



GREAT LAKES CENTER
FOR EDUCATION RESEARCH & PRACTICE
LEGISLATION POLICY BRIEF
SUMMARY

Multiple Pathways: 21st Century High Schools that Prepare
All Students for College, Career and Civic Participation
http://greatlakescenter.org/docs/Policy_Briefs/Saunders_Chrisman_MP.pdf

Marisa Saunders & Christopher A. Chrisman

Many states are currently developing high school reforms labeled “Multiple Pathways,” built on the fundamental insight that career and technical education – which used to be called “vocational education” – can be academically rigorous. Multiple Pathways policies also allow students to gravitate to schooling themes that are personally relevant, and they hold the potential to substantially improve secondary schooling. The reform, as described in the [attached brief and draft legislation](#), rests on three research-based propositions:

- Learning both academic and technical knowledge is enhanced when the two are combined and contextualized in real-world situations;
- Connecting academics to such real-world contexts promotes student interest and engagement; and
- Students provided with both academic and career education are more likely to be able to later choose from the full range of postsecondary options.

But if poorly designed or enacted, the reform will only maintain the same old vocational education programs or “alternative” schools, continuing discredited practices of ability tracking rather than transforming the comprehensive high school. A well-designed Multiple Pathways reform must include the following four essential components within each and every pathway:

- A college-preparatory academic core that satisfies the course requirements for entry into a state’s flagship public university, using project-based learning and other engaging classroom strategies;
- A professional/technical core well-grounded in academic and real-world standards;
- Field-based learning and realistic workplace simulations that deepen students’ understanding of academic and technical knowledge through application in real-world situations; and
- Additional support services to meet the particular needs of students and communities, which can include supplemental instruction, counseling, and transportation.

This new brief, including proposed statutory language, meets these criteria for designing and implementing effective multiple pathway schools. Such a genuine approach to Multiple Pathways will help to meet the learning needs of a diverse student population and respond to society’s need for a productive workforce and engaged citizenry.



The *Stanley E. Foster Construction Tech Academy* is one of four small, diverse magnet schools housed in San Diego's Kearny High Educational Complex. Before 2004, the building housed an unsuccessful, urban high school. Each of the new four schools now offers a "Multiple Pathways" curriculum, providing all students with a rigorous college preparatory curriculum in a career-themed environment.

Students enrolled in the Construction Technology Academy (CTA) attend classes in the former shop buildings, but the level of expectations and the nature of the teaching and learning are very different from that seen in old vocational education tracks. CTA's mission emphasizes college preparation integrated with the hands-on study of architecture, engineering and construction. The school uses a project-based learning environment focused on neighborhood concerns and needs. Each project is designed to prepare graduates for further education or for a professional path.

Instead of the old six-period day, courses are now combined into 75 to 90 minute blocks—each meeting a few times each week—that permit the flexible use of time for mastering academic subjects and exploring the world of construction, engineering, and architecture. The school's academic and vocational teachers share common planning time, during which they discuss their students' needs and adjust interdisciplinary assignments and learning supports. The principal makes home visits when students are struggling. The students are engaged by the thematic learning and their success is greatly facilitated by these supports and teaching approaches.

Students work in teams, using the latest industry design software and sophisticated computer equipment to complete pre-engineering courses as well as construction, engineering and architecture projects. The projects are supported by a host of mentors from the construction industry and require academic and technical skills and abilities.

CTA is not, however, primarily an occupational training program; Multiple Pathways is not vocational tracking. CTA students have access to Advanced Placement classes in 15 subjects and to other college-level courses. The school's contextual, hands-on pedagogy and rigorous curriculum prepare students for direct entry into college, apprenticeship programs, a job, or a career—whichever they choose. In fact, 81 percent of the members of CTA's 2007 graduating class were accepted to college; 36 percent were accepted to four-year universities. And these results are not due to selective attrition: the graduating class included 99 percent of the students who were enrolled as ninth graders four years earlier (a small number transferred to other high schools). The students who did not go to college entered apprenticeship programs or joined the military.

* This description is a shortened and modified version of a vignette presented in Oakes, J. & Saunders, M. (2008). "Multiple Pathways: Promising to Prepare All High School Students for College, Career, and Civic Participation" in Oakes, J., and Saunders, M. (Eds.), *Beyond Tracking: Multiple Pathways to College, Career, and Civic Participation*. Cambridge, MA: Harvard Education Press.