



## Learning and Teaching

Pathway students engage in inquiry- and project-based learning that is outcome-focused, rigorous, relevant, and collaborative. Members of the pathway Community of Practice plan these learning experiences for students. They regularly collaborate to develop and articulate standards-aligned grade-level, course, and project outcomes to organize the pathway's program of study and guide assessment, curricular, and instructional planning. They also use performance assessment tasks with common rubrics to assess, monitor, and support every student's progress toward mastery of college and career-ready pathway learning outcomes. The Community of Practice regularly engages in professional learning, evidence-based inquiry, and reflection to continuously improve their practice.

### Reflect on Your Practice

- What experiences have individuals on the pathway team had with inquiry or project-based learning? What were the benefits and challenges?
- What kinds of agreements and support might be necessary to ensure project alignment with multiple instructors?
- Based on prior experience, how has student self-assessment or peer assessment influenced student engagement and perseverance?

### Foundational Steps

- Increasing awareness of and facility with the curriculum and instructional strategies currently being promoted by the site and district.
- Clarifying the complexity and type of integrated project(s) the team will undertake each year.
- Providing sufficient formal time to collaboratively plan and integrate.

# P4. Learning and Teaching

<b>1 Emerging</b>	<b>2 Developing</b>	<b>3 Advancing</b>	<b>4 Transforming</b>
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## P4.1 Rigorous, Relevant, and Integrated Learning

<p>Some pathway teaching and learning:</p> <ul style="list-style-type: none"> <li>■ Involves student-centered, research-based instructional and learning strategies.</li> <li>■ Includes standards-based, project- or problem-based learning that:             <ul style="list-style-type: none"> <li>• Integrates academic and technical content;</li> <li>• Aligns with the pathway theme</li> <li>• Connects to tasks of professionals in practice;</li> <li>• Connects to students' backgrounds, experiences, and interests;</li> <li>• Involves critical thinking, problem solving, and production of products or services.</li> </ul> </li> </ul>	<p>Most pathway teaching and learning:</p> <ul style="list-style-type: none"> <li>■ Involves student-centered, research-based instructional and learning strategies.</li> <li>■ Includes standards-based, project- or problem-based learning that:             <ul style="list-style-type: none"> <li>• Integrates academic and technical content;</li> <li>• Aligns with the pathway theme</li> <li>• Connects to tasks of professionals in practice;</li> <li>• Connects to students' backgrounds, experiences, and interests;</li> <li>• Involves critical thinking, problem solving, and production of products or services.</li> </ul> </li> </ul>	<p>The majority of pathway teaching and learning time consistently involves:</p> <ul style="list-style-type: none"> <li>■ Involves student-centered, research-based instructional and learning strategies that align with the indicators listed below.</li> <li>■ Includes complex and extended standards-based, project- or problem-based learning that:             <ul style="list-style-type: none"> <li>• Integrates academic and technical content;</li> <li>• Aligns with the pathway theme;</li> <li>• Reflects the processes and products of industry professionals;</li> <li>• Involves critical thinking and creativity and requires students to make connections across the curriculum;</li> <li>• Involves the design and public defense of high-quality products or services.</li> </ul> </li> </ul>	<p>In addition to achieving the Advancing criteria, pathway teacher teams ensure that students:</p> <ul style="list-style-type: none"> <li>■ Apply their knowledge and skills in new and unpredictable situations.</li> <li>■ Interact regularly with industry, post-secondary, and community partners.</li> </ul>
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## P4.2 Collaborative Learning

<p>Some pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Provide daily opportunities for students to work in heterogeneous pairs or groups.</li> </ul>	<p>Most pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Ensure that all students have daily activities that require them to work in heterogeneous pairs or groups.</li> <li>■ Provide specific skill instruction in collaborative learning.</li> <li>■ Are beginning to document students' growth in and mastery of effective teaming skills, including project management, group roles and accountability, and conflict resolution.</li> </ul>	<p>All pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Ensure that all students have extended, daily activities that require them to work in heterogeneous pairs or groups.</li> <li>■ Provide specific skill instruction and differentiated support to students in collaborative learning.</li> <li>■ Assess students regularly and ensure that all students demonstrate effective teaming skills, including project management, group roles and accountability, and conflict resolution.</li> <li>■ Ensure that students have regular opportunities to collaborate with industry, postsecondary, and community partners in collaborative learning.</li> </ul>	<p>In addition to achieving the Advancing criteria, all pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Have students regularly reflect on their collaboration skills and their impact on their own learning.</li> <li>■ Have students share their work processes and products with others.</li> <li>■ Ensure that students take the initiative to effectively involve industry, post-secondary, and community partners and families in collaborative learning experiences.</li> </ul>
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**1 Emerging****2 Developing****3 Advancing****4 Transforming****P4.3 Outcome-Focused and Student-Directed Learning**

<p>Pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Occasionally involve students in outcome-focused, student-directed learning related to the pathway theme in which students:             <ul style="list-style-type: none"> <li>• Informally discuss learning goals and expectations by pathway staff.</li> <li>• Reflect on progress toward short-term learning goals, challenges, and successes.</li> </ul> </li> </ul>	<p>Pathway teachers:</p> <ul style="list-style-type: none"> <li>■ Involve students in outcome-focused, student-directed learning related to the pathway theme a couple of times each week and set up structures in which students:             <ul style="list-style-type: none"> <li>• Set short-term learning goals that are aligned with the pathway's student learning outcomes.</li> <li>• Modify learning activities to align with students' interests.</li> <li>• Lead conferences with supporting adults to share student work that demonstrates progress toward meeting student learning outcomes.</li> </ul> </li> </ul>	<p>Pathway teachers daily:</p> <ul style="list-style-type: none"> <li>■ Involve all students in outcome-focused, student-directed learning and set up structures in which all students:             <ul style="list-style-type: none"> <li>• Set short-term learning goals that are aligned with the pathway's student learning outcomes.</li> <li>• Revise work based on feedback until it meets or exceeds identified standards.</li> <li>• Provide evidence of reflection, growth, and progress on specific skills being assessed, as well as overall growth as a student.</li> </ul> </li> </ul>	<p>In addition to achieving the Advancing criteria, all pathway teachers support pathway students with mentors and advisors to:</p> <ul style="list-style-type: none"> <li>■ Engage in long-term independent or small group projects that are aligned with student interests and goals and add value beyond the classroom.</li> <li>■ Self-monitor progress toward meeting short-term goals and the pathway's student learning outcomes.</li> <li>■ Demonstrate mastery of standards and attainment of learning goals through a variety of assessments.</li> </ul>
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**P4.4 Reflective Practice and Professional Learning**

<p>There is some professional development for some pathway teachers that:</p> <ul style="list-style-type: none"> <li>■ Introduces research-based instructional strategies.</li> <li>■ Introduces standards-based learning and teaching.</li> <li>■ Presents various assessment strategies.</li> <li>■ Introduces teachers to the pathway theme.</li> </ul>	<p>There is ongoing professional development for pathway teachers that:</p> <ul style="list-style-type: none"> <li>■ Provides options for learning about research-based instructional strategies.</li> <li>■ Engages teachers in developing standards-based units and projects.</li> <li>■ Introduces teachers to authentic assessment strategies.</li> <li>■ Provides introductory dialogue with industry partners to learn more about the pathway theme.</li> </ul>	<p>The pathway community has a coordinated, strategic, and practice-embedded approach to professional development that:</p> <ul style="list-style-type: none"> <li>■ Focuses on a variety of research-based instructional strategies.</li> <li>■ Uses data from student work and other sources to inform teacher practice.</li> <li>■ Builds instructional knowledge and skills that support full inclusion of English language learners, special education students, and GATE students.</li> <li>■ Develops skill in creating single discipline and interdisciplinary standards-based units, projects, and authentic assessments.</li> <li>■ Provides teachers with industry experiences related to the pathway theme.</li> </ul>	<p>In addition to achieving the Advancing criteria, the pathway Community of Practice:</p> <ul style="list-style-type: none"> <li>■ Builds teacher leadership through regular reflection and opportunities to share practice with others beyond the pathway.</li> </ul>
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**1 Emerging****2 Developing****3 Advancing****4 Transforming****P4.5 Authentic Assessment**

Pathway teachers:

- Primarily use traditional end-of course exams, quizzes, or other standardized assessments to measure student success.
- Are beginning to use some forms of formative and summative performance assessments.
- Occasionally use their industry, community, and post-secondary partners to assist and view student work.

Most pathway teachers:

- Use a variety of standards-aligned formative and summative performance assessments to assess:
  - Student products and performances;
  - Demonstrations of learning and skills; and
  - Use industry, community, and post-secondary partners to serve as project consultants or audiences for student work.

All pathway teachers:

- In collaboration with partners, regularly use a variety of formative and summative interdisciplinary performance assessments to assess:
  - The quality of student products and performances;
  - Student demonstrations of content learning and application of knowledge and skills; and
  - Student progress toward achievement of the learning outcomes.
- All pathway teachers use industry, community, and post-secondary partners as project consultants and authentic audiences.
- Regularly use results from formative and summative performance assessments to inform and improve curriculum, instruction, and assessment.

In addition to achieving the Advancing criteria, pathway teachers:

- Use quality criteria reflective of an industry standard.
- Involve partners in professional development activities, as project consultants and authentic audiences.