Mastery-based Learning in Washington State

2021 REPORT

By the Mastery-based Learning Work Group

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Executive Summary

Our education system reflects our larger world where for too long, structural inequities have gone unaddressed, leading to generations of underserved students not receiving the high-quality education they deserve. Although there are students who do well in our current system, many of them are not thriving. The Mastery-based Learning Work Group members believe that Washington has an imperative to shift the focus of our education system from an industrial model that sorts students to one that intentionally supports every student in developing the range of dynamic skills we want to see in each graduate of our public K-12 system.

Washington State’s Profile of a Graduate represents a shift in the focus of our system. We recognize that many educators are already helping students to cultivate the skills laid out in the Profile. The larger community, students, educators, and families all contribute to the effort to support our students growing and developing as human beings and learners.

Our collective "why" calls for a transformation of our education system to close both the opportunity gap and the resulting achievement gap. The Work Group believes that the Profile of a Graduate should serve as the overarching vision for the entire K-12 education system moving forward—a vision that will help Washington State achieve the goals of basic education and that schools, families, and communities will embrace because they helped develop it.

Washington is taking steps to increase capacity for a more personalized learning system. The Work Group has been reexamining what students should know and be able to do, and how students demonstrate their knowledge and skills. The Profile of a Graduate will be the bridge between the two routes to a diploma (credit-based and mastery-based). It would convey that every student is working toward meeting the same standards. The Profile will set the vision for our expectations of students, whether they attend a traditional program, or mastery-based school, or both during their educational journey.

The Work Group is proposing a Profile of a Graduate that reflects a wide range of input from stakeholders and lessons learned from other states and communities. Our recommendations align to the charges (in bold) assigned to the Work Group in 2021 through SSB 5249:

1. **Consult with students, families, and educators who have been underserved by the education system:** Feedback was solicited through a variety of methods to inform development of the Profile of a Graduate. The themes from the feedback were generally consistent across methods and stakeholder groups. For instance, what students shared about what they need regarding soft skills was very similar to what employers shared.

2. **Consult with representatives from postsecondary education and training programs, labor, and industry:** Stakeholders appreciated the goals of the Work Group to refocus the education system on helping students prepare for their post-secondary goals by developing their transferrable skills. They particularly emphasized that students need cultural competency skills so they can work effectively with people from all backgrounds.

3. **Develop the Washington State Profile of a Graduate:** We do not believe implementation of the Profile should just be one more thing school districts are taking
on in the midst of responding to the coronavirus pandemic. Rather, the Profile should serve as the North Star for a district, to help design educational experiences that support every student in attaining the skills they will need in their journey after high school, for success in postsecondary education, careers, citizenship, and to enable lifelong learning.

a. A group of K-12 educators and business and community representatives should be convened to develop sample tools and rubrics for the Profile to ease the burden on schools regarding implementation. These rubrics and other tools will help tangibly explain to educators, students, and families how Washington’s Profile of a Graduate skills can be demonstrated by students.

b. The High School and Beyond Plan (HSBP) will be invaluable as a tool for helping each student track their growth in the Profile of a Graduate characteristics and focus on what skills they need to develop for their personal goals post high school. To maximize the potential of the HSBP in supporting student learning and the Profile of a Graduate, the Work Group recommends additional work happen at the state level to make the HSBP more uniform and equitable for students.

c. The Work Group recommends the SBE review the Profile every ten years to ensure the skills still reflect the top needs of Washington’s communities.

4. **Provide recommendations for supporting implementation of MBL:**

a. The Work Group’s 2020 Report explains that successful MBL implementation will require a variety of other policy changes and supports. We provide additional information and updated information where it is available in this report.

b. The Work Group believes the lessons learned through the MBL Collaborative grant project will be invaluable. While the SBE is seeking private funding to extend the effort, SBE will likely have continued requests for ongoing funding from the Legislature as we are able to demonstrate efficacy of the program. The Work Group believes this approach will more equitably serve students and has the potential for a high return on investment for the state.

c. The Work Group recommends that a standardized state format for a mastery transcript be developed. We want to balance the concerns regarding capacity of our higher education partners to evaluate mastery transcripts with the desire of MBL schools to move toward more equitable grading practices. We recommend a phase-in period for the adoption of the new mastery transcript, determined by SBE in consultation with higher education partners and other stakeholders.

5. **Submit the report on the Profile of a Graduate to the State Board of Education:** We believe SBE should consider a variety of issues in their work to align graduation requirements to the Profile, including development of a crosswalk between learning standards, credit requirements, and competencies based on the Profile. This will explain what skills we expect students to gain from each of the credit/subject area requirements.

The Work Group emphasizes that the implementation of the Profile must be done with an equity lens. Once implemented, the Profile should help educators and the system recognize and value what skills students bring to their education from their diverse cultures. This is our opportunity to radically transform our education system and change the foundation of our system by centering students, equity, inclusion, and access through Washington’s Profile of a Graduate.
Overview of the 2021 Work Group Report

As directed by SSB 5249 (Chapter 144, Laws of 2021), the Mastery-based Learning (MBL) Work Group has developed a Washington State Profile of a Graduate describing the cross disciplinary skills a student should have developed by the time they graduate high school.

Beyond the recommendations already laid out previously in the MBL Work Group’s 2020 Report, this report discusses recommendations for implementation of the Profile of a Graduate (in section 3) and additional recommendations (in section 4) for supporting implementation of mastery-based learning. Mastery-based learning is defined in E2SHB 1599 Section 301 as:

- 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 for 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.

Why does Washington need a Profile of a Graduate?

Developing a Profile of a Graduate is an opportunity to radically transform our education system and change the foundation of our system by centering students, equity, inclusion, and access. Although some students succeed in our current system, many students are not being well served and even many of the students who do well are not thriving.

Our education system has not substantially changed since the Industrial Revolution, when it was “...designed to select and sort [students], rather than to develop potential, and—through segregation, unequal school funding, and tracking systems—institutionalized racism and classism are baked into the design of the system itself.”¹ We cannot continue to simply tinker around the edges of the system and expect our students to be prepared for a 21st century world and

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changing economy. As a state, we must support schools to intentionally help students develop the dynamic range of skills we want to see in each graduate of our K-12 system.

Families, employers, and the public all say the education system should focus on developing innovators, self-starters, and individuals with a full set of “life-ready” skills. The Superintendents Alliance at the National Center on Education and the Economy, an alliance of urban superintendents with a combined enrollment of more than 1 million students, recently argued that “...a life-ready standard would mean students are competent in reading and math but also able to demonstrate critical-thinking skills, mental and physical health, creativity, collaboration, leadership, and effective communication. It would mean students have engaged with a rich curriculum that asked them to think deeply, make connections across disciplines, where assessments encourage them to explain their reasoning and show what they know.”2

According to a nationally representative survey of parents, “Parents are strongly in favor of schools teaching the skills promoted in social-emotional learning. Things like setting goals, controlling emotions, and being informed citizens.”3 The survey found that 86% of parents agreed somewhat or strongly with the statement: “Learning life skills and social skills at school is just as important as learning academics.”4 Likewise, a 2021 national poll of likely 2022 voters revealed that 74 percent of respondents say a lack of personalized learning focused on individual needs is a problem, indicating voters support a shift in our system to increase personalized learning opportunities for students.5 We must shift our system focus to developing each student as a whole person, and spending time supporting each student’s social, emotional, and mental needs, as well as their academic needs.6 Then every student can truly thrive.

The Profile of a Graduate is a way to make Washington’s Basic Education Goals actionable, as schools will help each student develop on a personal

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2 https://www.edweek.org/leadership/opinion-graduation-must-depend-on-learning-not-time/2021/10
3 https://www.edweek.org/leadership/parents-like-social-emotional-learning-but-not-the-name/2021/08
4 Ibid
6 Throughout the report, we have used language focused on the individual student. However, despite conventional grammatical rules that pronoun usage should be parallel within a sentence (singular or plural), we have intentionally used “their” to be inclusive and representative of all student perspectives along the gender binary spectrum.
level in the skills and knowledge articulated in the law.

The Profile of a Graduate is not just the latest trend. It is a way of enabling educators to address all the important skills in the classroom that we want our students to learn beyond the academic content, such as critical thinking, problem solving, and how to work well in a team. Research indicates that for learning to “stick,” it must be integrated with every aspect of our existence: academic, social, emotional, cognitive, physical, and identity-building…This integration is why children must be seen as whole people and taught holistically. Children need support in developing self-regulation and executive functioning. They must develop physical and psychological wellness in order to understand their self and their relation to the world. These attributes are as important to positive development and personal growth as learning reading, math, or the arts, and are critical to learning those things as well.7

Importantly, as policymakers contemplate the adoption of the skills in the Profile of a Graduate, they must acknowledge that in order to move forward leading with equity, it is essential that we value and celebrate the diversity of the bodies and minds that exists in our school system. The education system must center our students of color and students from low-income households, who bring a wealth of knowledge, cultural richness, and diversity of experiences into the classroom but unfortunately, who are disproportionately disciplined for behaviors that would be otherwise be accepted as developmentally appropriate. Self-regulation must be equitably taught and reinforced in a trauma-informed manner, paying attention to factors that may influence behavior, such as crises or challenges at home. Likewise, we must honor students with physical, cognitive, sensory, and developmental disabilities that may exist differently in the world, thereby having different, but equally important, needs, goals, and achievement benchmarks with regards to physical and psychological wellness.

Recently, the Aurora Institute published a policy brief which identified the top issues to address in state policy to transform the K-12 education system and to move toward an equitable system that is built around how students learn best. The first recommendation calls for redefining student success through a Profile of a Graduate to “create a vision to modernize and redefine more holistic graduation requirements based on what students need to know and be able to do for future success.”8

Multiple states have already adopted a Profile of a Graduate, including South Carolina, Utah, and Vermont. For instance, “The Profile of a Virginia Graduate was officially approved by the Board [of Education] in 2017, which updated Virginia’s high school graduation requirements and

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opened the way for high schools to more fully embrace a focus on deeper learning, career pathways and performance assessments.9"

Various organizations in the education community across the nation have been arguing that developing a Profile of a Graduate “framed as an aspirational and descriptive vision of outcomes for the system—can create momentum for achieving education transformation...by galvanizing educators and the community around a shared vision and a more comprehensive definition of success that goes well beyond the limitations of what any standardized test can reveal about a learner’s future readiness.10"

**HOW DOES THE PROFILE OF A GRADUATE ALIGN WITH CURRENT LAW?**

Washington is taking steps to increase our capacity for a more personalized learning system. The MBL Work Group has been reexamining what students should know and be able to do, and how students demonstrate their knowledge and skills. As stated in the MBL Work Group’s 2020 report, the Profile of a Graduate will be the bridge between the two routes to a diploma (credit-based and mastery-based). It would convey that every student is meeting the same standards. The Profile of a Graduate will set the vision for our expectations of students regardless of how we deliver instruction (either through a traditional model or through a mastery-based model).

Some references in law already guide what our students should know and be able to do by the time they graduate from high school. For instance, “the purpose of a high school diploma is to declare that a student is ready for success in postsecondary education, gainful employment, and citizenship, and is equipped with the skills to be a lifelong learner” (RCW. 28A.230.090). Our basic education law states that students will have the opportunity to become responsible and respectful global citizens, to contribute to their economic well-being and that of their families and communities, to explore and understand different perspectives, and to enjoy productive and satisfying lives. The goals of each school district include providing opportunities for every student to develop the knowledge and skills essential to communicate successfully, know and apply knowledge across subject areas, think analytically and creatively, and solve problems (RCW 28A.150.210).

The Work Group strongly supports the policy intent of these laws, believes the Profile of a Graduate aligns with and further defines them, and envisions the Profile of a Graduate as a tangible, easily understood representation of the characteristics students will develop by the time they graduate from the K-12 system (as shown in Figure 1).

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The Profile will be used by the State Board of Education to review and recommend revisions to graduation requirements (as shown in Figure 2).

Another example of how the Profile might inform policy is to look at the need for students to develop critical thinking skills. Critical thinking has been identified as a need by employers and higher education for decades and the importance now is greater than ever to prepare students to enter the global economy and engage productively in their communities. Likewise, critical thinking is a skill that cannot be centered in an individual course or experience. By highlighting it as an outcome in the Profile of a Graduate, the system can emphasize the importance of this skill across all subject areas and curriculum. The Profile must support all students so that it can be a transformational tool to help generate an educational system that better serves all students.
Specifically in Washington, among the factors employers cite most often when surveyed about difficulty in hiring is the lack of soft skills in applicants (identified by 32% of employer respondents on the survey.) Social-emotional learning helps students develop the soft skills that employers seek as well as other necessary life skills to thrive in the real world. Social-emotional learning can and should be integrated across the system; we need to help students learn to self-regulate and self-advocate.

This is our opportunity to breakdown the silos in our education system. The Profile of a Graduate skills are inherently interdisciplinary. Students can practice collaboration during a science lab just as easily as they can during a group project in English Language Arts. Science teachers, English Language Arts teachers, and CTE teachers should all be able to teach the skills in the Profile of a Graduate. The Work Group recognizes that many educators are already helping students to develop the characteristics of the Washington Profile of a Graduate. But these efforts are too frequently isolated endeavors. We must mount a systemic effort that includes the larger community of students, educators, families, and the public in understanding and supporting our students’ growth and development as human beings and as learners.

The Work Group believes that the Profile of a Graduate should serve as the overarching vision for the entire K-12 education system moving forward—a vision that schools, families, and communities will embrace because they helped develop it.

**Washington State Profile of a Graduate**

The development of the Profile of a Graduate skills is a lifelong process; these are skills adults may still struggle with at times in their life. Thus, the K-12 system focus is to support students in developing age-appropriate foundational skills which prepare them for their next steps in life. Once fully implemented, we expect all Washington students to be developing these skills throughout their education and that high school graduates would have the ability to draw upon each of these interconnected skills at the appropriate time; for instance, when an individual should be a collaborator versus being a leader.

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A Washington State high school graduate:

- **Embraces Differences/Diversity**: The graduate recognizes our differences as assets
- **Sustains Wellness**: The graduate honors their individual needs and is able to prioritize their physical, mental, and emotional health.
- **Communicates Effectively**: The graduate communicates effectively about thoughts and ideas using oral, written, and nonverbal communication skills in many forms and contexts.
- **Solves Problems**: The graduate generates original ideas, solutions, and products in imaginative ways, and extracts learning from failure to move ideas forward.
- **Cultivates Personal Growth and Knowledge**: The graduate understands their own skills, talents, strengths, and weaknesses (places to lean into the talent of others).
- **Masters Life Skills/Self-Agency**: The graduate has knowledge of core principles across content areas and understands how to apply this knowledge in appropriate contexts.

Figure 3 shows the Profile of a Graduate categories and the skill components of each larger category.
Each Profile of a Graduate larger category (Communicate Effectively, etc.) is further defined with the variety of skills necessary to reach the overarching skill (e.g. It is necessary to collaborate as well as navigate conflict to communicate effectively):

- **Cultivates Personal Growth and Knowledge**:
  - **Shows confidence**: Believes in themselves, demonstrates excitement to learn, and a hunger for engaging with the world.
  - **Applies learning**: Uses their knowledge and skills from a variety of disciplines and can apply relevant information to each situation
  - **Sets personally meaningfully goals**: Creates, monitors, and reflects upon ambitious and realistic goals.

- **Solves Problems**:
  - **Thinks critically**: Examines and challenges assumptions, makes decisions based on evidence, reasons effectively to make logical judgments and explanations.
  - **Demonstrates resilience**: Sets personal goals, applies best efforts to achieve them, and perseveres when faced with challenges and setbacks. Works well in a climate of uncertainty and changing priorities.
  - **Embraces creativity**: Generates original ideas, solutions, and products in imaginative ways.

- **Communicates Effectively**:
  - **Works on a team**: Honors and leverages others’ strengths to build collective commitment and action.
  - **Collaborates**: Takes responsibility for self and team through shared, focused leadership. By joining forces with others, makes room for a diverse range of voices, skills, and views.
  - **Navigates conflict**: Contributes toward healthy dynamics between individuals and among communities.

- **Sustains Wellness**:
  - **Cultivates physical and emotional well-being**: Belief in development of whole self, including being able to support a healthy balance of mental, social/emotional and physical well-being. Understands the importance of universal access to health and wellness resources, such as natural spaces, gyms, healthy food and produce, and health care.
  - **Fosters empathy**: Listens to others, including people from differing opinions/backgrounds, to understand their experiences.
  - **Builds relationships**: Builds and sustains strong, healthy relationships in personal life as well as in school and the community.

- **Embraces Differences/Diversity**:
  - **Participates in community**: Feels a sense of belonging to a community and a commitment to contribute meaningfully to that community.
  - **Promotes global responsibility**: Practices responsible decision-making and considers the impact on others and the environment.
o **Shows cultural competency:** Values and embraces diverse cultures and unique perspectives through mutual respect, open dialogue, and civic responsibility. Understands own biases and reflects on them regularly. Considers the impact of structural inequality and understands how power and privilege work to provide inequitable societal benefits. Has knowledge of current and past structural and institutional racism and ableism.

- **Masters Life Skills/Self-Agency:**
  o **Takes initiative:** Seizes opportunities to grow, explore, and lead by combining hard work and determination with purpose and critical thinking. Able to learn independently, advocate for oneself and reach out for information when they hear about opportunities.
  o **Understands financial and digital literacy:** Understands critical financial information, such as budgeting, taxes, and loans; utilizes technology in productive, responsible ways in social, academic, and professional settings.
  o **Accesses resources:** Able to find valid and reliable information and supports they seek in their personal and professional lives.

**Work Group Process and Recommendations**

The Legislature directed the MBL Work Group to, “...develop a Washington state profile of a graduate describing the cross disciplinary skills a student should have developed by the time they graduate high school.” The Legislature required the Work Group, in developing the Profile, to:

1. Consult with students, families, and educators who have been underserved by the education system, examples of which include communities of color, English language learners, and students with disabilities.
2. Consult with representatives from postsecondary education and training programs, labor, and industry, and seek input from the Council of Presidents and the Washington Association of Colleges for Teacher Education.
3. Submit a report on the Profile of a Graduate to the Legislature.
4. Provide related recommendations for supporting implementation of mastery-based learning.
5. Submit the report on the Profile of a Graduate to the State Board of Education.

The following feedback from stakeholders and subsequent recommendations have been grouped into five sections based on the applicable component of the statutory charges (as listed above) to the Work Group:
1. CONSULT WITH STUDENTS, FAMILIES, AND EDUCATORS WHO HAVE BEEN UNDERSERVED BY THE EDUCATION SYSTEM

Feedback Overview and Recommendations
The Work Group was intentional in seeking out feedback from students, families, and educators who have been underserved by the education system. The feedback was solicited through a variety of methods to inform initial development of the Profile of a Graduate:

- Profile of a Graduate survey
- Profile of a Graduate public listening sessions (hosted by SBE on behalf of the Work Group)
- Profile of a Graduate listening sessions hosted in collaboration with partner organizations, including:
  - Washington State School Directors’ Association
  - Road Map Project: Parent Leadership Team
  - Washington State Commission on Asian Pacific American Affairs
  - Enumclaw High School’s Cultural Club students
  - Black Education Strategy Roundtable
- Athena Group affinity group sessions
- The Root of Our Youth community conversations
- Individual meetings with interested parents and students (hosted by SBE on behalf of the Work Group)
- Listening session with students and staff from the Spokane Juvenile Detention School Programs

Participants from across all feedback methods had the opportunity to select if they wanted to be informed about the Profile of a Graduate development process and receive updates. Once the Work Group developed a draft Profile of a Graduate, an email was sent to those who had opted to receive updates to ask if the draft aligned with their initial feedback and if they had additional feedback they wanted considered by the Work Group.

Overall, the themes from the feedback were generally consistent across feedback methods and from different stakeholders. For instance, what students shared about what they need regarding soft skills and what the employers say they need were the same or very similar; both groups identified the same necessary skills.
However, a concern, particularly when hearing from communities of color, is about how the Profile of a Graduate will be implemented. The Work Group emphasizes that the implementation of the Profile must be done with an equity lens. The way one culture may recognize work ethic or demonstrate resiliency is different across contexts. The Work Group urges the education system and each district and school within it to use the Profile of a Graduate as a way to recognize our underserved students and the knowledge and skills gained through circumstances and experiences outside of the classroom. For instance, students who are working to support their families and appear tired in classes could be seen, not as unmotivated, but rather as resilient and resolute. The fully implemented Profile should help educators and the system recognize and value what students bring to their education as well as help identify and address factors that make learning more challenging for individual students.

We must recognize all the ways our students uniquely demonstrate each of the skills in the Profile of a Graduate, some of which may be demonstrated in classrooms, and some of which may be demonstrated through learning experiences that take place outside of the school building. To do this, educators must get to know their students, so they know what is happening in their students’ lives and what learning is occurring outside of the classroom. While many educators likely already have structures in place to naturally get to know each student as individuals, some educators may need to think differently to shift their focus to developing their student as a whole person, and not focus only on teaching content knowledge. Forming these relationships is why most teachers became teachers in the first place; and yet, systemic issues along the way have forced teachers to narrow their focus.

Likewise, local district and school administrators will need to support educators in this endeavor. One option, already in place in many schools, may be creating advisory or homeroom classes, so that each educator has a group of students they are able to interact with and build relationships with at a deeper level. Students need to have multiple meaningful relationships with adults and smaller learning groups. The facilitation of small learning communities could be the preferred method for students to build authentic relationships with multiple adults simultaneously. Smaller learning groups can be achieved in a variety of ways, e.g., through multiple adults in one classroom (a certificated educator and a paraeducator, etc.) As stated in the Staffing Enrichment Workgroup’s report: “Reductions to caseload and class size increases the ability of educators to individualize instruction or supports, provide timely feedback to students and families, and keep students actively engaged in learning...caseload and class size impact the ability of staff to more
fully serve students and eliminate opportunity gaps.”\textsuperscript{12} This recommendation is also supported by the recommendations provided by students from the Spokane Juvenile Detention School Program (see later section in the report), who recommended this as one way they could have been more successful in the traditional school system if they had been given more individualized attention and support.

**PROFILE OF A GRADUATE SURVEY**

Throughout the summer, the SBE administered a survey on behalf of the Work Group to solicit feedback on the development of the Profile. The survey was open from July 29 through October 4, available in twelve languages, and completed by 300 respondents. Both broad and targeted outreach was conducted to solicit responses. The survey was publicized through all SBE communication channels (social media platforms, listserv, etc.) and shared via multiple partner communication channels (see Appendix 5 for more details on partner organizations who spread the word about this work.) Individual email outreach was conducted to encourage participation, especially from students and families who have been underserved by the education system, and particularly from communities of color, English language learners, and students with disabilities. Demographic data for race/ethnicity and annual household income is shown in Figures 4 and 5 respectively for survey respondents.\textsuperscript{13} Information regarding respondents’ geographical location by Educational Service District (ESD) is shown in Figure 6. Additional data from the survey is available in a separate data appendix.

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\textsuperscript{12} https://www.k12.wa.us/sites/default/files/public/communications/2019-12-Staffing-Enrichment-Workgroup.pdf p. 32, 33

\textsuperscript{13} We recognize that the survey results received do not adequately represent the target populations from which we were hoping to obtain feedback; namely, communities of color, families of students with disabilities, and non-native English speakers. Further feedback from these communities was collected during focus group sessions conducted by The Athena Group, The Root of Our Youth community conversations, and the Road Map Project: Parent Leadership Team listening session (see Appendix 2).
The survey posed multiple questions about the components to the purpose of a high school diploma. Washington law (RCW 28A.230.090) states that the purpose of a high school diploma is to declare that a student is ready for success in:

- postsecondary education,
- gainful employment,
- and citizenship,
- and is equipped with the skills to be a lifelong learner.

Respondents were asked to indicate how critical each of the four components is as a part of the Profile of Graduate. The survey asks these questions so that the Profile of a Graduate can help the system to realign our focus to the areas that are most important or that have not been emphasized in school.

The survey asked two questions per each of the four components. The first question asked the respondent to rate (on a scale of 1 to 100 with 100 being the most important) the importance of the measure. The second question asked the respondent to rate (on a scale of 1 to 100) how effective the education system is in providing the outcome to students. In every case, the respondents rated the measure as being very important but the educational system as only moderately effective at providing the desired outcome. For instance, Figure 7 shows the ratings for the importance of and system effectiveness of preparation for life after K-12 and lifelong learning by respondent role.

The survey respondents’ top roles (in order) were K-12 staff, K-12 parent, parent of a post-secondary student, business owner, post-secondary student, higher education staff, K-12 student (shown in Figure 8).

Respondents were asked to select the top three skills that they thought would be important to include in a Profile of a Graduate (based on a list of ten skills identified by business and labor
representatives at an early Work Group meeting—see the full list in the survey data appendix.) The top six skills selected, in order from highest to lowest of respondent selection, included:

1. Self-management/responsibility/self-efficacy
2. Systems thinking/critical thinking
3. Conflict communication
4. Resiliency/adaptability
5. Community-mindedness/global citizen
6. Problem-solving

While the Work Group made some changes in wording/terms used based on additional feedback, all six of these skills show up in the Profile of a Graduate.

Several quotes from the survey,14 in response to a question regarding the most important skills to include in the Profile of a Graduate, include:

- “Students need ‘practice’ using the skills we know are important for them to utilize in their young adult lives. With ‘experience’ being the best teacher, students need safe, consistent, environments toward gaining skills to become a productive, healthy, viable citizen. In other words, schools need to intentionally and immediately incorporate these skills into all aspects of their education pathway and not only as ‘stand alone’ skills. The topic that is of utmost importance is personal finance; students need comprehensive knowledge of this topic immediately and consistently. This is the one item students tell me they wish had been mandated throughout their school career.”
- “The K-12 curriculum should meet students where they are at and help them develop and master capacities across these 4 domains: emotional, intellectual, physical and spiritual. Support students to have ‘sense of place’; to know the land where they live, play, go to school and engage in their communities. High school graduates should have multiple experiences with people of different cultures, beliefs and backgrounds and be skilled in addressing complex systems issues in an interdisciplinary manner together with others.”

14 Additional quotes are available in Appendix 1.
PROFILE OF A GRADUATE PUBLIC LISTENING SESSIONS & STAKEHOLDER GROUP SESSIONS

The SBE hosted four public listening sessions on behalf of the Work Group to provide an overview of the goals behind the Profile of a Graduate development and solicit feedback to inform the development of the Profile. The sessions were held from July to September and included seventy attendees total.

In addition to the discussion, attendees were polled at each session and asked to select their top three skills for the Profile of a Graduate. Across all four sessions, the top three skills were self-management, critical thinking and problem-solving, and global citizen/culturally competent. Several quotes from the sessions included:

- “Lifelong learner—I do everything I can to instill a passion for learning in my students. Confident, responsible, reflective, engaged learners. I use my English Language Arts curriculum to teach the skills I think they’ll need to be successful in life.”
- “As we define what these skills might look like, we want to make sure we aren’t perpetuating the bias already present in our system. We have to utilize Universal Design for Learning to ensure we are recognizing how various cultures and students with disabilities are showing these skills.”
- “As we move into implementation, we need to have shared accountability and engagement with communities. What does it look like to come back and revisit how is this working? We will need processes to continually review.”
- “[The Profile of a Graduate] has to be addressed by the whole system, not just high school.”
- A current student shared: “We need required classes for real life skills like financial literacy, a leadership class to help with communication, and a cultural studies class. Students also need to learn to disagree respectfully.”
- “Well-rounded in social emotional intelligence, be an ally, know independent living skills, a world citizen, have integrity, collaborative, lifelong learner.”
ATHENA GROUP: AFFINITY GROUP SESSIONS
SBE contracted with The Athena Group as an external consultant to help with specific engagement with students and families of color as well as students with disabilities.\textsuperscript{15} Their report highlights some of the same skills that came across in the public listening sessions, but the affinity groups also prioritized empathy, independent life skills to effectively navigate life and systems, and wellness of the whole person.

Several quotes from the sessions included:

- “Teachers and parents, and the community work together as a unit...[starting] in Elementary.” –Parent of student with disabilities expressing desire for whole community approach to raising children
- “Every child can be smart when given the right resources.” –Asian American parent/guardian talking about the value of support
- “I want my student to definitely have a better life than I did, surrounded by love and have a strong foundation. I want them to understand how important their education is so they can have a good job with great pay, always making time for their family and time for themselves for hobbies and such.” –Multicultural parent/guardian (Black/African American, Indigenous, Asian American)
- “There are a lot of great minds from different groups of people; if people aren’t accepted, we miss out on those ideas.” –Hispanic/Latina Parent
- “Teaching them leadership skills at an early age is very, very important to help them be successful in their careers later on.” –Black/African American Parent

THE ROOT OF OUR YOUTH
The Root of our Youth (ROOY), the 100% student run subcommittee of The Root of Us, conducted a community conversation project on behalf of the SBE and Work Group. The objective of this project was to center student voice (especially Black, Indigenous, People of Color (BIPOC), queer, trans, and non-binary) in three interrelated areas of SBE work: Profile of a Graduate, high school graduation requirements, and statewide K-12 accountability.

ROOY came up with their own version of a Profile of a Graduate. It is more focused on personal growth and developing as a person than the other Profile of a Graduate examples shared from other communities. The students shared that they wanted to learn in school about financial education, how to fill out a rental application, and generally how to “do life.” Students also felt that the career center was underused and that there should be a career class offered.

Even though most students in ROOY noted they were doing quite well in school by traditional measures, they expressed that the current education system isn’t engaging and doesn’t give

\textsuperscript{15} Participants self-identified their race/ethnicity as well as if they (the student) or their student (for family members) had a disability.
them a chance to learn in ways that develop them as thinkers and individuals who are going to be our future leaders. They emphasized the importance of seeing themselves represented at school through a more diverse educator workforce and curriculum that celebrates diversity. Rote memorization and the classic classroom setting are not compelling to them. They wished that educators and policymakers realized that there are problems in our education system not just for students who are struggling academically, but that even the “best” students feel uninspired and disengaged by traditional schools where they can “play the game” but don’t get to enjoy the learning process because of how school is currently structured.

Importantly, the students highlighted their experiences of marginalization, discrimination, and erasure as students of color with diverse cultural and gender identities. They wanted a revision of graduation requirements to include a greater diversity of options, more pathways for success, flexibility in kinds of credits offered, student-led learning, and student-centered approaches.

More information about the larger community conversation project with The Root of Our Youth is available in Appendix 2.

**INDIVIDUAL MEETINGS WITH PARENTS AND STUDENTS**

On behalf of the Work Group, SBE staff offered one-on-one meetings with parents and students if they wanted to provide additional context to their feedback provided via listening sessions or the statewide survey.

**INSIGHTS FROM FORMER STUDENT**

Che Teeters\(^{16}\) dropped out of a traditional high school and recently graduated with a degree in network technology and computer security from the Open Doors program at Lake Washington Institute of Technology. He shared the following about his experience in a traditional high school:

In high school, I know I wasn’t the best kid, but when teachers gave up on me then I gave up on me. They never tried to understand why I was dropping out. My biggest reason is that high school treats students like we are little kids. When I dropped out, I didn’t know how to be an adult. I didn’t know how to make executive decisions or how to problem solve because I was never taught that in high school. When I left high school, I felt unprepared for the world—not because I didn’t take calculus, but because I didn’t know how to do taxes or how to apply math to my paycheck. In high school, underused knowledge was prioritized when practical knowledge should have been. So much pressure is put on kids about their GPA and setting themselves up for the rest of their lives; it's not fair and it's unnecessary. High school is made harder than it should have

\(^{16}\) Che’s name is used with his permission.
been—students base their confidence on how well they do on the test. It’s awful we tell kids there’s only one path to success: college as soon as they graduate high school.

In the Open Doors program, right away we’re treated as adults and our learning was all based on applied knowledge (e.g., math in society).

To make schools healthier for kids, it doesn’t even have to be a massive change in schools. Teachers just have to acknowledge that not everyone learns the same way and get to know their kids. But teachers need to be supported to do this—they can’t have class sizes of 30-40 kids. Or at least if they do, schools need to come up with advisory or other cohort structures so teachers have a responsibility to get to know a small group of kids.

High schools need to teach students to have confidence in themselves, how to problem solve, how to negotiate a salary, how to make yourself a desirable candidate for a job, what a cover letter is and how to write a resume, and make long lasting connections with people (network, not just for a job, but socially). Even more importantly, students need to learn how to express themselves well emotionally and learn healthy life skills.

Several quotes from other one-on-one sessions included:

- **Parent of color from South King County:**
  - My hope is that school districts will align to the Profile of a Graduate work—it is important. It’s an opportunity to focus on each student’s humanity. If a child has a foundation to learn, they will learn. Social and emotional skills (like in the Profile) is that foundation. In my own words, I would prioritize:
    - “Truth-seeker”: searching and understanding American history and sifting through bias
    - Compassion: can demonstrate that I can contribute and highlighting wording that expresses healthy contributions
    - Courageous: fighting peer pressure and speaking up for justice
    - Embracing identity: for my children, constantly affirming their identity, encouraging them to speak up, and embracing their own uniqueness as well as embracing others’ differences

- **Parent who is deaf and has a deaf child:**
  - I want to make sure that the [Profile of a Graduate] makes room for deaf or hard of hearing students who have already developed self-assessment skills.
  - Deaf and hard of hearing students vary so much. The thing they have in common is that they don’t have language access. Because the tests are culturally based on the ability to hear environmental language—those students will miss the questions because they don’t have experience, not because they’re not intelligent. Lack of connection to experience in the world is a big problem for assessment.
I work as an employment consultant with deaf and hard of hearing adults to do job coaching. I worked with a young man who had cochlear implants who had graduated from Cascadia Technical school and was brilliant. I came in as a job coach and found out that his productivity was low and I was trying to understand why. I was signing and talking at the same time because the man didn't sign very much, he'd use spoken English. I realized that he had been working for a couple of months—he didn’t know everyone’s name in the environment; he didn’t even know the supervisor’s name. I had to tell him you have to know people’s names.

Students need opportunities to practice collaboration, problem-solving, self-awareness, and being a self-advocate. Soft skills are very important, especially for deaf students. Often deaf students are told do this then do this—tell tell tell. Because their access through the teacher is always through an interpreter—they are more spoon fed. They don’t have the experience of doing things on their own.

Mastery-based learning [and the Profile of a Graduate work] would really help solve some of the problems I see in the employment coaching I do because through those, students are having to direct their learning and apply it. When I told the man I was coaching that you have to learn more in your content area and figure out some of these issues on your own, his eyes widened. He thought he could just play with the machines but when I told him you have to incorporate other skills to be a valuable employee, he was shocked. He thought he could just do what he was told, he didn’t realize he’d have to have the initiative to solve problems on his own.

LISTENING SESSION WITH STUDENTS AND STAFF FROM THE SPOKANE JUVENILE DETENTION SCHOOL PROGRAMS

The Work Group engaged with students and staff from the Spokane Juvenile Detention School Programs: Success Through Academic Connections (SAC) Day Reporting School at their October 2021 meeting.

The following includes some of the key quotes and takeaways from the discussion about how we can better serve all students in our traditional system, based on how students in the SAC thrived under more supportive conditions:
- A teacher noted: the Profile of a Graduate is positive because it is about mastery of objectives and skills. It allows the teacher autonomy and the ability to differentiate. It still has an end goal but allows the student to show mastery in a creative way. It allows teachers to help students achieve that victory concretely but also gives teachers the ability to be creative.
  - SAC already teaches many of the Profile of a Graduate skills explicitly and on a continuum, never assuming the skill is attained. Every day we talk about SEL skills, cultural sensitivity, health and wellness, mindfulness, goal setting, and hope.
  - A student believes schools need to focus more on individualized goal planning and preparation— and what steps can you take to achieve those goals. More life skills are needed too, that students can take with them after graduating high school.
  - They’ve been teaching life skills and financial literacy for 20 years as a transition class: how to find a job, how to fill out job applications, credit card and rental agreements, and how to live independently. They have a new aptitude test and videos from over 1000 jobs they can use to do a Virtual Job Shadow to different job sites and careers. One of their Title I goals as a school is the life skills piece. If students don’t graduate, at a minimum, they need to be able to access appropriate resources and engage in the community.
  - Students read the paper every morning, analyze an article, and look for critical thinking errors. The teachers would like to see critical thinking taught very early on in school. This is media literacy— addressing questions about the source and if is it accurate.
  - More schools should be the community hub where students can wash their clothes, get health services, etc. If we could look at school more holistically, the whole person, vs. just academic achievement, which this is doing, then we can streamline a lot of those activities.
- The students like the draft Profile of a Graduate but want to know more about how it will be implemented. For instance, they recommend that schools should sit down with every student to develop an individual learning plan, with a focus on personal career planning and life skills. The students noted that if their post high school plans are unclear, it’s hard to stay engaged and see relevance in the curriculum.
  - The principal noted that special education has been ahead of the game with Individualized Education Programs (IEPs). It’s more work but sure would be nice if every kid from kindergarten on had their own individual program.
• One of the teachers shared that kids start disengaging in middle school. We need to think more outside the box to keep them engaged, so they don’t “check out” in high school. Until we design programs that allow students to be successful, nothing will change. We only ever see a discipline file, not a “good job” file for these students. We need to find the reasons for the behavior. Their kids don’t have computers or food or clean clothes, and the behaviors match the difficult life situation. We have to continue to push teaching staff about restorative practices. Supports for families are also needed. We can’t discount parents—they’re the critical piece. They have to know how to advocate for their child and be welcomed into the school, even without knowledge of the education system.
  o Student shared that he lost hope of finishing school starting in 7th grade. He noted that SAC helps you focus on your future and helps you make a plan to get there. Ideally, the middle school system could help kids work toward their dreams and identify steps needed to achieve those dreams rather than “throwing whatever” at them by the end of the week. It is hard to engage if you don’t like the work or see the point.
• Students excel in small learning community environments where they can get the help they need to understand various topics.
• The students shared that in traditional schools, they would have done better if they had been allowed to work at their own pace and understand an assignment before moving on to the next. In public school, students receive lots of assignments in one week and are expected to complete them. If there was material that students were supposed to learn in middle school but didn’t, then catching up becomes very hard and students fall behind. Being able to work at your own pace [like in mastery-based learning] would be very helpful.

2. CONSULT WITH REPRESENTATIVES FROM POSTSECONDARY EDUCATION AND TRAINING PROGRAMS, LABOR, AND INDUSTRY
Survey respondents were asked to self-identify their affiliations and 36 participants (11.6%) selected that they were a business owner/employer. Likewise, 28 participants (9%) of survey respondents self-identified as either a higher education teacher or other higher education staff.

The Work Group engaged with representatives from labor and industry at their June 2021 meeting as well as with representatives from postsecondary education and training programs at their July 2021 meeting. During both meetings, it was emphasized that students need cultural competency skills and recognition of what privileges students have in their own life.
Key takeaways from the meeting with employers include:

- In apprenticeships, we look for troubleshooting and problem-solving capabilities/critical thinking. Soft skills are more important than the technical academic skills.
- Hard skills / core job competencies / technical skills remain the employer’s responsibility to train. We would look for basic soft skills that make the graduate receptive to that training and mentally prepared for it.

Key takeaways from the meeting with postsecondary education and training representatives include:

- For Profile of a Graduate, consider including skills like confidence or the ability to persevere.
- From the employer view and the companies I work with, the number one thing I hear is “build lifelong learners.” Companies also look for problem-solvers that are competent in communicating about the problem and how to work with others to solve it. The 4 C’s of collaboration, communication, creativity, and critical thinking are all needed to problem solve.
- Math comes up all the time, but specifically proportional reasoning as well as data analysis and statistics. We need more applied math so students can think about how they can be a good employee and problem solver.

3. IMPLEMENTATION OF THE WASHINGTON PROFILE OF A GRADUATE

The Work Group understands that it will take districts time to align their work to the vision in the Profile of a Graduate. However, the Washington State Profile of a Graduate is our vision for the K-12 system moving forward, to better support and develop every student as whole person and prepare them to thrive in their life after high school. Therefore, districts are strongly encouraged to begin a process to align their priorities to the Profile of a Graduate vision and goals.

We do not believe implementation of the Profile of a Graduate should just be one more thing school districts are taking on in the midst of continuing to respond to the coronavirus pandemic. Rather, the Profile of a Graduate should serve as the North Star for a school district, to help design educational experiences that support every student in attaining the skills they will need in their journey after high school, for success in postsecondary education, careers, citizenship, and lifelong learning. For instance, the Profile of a Graduate could guide each school’s strategic planning and development of their school or district improvement plan.

Some districts already have a Profile of a Graduate. For instance, Snoqualmie Valley’s Portrait of a Graduate was developed in 2019. Othello School District developed their Profile of a Graduate in 2021. Their Profile of a Graduate website is dynamic; each skill can be clicked on to expand to...
the subcomponents that are written as “I can” statements for students. They are also building out how each skill is shown at the elementary, middle, and high school levels by aligning these skills to the state learning standards.

The Work Group admires the work these local districts have done already by engaging with their communities about their local needs and beginning to shift their focus to intentionally supporting students to develop skills that can be applied across contexts. We believe that Washington State needs to have one unifying Profile of a Graduate, while also recognizing the importance of making space for each district’s unique environment. Each district will be able to locally determine how to adapt their instruction to focus on developing these skills as well as assess how students demonstrate they have gained foundational competency in each skill. We recommend that districts who already have a Profile spend time reviewing the state Profile of a Graduate and finding ways to align the state themes to their own context.

**SECTION 3 RECOMMENDATION A: DEVELOP SUPPORTS AND TOOLS FOR PROFILE OF A GRADUATE IMPLEMENTATION**

The Work Group recognizes and recommends that the next step to support implementation of the Profile of a Graduate must include development of sample rubrics and other tools for use by schools. Again, the Profile of a Graduate cannot just be one more additional thing for schools; and to ease implementation, we want to provide a framework schools can use to begin implementing and then customizing to their local context as they move forward.

The Work Group believes that by providing this framework for Profile of a Graduate, the state would signal to school districts the importance of giving educators permission to build individual relationships with students and to spend time developing a positive culture in their classrooms. This also aligns with the need to recenter the focus of our education system as we heard from the students in The Root of Our Youth: The state, “should acknowledge the importance of connection, community, and mutuality in learning. These must be better understood, valued, and centered in Washington schools. The most profound learning is relational or transformational not transactional.” To further support educators in the renewed focus to build relationships with their students, as stated previously, the Work Group recommends that the state continue to support schools through funding for smaller learning

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17 See Appendix 2 for more information about The Root of Our Youth recommendations
communities or for the hiring of additional teachers and staff to facilitate small advisory groups that can bolster support for students throughout their educational journeys.

A group of K-12 educators (classroom teachers, mental health counselors, administrators, etc.) should be convened to develop these sample tools and should also include representatives from business and community. This group should also address alignment with the state’s Washington’s K-12 Social Emotional Learning Standards and Benchmarks. These rubrics and other tools will help tangibly explain to educators, students, and families how Washington’s Profile of a Graduate skills can be demonstrated by students. Their work should include real life examples for how schools can actualize the Profile of a Graduate in kindergarten, 1st grade, etc. as well as how the skills are scaffolded between grade bands.

These sample tools don’t have to be bound by specific grade bands but could have a number of levels to represent students’ growth in the skills across their K-12 journey. This can help educators grasp how to recognize students are meeting the criteria in the skills laid out in the Profile of a Graduate. For instance, South Carolina developed a Profile of a Graduate in 2013 and then developed associated Competencies of the Profile of a Graduate five years later. Each competency, or interdisciplinary skill, has rubrics with six levels that track student growth and readiness for postsecondary success. The six levels do not represent grade bands, but rather just growth in the skills across a student’s time in K-12. The state’s department of education provides ongoing professional learning opportunities around the Profile of a Graduate and associated competencies, including a teacher leader fellows network to lead the implementation in their schools and regions.

The Work Group strongly recommends that the Profile of a Graduate skills are reported separately for students (and are not combined into their academic grades.) While curricula must cultivate the development of both academic knowledge and the Profile of a Graduate skills, these Profile skills (also known as habits of success, noncognitive skills, transferable skills, social and emotional skills, etc.) should not be graded on an A-F scale or reported as numerical grades. Numerical grades, when used, should reflect only the student’s level of mastery of academic content. The Profile of a Graduate skills should be reported in ways that don’t impact the student’s academic grades, but are rather reflected in a manner like “approaching standard,” “meeting standard,” and “extending beyond” or other such ways of reporting these skills. In other words, these skills should be taught and tracked as evidence of learning and growth over time, but not integrated into final academic grades. This aligns with effective practices in mastery-based schools where “academic progress and lifelong learning competencies — often referred to as habits of mind, college and career readiness skills or higher-order skills — are
assessed and reported separately. The state of Oregon even requires that schools report academic progress separately from behavior.

Across all of the feedback methods, and particularly the listening sessions and focus groups, participants always asked about implementation. For instance, a parent in the listening session hosted by the Road Map Project said: “It all sounds good. But were these not the goal previously? To go further, where is the plan that supports the how, and when? The wrapping paper is pretty. I gotta wonder what’s inside.”

To ensure the Profile of a Graduate is actionable in all schools and classrooms across the state, and that it is not just a poster on the wall, we believe providing sample tools will be crucial to this effort to reimagine our education system.

**SECTION 3 RECOMMENDATION B: HIGH SCHOOL AND BEYOND PLANS WILL BE A CRITICAL TOOL FOR THE PROFILE OF A GRADUATE**

At the student level, the High School and Beyond Plan (HSBP) will be invaluable as a tool for helping each student track their growth in the Profile of a Graduate characteristics and focus on what skills they need to develop for their personal goals for after high school. For districts who require a culminating exhibition as a graduation requirement, students’ culminating exhibitions could focus on their personal progress and growth on the Profile of a Graduate characteristics.

For all schools, the HSBP could be the method by which students demonstrate they have met the criteria of the Profile of a Graduate. The HSBP should be used as a key strategy for operationalizing the Profile of a Graduate. Educators can help students plan their coursework to support their development of both academic knowledge and transferrable skills to prepare for their post-secondary goals.

However, HSBP implementation is uneven across the state. More research is needed around promising practices districts use in their HSBP process as well as data around outcomes for those students who have experienced a robust HSBP process. In order for the HSBP to fully support student learning and the Profile of a Graduate, the Work Group recommends additional work at the state level to make the HSBP more uniform and equitable for students. This work could take many forms, but beyond the existing requirements in law, the Work Group reiterates recommendations from its 2020 Report. For instance:

- When teachers understand each student’s individual learning goals as articulated in their HSBP, they can tailor their instruction to become more relevant and responsive to their

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19 Ibid.
students’ interests. For this to take place, professional development is needed for teaching staff and other educators on the HSBP.

- The Work Group recommends recognizing the value of the HSBP through awarding credit (in the traditional credit framework) or meeting a content area requirement (in the MBL diploma framework).
- One possible way to support this recommendation would be through the development of a state model HSBP curriculum to align with relevant state learning standards but that could be adapted to fit local needs.
- Districts across the state use multiple platforms for their HSBP process. While districts should be free to use whichever platform works best for their unique process, the Work Group recommends that the key components of the HSBP be identified that must exist on all platforms to ensure high-quality implementation throughout the state.

**Section 3 Recommendation C: Statewide Awareness and Recognition of the Washington Profile of a Graduate**

The State Board of Education was charged through SSB 5249 with reviewing the Profile of a Graduate developed by the Work Group and permitted to consider modifications to the Profile based on public comment. SBE is also tasked with submitting a report to the legislature by December 31, 2022, with recommendations to align graduation requirements with the Profile of a Graduate.

The Work Group recommends that once the SBE finishes their work outlined in SSB 5249, that the SBE formally adopt the Profile of a Graduate and review the Profile of a Graduate every ten years. Organizations like Battelle for Kids that help local districts develop graduate profiles recommend a regular review process to ensure the profile stays aligned to local needs; Ken Kay shared in a recent article that “most communities with a POG update it every four to five years.” However, for a state level Profile of a Graduate, the Work Group believes that a review every 10 years is sufficient.

A review should include another stakeholder engagement process to ensure the skills outlined in the Profile are still the top needs of the state that families, schools, communities, and businesses believe the education system should focus on at the time of each subsequent review. This will ensure that the Profile of a Graduate is used as intended as the guiding vision for our state’s education system, by not just the SBE, but by all K-12 stakeholders.

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20 https://www.edutopia.org/article/why-school-leaders-should-develop-portrait-graduate
4. PROVIDE RELATED RECOMMENDATIONS FOR SUPPORTING IMPLEMENTATION OF MASTERY-BASED LEARNING

MASTERY-BASED LEARNING VERSUS MASTERY-BASED CREDITING

Mastery-based crediting (MBC) is an approach used in schools to award credit to individual students based on their prior knowledge or other demonstration of mastery of learning standards. For instance, districts may award credit for a course when the student successfully completes the next higher-level course in a sequence that includes a natural progression of the state learning standards from the previous course.\(^{21}\) Even since the Work Group began our work in 2019, the availability of MBC opportunities for students has grown. In 2021, out of the state’s 253 districts that include a high school, 159 have adopted a permanent policy allowing schools to provide mastery-based credit, compared to only 138 in 2019 and eight-nine in 2017. Another nineteen districts have adopted a coronavirus temporary MBC policy.\(^{22}\) Likewise, the number of subjects in which districts offer MBC has also increased, with 2021 results showing that seventy-seven districts offer MBC in all subjects, compared to only twenty-six districts reporting availability in all subjects in 2019 and fifty-seven districts in 2020.

Alternatively, mastery-based learning (MBL) is a much bigger shift in approach from the traditional model. In this report and in our state generally, mastery-based learning has implications for the full school building around structuring learning differently, meaning changes in instructional practice, assessment, scheduling, grading policies, and more. MBL also includes many hands-on learning experiences like project-based learning (PBL) and work-based learning where students can earn academic credit for work completed during internships. At its core, MBL is personalized learning. Under MBL, students advance upon mastery of content (not seat time) as measured by meaningful, authentic assessments tied to state learning standards. Students take ownership of their learning and receive differentiated support based on their interests and needs. This model of instruction, which honors students’ assets and cultural backgrounds, has been shown to help close opportunity and achievement gaps.

Results of SBE’s recent research on graduation pathways show that students, parents/caregivers, and educators agree there is a need to include additional pathway options that provide students with more opportunities for mastery-based learning (MBL). Indeed, nearly half of all respondents indicated that a mastery-based learning pathway should be added, with students having the highest response.

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\(^{21}\) See more about mastery-based crediting and applicable requirements on SBE’s Mastery-based Learning FAQ webpage.

\(^{22}\) This is based on preliminary (incomplete) data from SBE’s Basic Education Compliance and Reporting as of November 16, 2021.
rate for adding such a pathway (fifty-six percent). A student in one of the focus groups shared: “Regular learning is so rigid. Mastery-based learning is much more personalized and allows curriculum to be tailored to us, the students. Mastery-based learning should be a part of all pathways, not its own pathway.”

WHAT DOES THE RESEARCH SAY ABOUT MASTERY-BASED LEARNING?

The five components of MBL outlined in the legislation are widely acknowledged in the field as the essential elements that define and differentiate MBL from the many individual strategies that are used to support it. Because MBL has multiple components, robust studies of MBL implemented in its entirety are limited. In several studies, schools would say they were implementing MBL but really, they had only made small shifts or were only implementing some but not all components of MBL (e.g., They had made no changes to their assessment system.) Change also takes time. In fact, administrators have cautioned against conducting research on student outcomes for districts/schools in the early phases of implementation because significant time is required to ensure MBL practices are implemented to their full potential and collecting data on student outcomes too early could produce misleading results.23

However, research supports that components of MBL have positive academic and other impacts. Rather than a student being moved along in the content with knowledge gaps, in MBL, students don’t move on until they’ve mastered the essential knowledge and skills. Advocates point to this as one way MBL could reduce the opportunity and achievement gaps.24

Additionally, a key component of MBL is performance-based assessments. Schools participating in the New York Performance Standards Consortium use performance-based assessments (PBAs) to assess student progress and have collaborated to add authentic evidence of student learning to the college admissions process. A study of the program supports other findings suggesting that learning experiences structured around PBAs can help narrow opportunity and achievement gaps.25 Early evidence from the study suggests Black males in

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particular benefit from this program when compared to Black males in traditional high school settings—they’re more likely to persist in college and receive higher grades.26

MBL honors the unique contributions of every student and the knowledge they bring from their diverse cultures and communities. This aligns to research showing students learn best when they can connect their cultural backgrounds to what they are learning in school.27

Outcomes of MBL from a literature review of implementation and outcomes from research conducted from 2000-19 found mixed results regarding whether MBL supports improved academic achievement, increased student engagement, and other academic outcomes like increased attendance and increased goal-setting and self-management.28 Several studies found evidence of all of these things, but other studies found negative impacts, especially if they were done early in implementation.

That is why Washington’s MBL demonstration project (see Rec. 4A) is so important. The project will include a robust evaluation from the beginning so we can learn more about the impacts of MBL on underserved students, particularly students of color, students with disabilities, and students from low-income households.

**MBL Implementation Concerns and Recommendations**

**Implementation Concerns**

During our time together as a Work Group, we have become even more convinced about the need for increasing mastery-based learning opportunities for students in our system. MBL is a way to fulfill the academic needs of student in a holistic way as well as address the institutional racism present in schools. However, as a Work Group, and as we also have heard from stakeholders, our concerns regarding MBL revolve around how it is implemented. If educators are unprepared for this shift in our system, then students who have been underserved in our system will continue to be underserved. Ongoing, high-quality educator training for preservice and current educators is critical to ensuring that MBL is successful and does not exacerbate existing inequities in our system.

This is also why we are not mandating MBL or imposing this on the system or school districts. We want MBL to succeed, and for that to happen, we strongly believe it has to be a school’s choice to jump into this system transformation wholeheartedly.

26 Ibid.
Mastery-based learning has great potential to increase equity in our education system—yet this will not happen automatically. A MBL system must be evaluated and sustained primarily based on its progress in reducing both the opportunity and the achievement gap.

We have seen examples from across the country of MBL having no impact on the status quo, because of the assumption it would inherently increase equity. We know that is not the case—equity has to be front and center, and MBL education system must be intentionally designed and cultivated to be culturally responsive and sustaining. As a key part of this work, schools must engage in authentic community engagement efforts with their community, to first explain the “why” behind the work and then to co-develop the school’s MBL efforts with community members seen as valued partners.

IMPLEMENTATION RECOMMENDATIONS
Mastery-based learning will require various changes in state and local school district policy structures. As stated in the Work Group’s 2020 Report, successful mastery-based learning implementation will require a variety of other policy changes and supports:

- **A state and regional support structure:** The transition to a mastery-based learning (MBL) model requires a sustained effort over time to ensure state and local policies support implementation and schools and districts have access to resources to support their learning as they transform their systems. Developing a clear policy framework and support structure to implement MBL is essential (p. 23.) The Work Group believes this previous recommendation aligns well with the SBE’s current work on the Mastery-based Learning Collaborative (see more in Rec. 4A).

- **Educator training for preservice and current educators:** Training cannot be limited to only classroom teachers. All educators must be provided training to support a MBL system—teachers, counselors, administrators, other education support personnel (ESP), and school board members. To ensure a cohesive education system, MBL training should not be limited to only educators already in the field, but should include preparation programs for teachers, counselors, and administrators as well (p. 18-19.) Educator training is a key component of the Mastery-based Learning Collaborative (see more in Rec. 4A).

- **Culturally responsive instruction:** MBL must be implemented in a culturally responsive sustaining way (p. 8.) All students benefit from culturally responsive instruction (p. 21-22.) It is up to Washington to intentionally implement MBL in an equitable way that disrupts the status quo, ensures every student feels a sense of belonging in their school community, honors the assets students bring and engages students through their diverse cultures and communities.

- **Changes in accountability and assessment systems:** Common state policy barriers to a mastery-based learning education system include accountability (when the state’s measures of success don’t align with a mastery-based learning approach) and assessment (if tests don’t support the learning process) (p. 13.)
  - When schools transition to MBL, they require a new approach to assessment but with the same level of rigor and expectations as our traditional system (since they
teach the same learning standards). The Work Group wanted to learn more about what the literature says about MBL and assessment, which is provided in detail in Appendix 4.

- **SBE has noted the limitations of the current state and federal accountability system and has been engaged with partners to develop a more authentic and equitable accountability system for Washington. While not started in response to this work, the resulting framework will be supportive of a mastery-based system.**

  - **Funding:** Legislation (2020 SSB 6521) directed the Office of the Superintendent of Public Instruction (OSPI) to create and administer an innovative learning pilot program to authorize full-time enrollment funding for students participating in mastery-based learning programs. By December 1, 2022, the OSPI, in collaboration with the SBE, must report to the legislature regarding the efficiency, cost, and impacts of the funding model or models used under the pilot program (p. 44-45.)

  Washington policies mostly support a mastery-based learning approach in classrooms. However, the barrier arises when students are away from the classroom for significant amounts of their instruction (one to two whole days per week.) There are existing regulations that do fund and support student learning away from school. Ongoing work will involve learning more about these models and if/how these are regulated to ensure the expectations of public education. See additional details in Appendix 3.

  - **Higher education and transcripts:** During Washington’s transition to an education system that supports mastery-based learning opportunities, students should still have access to traditional high school transcripts until higher education institutions better understand MBL. However, Work Group members strongly support the use of a MBL transcript that more authentically demonstrates student learning, such as the transcript developed by the Mastery Transcript Consortium (p. 25-26.) See additional recommendations around transcripts in Rec. 4B.

**SECTION 4 RECOMMENDATION A: CONTINUE SUPPORT FOR MBL DEMONSTRATION SITES**

Washington’s 2023 biennial budget for the State Board of Education (SBE) includes funding for “implementation of mastery-based learning (MBL) in school district demonstration sites for the purpose of addressing learning recovery and other educational issues related to Covid-19.” This work will involve developing state and regional support structures for Mastery-based Learning (MBL).

Under the leadership of the Washington State Board of Education, and with executive sponsorship from the Office of Superintendent of Public Instruction (OSPI) and the Professional
Educator Standards Board (PESB), the **MBL Collaborative** will involve a statewide effort, including personnel at state agencies, educational service districts, community-based partners, educator preparation programs, and participating districts and schools. Project objectives include:

- Establish a statewide infrastructure to provide needed professional development, policy, and communications support to enable schools to implement MBL.
- Demonstrate that schools can successfully implement MBL with student learning and assessment that are more authentic, engaging, and culturally connected and sustaining.
- Document the key steps that states, districts, and schools must take to transition to MBL successfully.
- Positively impact student engagement and progress toward learning goals.

School grant recipients will participate in the Mastery-based Learning Collaborative (MBLC) to learn together and share effective practices. They will receive professional learning in mastery-based learning and culturally responsive-sustaining instruction from a professional learning provider hired by the state. The professional learning provider will also help schools think through the other building level changes that will need to be made around assessment and equitable grading practices as, “…traditional grading practices perpetuate our achievement and opportunity gaps and improved grading practices promote objective assessment of academic mastery, transparent expectations, growth mindsets, a focus on learning instead of points, and student agency—all key ingredients to serve diverse learners and create culturally responsive classrooms.”

We anticipate that several schools in the MBLC will have already been implementing mastery-based learning and will serve as leaders in the Collaborative, along with agency staff and the professional learning provider. As a condition of receiving funding, they will be expected to share resources with the schools new to MBL. We also anticipate that they may help develop model frameworks and resources for districts beginning the transformation to mastery-based learning such as shared rubrics, common performance assessments, etc.

Literature from the field and from our prior reports have demonstrated the importance of a body of practitioners engaging in this system-changing work together so that educators don’t feel alone and to serve as lighthouses of practice for the state. This project will also serve as a feedback loop into further policy development and refinement.

The Work Group believes the lessons learned through the MBLC will be invaluable. In addition to the schools’ own learning and what state leaders glean on their own, SBE has also engaged international experts in MBL (the Aurora Institute) to evaluate the project and identify state policy supports to sustain the work. While the SBE is seeking private funding to extend the

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effort, SBE will likely have continued requests for ongoing funding from the Legislature as we are able to demonstrate efficacy of the program. The Work Group believes MBL, as well as the support structure for schools provided through the MBLC, will more equitably serve students and has the potential for a high return on investment for the state.

SECTION 4 RECOMMENDATION B: TRANSCRIPT IMPLICATIONS FROM MASTERY-BASED LEARNING

A NOTE ON GRADES, ASSESSMENT, AND LEARNING STANDARDS

In education discussions, there is often conflation of grades and assessment and if students are meeting 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).

It is worth starting the conversation of assessment in MBL with a delineation between grades and assessment. The end goal of MBL is not a grade at the end of a course or segment of learning, but rather, the acquisition of relevant skills and knowledge of the desired learning goals (see more about the MBL learning and assessment process and how it differs from the traditional process in Appendix 4.) Instead of grading a series of assignments, the final grade represents the degree to which content is mastered and only artifacts that reflect the mastered learning should be included in the final grade.30 Grading in MBL focuses on the evaluation of meeting a learning standard with pre-defined criteria.

A key distinguishing factor of MBL is student participation in the assessment process. Work Group members have seen a five-year-old explain what learning standard they are trying to accomplish and how they will get there. In MBL, educators take time to share with students the current learning standard they are focused on as well as to teach student how to self-assess their work, as one step toward becoming a lifelong learner. Assessment also provides feedback to students that supports their learning along their journey toward mastery.

MBL models often have more consistency in how educators evaluate whether a student has mastered the state and local learning standards than the traditional model. Assessment as to whether a student met a particular learning standard is more objective than however a letter/numeric grade (traditionally A-F or 0-100) is placed on student work. As Joe Feldman explains, “Bias-resistant grading practices help us to focus on a student’s knowledge and not her circumstances or behavior (or how we perceive and interpret her behavior.) We want our grades to be accurate reflections of a student’s level of content mastery and not to be lowered because of how we judge nonacademic aspects of the student.”31

There is no shortage of research to support the benefits of MBL assessment models. They have been shown to prevent gaps in learning among diverse student populations, lead to longer-term retention, build confidence in students, positively influence student mindsets, improve student-teacher relationships as teachers and students become partners in the learning, contribute to long-term retention, inspire students to want to learn more when they have demonstrated mastery at prior learning, support deeper learning and cross-curricular connections, and motivate students for future learning. Furthermore, ongoing feedback supports social-emotional learning skills such as perseverance, overcoming, problem-solving, success, and has a direct impact on student mindsets.

See more details about what the literature says about MBL and assessment in Appendix 4.

FEEDBACK FROM HIGHER EDUCATION PARTNERS
The Work Group solicited feedback from our higher education partners regarding what would be needed for students coming from MBL programs and possibly using a MBL transcript to not be disadvantaged in the admissions process.

The Council of Presidents (COP) and the State Board for Community and Technical Colleges (SBCTC) shared in their joint letter to the Work Group:

Washington’s public higher education institutions support innovative approaches to teaching and learning in K-12 including innovations in curriculum and the assessment of students. We believe the Profile and mastery-based transcription offer the potential to communicate well students’ work and achievement. However, the Profile and transcript of mastery-based learning should include the following to allow for institutions, employers, and apprenticeships to understand the transcript and properly evaluate the strength of a student’s academic record and accomplishments:

- Clearly present and describe the school districts’ policies, programs, and practices.

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• Be comprehensive and understandable, explaining critical information for review such as the content and rigor of the academic program, the technicalities of the assessment and grading systems, and the characteristics of the graduating class.

• In the absence of course grades and GPAs, a common “key” outlining what it means for a student who passes, meets the average and/or fails a course is needed. A course title, grade, GPA, or class rank will lack clarity for admissions offices without a “key” (e.g., the school profile) to understand how the system works and how the applicant performed in that system to ensure timely review and equity in the admissions process.

• Partner with colleges and universities to address the use of mastery-based learning transcripts and assessment for not only admissions, but also scholarships and placement. Institutions use GPAs to determine eligibility for guaranteed admissions, scholarship, honors programs and English and math placement.

• Implementation of electronic transcripts and alignment with state transcript coding.

The Independent Colleges of Washington shared:

We commend the creativity as well as the goals of greater assessment that the Mastery Based Learning Transcript initiative seeks to achieve. Still, we want to point out two significant concerns: a number of colleges and universities award scholarships based on high school grade point averages (GPAs). It would take a number of years for a given college or university to collect and analyze the information needed to understand what a mastery assessment means in relative terms. Therefore, higher education institutions may be more conservative in awarding scholarship aid to mastery transcript students. We are concerned that historically marginalized and disadvantaged populations may suffer the consequences of this shift.

Further, extensive research has shown that cumulative unweighted high school GPA is one of the best predictors of student success in higher education. Removing it from student transcripts and college applications opens the door for more subjective determinations of a student’s capacity to be successful. For example, perceptions of school quality and rigor may become unofficial assessment tools during the application review process.

**MBL Transcript Recommendations**

The Work Group wants to balance the concerns regarding capacity of our higher education partners to evaluate mastery transcripts with the desire of MBL schools to move toward more equitable grading practices. For instance, in grading, “Mastery goals have been found to
improve students’ persistence and a greater sense of well-being.” 35 According to Joe Feldman, there are **three essential pillars necessary to move toward equitable grading**:

1. [Grades] are mathematically **accurate**, validly reflecting a student’s academic performance.
2. [Grades] are **bias-resistant**, preventing biased subjectivity from infecting our grades.
3. [Grades] **motivate** students to strive for academic success, persevere, accept struggles and setbacks, and to gain critical lifelong skills. 36

The Work Group has discussed how traditional approaches to the 4.0 grading system, as used through GPA in the higher education admissions process, have been used as a sorting tool to marginalize students. MBL challenges the conventional ways of representing when a student is prepared to further their education and the current and traditional methods to admission. This exposes what is well known, the U.S. education system was designed, created, and structured to meet the academic, social, political, and economic needs of the dominant group and to maintain the power of White, heterosexual males and the status quo. 37 Work Group members noted that our current grading system perpetuates social inequality. It facilitates universities acting as gatekeepers and having a role in preventing more members of our multicultural society from being exposed to education and its benefits—particularly class mobility. Across the nation we have seen some higher education institutions reflect that mastery transcripts are time consuming and are a less efficient method of admission.

Addressing these issues will require higher education partners and policymakers to think differently about how they engage with students coming into the system. Washington higher education institutions have committed to discuss the issue of mastery transcripts and begin collaborating on how to move toward more equitable methods of assessing students.

A mastery transcript also aligns well with the Profile of a Graduate work, as it could serve as a tool to showcase the 21st skills students are acquiring across the curriculum. The goal of the MBL Work Group is not to transition all schools in the state to a mastery transcript. Rather, we believe that schools who have implemented MBL and want to use a mastery transcript should be allowed to do so after a transition period. Currently, around 20 public high schools in the state use a MBL model and may want to transition to a mastery transcript if they are not already using one (to date, six are already using Mastery Transcript Consortium’s transcript). With the creation of the new Mastery-based Learning Collaborative grant program, additional schools may want to also transition with time.
The Work Group recognizes the need for thoughtful discussion around mastery transcripts and the related systemwide capacity building that will be needed to prepare educators for new assessment models under MBL. Therefore, the Work Group recommends a phase-in period for the adoption of the new mastery transcript and phasing out its translation to grades (GPA) over a period of time determined by SBE in consultation with higher education partners and other stakeholders. During this time schools would be required to translate or provide a crosswalk of the mastery transcript to grades and colleges and universities would track student cohorts with mastery transcripts. The translation would align with the nationally recognized higher education admissions terminology of credits, courses and grades and allow for colleges and universities to assess how the mastery transcripts correlate with metrics such as retention and graduation, as well as how they may affect student diversity.

At the specified time determined by SBE, an evaluation of student cohorts with mastery transcripts would be completed to inform SBE and MBL stakeholders whether the additional two years or less is needed. Then, schools would transition to meet the long-term goal of using a mastery transcript (without GPA) that more authentically demonstrates student learning, such as the transcript developed by the Mastery Transcript Consortium (See page 25-56 in the MBL Work Group’s 2020 Report for more context.) The Mastery Transcript Consortium (MTC) mastery transcript is only one example, yet the Work Group appreciates that MTC has school profiles for each school using the transcript that gives information on the school’s background, curriculum, and how to interpret “Mastery Credits” (MTC terminology) earned by a student in the context of their school and cohort.

The Work Group recommends that a standardized state level format for the mastery transcript be developed, in response to concerns from our higher education partners. The Work Group also agrees with the request from COP, ICW, and SBCTC that any school using a mastery transcript must develop a comprehensive school profile as the “key” to interpreting the mastery transcript. Likewise, the Work Group believes that the school profile must provide a clear articulation of how school defines proficiency to indicate a student has mastered a course. For instance, most MBL schools set the mastery level at 80% or above for a student to advance—much higher than a C or D or pass/fail level of a traditional classroom.

The Work Group further supports finding continued ways to partner with the state’s higher education sectors to collaborate on this work as it moves forward.

38 The school profile for the mastery transcript is a separate concept from the Profile of a Graduate. See previous paragraph for additional information about how the MTC uses school profiles.
5. SUBMIT THE REPORT ON THE PROFILE OF A GRADUATE TO THE STATE BOARD OF EDUCATION

Senate Bill 5249 (Chapter 144, Laws of 2021) directs the SBE to submit recommendations to the Legislature to align graduation requirements with the Profile of a Graduate, and to consider:

- Whether changes to the core subject area requirements, flexible credits, and noncredit requirements should be made and what those changes should be;
- The relationship between credits and core subject area requirements; and
- How the following components of the high school diploma work together as a system of graduation requirements designed to declare that a student is ready for success in postsecondary education, gainful employment, and civic engagement and is equipped with the skills to be a lifelong learner: The high school and beyond plan and the credit and subject area graduation requirements under RCW 28A.230.090 and the graduation pathway options under RCW 28A.655.250.

The Work Group believes there are a variety of issues the State Board of Education should consider in its alignment work next year:

- Investigate the relationship between the High School and Beyond Plan and a mastery high school transcript.
- Consider if the definition of a high school credit should be reevaluated to assist with mastery-based learning.
- Examine whether learning standards could better support MBL through developing large categories of interdisciplinary learning standards
- Explore developing a crosswalk (translator document) between learning standards and credit requirements and competencies based on the Profile.\(^{39}\) This will help explain what skills we expect students to gain from each of the credit and subject area requirements.
  - For instance, for the English Language Arts credit requirements, what is the expectation of the competency achieved through the learning standards? E.g.,

These competencies are the outcome of having mastery of English IV learning standards.

• A database tool of all the state learning standards would be very helpful for educators. It would allow them to track at an individual student level when students have mastered standards from various content areas and could help ease the burden on teachers collaborating to develop interdisciplinary courses.

Conclusion

The Mastery-based Learning Work Group recommends a Washington State Profile of a Graduate that reflects a wide range of input from stakeholders and lessons learned from other states and communities. The Profile is our vision for the K-12 system moving forward. It is intended to better support and develop each and every student as a whole person and prepare them with the transferable skills they will need to thrive in their life after high school.

We recognize that many educators are already helping students to cultivate the skills laid out in the Profile. The larger community, students, educators, and families all contribute to the effort to support our students growing and developing as human beings and learners.

The Work Group members urge the K-12 system to implement the Profile of a Graduate with equity and with students at the center of the effort. Washington has the opportunity to actively redesign our education system through the Profile of a Graduate and with mastery-based learning. The fully implemented Profile, like mastery-based learning, should help educators and the system recognize and value the skills and assets students bring to their education from their diverse cultures. The Profile will also serve as the bridge between Washington’s traditional system and a mastery-based system by setting the vision for our expectations of all students no matter where they live or which school they attend.

We believe this work is the way to shift our system focus toward more personalized learning that supports every student based on their individual needs. With ongoing support, this shift will also lead to the transformation of our education system, and to closing both the opportunity gap and the resulting achievement gap. We’re moving closer to an educational landscape where students are safe to explore, are accepted and appreciated, and are challenged to practice critical thinking. Our schools can be places for students to discover themselves and learn the skills they need to thrive in life outside of the classroom. We invite you to join us on this journey to make our schools, and ultimately our state and our world, more equitable places where each person is recognized for their unique talent and equipped to take their place as a critical member of our community.
Appendix 1: Summary of Profile of a Graduate Survey Results

A separate document is available that includes data analysis of the Profile of a Graduate survey results. The following includes quoted excerpts from the survey open text response questions:

- Prepared with skills necessary for life, not just for school success. Confident, with a good understanding of own skills, talents, strengths, and weaknesses (places to lean into the talent/support of others). Connected to a network of adults ready to help usher the young person into a successful adult life with support ready for inevitable struggles during transition. A sense of belonging to a community and a commitment to contribute meaningfully to that community. Knowledge that their skills and contributions are critical to the community and needed uniquely from them. Understanding that no matter where they "placed" in their graduating class, they have unique skills and inherent talents that make them vital to a community.

- Environmental steward, civic servant, systems thinker, collaborative worker, creative problem solver thoughtful, wise communicator, deeply values diversity, equity, inclusion...

- Ability to think critically, to be a compassionate, empathetic and have social awareness with the ability to understand the perspectives of others. Especially those with diverse backgrounds cultures and context and navigate the dynamics of culture differences in positive manner. Have a plan for post high school, trade, work, or college. Have an internship in the workforce during school. Have an applied math class that connects to the real world and banking/ finance management.

Appendix 2: Summary of Findings from External Reports (Athena Group, The Root of Our Youth, Strobel Consulting)

Throughout 2021, the State Board of Education has engaged in several related research and outreach efforts. The focus of the research is to engage with communities and stakeholders that have been left out of key policy conversations that impact them. The engagement with The Athena Group and The Root of Our Youth was done by SBE on behalf of the Work Group and were particularly focused on the Profile of a Graduate. Strobel Consulting’s work focused on researching graduation pathway options, with a focus on mastery-based learning.

A summary of the reports from the Athena Group, The Root of Our Youth, and Strobel Consulting is available online.

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40 In an effort to keep this report as informative and concise as possible, the full survey report is not included here. However, the full report (including all open text responses) is available upon request by emailing the State Board of Education: Alissa Muller, Director of the Mastery-based Learning Collaborative.
You can view the full report from Strobel Consulting (Volume I and Volume II) on SBE’s website. Full reports discussing the results of various feedback opportunities provided to inform development of the Profile of a Graduate are also available on SBE’s website: The Athena Group focus group sessions, The Root of Our Youth community conversations, and the Road Map Project family listening session.

Appendix 3: MBL Funding and the Innovative Learning Pilot Project

Many of the practices of mastery-based learning are currently supported in Washington State educational policies. Teachers, schools, and districts are provided the local decision-making authority on how instruction is delivered and assessed toward state learning standards and credited for graduation requirements. There are a few practices that may require updates to our data collection guidance and systems, as well as school funding regulations.

The primary identified funding barrier relates to the off-campus instructional time that some mastery-based learning models utilize for students to participate in individual internships, job shadowing, and/or other community learning. Existing funding models are based on in-person instructional time and attendance, with a couple of exceptions including:

- Career and Technical Education’s Cooperative Worksite Learning allows students to earn credit through employment coordinated through their CTE program. Regulations ensure connection to the CTE program, as well as a safe and appropriate work environment. The model is funded at a 2:1 formula counting two hours of work-based learning as one instructional hour for funding with an annual cap.
- Running Start provides students access to college courses provided by the state’s colleges. It largely relies on the expectations and regulations of college instruction. It is funded at a standardized Running Start rate.
- Alternative Learning Experience (ALE) creates flexibility to count instruction when the student is independent of the regular classroom or schedule for some or all of the instruction. Regulations support students in these settings while remaining accountable to state education expectations and the use of public funds. ALE is also funded at the standardized Running Start rate without access to the vocational enhancement.

The Office of Superintendent of Public Instruction is reviewing, as part of this ongoing mastery-based learning work and through the Innovative Learning Pilot program, whether adjustments to existing funding models or recommendations for a new funding model may better support and encourage the benefits of this model while still maintaining school accountability and mitigating risks to student safety, and the appropriate use of public funds.

Appendix 4: Research on Assessment in Mastery-based Learning

In alignment with the focus of mastery-based learning (MBL), assessment in MBL is a form of competency-based assessment and grading where students are assessed on their individual progress toward state and local learning standards and their specific identified learning goals.
Mastery learning claims that all students can learn with clear expectations, appropriate learning conditions, frequent and meaningful teacher feedback, and the opportunity to correct mistakes. The key to this process is effective classroom assessment practices. What sets MBL assessment apart from traditional assessment is that the purpose of the assessments is formative in nature until mastery has been achieved, at which point, students advance to more complex or new content. Traditional assessment practices are a way to provide a label on a student’s level of proficiency at a specific stopping point, whereas a mastery-based assessment model is striving to improve learning to the point of mastery.

Ungrading

It is worth starting the conversation of assessment in MBL with a delineation between grades and assessment. The end goal of MBL is not a grade at the end of a course or segment of learning, but rather, the acquisition of relevant skills and knowledge of the desired learning goals. Eliminating grades, or “ungrading” and focusing on feedback is one way to focus on the learning. The MBL process of learning and assessment includes students learning at their own pace, learning from other students working on the same skills, making mistakes, and advocating for their own learning growth. The traditional learning-assessment process follows a linear path where the learning takes place, students may practice during the lesson, students may receive guidance during the practice, and then they finish with a final assessment. The MBL learning-assessment process, in contrast, involves a more cyclical process where the learning takes place, students practice, they may receive guidance, they take the assessment, but then they receive feedback on the assessment, they engage in reflection and processing of the feedback, revise the assessment, and make another attempt until the point of mastery.

Mastery-based learning assessments include a variety of assessment tools and opportunities for students to demonstrate mastery including portfolios, demonstrations, presentations, and performances rather than only using traditional assessment measures such as essays and exams.

Assessment in MBL is a disruption to the current system. Mastery learning requires multiple feedback loops on smaller, well-designed, and sequenced units of study. They are meaningful and provide an opportunity for rapid, differentiated support based on individual learning needs. Instead of grading a series of assignments, the final grade represents the degree to which content is mastered and only artifacts that reflect the mastered learning should be included in

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the final grade. Early education philosopher, John Dewey (1903) argued that grades harmfully impact education by fostering individualistic competition, fear of failure, and feelings of superiority. Such consequences are counterproductive to students and the goals of MBL, where learners are encouraged to challenge themselves to take risks and strive to obtain mastery of competencies related to their own interests, talents, and goals.

**Journey to Mastery**

There are two main aspects of mastery, the first begins with the instruction and practice of the skills and knowledge that are taught. As students are exposed to a new skill, they need to practice the skill. The practice must include some application, collaboration, and opportunities for feedback and constant revision. Then when students are ready, they choose to demonstrate mastery on the skills taught. Ideally, students determine their readiness to demonstrate mastery with the encouragement and support of the instructor. These assessments are administered individually and can include a variety of assessment tools and contexts. For example, in some MBL classrooms there is a “zone” for students to show mastery and it is embedded throughout the school day. In other cases, students submit a project of evidence and as feedback is provided, they are given the opportunity to relearn on their own time and then resubmit. The key is supporting the mastery of the learning in the way that works for both the educator and the student.

These assessments should be bite-sized and easy to assess to provide quick and specific feedback/scoring. They can be in a variety of formats such as quizzes, demonstrations, presentations, mini-projects, or even larger projects that have been built on prior learning over time. The key is feasibility and the ability for students to receive quick and relevant feedback and are provided the opportunity for reassessment. This is key to mastery-based learning.

**Benefits of MBL**

Much like the practice of mastery-based learning, there is no shortage of research to support the benefits of MBL assessment models. They have been shown to prevent gaps in learning among diverse student populations, lead to longer-term retention, build confidence in students, positively influence student mindsets, improve student-teacher relationships as teachers and students become partners in the learning, contribute to long-term retention, inspire students to want to learn more when they have demonstrated mastery at prior learning, support deeper

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50 Farah, 2021; Hattie, 2009
learning and cross-curricular connections, and motivate students for future learning.\textsuperscript{51,52} Furthermore, ongoing feedback supports social-emotional learning skills such as perseverance, overcoming, problem-solving, success, and has a direct impact on student mindsets.\textsuperscript{53}

Although mastery-programs were shown to require slightly increased instruction time (about 4\%) versus traditional teaching methods, the same meta-analysis of 108 studies also demonstrated that MBL produced higher standardized assessment scores and demonstrated less variation among diverse student groups within those scores.\textsuperscript{54} The higher the requirement of the level of mastery (e.g., 100\% correct), the higher the effects. Furthermore, the study revealed that MBL also resulted in more positive perspectives and attitudes among students. Although the research did indicate a slight increase in instructional time, meaning it takes students a bit longer to demonstrate mastery, the impacts were slight. Such an increase would be four minutes for every 100 minutes of instruction, barely impacting the experience of the student or teacher. With such positive outcomes, it seems that MBL would be the answer to many of the challenges facing education today. However, implementing MBL itself comes with a set of challenges on their own.

\textbf{Challenges in MBL Assessment}

Mastery-based assessment is not without challenges. First, it has the potential to require more time for teachers.\textsuperscript{55,56} It is important to note that the additional time stems from the investment in formative assessment. Because teachers are giving students multiple opportunities to show mastery with feedback at every demonstration, there is more grading that must be completed efficiently with relevant feedback. However, providing explicit feedback is a research-based strategy that benefits all students in all learning models and has been shown to be a top strategy to improve student achievement,\textsuperscript{57} but is frequently a neglected component of traditional instructional models, time being the predominant challenge.\textsuperscript{58} In traditional instructional models, time is held constant and learning is variable (How much can I fit into this block of time?) and in contrast, MBL posits that the learning be held constant and time is variable.\textsuperscript{59} Some MBL models, such as NYC Mastery Collaborative, claim that the increased time

\begin{thebibliography}{99}
\item Kulik et al., 1990
\item Farah, 2021
\item Hattie, 2009
\item Hattie, 2009
\end{thebibliography}
commitment is mostly at the onset of MBL adoption and eventually wanes over the duration of implementation until the time difference between MBL and traditional models is insignificant.60

Another challenge is that students lack comfort with the process.61 In fact, some students (and families) may find discomfort with MBL assessment and resist the model. Students are conditioned to move on in the curriculum whether proficiency has been achieved or not, rather than continue persevering through content until mastery has been achieved. Equally, assessing in MBL can be confusing for many teachers. Some tend to think of it as an "easy A" because students have multiple opportunities to demonstrate mastery in order to achieve it; however, mastery may not result in an "A" for every student, but rather, will be the student's best work in the context (the setting and timeframe) the learning took place.62 This means that within the timeframe and setting allowable, not all students may be able to demonstrate mastery at 100% (or whatever the criteria may be). However, the goal of mastery learning is to support students to reach their highest potential within the timeframe mutually established by the educator and student. For instance, this may occur at the end of the school year or whenever the educator and student jointly decide the student has reached an acceptable proficiency level (even if that is not 100% mastery) and is ready to be successful in moving onto the next skill in the content area.

**How to Implement Mastery-Based Assessment**

Mastery-based assessment starts with identifying the criteria/criterion for evidence of proficiency. Some MBL advocates suggest that students should create the assessment; however, this should be done with support and collaboration with the instructor, and possibly even industry partners when necessary. Kulik (1990) and colleagues demonstrated that teacher-paced mastery-learning produces the highest effects, as the teacher and student’s collaboration and goal setting provide a foundation of feedback and guidance for the learner. Although teacher-pacing could appear contradictory to the individualized nature of MBL, as part of the optimal learning conditions for effective MBL, Hattie (2009) reiterates that the research supporting teacher-paced MBL results in the highest effects. This does not necessarily mean whole-class pacing, but rather, places an emphasis on the importance of the teacher using their knowledge of the student, content, and instructional practices to determine the appropriate pace, scaffolds, and tools for each individual student. Together, students and instructors can determine goals, processes, the assessment tool, and related criteria that would exemplify mastery in the content.63 Once the criteria for mastery is determined, students are introduced to the skills and knowledge, which can be done in any variety of instructional modes, provided the students have

60 April 2020 MBL Work Group Meeting Panel
61 Newton et al., 2020
62 Ibid
63 Ibid
the opportunity to spend the time on the skills until they achieve proficiency utilizing feedback from formative assessment. To ensure effectiveness of this assessment model, it is essential to establish a culture of revision. Students must feel that revision is a part of learning and that it is ongoing, and healthy and ultimately, be eager to revise. Equally, self-reflection builds a foundation for life-long learning and should accompany assessments in MBL, as it allows students to reflect, grow as learners, and provides support in synthesizing learning for long-term retention.

**Grading in Mastery-Based Learning**

Although the consensus for reporting out and grading in MBL is still undetermined, standards-based, credit-based, and digital badges are all used by some districts to represent mastery.

**Standards-Based or Competency-Based Grading**

Grading in MBL focuses on the evaluation of meeting a standard with pre-defined criteria, also sometimes referred to as “standards-based grading.” The MBL Work Group’s 2020 Report highlights Delta High School of Pasco, Washington, that uses standard-based grading which encourages students to accept feedback and revise their work and provide at least three separate pieces of evidence of mastery on each standard to have demonstrated mastery achievement. Although in some courses at Delta the formative feedback is graded as well as the summative, which is not necessarily aligned with MBL grading in the purest sense since the notion of utilizing feedback to refine learning until the learning goals have been met is a primal element of MBL. It is important to note that many educators refer to standards-based and competency-based grading interchangeably; however, some experts in the field do argue that there are fine details that require a clear distinction between the terms. Often, experts prefer to make the distinction because more traditional schools can use standards-based grading without making any of the other culture shifts seen in a true MBL school. However, despite the differences stated in the literature, in this appendix they are grouped together based on the significant similarities and how the terms are used within the state.

**Credit-Based Grading**

One form of grading is to use credit as the outcome of achieving mastery versus the traditional letter grade. One such example, Avanti High School in Olympia, Washington, awards credit upon mastery of course content. The pace is dependent upon students and upon mastery. The students have the option of taking more advanced content or enrolling in a new course. The criterion for mastery is determined by a grade of “B” or above and upon completion the academic credit is awarded (more information is in the MBL Work Group’s 2020 Report). In other

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64 Farah, 2021  
65 Newton et al., 2020
models of mastery-based credit, students receive credit based on what they can show in a content area and/or professional skills using a classroom, school, or district assessment tool (tests and/or performance tasks) that have been implemented in mastery-based learning models. For example, if a student enters high school already bilingual, they are allotted credit upon passing an assessment measuring biliteracy without taking any coursework. Or a student who was raised working in their father’s auto shop would be able to demonstrate mastery in auto mechanics through passing a standardized performance task.

**Digital Badges**

Digital badges have a long history stemming from the scout movement to the military and many other contexts to display authority, honor, and belonging. In the context of MBL, digital badges could be used in lieu of or in conjunction with a regular grading system to represent mastery of specific skills and content. In the digital world, badging has been used in the gaming industry with great success and the use of badges in education has been encouraged by many leaders in the digital education environment.

The digital badging hype a decade ago was supported with minimal empirical evidence and in many instances, fell to the wayside. However, a recent metanalysis of the empirical evidence suggests that digital badging does positively impact learner engagement and motivation under the right conditions. The study also found that fidelity in implementation of the digital badge as evidence of mastery is key to receiving the optimal benefits from using digital badges as a tool for grading.66

**Areas for Future Research Needed in Mastery-Based Learning Assessment**

Although there are systems in place that have proven to adequately assess MBL, one area of future research and focus is the role that industry partners play in assessing the skills and content related to the workplace. There is room for this collaborative to grow in regard to creating criteria for successful workforce skills that could be assessed in the K-12 environment.

Additionally, more current data on effective MBL assessment data and tools in the K-12 context are needed. With the broad access to instructional technology, MBL instruction and assessment is undoubtedly different than what is represented in the bulk of studies in the literature conducted in the 1980’s and 1990’s.


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Appendix 5: Organizations the MBL Work Group has sought feedback from or who helped spread the word about the Profile:

Asian Pacific Islander Coalition (APIC) of Washington
Association of Education Service Districts
Associated General Contractors of Washington
Association of Washington School Principals
Association of Washington Student Leaders
Black Education Strategy Roundtable
Capital Region ESD 113
Commission on Asian Pacific American Affairs
Communities in Schools Peninsula
Community Center for Education Results: Parent Leadership Team
Council of Presidents
Developmental Disabilities Administration
Educational Opportunity Gap Oversight and Accountability Committee
Enumclaw High School’s Cultural Club students
Equity in Education Coalition
League of Education Voters
Legislative Youth Advisory Council (LYAC)
Machinists Institute
Migrant Education Program
North Central Educational Service District
Online Learning Advisory Committee
OSPI Secondary School Counseling
OSPI Special Education Department
Peninsula School District
Quinault Indian Nation
Ready Washington
Roots of Inclusion
School’s Out Washington
Southeast Seattle Education Coalition
Spokane Military Entrance Processing Station
Stand for Children Washington
The Breakfast Group
Washington Education Association
Washington State Parent Teacher Association

Note: A variety of other organizations were provided information about the Profile of a Graduate effort and either didn’t respond or chose not to share the information with their community due to capacity limitations.
Washington State Parent to Parent
Washington State School Directors' Association
Washington State's LGBTQ & Allied Chamber of Commerce
Workforce Training and Education Coordinating Board
Work-Integrated Learning Advisory Committee