



A Fact Sheet on Multiple Pathways

California's high schools are not working for large numbers of young people. Almost a third of new ninth-graders drop out before graduating. Another third finish high school but lack the academic and technical readiness to succeed in college or career. Only a third of high school students in California graduate on time and transition easily to postsecondary education and lasting career success.

Multiple pathways offer a promising approach to improving high schools while also connecting to

actual needs in our state's economy. They provide a challenging vehicle that inspires students to learn, and give students access to education that is both rigorous and relevant. The great promise of pathways is the ability to make learning real and exciting for the thousands of students who are bored with conventional high school curricula. Whether they aspire to become doctors or medical technicians, architects or carpenters, all students hunger for the answer to a simple question: "Why do I need to learn this?"

What Are Multiple Pathways?

Multiple pathways offer students a choice among several different multi-year programs of study. Each pathway combines academic and technical programs of study organized around broad industry themes (e.g., biomedical and health sciences; construction and building design; agriculture and renewable resources; and arts, media, and entertainment) that

prepare high school students for career and a full range of postsecondary options, including 2- and 4-year college or university, apprenticeship, the military, and formal employment training. There is no one right way to implement a pathway. But whatever the strategy, each pathway embraces four organizing principles and four core components.

Organizing Principles

1. Pathways prepare students for postsecondary education and career—both objectives, not just one or the other.
2. Pathways connect academics to real-world applications by integrating challenging academics with a demanding technical curriculum.
3. Pathways lead to a full range of postsecondary and career opportunities by eliminating tracking and keeping all options open after high school.
4. Pathways improve student achievement.

Core Components

1. A challenging **academic component** prepares students for success—without remediation—in California's community colleges and universities, as well as in apprenticeships and other postsecondary programs.
2. A demanding **technical component** delivers concrete knowledge and skills through a cluster of four or more technical courses.
3. A **work-based learning component** offers opportunities to learn through real-world experiences that complement classroom instruction.
4. **Support services** include counseling as well as additional instruction in reading, writing, and mathematics to help students succeed with a challenging program of study.

How Multiple Pathways Are Different

Students in a building and engineering pathway might learn about geometry and algebra while designing and building a structure. Students in an arts, media, and entertainment pathway might learn persuasive writing skills while developing business plans, or creative writing skills while drafting scripts.

While any school can be theme based, a key difference with pathways is that academic course content is coordinated with and reinforces technical course content and vice versa. The science teacher learns from the technical teacher what students did not understand in class and then can review those theories. Likewise, the technical instructor learns what theories to bring to life in the next hands-on technical class. This coordination helps students gain a greater depth of knowledge by seeing the connection between academic theories and real-world applications.

Schools Implementing Pathways

While multiple pathways are hardly the norm, they are already a powerful—and proven—approach in communities across California. They are operating in places like Construction Technology Academy at Kearny High, High Tech High School in San Diego, Health Careers Academy at Palmdale High School, Health Professions High School in Sacramento, Manufacturing Production Technology Academy at Laguna Creek High School, and Media Academy at Grover Cleveland High School in Los Angeles. Today in California, 340 Partnership Academies each select and organize instruction around one of the state's 15 major industry sectors, and another approximately 300 career academies are in operation. Many of these schools offer multiple pathways.

The Coalition for Multiple Pathways

Multiple pathways have gained a broad base of support. This may be best evidenced by the Coalition for Multiple Pathways—a statewide alliance of more than 60 education, business, industry, and community organizations. The Coalition brings a collective voice and coordinated effort to expanding access for California's students to multiple pathways. It seeks to build awareness of multiple pathways, optimize resources to support pathway development, and encourage policy development that will support pathways.

Evidence

There is growing evidence that a multiple pathways strategy will improve student outcomes. For example:

- Data from California's Partnership Academies show that academy students had higher passing rates of the High School Exit Exam in their sophomore year, higher completion rates for challenging academics that prepare them to apply to the state's universities, and higher high school graduation rates.
- A rigorous study using random assignment and experimental design found that, four years after completing high school, males who had enrolled in career academies earned \$2,500 annually more than their peers.



ConnectEd

The California Center for College and Career

Transforming today's education
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ConnectEd's mission is to support the development of multiple pathways by which California's young people can complete high school, enroll in postsecondary education, attain a formal credential, and embark on lasting success in the world of work, civic affairs, and family life. We are dedicated to advancing practice, policy, and research supporting multiple pathways.

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ConnectEd was founded with a grant from The James Irvine Foundation.