



P-TECH MODEL RESOURCE

HOW TO ENSURE CURRICULUM ALIGNMENT AT A P-TECH 9-14 SCHOOL

Most high schools have a goal of preparing their students for post-secondary education. High school teachers develop curriculum in a variety of content areas and use a number of academic standards, including the Common Core Learning Standards, to create a “college-ready” academic culture.

What makes an early college school different in this regard, however, is that teachers have the opportunity to develop curriculum, alongside college professors and often with industry professionals, with the goal of preparing students to be ready for specific college courses in targeted degree pathways.

Aligning high school curriculum to college courses and learning outcomes of particular degree pathways is crucial to the success of the academically diverse group of students enrolled in an early college school. By thoughtfully planning curriculum, teachers, professors, and industry professionals can construct learning experiences that develop the skills and knowledge necessary for students to transition successfully into entry-level college courses while they are in high school. Without this thoughtful curriculum alignment, it is entirely up to the students, once they are enrolled in a college course, to make their own connections between the high school subject matter and college material, fill in the learning gaps, and quickly transition to the new skill and content knowledge expectations of college. The early college model offers a more far-sighted, and thus greater student-supported, approach to high school teaching and learning that is designed to enable students to meet the rigorous demands of college.

1. Who Benefits from Curriculum Alignment?

STUDENTS

Will benefit from more successful transitions into entry-level college courses in a variety of subject areas.

TEACHERS

Will benefit from teaching curriculum and utilizing instructional practices that they know will provide their students with the knowledge and skills necessary to be successful in the entry-level college courses. Teachers also can improve their instructional practices by learning together with college faculty.

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COLLEGE PROFESSORS

Teach entry-level college courses, especially in math, English, developmental courses, and the technical subjects associated with the targeted degree paths, can provide college course syllabi, course learning outcomes, sample assignments, texts, an understanding of the academic skills and discipline-specific ‘ways of thinking’, and an understanding of the roadblocks college students face with entry-level college material. This comprehensive information can inform the development of high school curriculum by ensuring that the content that is taught in high school relates to what will be taught in college, and that good college habits are learned early enough to clear any obstacles to college success.

INDUSTRY PROFESSIONALS

From the partner employers can help inform curriculum by contributing their “skills map” of required academic, technical and workplace skills for entry-level jobs that students will develop in both high school and college classes, as well as ‘real life’ workplace scenarios that are important in the development of high school curriculum, especially ‘hands-on’ projects within units.

2. What are some ingredients of effective curriculum alignment?

The curriculum alignment process is a two-way or three-way dialogue, rather than an opportunity for college faculty or industry professionals to “tell” high school teachers what they need to do differently. The process is effective when each member of the group understands that they have much to learn from the other participants.

- The curriculum alignment planning committee will need a well-defined goal or purpose for working together. The school leader should develop this goal in concert with the Steering Committee, a specific department chair (at the high school or college), or another group charged with developing and implementing the “big picture” goals for the school. Each member of this committee will need to understand how their perspective will help accomplish this goal.
- Effective curriculum alignment requires the efforts of a dedicated team or committee. The group will likely convene regularly over the course of a semester or a year, and the membership should remain consistent through the lifespan of the project.

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- The curriculum alignment planning committee needs sufficient time to complete their work. This is not a project that can be done in an ad hoc fashion, instead committee members will need regularly scheduled meeting times (either weekly, bi-weekly or monthly, depending on the scope of the project). Team members will need time to work both together and independently, and some groups may benefit from visiting high school, college, and workplace settings. Due to the significant time demands of this type of work, some contracts will require that high school and college faculty be compensated for their time.
- Many curriculum alignment teams will benefit from a facilitator, who can help establish norms for communication and standards for the work. If a facilitator is not available, the group will need to establish norms and procedures on its own. Individual roles and responsibilities should be made clear during the initial meetings.

3. The Key Steps in Aligning Curriculum

Faculty from the high school and college and employer partner should begin with the following questions:

- What are the main things that experts ‘do’ in a specific profession? Similarly, what are the discipline- specific skills that college faculty expect to see as important for success in their field of study?
- What should high school students know and be able to do in order to be prepared for the specific entry- level college courses in various disciplines? How do those expectations relate to academic standards in high school and college courses? Is the coursework aligned with current industry practice? Are pre- requisites designed to assure student success in required courses or is there a misalignment?
- How do teaching strategies and classroom technologies differ between high school, college and workplace settings? Are there opportunities to mimic elements of one setting in another?
- How are skills and content knowledge assessed in different settings? What are critical “high stakes” assessments in high school, college, and/or the workplace? How can we demystify those assessments for students and faculty? How do college placement exams affect the content of courses that are offered either before or after them? Is there alignment between high school exit exams and college placement exams?
- What are the roadblocks that college students experience in the entry-level courses that stand in the way of students acquiring the skills and knowledge necessary to be successful?
- How should we assess our alignment work moving forward and plan to adjust as necessary?

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Depending on the goal and composition of the group, the committee should begin to review and adapt curriculum for the identified courses.

Here are a few curriculum development suggestions:

- Begin with discrete units rather than entire courses in order for curriculum committee members to learn lessons from well-tested units in the classroom.
- Create opportunities for committee members to review and compare student work from different settings (i.e., high school, college, workplace) but in closely related subjects. Compare the ways in which student work is assigned and assessed. Discuss opportunities to share the different types of expectations with students as they move from one environment to the next.
- For a high school course that leads to a college course, develop an end-of-course assignment in the high school course that mimics the first assignment in the entry-level college course.
- Develop syllabi for high school courses that follow the form and content used in college course syllabi. Use the high school course as an opportunity for students to learn to read and understand how syllabi are used in the college setting.
- Create time in the high school curriculum for students to engage in conversations about how their learning relates to college-level learning and/or workplace norms in a specific discipline. This time to reflect will help students have a better understanding of what they know and what they need to do in order to take the next step in learning.
- Encourage employers to provide “real-life” examples, problems, or challenges that high school and college faculty can use as the basis for interdisciplinary projects. Create opportunities for students to present their work to panels that include high school, college and industry professionals.