DefinedLearning Credentials

Micro-Credentials

Micro-credentials are a competency-based form of certification. They are developed and issued based upon personalized professional learning experiences supporting an educator's application of skills and knowledge to improve professional practice that supports student success. Each micro-credential is an assessment of a specific competency with the educator applying their knowledge and skills to create a specific product, reflection and application demonstrating competence of the attribute. Each micro-credential takes 1-2 hours to complete.

Stacks	Micro-Credentials
Planning and Preparation	**1. Aligning to Standards** **2. Infusing (5Cs, 21st C, Workplace, SEL) Skills** **3. Designing Authentic Tasks** **4. Developing Driving Questions** **5. Using GRASP to Frame a Task** **6. Planning for Student Voice and Choice**
Instruction	**1. Purposeful Grouping** **2. Providing Scaffolding** **3. Effective Facilitation/Coaching** **4. Meaningful Feedback** **5. Guiding Research** **6. Digital Literacy**
Assessment	**1. Pre/Diagnostic Assessment- Finding Out** **2. Formative Assessment- Checking In** **3. Summative Assessment- Making Sure** **4. Rubric Design** **5. Critique and Revision** **6. Public Product**
Classroom Environment	**1. A Culture of Reflection** **2. Developing Self-Direction** **3. Encouraging Risk-Taking** **4. Creating an Environment of Sustained Inquiry** **5. Developing a Growth Mindset/Grit** **6. Incorporating Social/Emotional Learning**

Leadership	**1. Reflecting on Teaching** **2. Collaborating with Colleagues** **3. Leading Professional Development** **4. Creating Community Events** **5. Communicating with Families** **6. Growing and Developing Professionally**

A brief overview of the micro-credentials in the Defined Learning PBL Medallion can be found be below:

Planning and Preparation

Aligning to Standards

Academic standards provide guidance to teachers about what students must know, understand and be able to do. Standards are used to determine mastery and provide feedback for students. PBL tasks that are aligned to standards communicate to students that authentic learning is as valued as more traditional measures, such as test scores. Not all standards are appropriate for PBL tasks. Standards that ask students to apply their knowledge and understanding in meaningful ways are often best measured through PBL tasks vs. traditional assessments.

Infusing (5Cs, 21st C, Workplace, SEL) Skills

Infusing skills beyond academic standards adds rigor and relevance to traditional coursework. A variety of skills are needed to accomplish real-world tasks. Students must be able to flexibly use 21st Century skills, career and workplace-readiness skills and social-emotional learning by the time they graduate from high school. Students must be provided with real-world scenarios to authentically practice these skills. They also need feedback in their progress as they develop these skills.

Designing Authentic Tasks

When students are engaged in authentic learning, they are more likely to develop a deep understanding of content and skills, take responsibility for their own learning and become intrinsically motivated to do their best work. Teachers who design authentic tasks can select projects that use realistic scenarios, customize learning tasks based on what their students care about and develop tasks designed to meet school and community needs.

Developing Driving Questions

When students are engaged in complex, open-ended, interdisciplinary problem solving, a driving

question can provide guidance and clarity. Driving questions are simple statements of what students will investigate throughout a Project-Based Learning (PBL) task. Driving questions can be conceptual, product-focused or role-focused. They connect what students are learning to a real world problem or question and help guide the project in a direction that is meaningful and authentic.

Using GRASP to Frame a Task

The GRASP (Goal, Role, Audience, Situation and Product) model provides opportunities for students to use and grow their 4C skills - critical thinking, communication, collaboration and creativity- to prepare students for living in an increasingly interconnected world. The model also serves as a planning framework for teachers designing high-quality Project-Based learning tasks.

Planning for Student Voice and Choice

Providing students with voice and choice activates learning. Every student is different. Students have different needs and interests. They are also empowered in their learning when they have an opportunity to make an academic choice and reflect on its success or failure. Teachers can provide choice in content, product or process. They can also provide opportunities for students to co-create projects as they become more experienced and confident in their choices.

Instruction

Purposeful Grouping

In classrooms where students are learning collaboratively, effective facilitators of PBL experiences incorporate purposeful grouping practices. Purposefully grouping students for efficiency, shared interests or maximum growth can help create a rigorous and engaging learning environment. Teachers can group students for entire projects or for different parts of a project, simulating a real-world work environment.

Providing Scaffolding

PBL is appropriate for all learners. Engaging in PBL allows students to demonstrate their knowledge and understanding in authentic ways. Students who may struggle with traditional instruction and assessment often thrive while completing PBL tasks because they are engaged and motivated to succeed. Teachers can scaffold content, process or product to create engaging learning opportunities for all students, regardless of their level of readiness.

Effective Facilitation/Coaching

Project-Based Learning (PBL) requires students to be self-directed and actively transfer knowledge and skills into authentic contexts. Sometimes this requires direct instruction, but more often it requires effective facilitation from the teacher. Effective facilitators or coaches ask

probing questions, listen, provide feedback, encourage reflection, gradually release responsibility to the students, and demonstrate trust through affirmation.

Meaningful Feedback

Critique and revision is an important part of any Project-Based Learning (PBL) experience. Students must learn to respond to feedback, even criticism, in productive ways in order to improve their products and demonstrate their understanding. Meaningful feedback provides actionable guidance for students to make meaning and transfer understanding of knowledge and skills in important ways.

Guiding Research

Nearly every Project-Based Learning (PBL) experience includes some form of research. Teachers who *guide* research effectively teach students how to research while also helping them seek answers to engaging questions. Guiding research may include explicit teaching, modeling and/or meaningful feedback before, during and after the research process.

Digital Literacy

While Project-Based Learning (PBL) tasks do not need to include digital components, allowing students to use digital tools to consume, organize and share information is an important part of preparing students for the world of work. Digital literacy skills are best developed when students have meaningful context for using them. PBL tasks provide a motivating opportunity for students to put their skills into practice.

Assessment

Pre/Diagnostic Assessment- Finding Out

Pre Assessment, otherwise known as diagnostic assessment, can be a great tool for Project-Based Learning (PBL) tasks. When teachers know what students already know about a topic, they can accelerate instruction and quickly allow students to deeply learn information about a concept that relates to a real world problem. When they find out what gaps students may have, they can prioritize instruction to ensure all students learn key content and skills during a PBL task.

Formative Assessment- Checking In

Formative assessment is a vital element of Project-Based Learning (PBL). Effective facilitators of PBL constantly evaluate student knowledge and understanding by informal questioning, exit tickets, short quizzes and conferences. The results of these assessments inform instruction and guide student learning throughout a project.

Summative Assessment- Making Sure

Summative assessment is often associated with the final product in Project-Based Learning

(PBL). Summative assessment can be used in a variety of ways to evaluate student mastery. Teachers can use reflections, portfolios of work or student conferences as summative assessments in addition to products students complete during the PBL. In PBL, summative assessments provide formal feedback to students and allow teachers to grade student work, often after numerous formative checks for understanding. Summative assessments for one project can also be used as formative assessments for the next project.

Rubric Design

Rubrics are an open-ended and responsive tool for providing feedback to students during Project-Based Learning (PBL) activities. Rubrics can show current levels of understanding and provide students with insight of how they can improve their performance in the future. Rubrics often include application of content, skills and practices, quality of student work and effectiveness of results.

Critique and Revision

Students (and teachers) are increasingly intolerant of critique and revision. Many assignments are focused on completion rather than quality. When students are faced with creating a high quality product, however, critique and revision are essential for the best possible outcome. Teachers who provide multiple opportunities for critique and revision during a Project-Based Learning (PBL) experience help students understand the importance of developing products that improve with effort.

Public Product

One of the most unique features of Project-Based Learning (PBL) is the opportunity to present products publicly. Asking students to address an authentic audience for their final product requires strategic thinking, effective communication and application of interdisciplinary content and skills in meaningful ways. Traditional assessments are often not robust enough to capture these important deeper learning skills. Additionally, public products elevate student motivation and shift the teacher's role from arbiter of success to guide or coach, helping students create the best possible product for their intended audience.

Classroom Environment

A Culture of Reflection

Reflection is a powerful practice for students to make meaning of what they are learning, particularly during process-based experiences like Project-Based Learning (PBL). Classrooms that establish a culture of reflection help students understand that thinking, talking and writing about learning is often more impactful than the products they create. Building in opportunities for reflection into the regular classroom routine empowers students to use reflection flexibly throughout the learning process.

Developing Self-Direction

Students who can take control of their own learning often report higher levels of confidence, self-efficacy, critical thinking and creativity. They are able to adapt and apply learning to new situations and transfer understanding between concepts, lessons, units and grade levels. They are also able to apply their learning to real world scenarios.

Encouraging Risk-Taking

Students will encounter risks and challenges in everyday life from a very early age and throughout their development. It is important to create a classroom environment that provides opportunities to take risks to develop life skills such as resilience and persistence. Project-Based Learning (PBL) tasks provide the context for taking risks beyond the rigor of academic standards in a way that is engaging, motivating and intellectually safe for students.

Creating an Environment of Sustained Inquiry

Inquiry, the simple act of asking a question and seeking its answer, can be a powerful motivator and increases engagement in the classroom. When students learn to ask their own questions, the learning environment becomes dynamic. Teachers become influential in student success when they teach the students the tools to seek out the answers to those questions, so that students learn to apply the content and skills in meaningful ways.

Developing a Growth Mindset/Grit

Teachers can create a classroom environment that encourages students to develop a growth mindset and grit by prioritizing students' passions, providing strategies that help students persevere in the face of difficulty and communicating the value of learning and improving for its own sake.

Incorporating Social/Emotional Learning

According to The Collaborative for Academic, Social, and Emotional Learning (CASEL), "Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions." Strategies like Project-Based Learning (PBL) provide opportunities for students to develop SEL skills in an academic and real world context.

Leadership

Reflecting on Teaching

Skillful facilitators of Project-Based Learning (PBL) know how important reflection is to the learning process. Leaders of PBL also know how important reflection is to the *teaching* process. When teachers take time to reflect on the successes and challenges of a lesson, they make thoughtful decisions in future lessons, creating a more productive and engaging learning environment for students.

Collaborating with Colleagues

Skillful facilitators of Project-Based Learning (PBL) know working as a team can create an optimal learning experience for students. They delegate responsibilities, share what is working and not working and reflect on teaching and learning. Collaborative projects are often more effective and engaging as a result.

Leading Professional Development

Skillful facilitators of Project-Based Learning (PBL) know that PBL is more effective when students have previously experienced inquiry-based learning. A school-wide approach to PBL starts with teachers providing leadership and coaching for one another. Peers leading professional development show their colleagues that a strategy is within reach and effective for students they know and care about.

Creating Community Events

Skillful facilitators of Project-Based Learning (PBL) know that PBL tasks are most effective when students are presenting to an authentic audience. Community involvement in PBL tasks can include career connections, expert feedback or celebration. Whatever the entry point, students are more engaged and invested in a PBL experience when the community will be part of their work.

Communicating with Families

Skillful facilitators of Project-Based Learning (PBL) know that communicating with families can support the idea that learning does not only happen in the classroom. Students can extend their learning through conversations with family and teachers may find ways to connect PBL experiences with family resources and interests.

Growing and Developing Professionally

Skillful facilitators of Project-Based Learning (PBL) know that each group of students or new set of curriculum standards can require developing new skills. As the context for PBL changes, so do the strategies and methods required to effectively implement a task. Teachers and leaders of PBL must continuously seek professional growth opportunities.