

'Linked Learning' and 'Multiple Pathways':

Aligning COLLEGE PREP and CAREER AND TECHNICAL EDUCATION
(formerly "vocational education") in an academically rigorous curriculum

A DECADE ago it was *A Bridge to the Twenty-first Century*. Now we have crossed the bridge and like Yogi Berra's fork-in-the-road ("If you find one, take it!") we face *multiple pathways*. The motto of a Chinese university is: "What is the goal of a 21st century education if not to prepare us for the 22nd?" Good question.

Today I was visiting my daughter's former high school on PTA-related business and I ran into the school's auto shop teacher. He's a big burly guy and a truly dedicated teacher; dedicated to his students ...and they to him. A beloved Mr.-Chips-kind-of-teacher - *as played by Hagrid in the Harry Potter stories*. As we were catching up I told him I was writing this article for PTA about multiple pathways and career tech ed – and he lit up. The recent school reform focus on "small learning communities" and A thru G university requirements – preparing everyone for college he understood. But the single focus on college prep is getting in the way – *not just of his "auto shop" kids ... but of all students*.

"Every year I used to get a couple of 'calculus kids' in my classes," he said. "And they were often my best students. But the concentration on small schools and the rigorous college track make it hard for them to fit auto shop into their schedule. Or music or art into my shop students' schedules. Whatever happened to the idea of the comprehensive high school where high school students get exposed to a wide range of experiences rather than a single track and a "college-for-all" curriculum?

"I want the science kids and the drama kids and the English majors in my classes ... It makes for a better experience for everyone. It's a lot like the storyline of the TV Show 'Glee': It takes all kinds."

So Mr. Marshall makes his argument. The truth is if we prepare every high school student for college or university and if they all graduate - *truly laudable goals* - there won't be places for them in college. We don't have places in college for all the kids we graduate now. And we would soon have a shortage of auto mechanics and plumbers and bakers and candle-stick-makers – and the other skilled jobs where a college education isn't a prerequisite. And, let's face it, some kids don't want to go to college!

The emerging paradigm/buzz-phrase is **College Prepared and Career Ready** - with a couple of understandings that must be understood about the here-and-now – and about the future:

- A high school diploma isn't going to be the end of the educational road for anyone. Everyone will need some post-secondary education – whether in college or university, community college, trade school, night school, the service, apprenticeship – or specialized training/continuing education/professional development provided by one's employer.
- No educational experience is ever going to teach one all one needs to know. The goal of education will be to give students the skills they need to learn what they need to know when they need to know it: to build lifelong learners.
- Almost everyone is going to change careers as they go through life.
- Multiple pathways/linked learning recognize that there are other ways than just through A-G college preparation to graduation and success.
- There are more than 9 million school age kids in California ...*there may be 9 million pathways*.

According to an EPIC/University of Colorado definition: Multiple Pathways programs connect rigorous academic preparation, technical knowledge, and opportunities to learn from adult, real-world settings, including the workplace. The approach rests on three research-based propositions:

1. Learning both academic and technical knowledge is enhanced when the two are integrated and contextualized in authentic situations;
2. Connecting academics to real-world contexts promotes student interest and engagement; and
3. Students who gain both academic and career education stand the best chance of accessing the full range of postsecondary options and a solid start toward a personally and socially productive middle-class life.

Background on Multiple Pathways/Linked Learning in California

On September 30, 2008, Governor Arnold Schwarzenegger signed Assembly [Bill 2648](http://bit.ly/9UROxX) [http://bit.ly/9UROxX], requiring the Superintendent of Public Instruction to develop a report that explores the feasibility of establishing and expanding additional career multiple pathway programs in California, including the costs and merits associated with expansion of these programs. The Superintendent is required to develop this report in conjunction with the Secretary for Education, the California Community Colleges, the University of California, the California State University, the Employment Development Department, both houses of the California Legislature, teachers, chamber organizations, industry representatives, research centers, parents (PTA is represented), school administrators, representatives of regional occupational centers and programs, community-based organizations, labor organizations, and others that the State Superintendent of Public Instruction deems appropriate.

AB 2648 states that multiple pathways programs created for high schools may be housed within a number of structures, including, but not limited to, California partnership academies, regional occupational centers and programs, charter schools, other small learning communities, and other career-themed small schools.

Guiding principles of pathways

- Pathways **prepare** students for postsecondary education and career.
- Pathways **connect** academics to real-world applications.
- Pathways **lead** to a full range of postsecondary opportunities.
- Pathways **improve** student achievement.

Core components of pathways

- A **challenging academic component** that prepares students for success in California’s post-secondary education institutions, as well as in apprenticeships and other post-secondary programs.
- A **demanding technical component** that delivers concrete knowledge and skills through a cluster of four or more technical courses.
- A **work-based learning component** that offers students opportunities to learn through real-world experiences.
- **Supplemental services** that support students in a challenging program of study.

ON MAY 12, 2010 State Superintendent of Public Instruction Jack O’Connell released the report required by AB 2648. The report, titled *Multiple Pathways to Student Success, Envisioning the New California High School* includes recommendations about expanding a high school transformation approach that links rigorous academic course work, career technical training, work-based learning opportunities and greater student supports – a process now called *linked learning*.

“Linked learning is a promising approach to transforming our high schools so students graduate career and college ready and ready to be successful in the global economy of the 21st Century,” O’Connell said. “This report provides a roadmap for policymakers as they consider ways to systemically transform our high schools and significantly improve results for children.”

“Multiple pathways helps keep kids in school – keeps them in the game until they cross their own personal goal line – whether it’s college, a profession, or a good job you can raise a family on,” Speaker Emeritus Bass, the author of AB 2648, said. “Multiple pathways doesn’t just prepare students, it empowers them.”

“Linked learning is a way to remove what is now a false and faulty separation between academic rigor and career preparation. Our students need both if they are to succeed,” O’Connell said.

<p>EXECUTIVE SUMMARY: May 12, 2010 - Multiple Pathways to Student Success: Envisioning the New California High School (PDF; 259KB; 42pp.) http://bit.ly/dvHNQQ</p>	<p>FINAL REPORT: May 12, 2010- Multiple Pathways to Student Success: Envisioning the New California High School [Pre-Publication Version] (PDF; 1.1MB; 218pp.) http://bit.ly/cNIPs7</p>
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There is currently legislation pending in California to begin implementing linked learning/multiple pathways – notably **AB 2172 (Carter)** (<http://bit.ly/cfOdrU>)

Many states are currently developing high school reforms labeled multiple pathways, built on the fundamental insight that career and technical 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.

National Policy is evolving around multiple pathways and CTE. In the April 21/Volume 29 Education Week featured an article, **“Advocates Press for New Definition of Career Readiness”**(<http://bit.ly/bT23J5>). The movement around the policy began with the Association for Career and Technical Education (ACTE), its Executive Director Jan Bray and the National Association of State Directors of Career Technical Education Consortium.