www.inacol.org/wp-content/uploads/2015/02/mean-what-you-say-1.pdf>

- (a) Successful completion, as defined by written district policy, of courses taught to the state's essential academic learning requirements (learning standards). If there are no state-adopted learning standards for a subject, the local governing board, or its designee, shall determine learning standards for the successful completion of that subject; or
- (b) Satisfactory demonstration by a student of proficiency/competency, as defined by written district policy, of the state's essential academic learning requirements (learning standards).

According to this definition, credits are based on learning standards—the learning standards addressed in a course that is part of a four year high school program. Through MBL, once an educator identifies the learning standards associated with a particular high school course, students do not need to complete that particular classroom-based course to earn that credit. A student who masters those learning standards through any educational experience—work based learning, completing an individual or team project, learning inside a classroom or outside a classroom—may earn the credit upon demonstration of mastery.

CREDIT EQUIVALENCIES

Students may receive credit for recognition of learning that takes place outside of school. Typically, schools or districts will have a policy and a process for awarding such credit, and will have some form of test or assessment that allows the student to demonstrate the skills and knowledge for which they are being awarded credit.

Appendix 2: Mastery-Based Learning Examples in Washington, Across the Nation, and Internationally

MASTERY-BASED LEARNING: WHAT IS HAPPENING IN WASHINGTON?

The establishment of the mastery-based learning work group is an important step in launching efforts to expand mastery-based learning in Washington. The work group has the opportunity to learn from a number of states that are ahead of us in developing policies and implementing mastery-based education. In addition, Washington does have existing state policies that support mastery-based learning and that could provide a foundation on which to build greater capacity. However, among Washington school districts knowledge about such policies and implementation of competency-and mastery-based learning practices is uneven. Districts may not know they have the flexibility and authority to create mastery-based learning opportunities, or districts may not feel equipped or adequately supported to take advantage of the flexibility. Furthermore, the current framework of laws, policies, and practices in Washington may be insufficient to allow mastery-based learning to flourish. The work group may consider identifying policies and practices that might be modified or added to better support expanded access to mastery-based learning.

MASTERY-BASED LEARNING LAWS AND POLICIES IN WASHINGTON

Current laws that may govern mastery-based learning in Washington include:

- [WAC 180-51-050](#)—Definition of High School Credit
 - This law defines high school credit based on learning standards, rather than seat-time. This enables districts to have freedom in designing student learning experiences that result in credit.
- [WAC 392-121-182](#), [RCW 28A.232](#)—Alternative Learning
 - Alternative learning law provides a funding formula and a reporting model for learning that takes place partly or fully outside of a traditional classroom.
- [WAC 392-410-315](#)—Work-Based Learning
 - This law creates a funding formula and reporting model for worksite learning—learning and credit-earning that takes place at an employer’s workplace or other community setting where the student has a job or internship.
- [WAC 392-410-310](#)—Equivalency Course of Study
 - Equivalency course of study allows for students to earn credit for learning experiences planned and approved by a school that take place away from school or are conducted by non-district employees.

Additional policies that impact mastery-based learning in Washington include:

- Washington State School Directors’ Association (WSSDA) Model Policy for Competency-Based Credit
 - This model policy allows for competency-based credit through students demonstrating proficiency in a specific assessment. The policy was written for world language, but could be modified for any subject area. The policy assumes the existence of an assessment well-aligned to learning standards.
- Policies that allow acceleration in the earning of high school credits
 - While acceleration policies do not necessarily support innovation in instruction, they do allow flexibility in the rate at which some students progress. These policies include:
 - Middle school students earning high school credit.
 - Dual enrollment and early college programs.
- District waivers of credit graduation requirements
 - This waiver excuses schools from defining learning, and a student’s progress, through high school credits. Schools are not excused from teaching and learning of learning standards.
 - Schools operating under these waivers generally employ project-based learning and non-traditional, non-classroom learning, practices which may support mastery-based learning.
 - Twelve districts have this waiver. Most of the schools operating under this waiver employ the Big Picture model of learning.

COMPETENCY-BASED CREDITING: BASIC EDUCATION SURVEY DATA

Competency-based credit is related to mastery-based learning. In practice, educators usually use the term “competency-based credit” when students demonstrate proficiency and earn high school credit in a subject through a well-accepted, well-recognized assessment.

Every year, districts confirm their compliance with the requirements of Basic Education through an online survey submitted to the State Board of Education. In recent years, the Basic Education Compliance survey has asked if districts offered competency-based credit, and if yes, in what subjects. These survey results have shown that:

- The number of districts offering competency-based credit increased from 36% to 55% of districts with high schools between 2017 to 2019. The data are summarized below:

	Number of districts that allow competency-based crediting	Number of districts that do not allow competency-based crediting
Class of 2017	89	160
Class of 2018	121	130
Class of 2019	138	114

- The number of subjects for which competency-based credit is offered also grew.
 - World language is the most commonly offered competency-based credit. This is probably due to the WSSDA model policy that focuses on world language. Furthermore, there is a commonly-used assessment for many languages.
 - Next most common is the use of the high school state assessment, the Smarter Balanced Assessment, for competency credit in English or math (Algebra I).
- Responses indicate great variability in how competency-based credit is being offered. Short answer responses submitted through the survey show that:
 - Some districts only offer competency-based credit in their alternative high schools.
 - Many schools are reluctant to offer competency credit, offering it rarely to only a few students.
 - Some districts offer competency-credit through a policy that allows individual students to challenge graduation requirements.

OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION (OSPI) COMPETENCY-BASED ASSESSMENT REPORT

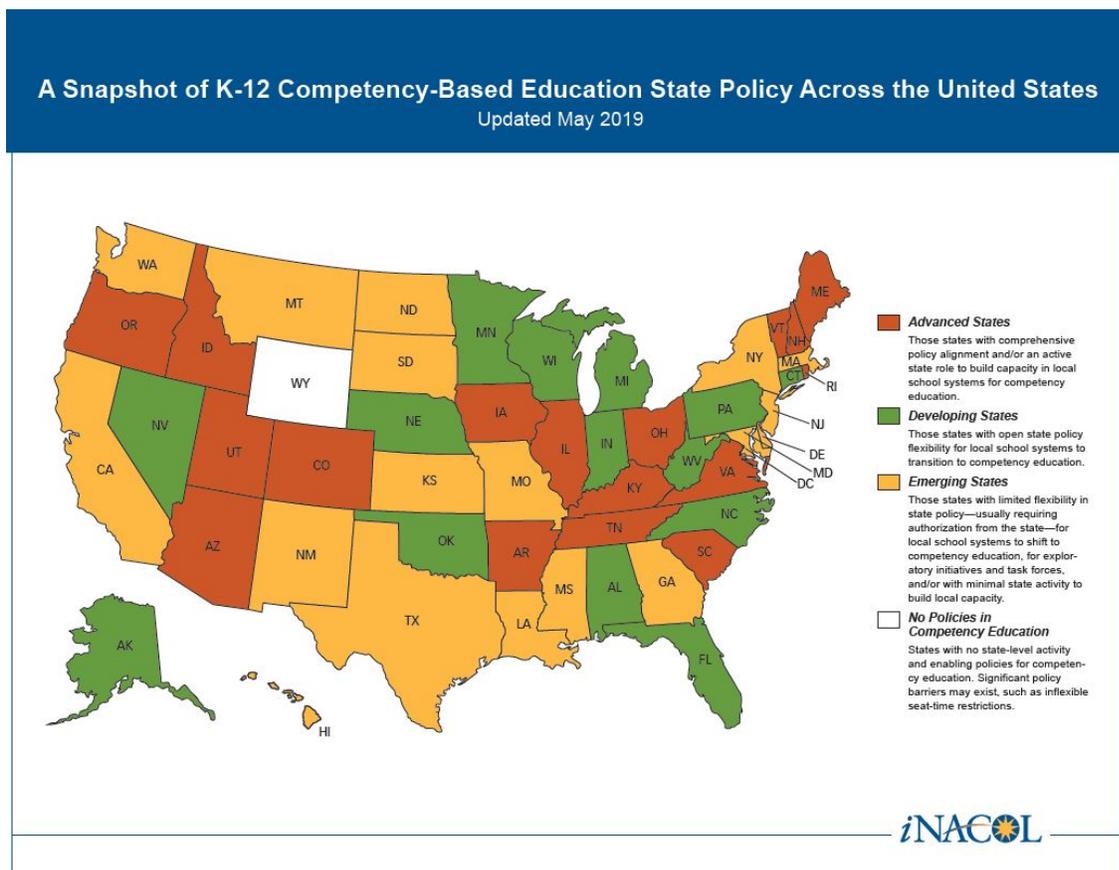
OSPI was tasked with providing a report to the education committees of the legislature detailing available competency-based assessments that meet the state learning standards. Information

from this report will inform the MBL work group’s final recommendations regarding ways to demonstrate mastery in accordance with state learning standards.⁸

MASTERY-BASED LEARNING ACROSS THE NATION AND INTERNATIONALLY

There are a number of states leading in the provision of mastery-based learning. Figure 1 shows the level of competency-based education state policy across the nation.⁹ A few states are highlighted below that are doing particularly interesting work that may inform further development of policies in Washington.

Figure 1: A Snapshot of K-12 Competency-Based Education State Policy Across the United States



IDAHO

Idaho is one of the states that is furthest along in its journey toward mastery education, because they have created an entire state framework around MBL. In 2013, an Idaho task force for improving education recommended pursuing the avenue of mastery learning. After an

⁸ <https://www.k12.wa.us/sites/default/files/public/communications/2018-11-CompetencyBasedAssessments.pdf>

⁹ A Snapshot of K-12 Competency-Based Education State Policy Across the United States. (2019, May). Retrieved from <https://www.inacol.org/wp-content/uploads/2019/05/2019-Snapshot-of-CBE-State-Policy-updated-5312019.pdf>.

implementation committee developed recommendations (2014) and the legislature passed HB 110 (2015), a public awareness campaign was held regarding the legislation (2016) and in 2017, the first cohort of the Idaho Mastery Education network was selected.

In Idaho's framework—learning is the constant and time is the variable. Idaho's definition and tenets of mastery-based learning align well with the work group's definition of MBL.¹⁰ Nineteen incubator teams (comprised of 32 schools) assessed standards, mastery, or competencies using various assessment tools, including exhibitions, portfolios, rubrics, project-based assessments, and individual assessments.¹¹

Idaho is now in its second year of mastery education implementation but schools are beginning to see various indicators of success. "Parents, students, and teachers described many benefits of mastery education, including that it is hands-on and has real-world connections.¹²" Incubator schools measured success most commonly through student engagement, but also through high school graduation rates, test scores, social emotional outcomes, and workplace success.

SOUTH CAROLINA

In 2012, the state developed their Profile of the South Carolina Graduate, which includes a focus on world-class knowledge, world-class skills, as well as life and career characteristics. In 2014, a new state superintendent helped develop the vision to establish a system of personalized learning in every district, leading to state support beginning in 2016. The state Office of Personalized Learning was established in 2017, and the PersonalizeSC network launched the next year.

The South Carolina Personalized Learning Network focuses on student ownership, through learner profiles, learning pathways, and flexible learning environments. Students understand why they are learning what they are learning and have meaningful ways to demonstrate evidence of learning. The pace of instruction is based on the individual student's learning pathway, and students can take as much or as little time as they need for each content standard.¹³

Beginning with 10 districts in 2017-18 school year and 25 coaches, the program grew substantially the next year to 55 districts (over 100 school teams) and over 100 coaches. The State Office of Personalized Learning focused on providing professional learning opportunities for each cohort, depending on their stage of implementation.

¹⁰ Idaho State Department of Education. (2019). Idaho Mastery Education Progress Report. Retrieved from <http://www.sde.idaho.gov/mastery-ed/files/imem/IMEN-Progress-Report-2018.pdf>

¹¹ Roccograndi, A., & Stiefvater, E. (2019). *Idaho Mastery Education Network Implementation Report*. Education Northwest. Retrieved from <http://www.sde.idaho.gov/mastery-ed/files/imem/IMEN-Evaluation-Report-2018.pdf>

¹² Ibid, page 27

¹³ Competency-Based Education. (2019). Retrieved from <https://ed.sc.gov/instruction/personalized-learning/competency-based-education/>

UTAH

Legislation in 2013 and 2016 led to a state competency-based education pilot grant program in the 2017-2018 year with 13 participating local education agencies (LEAs).¹⁴ The initial legislation in 2013 (HB 393) instructed the State Board of Education to recommend a funding formula for schools and districts using a competency-based education approach. In the 2016 legislative session, a funding pool was established for districts to seek reimbursement for any loss in funding resulting from utilizing a state approved competency-based model.

Before beginning the pilot program, the State Board of Education conducted a needs assessment where they discovered that the interested LEAs were excited about the pilot program but felt “they lacked the knowledge to immediately design a successful competency-based education program.”¹⁵ Based on this information, the pilot program was redesigned to accommodate first an exploratory phase and then a design phase. The pilot application also required applicants to identify at least four individuals from the LEA who would focus on the competency-based education program to ensure commitment to a successful pilot experience.

Utah released a Competency-Based Education Framework in 2018. The framework includes program quality indicators for the pilot period (e.g. student engagement measured through surveys and absenteeism rates as well as teacher turnover by teacher effectiveness), after the program has been fully implemented for three years (e.g. percent of students demonstrating proficiency at a specific level in core subject areas and performance on state accountability assessments), and long-term indicators (e.g. percent of students with an industry certification and percent of students who persisted from their 1st to 2nd year of college within 3 years of graduation.¹⁶)

NEW HAMPSHIRE

New Hampshire has been working toward a competency-based education system for more than twenty years. The state’s first competency-based education high school pilots were created in 1998. Beginning in 2004, the state began convening stakeholders to reevaluate “the goals and design of the state’s high school system.”¹⁷ Beginning in the 2008-09 school year, local school boards were required to have a policy to ensure students could earn credit by demonstrating mastery of required competencies for a course (rather than by seat time). As of 2013, the state

¹⁴ Phillips, K., & Lockett, E. (2017). *The Path to Personalized Learning: The Next Chapter in the Tale of Three States*. ExcelinEd. Retrieved from <https://www.excelined.org/downloads/path-personalized-learning-next-chapter-tale-three-states-october-2017/>

¹⁵ Ibid, page 13

¹⁶ Utah State Board of Education. (2018). *Competency-Based Education Framework*. Retrieved from <https://www.schools.utah.gov/file/93b6b3c0-85c7-47e5-9f1b-3677b1c9603b>

¹⁷ Frost, D. (2016, May 10). *How New Hampshire Transformed to a Competency-Based System*. Retrieved from <https://www.inacol.org/news/how-new-hampshire-transformed-to-a-competency-based-system/>

now has approved subject competencies for all grade levels in English Language Arts, mathematics, and science.

The state has established statewide standards for their high schools to provide competency-based learning environments. Local districts are encouraged to establish additional academic standards as they determine what might be necessary to serve their students within their local context.¹⁸ Since 2012, all school districts are invited to take part in the Performance Assessment of Competency Education (PACE) program that combines standardized testing with locally-developed performance assessments. The goal of the PACE assessments is to “support deeper learning and be more integrated into students’ day-to-day work than current standardized tests.”¹⁹

Other areas of innovation in New Hampshire include the “No Grades, No Grades” (NG2) pilot initiative, which utilized multi-grade bands so that students are able to advance upon demonstration of mastery (the participating schools also participated in the PACE program).²⁰ Students participating in the multi-grade bands were able to demonstrate a clear increase in their learning progress.

OTHER STATES

Even in states that do not have a stated focus or program of mastery-based learning, elements of MBL are still present in certain programs and schools.

For example, in Massachusetts, there was a MassGrad initiative to employ evidence-based strategies for dropout prevention. One of the strategies included an “alternative pathways” program implemented in 17 high schools. Some of the schools incorporated elements of mastery-based learning:

- Several schools offered online courses that were self-paced (and did not include seat time restrictions). Students also had the ability to test out of units where they had already mastered the content.
- Teachers at several schools tried new approaches to both instruction and assessment.
- At competency-based Boston Day and Evening Academy, when students enroll, they are assessed and then based on their results, are placed in personalized courses where they can progress at their own pace.²¹

¹⁸ Ibid

¹⁹ Ibid

²⁰ Els, J. V., & Holloway, D. (2018, February). *Our Quest to Personalize Competency-Based Learning in New Hampshire*. Retrieved from <https://www.competencyworks.org/case-study/school-models/our-quest-to-personalize-competency-based-learning-in-new-hampshire/>

²¹ University of Massachusetts Donahue Institute in collaboration with the Massachusetts Department of Elementary and Secondary Education. (2015). *Alternative Pathways to a High School Diploma: MassGrad Summary Brief*. Retrieved from <http://www.doe.mass.edu/ccr/massgrad/SummaryBrief-AlternativePathways.pdf>

INTERNATIONAL EXAMPLES OF MASTERY-BASED LEARNING

Across the European Union, member countries have agreed to a set of key competences for lifelong learning critical for all students to achieve (a number of these overlap with the U.S. concept of 21st century skills).²²

In Finland, after decades of reform, the education system has shifted from a centralized one that emphasizes standardized tests to a localized focus. Educators are highly respected as professionals, and the state pays for a research-based master's degree for each educator—which includes a full year of student teaching at a model school associated with the student teacher's university. At each school, educators and administrators design the educational goals for their local context. One of the guiding themes in competency-education is a focus on equity and students receive feedback on their learning in a variety of ways, including with ongoing formative assessments. Additionally, students engage in self-paced learning and create their own individual study plan, especially in high school.

In Sweden, 33 Kunskapskolan (knowledge schools) operate through a fully competency-based model where students set their own learning goals as early as eighth grade. A student's education has two levels: individual subject competency as well as higher level skills that align with the EU's key competences. Over 100 schools operate under this model around the world in six countries (adapted to each nation's standards), including in the U.S.

In British Columbia (Canadian province), there is a stated goal in the province's Education Plan²³ that students be at the center of their learning. To develop the province's plan, there was extensive stakeholder outreach to inform the creation of a new curriculum that was more flexible for all students. This is enabled in several ways, including through a legislative framework allowing each local school board to establish the calendar it believes best fits the schools within its district (there is no standard calendar). One school in British Columbia with a particular focus on mastery-based learning is Thomas Haney Secondary School, where "it is common to see students of different ages collocated and engaged in shared class time. Beginning in the ninth grade, students may design their entire day of classes, as long as it revolves around that day's learning goal, which is mapped to the learning standards (and which they can articulate)."²⁴

Finland, Scotland, and British Columbia all have leaner standards intended to provide greater autonomy to teachers and more personalization opportunities to students. Both Finland and Scotland have a focus on the "whole child" and providing wraparound support services (e.g. on-site health services) to all students. Both Finland and New Zealand have a focus on ensuring that

²² Bristow, S. F., & Patrick, S. (2014). An International Study in Competency Education: Postcards from Abroad. CompetencyWorks. Retrieved from <https://www.inacol.org/resource/an-international-study-in-competency-education-postcards-from-abroad/>

²³ Ibid

²⁴ Ibid

students can articulate their learning and that they choose when they are ready to 'show what they know' through assessments or other methods.

Using the definition of mastery-based learning, here are some global examples of each of the components of MBL:

a) Students advance upon demonstrated mastery of content;

There is a perception that U.S. federal policy presents a barrier to this concept, because of "the expectation that state-level summative assessments be based on age and grade, rather than on the evaluation of where a student is in a learning progression, and the amount of growth that has occurred."²⁵ However, in select programs in districts across the U.S., a few schools have begun using multi-age cohorts—for instance in Idaho, there is a cohort of schools leading the implementation of mastery education with multi-age cohorts.

b) Competencies include explicit, measurable, transferable learning objectives that empower students;

A focus on teacher/school autonomy as well as student agency (that students can describe their own learning objectives and their progress toward them, as well as can demonstrate their mastery of a topic on their own timeline) is essential.

c) Assessments are meaningful and a positive learning experience or students;

When students can choose to be assessed on their learning at a time they pick and in a way they design, then assessment is seen as a natural and healthy part of the learning process. Then assessments (especially formative assessments) can help educators and students to better facilitate an individual student's learning progression.

d) Students receive rapid, differentiated support based on their individual learning needs; and

As identified already by work group members, adequate staffing to provide each student differentiated support based on their learning needs is a critical component of mastery-based learning. In both Kunskapsskolan and Thomas Haney Secondary schools, students have weekly check-ins with their learning coach. All other school schedules are based around this critical one-on-one time between educator and student.

e) Learning outcomes emphasize competencies that include application and creation of knowledge along with the development of important skills and dispositions.

When a country has learning standards or curricula focused on crosscutting skills, this allows individual schools to adapt classroom lessons to their local context with subject-specific knowledge acquisition. One local example of this is the Lummi Nation School in Bellingham, Washington which focuses on instilling cultural awareness in students throughout their

²⁵ Ibid, page 26

academic learning. The European Union, New Zealand, and Australia all have specific competencies identified to ensure equity across their educational system as well as ensure all students have the knowledge and skills they need to be successful in life.