STATE OF WASHINGTON
PROFESSIONAL EDUCATOR
STANDARDS BOARD

THE POTENTIAL OF MICRO-CREDENTIALS IN WASHINGTON STATE

educator quality. workforce. policy innovation.

STATE OF WASHINGTON
PROFESSIONAL EDUCATOR STANDARDS BOARD

The Professional Educator Standards Board (PESB)

Created in 2000, PESB ensures that Washington's educator workforce is composed of highly effective, professional educators who meet the diverse needs of schools and districts. PESB works towards this vision by creating innovative policies that improve and support educator quality, workforce development, and diversity.

The Paraeducator Board

Created in 2017, the Paraeducator Board establishes requirements and policies for paraeducator professional development certificates and makes policy recommendations that will increase opportunities for paraeducator advancement through education, professional learning, and increased instructional responsibility.

A collaborative approach

PESB and the Paraeducator Board recognize that high standards for all educators are essential to student success and achievement. To support our students, we must support our educators.

Note from the Executive Director, Alexandra Manuel

PESB has explored micro-credentials as one option for educator professional learning. Micro-credentials are well suited for building and recognizing teacher leaders and developing skills in-service educators may not have had access to pre-service.

Micro-credentials provide an opportunity to focus on targeted educator learning and growth. As needs for professional learning emerge in areas such as collaborating with paraeducators, culturally responsive social emotional learning, mental health, suicide prevention, school safety, and more, micro-credentials can both deliver professional learning and assess evidence of that learning. PESB is committed to supporting innovative ways to engage educators and provide resources to grow the profession.

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THE POTENTIAL OF MICRO-CREDENTIALS IN WASHINGTON STATE executive summary

PESB has explored micro-credentials as **one option** within Washington's professional learning ecosystem. Micro-credentials can provide educators choice, adding to our flexible and rigorous development system and contributing to classroom growth.

What is a micro-credential?

Micro-credentials are a portfolio assessment of a specific competency used to develop educators and improve their practice.

PESB pilot overview

Since 2016, PESB has offered three iterative micro-credential pilot grants, each with increasing scale and purpose.

- Pilot one, testing micro-credential technology.
- Pilot two, creating micro-credential content.
- Pilot three, implementing in diverse contexts.

Scaling up! Number of micro-credentials earned in each PESB pilot

Pilot one	Pilot two	Pilot three
1	10	132

PESB pilot grant learnings

PESB discovered several lessons to address in future micro-credential structures and to consider in other professional learning innovations. PESB's lessons learned align with best practices in educator professional learning. Participants tended to do better when the following were in place:

Support structures | Incentives | Professional learning was connected to existing initiatives.

Potential applications

How would micro-credentials fit into Washington state and address our unique needs? Two scenarios exemplify approaches to an answer.

1. **Teacher leadership |** Recognize and develop skills for various teacher leadership roles.
2. **State level standards |** Meaningful professional development for in-service educators in new state priorities.

PESB's recommendations

- Convene a micro-credential advisory board for system guidance
- Develop a system to track micro-credentials
- Engage districts
- Establish micro-credential policies to provide oversight and guidance
- Expand micro-credential pilots

> *"I think sometimes teachers feel like professional learning is something that is done to them. I felt like [the micro-credential] was very personalized, because I could write about my experience. If I had another colleague who was going through the same [micro-credential] ...they might have different gaps...It was very tailored [to] my learning, about what I needed...about things I was doing well, but also things I needed to work on."*
>
> *Carol, participant in pilot three*

INTRODUCTION |

"Teachers need to be looking at: "I may have created this beautiful lesson or conducted this great discussion," but where's the evidence of student learning? ...In that regard [micro-credentials] bring [evidence of student learning] back to the forefront."

Carol, participant in pilot three and earner of all three RWT micro-credentials

Educators are tasked with the immense responsibility of providing high quality instructional learning to classrooms of all sizes, to students of all ages, and on subjects that range across a spectrum of topics. Their primary focus is to aid in the development and growth of each of their students. To do this effectively, educators must receive opportunities across the trajectory of their career to grow and develop themselves, and their skills. One such opportunity is through micro-credentials.

The Professional Educator Standards Board (PESB) supports micro-credentials and other educator professional learning initiatives. As a creative form of professional learning, micro-credentials play an important role in our larger Washington professional learning system. Micro-credentials provide educators a creative opportunity to own, showcase, and gain recognition for their day to day learning.

In Washington, PESB maintains opportunities for educator professional learning through policy, programs, and processes. PESB has also offered three iterative micro-credential pilot grants. PESB's professional learning structures include:

- **Certificate renewal requirements**
- **Professional Growth Plans (PGPs)**
- **Optional second tier licensure**
- **Micro-credential pilot grants**
- **Paraeducator certificate program**
- **Recruiting Washington Teacher (RWT) professional learning modules**
- **Clock hour policy and provider approval**
- **Adding additional endorsements**

What is a micro-credential?

Micro-credentials create a job embedded opportunity for educators to "learn by doing."

Micro-credentials are a portfolio assessment of a specific competency used to develop educators and improve their practice. Micro-credentials provide in-service educators access to learning they may not have received pre-service.

Why micro-credentials?

Throughout this report and under the title, "**My why**," you will find micro-credential pilot grant participants' responses to the question: "What is your why? Fill in the blanks, "To _____ so that _____," where the first blank represents your contribution to micro-credentials, and where the second blank represents the impact of your contribution.

Micro-credentials are typically hosted and completed online. Earners may receive a digital badge as evidence of their accomplishments. These digital aspects make micro-credentials accessible to remote communities, portable between districts and schools, and trackable for state professional learning systems.

Micro-credential features include:

- **Standards based |** Micro-credential content, sequence, evaluation rubrics, and related structures are founded on standards specific to each competency.
- **Portfolio based |** Educators reflect on their practice and submit evidence of learning.
- **Cycles of inquiry |** An ongoing continuum: identify prior knowledge and needs; explore and organize ideas and data; make meaning; apply the learning; repeat.
- **Job-embedded supports |** Collaborative teams with the same goal are a part of the participant's day to day experience.
- **Rigorous evaluation |** Calibrated expert assessors review, evaluate, and score submitted evidence to determine if an educator has demonstrated competency (BloomBoard, p. 1).

Figure 1: What are micro-credentials?

Micro-credentials ARE:	Micro-credentials are NOT:
• Competency-based • Personalized, self-directed • Demonstration of new and existing expertise • Available on demand • Job-embedded learning • Learning by doing	• Seat-time based • One size fits all • Traditional online course or class • Available only at set times • Separate from teachers' classroom contexts • Learning by absorbing information

(Berry and Kator, 2016)

There are typically four roles that contribute to a micro-credential framework: earner, issuer, recognizer, and platform provider. Since 2016, PESB has offered three micro-credential pilot grants. The micro-credential pilots included each role.

Earners are participants who pursue the content, demonstrate the competency, and receive the micro-credential.

- PESB pilot grants: Earners were educators recruited by grant sites.

Issuers develop or select content, provide assessment, and award micro-credentials.

- PESB pilot grants: PESB was the issuer, developing and selecting content and rubrics. BloomBoard provided assessment services and awarded digital badges under the direction of PESB.

Recognizers are states, districts, or other large institutions who give the micro-credential value such as through leadership opportunities, salary advancement, hiring, or certificate renewal.

- PESB pilot grants: PESB encouraged grant sites to provide incentives for the micro-credentials and to set up necessary frameworks for participants to receive Washington State clock hours.

Platform providers are organizations that maintain online platforms where participants can engage with micro-credential content and submit evidence (Finkelstein et al, 2013, p. 6).

- PESB pilot grants: BloomBoard served as the pilot's online platform provider.

My why |
"To explore the possibilities and options for extending our view of professional learning so that our educator staff are empowered and in turn empower our students."

"I think sometimes teachers feel like professional learning is something that is done to them. I felt like [the micro-credential] was very personalized, because I could write about my experience. If I had another colleague who was going through the same [micro-credential] ...they might have different gaps... It was very tailored [to] my learning, about what I needed...about things I was doing well, but also things I needed to work on."

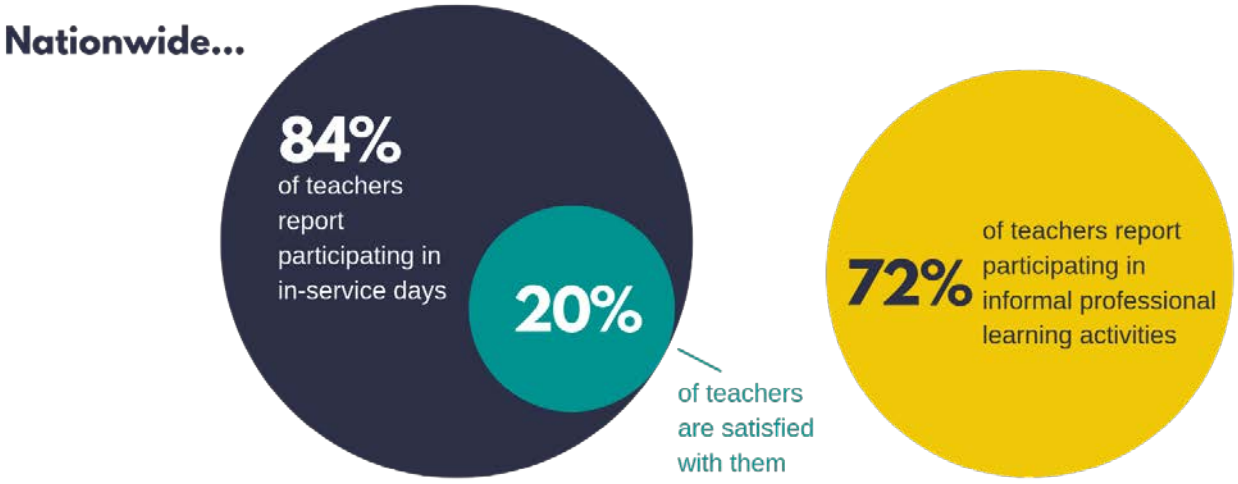
Carol, participant in pilot three and earner of all three RWT micro-credentials

Our current continuing education system

Washington's continuing education system uses clock hours as its currency for professional learning. Educators can earn clock hours through activities including clock hour courses, Professional Growth Plans (PGPs), National Board certification, and college or university credit.

This report explores micro-credentials as one option within the Washington professional learning system. As an option, micro-credentials provide educators choice, adding to our flexible and rigorous development system while contributing to professional growth.

Figure 2: National professional learning participation.



(Berry and Cator, 2016, p.7)

A micro-credential success story

Carol has been an educator for 30 years. She taught English and history, supported students as a school counselor, contributed to school leadership as an assistant principal, and serves as a BEST mentor. In the 2018-19 school year, Carol returned to the classroom to teach her school's first high school teacher academy, using the Recruiting Washington Teachers (RWT) curriculum.

Carol's district partnered with a university who received a PESB micro-credential grant to pilot the RWT micro-credential specialization. The RWT micro-credential specialization is made up of three micro-credentials (see page 13 of this report). Carol participated in the pilot, collaborating with other micro-credential participants from different grant sites, partnering with an elementary teacher to support her RWT students' "internship" experience, and directly implementing her professional learning in her classroom.

"A lot of times when we talk to our students we say, "Oh tomorrow is an in-service day or I'm taking a class over the summer," and students don't really think about it...But, as I was working on [the micro-credential], I would tell my students in teacher academy, "In today's discussion, we're going to film it so I can turn it in because I'm a student and I'm working on [this micro-credential]...It helped me really articulate and model that lifelong learning...I think my students kind of shared in my journey."

Carol

Carol felt that her learning was directly connected to her classroom, personalized to her strengths and weaknesses, and focused on student growth. Through her hard work, Carol succeeded in earning all three micro-credentials in the RWT specialization!

Carol's graduating RWT students

PROFESSIONAL EDUCATOR STANDARDS BOARD (PESB) MICRO-CREDENTIAL EXPERIENCE |

"Capacity building [professional learning] policies view knowledge as constructed by and with practitioners for use in their own contexts, rather than as something conveyed by policy makers as a single solution for a top-down implementation."

Darling-Hammond and McLaughlin, 2011, p. 82

In three iterative pilot grants, PESB has explored micro-credentials as one option within the Washington professional learning system. Through micro-credentials, PESB:

- Offered **innovative** forms of continuing education to educators that are **personalized, engaging, and relevant.**
- Supported the development of educators' skills in **areas they may not have had access to in pre-service.**
- Supported educators in **demonstrating their professional learning.**
- Supported growth across the **career continuum.**

The following characteristics of effective professional learning have contributed to successful development of and changes to classroom practice. Through PESB's pilots, the grant sites explored these characteristics in the context of micro-credentials:

- **Ongoing |** At least 14 contact hours (actual time engaging with learning content) and longer duration (extended timeline over which the opportunity is conducted) contributes to positive changes in student achievement (Garet et al, 2001, p. 933; DeMonte, 2013, p. 7; Yoon et al, 2007, p. ii).
- **Individualized |** Personalized professional learning incorporates what is important to the educator and the specific needs of their classroom, taking an educator's prior knowledge, strengths, and weaknesses into consideration (Berry and Cator, 2016, p. 10; Croft et al, 2010, p. 8).
- **Connected to existing initiatives |** Professional learning is more effective when an educator can see how the learning is relevant and tied to a wider "cause," as well as see how their contribution furthers that cause (Garet et al, 2001, p. 927; Hunzicker, 2010, p. 3).

My why |
"To bring meaningful professional development to teachers and so that their teaching can be more purposeful."

- **Job-embedded |** Professional learning integrated into and practiced during the school day contributes to classroom changes (Croft et al, 2010, p. 2; Hunzicker, 2010, p. 4; DeMonte, 2013, p. 7).
- **Collaborative |** Professional learning is more effective when educators work together to support each other through the learning process, to brainstorm solutions, and to prompt further reflection (Berry and Kator, 2016, p. 13; DeMonte, 2013, p. 8).

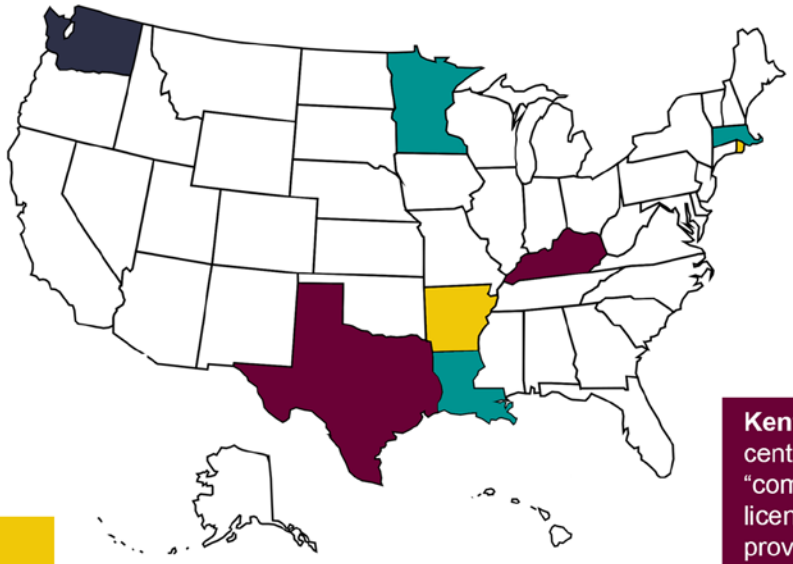
Across the nation, other states are also exploring and innovating around micro-credentials and competency based professional learning. Find examples of this nationwide activity below:

Figure 3: Map of nationwide micro-credential activity examples.

Minnesota | Provides micro-credential based alternative career and technical education (CTE) endorsements and certification for all work-based learning and high-need CTE areas (Minnesota Professional Educator Licensing and Standards Board, 2019).

Massachusetts | Allows up to two micro-credentials per year towards certificate renewal. Micro-credentials have a set value of 5 "professional learning points" (Massachusetts Department of Elementary and Secondary Education, 2017).

Texas | HB 2424 requires the Texas State Board for Educator Certification to create an educator micro-credential program, as well as their Department of Education to approve micro-credential providers and ensure micro-credentials can be recorded in the certification system (Tex. Educ. Code, 1995 & Supp. 2019).



Rhode Island | Is in the final approval process to formalize a six micro-credential certification for the state's computer science endorsement (Berry and Byrd, 2019, p. 9).

Kentucky | Education service centers are now offering "competency-based rank / licensure change" (which provides salary schedule lane change across the state) (Berry and Byrd, 2019, p. 11)

Arkansas | Through HB 1646, micro-credentials approved by the Arkansas Department of Education can be used to fulfill educator professional learning requirements (Ark. Code Ann., 1987 & Supp. 2017).

Louisiana | Replaced the Praxis exam with a series of micro-credentials for teacher leader licensure, and is piloting a series of micro-credentials for principal licensure (Berry and Byrd, 2019, p. 9).

The PESB pilot experience revealed micro-credentials are aligned with many of the characteristics of effective professional learning. However, like all professional learning, micro-credentials are naturally suited to some of these characteristics and require additional structures to ensure others.

Each pilot intentionally increased capacity in a specific aspect of the system. Distinct plans were made to focus on teacher leadership, areas of professional learning not encompassed by existing endorsements, and other professional competencies.

PESB's incremental approach allowed staff to collect and integrate stakeholder feedback and prior learnings at every stage. The most recent pilot included three micro-credential programs. Grant sites applied for and piloted one or more of the following micro-credential programs: Elementary Computer Science (ECS); Culturally Responsive Social Emotional Learning (CR-SEL); Recruiting Washington Teachers (RWT).

Ongoing | In PESB's most recent micro-credential pilot (see page 14), educators were eligible for 20 clock hours. Grant sites reported that completing a micro-credential was a time intensive process, with varying times depending on a participant's prior knowledge. Additionally, as a multi-step cycle of inquiry, the collecting, submitting, and reflecting of evidence require an extended timeline to engage with each step.

"I really appreciated that the micro-credential process held me accountable for the learning and took place over 20 hours, instead of one evening."

Participant in pilot three, CR-SEL micro-credential

Figure 4: Number of micro-credentials earned in PESB pilots.

Individualized | Micro-credentials are highly personalized by design. If an educator already possesses a certain skill, micro-credential tasks related to that skill will require less investment. If it is a new skill, an educator will have to invest more time and access provided resources.

"The opportunity to work at my pace, individualize the lesson for my kids, and ability to reach out to others in same program for ideas and encouragement. I loved being able to get feedback on my work."

"I think it will help me know the gaps in my learning so that I can be better prepared to teach the unit!"

Pilot two participant survey responses

Connected to existing initiatives | Existing initiatives can include state standards, a district's annual focus, an existing professional learning community's goals, an ongoing program, etc. In PESB's second and third pilots, micro-credential content was anchored to specific state computer science and SEL standards, and existing RWT program goals.

"I liked teaching a lesson targeting SEL and reflecting on the teaching against state standards."

Participant in pilot three, CR-SEL micro-credential

Pilot one, testing micro-credential technology, 2016-17

PESB's first pilot tested micro-credentials' technical aspects and laid the foundation for further exploration. Technical aspects included the online platform and digital badging. During this initial pilot, PESB determined micro-credentials needed to be customized to state priorities and distinct role areas, which led to the design of pilot two.

Pilot two, creating micro-credential content, Spring 2018

The second pilot explored micro-credential content, determined educator interest, and expanded on the technology infrastructure built in the first pilot. When selecting content, PESB staff focused on new competencies experienced educators did not have access to pre-service. Using this guideline, PESB developed the following micro-credential programs: Elementary Computer Science (ECS), Culturally Responsive Social Emotional Learning (CR-SEL) and Recruiting Washington Teachers (RWT).

Each program piloted a different way to use micro-credentials in the professional learning system. The ECS micro-credential built entirely new materials around existing state standards. The CR-SEL micro-credential took legislatively requested professional learning modules and standards and translated it into a competency-based format. The RWT micro-credential specialization focused on creating a professional learning tool structured for a specific role - the RWT teacher.

PESB staff contacted institutions and recruited interested parties. Educational Service District (ESD) 112 piloted the ECS micro-credential; Olympic Educational Service District (OESD) 114 piloted CR-SEL; and RWT was piloted by individual educators statewide.

Elementary Computer Science (ECS)

Washington State computer science endorsement competencies are inclusive of kindergarten through twelfth grade. The "Integrating Computational Thinking in Math & Science Instruction: Elementary Computer Science Unplugged" micro-credential elevates the elementary components of computer science competencies and standards.

Content for this micro-credential is based on computational thinking; an area of overlap between the computer science student learning standards and Washington's computer science endorsement competencies. The micro-credential focuses on computer science unplugged, meaning students were not required to be online. Rather, educators engaged their students in logical thinking, pattern recognition, and computational analysis offline in preparation for online application. The OSPI Computer Science office and American Institutes of Research worked with PESB to generate and refine the micro-credential content. Four participants from ESD 112 earned the ECS micro-credential in pilot two. In pilot three, 34 participants from various institutions earned the ECS micro-credential.

Job embedded | In a micro-credential, learning and competencies are immediately implemented in an educator's classroom or context. The evidence to demonstrate competency is taken directly from student work, filmed activities, or implemented lesson plans.

"It was fun to apply my learning of the SEL benchmarks into a classroom setting so that I was forced to interact with the material beyond sitting through a lecture. The micro-credential process made me feel like I engaged with the professional development in a relevant way that benefitted both my day-to-day teaching and my professional perspective."

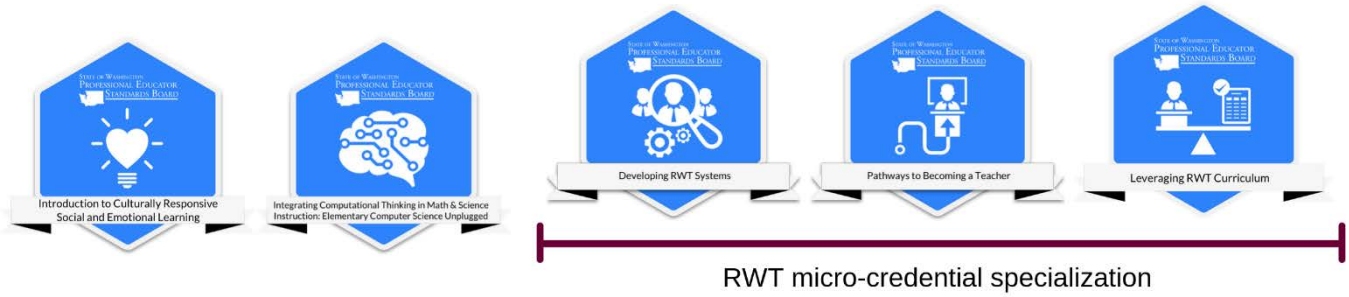
Participant in pilot three, CR-SEL micro-credential

My why |

"To provide elementary teachers the space, time, and compensation to integrate computer science into their instruction so that every child has access to computer science."

"To develop teacher capacity and skill to equitably teach computer science so all students in our state receive a predictable, high quality computer science education to prepare them for the jobs they will have in our communities."

Figure 5: PESB third pilot's micro-credential badges.



Culturally Responsive Social Emotional Learning (CR-SEL)

"I enjoyed the ability to work with some people I have not been able to work with in quite awhile and to focus on a curriculum I think is vital to student success but typically overlooked by all."

Participant in pilot three, CR-SEL micro-credential

Social emotional learning and cultural responsiveness are core to creating inclusive classrooms and holistically nurturing students. This micro-credential builds statewide capacity in these important areas. The "Introduction to Culturally Responsive Social and Emotional Learning" micro-credential provides in-service educators an opportunity to integrate and receive feedback on culturally responsive social emotional learning in their classrooms.

The content is founded on select activities from the OSPI Social Emotional Learning (SEL) modules, and Washington state SEL standards. OSPI Student Engagement and Support helped select activities and adapt CR-SEL content for the micro-credential. One participant from OESD 114 earned the CR-SEL micro-credential in pilot two. In pilot three, 88 participants from various institutions earned the CR-SEL micro-credential.

My why |

"To support…teacher learning in the area of SEL so that educators can learn how to provide safe and inclusive supports for all students in a manner that is personalized and meaningful."

"To provide support for teachers with strengthening their social emotional learning repertoire so that each and every student they serve can thrive and learn as their best self."

Collaborative | Collaboration structures enhance the micro-credential process. With creative structures and dedicated community time, micro-credentials can create space for participants to collaborate and learn together throughout the process.

"Teachers were clear: they want time to work together and share ideas. They agreed this was the most effective tool used to increase their competence. They also felt it was more powerful to have pairs or teams from schools' sites complete training together."

Pilot three micro-credential grant site report

My why |

"To support teacher leadership and learning so that they can inspire the next generation of Washington's students to become teachers."

"To build relationships, facilitate and support school districts, so that systems (and people) are aligned to inspire, recruit, and support a more diverse teacher workforce."

Recruiting Washington Teachers (RWT)

Recruiting Washington Teachers (RWT) is a high school teacher academy program, founded in equity pedagogy. In RWT classrooms, students explore cultural identity and educational opportunities through the lens of the teaching profession. In 2007, the legislature funded RWT pilot programs to advance equity in education careers for high school students, and with the goal of diversifying the educator workforce. In 2014, the legislature tasked PESB with designing a culturally responsive curriculum for all careers in education courses based on RWT pilot programs. RWT now operates in high schools around the state and is growing to include sites focused on developing future bilingual educators.

The RWT micro-credential specialization prepares educators to lead RWT classrooms and create the necessary infrastructure for a holistic pathway to teaching. The RWT micro-credential specialization consists of three separate micro-credentials: "Leveraging RWT Curriculum;" "Pathways to Becoming a Teacher;" and "Developing RWT Systems." Educators who participated in the RWT micro-credential specialization could pursue one or several of the micro-credentials. The Center for Strengthening the Teaching Profession (CSTP) collaborated with PESB to highlight elements of the RWT program and create the micro-credential content. Five participants statewide earned one of the RWT micro-credentials in pilot two. In pilot three, participants from Central Washington University and Seattle Public Schools earned ten micro-credentials with several individuals earning more than one micro-credential in the RWT specialization.

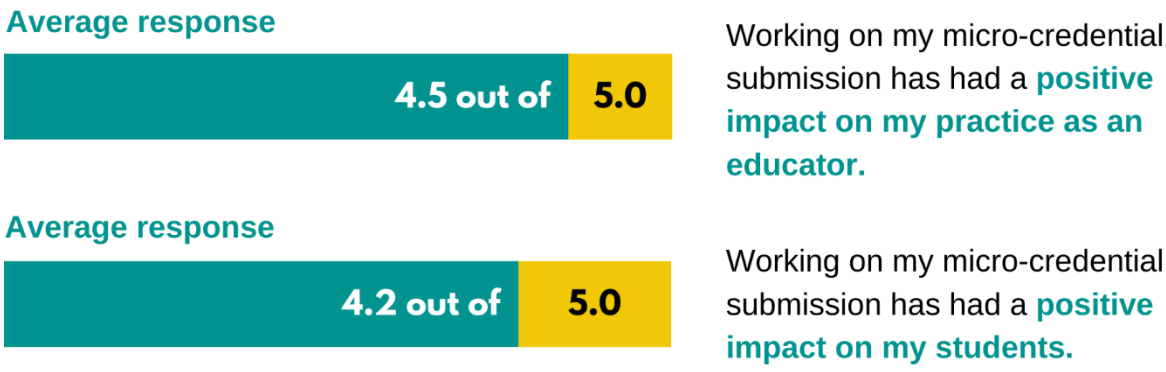
In pilot two, ten micro-credentials were earned in total.

- **One CR-SEL micro-credential** was earned by an OESD 114 educator.
- **Four ECS micro-credentials** were earned by educators from ESD 112.
- **Five RWT micro-credentials** were earned by educators statewide.

Participants from pilot 2 pursued these micro-credentials and provided feedback on the content and process. Educators received 15 clock hours for completing a micro-credential but reported each micro-credential took about 20 hours to complete. Educators who completed micro-credentials reported their learning had a positive impact on their practice and students. Along with other input, this feedback was included in the third pilot's design.

Figure 6: Pilot two participant survey.

On a scale of 1 (strongly disagree) to 5 (strongly agree) participants rated the following statements.



Pilot three, implementing in diverse contexts, 2018-19

After developing technology and content infrastructure, PESB designed a grant to scale up and test capacity for micro-credentials in Washington. Organizations (school districts, ESDs, higher education institutions, and community organizations) applied for $18,000 grants to pilot one of the three micro-credentials: ECS, CR-SEL, and RWT (see page 10). **14 organizations each received $18,000.** One organization honorarily participated in the pilot without the cash award.

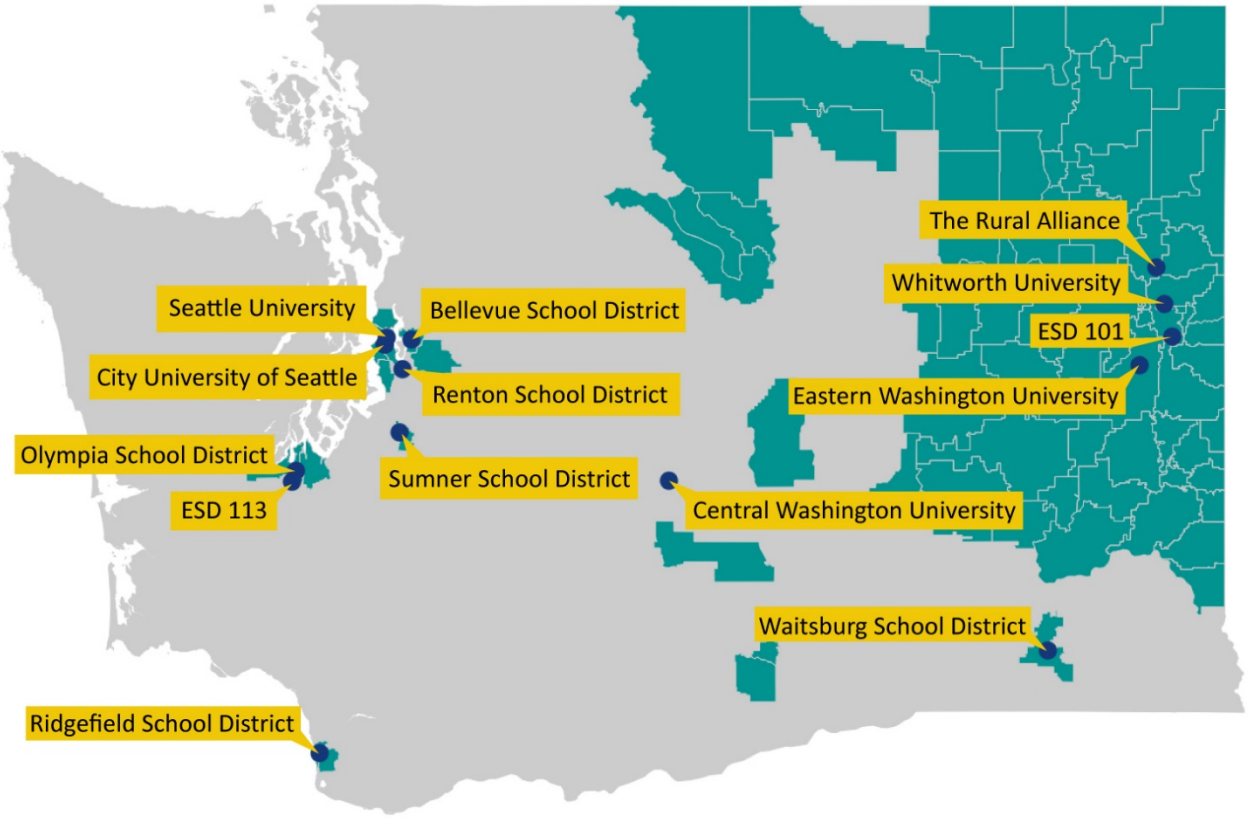
Responding to feedback from the second pilot, PESB staff refined the micro-credential content, more clearly aligned rubrics, and increased the recommended clock hours from 15 to 20.

Grant site characteristics

From **state universities** and large **urban school districts** to local **community organizations** and small **rural school districts**, PESB's grant sites represented a wide variety of institution types, sizes, and geographic locations.

Five grant sites were higher education institutions, all partnered with at least one school district. Two were ESDs, and one was a community organization. Six school districts were standalone recipients, while another four school districts participated as a district consortium under one grant. Micro-credential pilot participants came from **29 school districts** (count excludes the districts in the ESD grant sites) including both direct recipients and partners.

Figure 7: Map of grant site locations and partner districts.



My why |

"To provide/improve opportunities so that teachers in rural areas can access quality professional development and improve P-12 achievement."

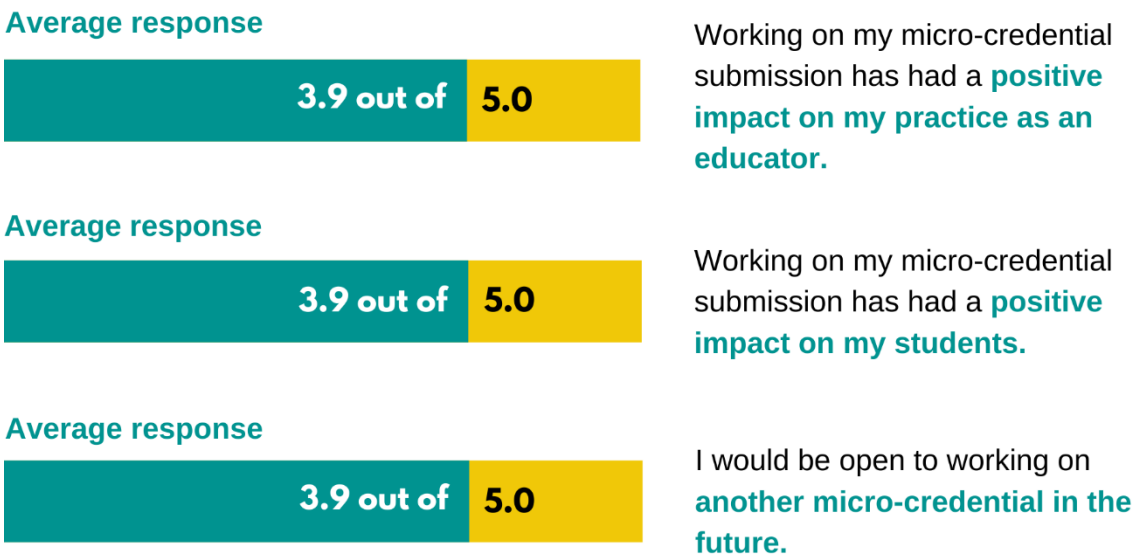
Each grant site piloted at least one of the three micro-credentials. Nine grant sites piloted CR-SEL; three piloted ECS; two piloted RWT; and one grant site piloted both CR-SEL and ECS.

- Bellevue school district | **CR-SEL**
- Central Washington University with Grandview and Mabton school districts | **RWT**
- City University of Seattle with Selah school district | **CR-SEL**
- Eastern Washington University with Cheney and Liberty school districts | **ECS** and **CR-SEL**
- ESD 101 | **ECS**
- ESD 113 | **CR-SEL**
- Olympia school district | **CR-SEL**
- Renton, Issaquah, Bellevue, and Highline school districts | **ECS**
- Ridgefield school district | **CR-SEL**
- Seattle Public Schools | **RWT**
- Seattle University | **CR-SEL**
- Sumner school district | **ECS**
- The Rural Alliance | **CR-SEL**
- Waitsburg school district | **CR-SEL**
- Whitworth University | **CR-SEL**

Micro-credential pilot participants were primarily teachers, however, some administrators, university faculty, school counselors, and paraeducators also participated.

Figure 8: Pilot three participant survey.

On a scale of 1 (strongly disagree) to 5 (strongly agree) participants rated the following statements.



Micro-credential results

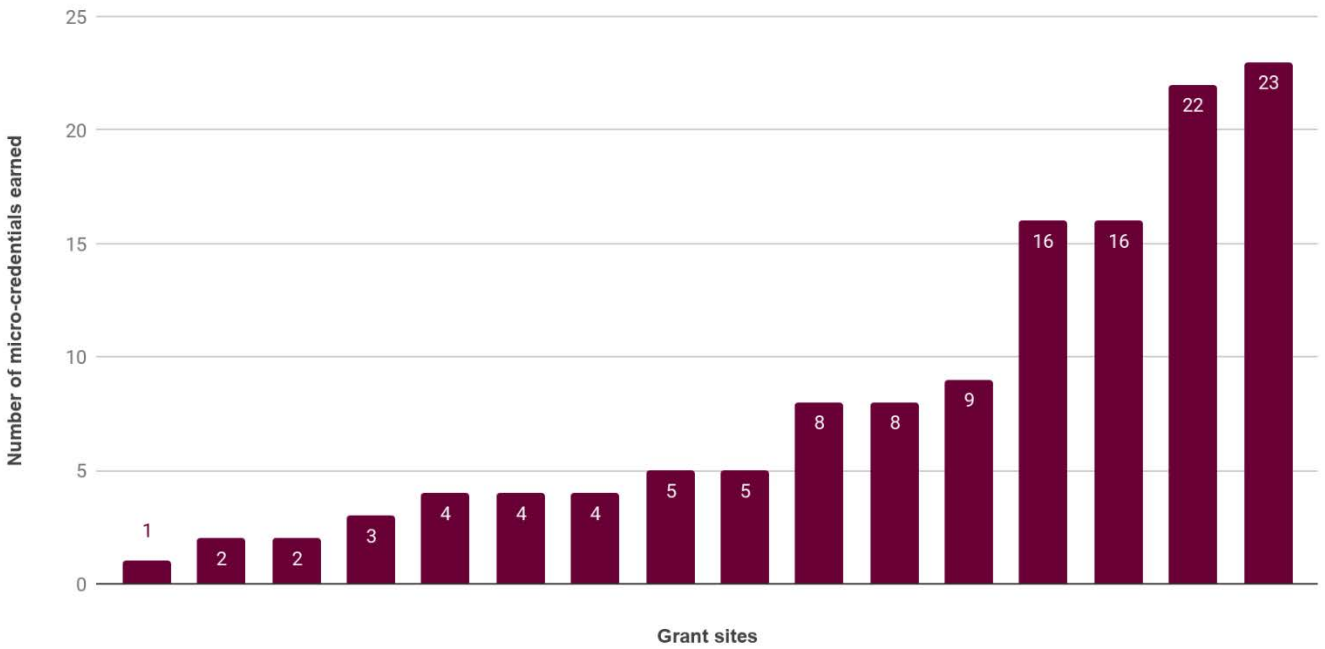
A varied set of grant sites also came with a diverse set of supports, incentives, participant engagement, collaboration structures, and number of micro-credentials earned. Overall, there were:

- **132** micro-credentials earned
  - **18** micro-credentials earned on the first attempt
  - **114** micro-credentials earned on the second through fifth attempt

Perseverance | Carol earned all three RWT micro-credentials (see page 6). However, she did not pass her first two micro-credentials on the first submission. On her first attempt, Carol submitted and received feedback at the same time as a colleague at an elementary school in her district. They quickly learned they both did not pass.

Two weeks later, the elementary teacher excitedly messaged Carol, “I passed this time! I think the second submission is easier, because you’ve already been through it. I really encourage you to do it.” The camaraderie encouraged Carol to realize she could do it. Carol re-submitted her first micro-credential, passed, and went on to earn the three RWT micro-credentials.

Figure 9: Number of micro-credentials earned by grant site.



In pilot three, participants earned 34 ECS micro-credentials; 88 CR-SEL micro-credentials; and ten RWT micro-credentials. In the RWT micro-credential specialization, participants could earn more than one micro-credential. Carol from this report's micro-credential success story (see page 6) earned all three RWT micro-credentials.

Pilot grant lessons

Through the pilots, PESB discovered several lessons to address in future micro-credential structures and to consider in other professional learning innovations. PESB's lessons learned align with best practices in educator professional learning. Professional learning best practices include the following characteristics (see page 7 of this report for citations and further explanation):

- **Ongoing**
- **Individualized**
- **Connected to existing initiatives**
- **Job-embedded**
- **Collaborative**

Support structures

Participants tended to be more satisfied with their micro-credential experience when they felt supported. Within the grant sites, support most often took the form of built-in collaboration structures. Learning communities and targeted guidance encouraged educators to persevere and complete the micro-credentials.

Collaborative support structures mitigate an educator working in isolation. When educators were spread out across a district or multiple districts, they appeared less likely to initially submit or persist after not passing. On the other hand, a push from a colleague or hard work regularly acknowledged, appeared to encourage participants to submit and earn their micro-credential. Intentional support structures can take multiple forms but should be a critical consideration in statewide implementation.

Pilot three micro-credential grant site reports provided some suggestions. Examples included:

> *"Much of our success can be attributed to the hybrid model of hosting optional in person meetings in addition to the use of the discussion board"*
>
> *"Those who attended the two in-person meetings were more successful in earning their micro-credential than peers who did not attend."*
>
> *"The need for individual coaching sessions peaked once participants received feedback and were working on resubmitting."*

Incentives

In pilot three, ten grant sites offered stipends to participants who either submitted or earned micro-credentials. Grant sites were also responsible for setting up the necessary structures for participants to receive 20 clock hours. Stipends ranged from $50 to $650, with the average stipend at $230.

Although incentives were not the only motivation for participants to engage with micro-credentials, the stipends created additional drive for educators to persevere and learn the process. Stipends or other incentives also served as recognition for participants' growth and dedicated time.

There are other incentives beyond stipends and clock hours that could recognize the work an educator invests in completing or earning a micro-credential. Some examples include: connecting to a career pathway, leadership opportunities, and salary advancement for earning a micro-credential.

> *"Continue to offer incentives – this is a meaningful learning process, but it does require a good deal of time, effort, and organization. I definitely think that micro-credentials have more to offer than a traditional professional learning as they lead to deeper and more practical understanding of a topic – but educators, who are already stretched thin, will need a reason to stick it out"*
>
> *Pilot three micro-credential grant site report*

My Why |
"To rejuvenate professional learning across a system so that teachers and students THRIVE in a personalized, strengths based, and focused way."

Relevant content

When organizations applied for the third pilot grant, grant sites described why they applied for that specific content area (CR-SEL, ECS, RWT). Rationales generally included: kicking off new initiatives; interest in the content; and building capacity in existing goals and programs. Existing initiatives in that content area appeared to incentivize organizations to dedicate more time and resources in turn encouraging micro-credential participation.

Carol, the educator who earned all three RWT micro-credentials (see page 6), chose to participate in the pilot because it was directly relevant to her class and building. Her school started an RWT program and Carol was put in charge of the course. She was able to immediately implement the content and skills she learned through the micro-credential, and directly connect it to her school's larger teacher academy initiative.

"We selected this focus because all of our elementary schools have been designated as STEM schools. Our aim is to integrate STEM learning throughout all subject areas. This opportunity provides us with resources to provide teachers with the knowledge and skills to integrate computational thinking across content areas and to provide guaranteed and viable STEM learning opportunities across the district."

Pilot three ECS micro-credential grant application. The grant site's participants earned nine micro-credentials.

PESB's grant sites seemed to see returns with more robust structures of support, substantial stipends, and coherent connections between micro-credential content and district or school goals. Further research with a larger sample size would be needed to determine any true correlations.

Awareness

As with any new policy, process, or program, communication is necessary. Few educators are familiar with the term or concept of micro-credentials. In a national survey, only 15% of teachers indicated they were "somewhat familiar with the concept of micro-credentials" (Grunwald Associates LLC and Digital Promise, 2015, p. 6). To ensure effective implementation and access to micro-credentials, PESB staff would raise awareness and communicate changes through PESB's robust communications process and channels.

PESB's frequent communication tools:

- **GovDelivery newsletters**
- **Resources and graphics**
- **Social media, Facebook, Twitter, YouTube**
- **Webinars**
- **Website**

Statewide micro-credential structures

At the end of the third pilot, PESB hosted a micro-credential policy convening, bringing together 100 attendees including micro-credential grant participants, Washington education stakeholders, and out-of-state guest speakers. Attendees explored pilot learnings and, in small groups facilitated by Washington educators, provided initial input into future recommendations for micro-credential system building and policy.

You can find the grant application at http://bit.ly/2VL0tJ4 and materials from the culminating January 2019 Policy Convening at http://bit.ly/2MEQdO7.

These small groups provided feedback on several structures. If micro-credentials were to be adopted as one professional learning option, these structures would also be considered by a micro-credential advisory council and the Board:

1. **Alignment to standards**
2. **Assessment of micro-credentials**
3. **Educator support and collaboration**
4. **Incentive types and provisions**
5. **Platform providers**

My Why |

"My personal mission is to serve, encourage, and discover...This opportunity presented itself and gives me a chance to serve my fellow professionals, encourage positive change, and discover new thinking and learning."

POTENTIAL FUTURE APPLICATIONS |

Micro-credentials align with professional learning best practices and, through pilots, PESB has explored the systems required to implement them. **How would micro-credentials fit into Washington State and address our unique needs?** Two scenarios exemplify approaches to an answer.

Teacher leadership

Currently, Washington does not have a credential or endorsement to build or recognize teacher leaders. Examples of teacher leader roles include: student teacher mentors, National Board cohort facilitators, professional learning community (PLC) facilitators, instructional coaches, department heads, RWT teachers, and more. Teacher leadership provides opportunities for teachers to advance professionally, as well as gain and receive recognition for additional skills. When teachers participate in leadership, they increase the capacity of their classrooms, schools, and districts to support students.

Each teacher leadership role requires a unique skillset. As an assessment of a specific competency, micro-credentials are set up to hone in on particular skills. A teacher taking on a leadership role could demonstrate aptitude for that unique skillset through a micro-credential or series of micro-credentials.

Currently, many teacher leadership roles are recognized locally by their district and building. A statewide system of teacher leader micro-credentials would increase the transferability of these roles, recognizing teacher leaders across buildings, districts, and potentially states. Micro-credentials inherently acknowledge prior learning, serving to holistically recognize teacher leaders' professionalism. Role based micro-credentials would concretely develop individual's skills and build capacity for districts in areas of teacher led facilitation, adult learning, and more.

My Why |

"To support the growth of the micro-credential option so that educators have the opportunity to explore areas of interest and import to them and their students in pursuit of excellent teaching and strong schools for all kids."

State level standards

State standards represent best practices and field innovations, as well as encourage a standard of quality. As new standards are created, pre-service candidates are exposed to the updated knowledge and skills through their educator preparation programs. However, for in-service educators there is no systematic way for them to access, demonstrate, and assess their competencies in these new areas.

Micro-credentials can lift up new standards and support in-service educators in developing skills they may not have had access to pre-service. Through micro-

credential's cycle of inquiry structure, in-service educators can demonstrate competency in new standards the way pre-service candidates do during their preparation experience.

For example, the PESB pilots legislatively requested state SEL and computer science standards and focused on specific competencies within those standards - cultural responsiveness and elementary centered computational thinking. Through additional micro-credentials, educators could continue to engage with other elements within these two standard sets, building statewide capacity in competencies related to SEL and computer science.

Continuing the important integration of SEL in Washington's education system, HB 5082 requires PESB to incorporate SEL into standards across the educator continuum. Micro-credentials are one avenue to provide meaningful professional learning on new areas for in-service educators.

"I learned that in Washington, there are now six SEL standards that are comprised of a variety of social skills. These skills are referred to as SEL benchmarks, which align with the standards."

Participant in pilot three, CR-SEL micro-credential

These scenarios describe how micro-credentials could serve as one option in Washington's professional learning system. Micro-credentials address the gaps above and provide educators choices, adding to our flexible and rigorous development system and encouraging changes to classroom practice.

RECOMMENDATIONS |

State government, institutions of higher education, school districts, community-based organizations, businesses, foundations, and other community members all play a role in further development of micro-credential systems in our state. PESB is committed to supporting innovative ways to engage educators and provide resources to grow the profession. Continued use of micro-credentials would involve additional pilots, stakeholder convenings, system guidance, and policy making. PESB proposes the following recommendations.

Convene a micro-credential advisory council

An advisory council should be convened to explore definitions, pilots, and policies to guide micro-credential system development. Individual districts and organizations across Washington are offering different micro-credential initiatives. However, there is currently no policy framework to define what is and what is not a micro-credential. Without policy frameworks, offerings vary in quality, purpose, and methodology. An advisory council would convene stakeholders and content experts to advise on existing and future micro-credential initiatives, review data on geographic and demographic use, and provide support on best practices.

Develop a system to track micro-credentials

Examples from other states |
In Texas, HB 2424 requires the state's Department of Education to ensure an educator can record their micro-credential activity in the Texas certification system (Tex. Educ. Code, 1995 & Supp. 2019).

In order for micro-credentials to best support educators, as well as to evaluate initiative results, micro-credential earners should be able to showcase their work in a centralized system that collects and tracks the data. Washington could use our eCertification system to track earned micro-credentials and recognize educators' learning. Statewide access to this information would be important for monitoring use and effectiveness.

Engage districts

Districts and educator preparation program providers have been independently implementing their own micro-credential initiatives. Organizations not yet using micro-credentials have expressed an interest in learning more about this innovative form of professional learning.

My Why |
"To learn how educators will use micro-credentials so that I can better lead my organization's work writing future micro-credentials."

Districts and providers who are offering their own micro-credentials should be provided opportunities to offer their institutional knowledge and implementation learnings. Organizations who have expressed interest in micro-credentials should be given the opportunity to learn more. Gaining and disseminating knowledge on how to implement micro-credentials will assist districts and providers.

Establish micro-credential policies

With the guidance of a micro-credential advisory council, policies should be established to define the purpose, clarify definitions, and provide guidance for micro-credentials in the state of Washington. Initial policy considerations should include:

1. **Alignment to standards**
2. **Assessment of micro-credentials**
3. **Educator support and collaboration**
4. **Incentive types and provisions**
5. **Platform providers**

Examples from other states | The Arkansas Department of Education approves micro-credentials that can be used to fulfill required professional learning for educators (Ark. Code Ann., 1987 & Supp. 2017).

In Massachusetts, educators can use up to two micro-credentials per year towards certificate renewal (Massachusetts Department of Elementary and Secondary Education, 2017).

Expand micro-credential pilots

Washington is just starting to learn about the impact of micro-credentials. Built upon the foundation of PESB's previous pilots, additional pilots would continue to grow system capacity. Potential explorations include: organizations serving as micro-credential content hubs, use of multiple online platforms, and developing teacher leaders.

Additional pilots could also help create and test micro-credentials for legislative initiatives such as: school safety, mental health training, social emotional learning, and collaborating with paraeducators. Participants would demonstrate competency in these initiatives through evidence from the classroom or school context. Pilots would scale up capacity in these new content areas for in-service educators.

Examples from other states | Rhode Island is in the final stages to formalize six micro-credentials for the state's computer science endorsement (Berry and Byrd, 2019, p. 9).

CONCLUSION |

Professional learning is most effective when it is **ongoing, individualized, connected, job-embedded, and collaborative.** PESB's pilot experience validates that micro-credentials provide an in-depth personalized experience, directly connected to the day to day roles of an educator. When well executed, micro-credentials are completed with collaborative supports and connected to ongoing local and state initiatives.

Micro-credentials have the potential to structure teacher leadership, recognize learning, and provide in-service educators access to new knowledge. As one option for professional learning, micro-credentials support educators in continuing to gain and grow the skills needed to support their classrooms, buildings, districts, and students.

"[Micro-credentials] bring the potential for a much more consistent experience with continuing education for our teachers. I think having the structure of a micro-credential that is by nature...longitudinal and asks people to go back and do something in their current practice is really useful and will have much greater impact on changing teacher practice...The whole structure of a micro-credential is more aligned with what we know to be true about the learning cycle and that works for students and adults."

Katherine Livick, integrated learning coach, ESD 112

"I appreciate that [micro-credentials] gave me the opportunity to delve deeper into my practice of helping my students grow as learners and providing tools and strategies to support them in their...development."

Participant in pilot three, CR-SEL micro-credential

GLOSSARY |

Culturally Responsive Social Emotional Learning (CR-SEL) micro-credential: The "Introduction to Culturally Responsive Social and Emotional Learning" micro-credential integrates culturally responsive social emotional learning standards into daily classroom implementation.

Elementary Computer Science (ECS) micro-credential: The "Integrating Computational Thinking in Math & Science Instruction: Elementary Computer Science Unplugged" micro-credential is based on computational thinking. The micro-credential focuses on computer science unplugged, meaning students were not required to be online. Rather, educators engaged their students in logical thinking, pattern recognition, and computational analysis offline in preparation for online application.

Micro-credential: A performance-based assessment of a specific competency, providing an opportunity for educators to present evidence of their learning.

Professional growth plan (PGP): A job-embedded, self-directed action plan for an educator's learning and development towards a specific goal.

Recruiting Washington Teachers (RWT): A collection of curriculum and resources for high school teacher academies, originally created through legislative action in 2007. RWT's goal is to "grow our own" diverse group of future teachers who more closely reflect the population of today's youth. RWT is founded in equity pedagogy and helps students to explore cultural identity and educational opportunities through the lens of the teaching profession.

Recruiting Washington Teachers (RWT) micro-credential specialization: The RWT micro-credential specialization prepares educators to lead RWT classrooms and create the infrastructure necessary for a holistic pathway to teaching. The RWT micro-credential specialization consists of three separate micro-credentials: Leveraging RWT Curriculum; Pathways to Becoming a Teacher; and Developing RWT Systems.

WORKS CITED |

Ark. Code Ann. § 6-17-704; 6-17-705; 6-17-707 (1987 & Supp. 2017).

Berry, B., & Byrd, P. A. (2019). *Micro-credentials and Education Policy in the United States: Recognizing Learning and Leadership for Our Nation's Teachers*. Washington D.C.: Center for Teaching Quality and Digital Promise.

Berry, B., & Cator, K. (2016). *Micro-credentials: Driving teacher learning & leadership*. Washington D.C.: Center for Teaching Quality and Digital Promise.

BloomBoard. (n.d.). Micro-credentialing Research Foundations. *Micro-credentialing Research Foundations*. Palo Alto, CA.

Croft, A., Coggshall, J. G., Dolan, M., Powers, E., & Killion, J. (2010). *Job-Embedded Professional Development: What It Is, Who Is Responsible, and How to Get It Done Well*. Washington D.C.: National Comprehensive Center for Teacher Quality.

Darling-Hammond, L., & McLaughlin, M. W. (2011, March). Policies That Support Professional Development in an Era of Reform. *Kappan*, *92*(6), 81–92.

DeMonte, J. (2013). *High-Quality Professional Development for Teachers: Supporting Teacher Training to Improve Student Learning*. Washington D.C.: Center for American Progress.

Finkelstein, J., Knight, E., & Manning, S. (2013). *The Potential and Value of Using Digital Badges for Adult Learners*. Washington D.C.: American Institutes for Research.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What Makes Professional Development Effective? Results From a National Sample of Teachers. *American Educational Research Journal*, *38*(4), 915–945.

Grunwald Associates LLC and Digital Promise. (2015). *Making Professional Learning Count: Recognizing Educators' Skills with Micro-credentials*. Washington, D.C.

Hunzicker, J. (2010). *Characteristics of Effective Professional Development: A Checklist*.

Massachusetts Department of Elementary and Secondary Education. (2017). License Renewal Guidelines for Massachusetts Educators.

Minnesota Professional Educator Licensing and Standards Board. (2019, March 11). Licensure via Portfolio. Retrieved from https://mn.gov/pelsb/aspiring-educators/portfolio/.

Tex. Educ. Code § 2.21.054 (1995 & Supp. 2019).

Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement*. (33rd ed., Vol. REL 2007). Washington D.C.: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Education Laboratory Southwest.

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