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# REMAPPING DEBATE

Asking "Why" and "Why Not"

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## Vocational education's moment in the sun

**Original Reporting** | By Greg Marx | Education

March 30, 2011 — To college-educated parents, the term “vocational education” may conjure up images of desultory high school wood shop classes, dead-end jobs, and classmates who couldn’t hack college work. But vocational education — or, as it is known today, career and technical education (CTE) — is finding new champions. [Pathways to Prosperity](#), a report published in February by Harvard’s Graduate School of Education, argued that America’s fixation on four-year college degrees was failing its students and young workers, and looked to Europe — where vocational programs are traditionally stronger — for inspiration. The Harvard report kicked off a flurry of debate, including a [vow from Arne Duncan](#), the federal Secretary of Education, that vocational education would no longer be “the neglected stepchild of education reform.”

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But for all the attention the report attracted, the vision it outlined remained constrained by an assumption that career success in the modern economy depends on higher education. A re-imagined education system with a strong vocational component, the Harvard team wrote, would still require “at least one year of post-secondary education or training” for every student. That message was reinforced by Duncan, who warned that contemporary vocational education is not about “earning a diploma and landing a job after high school,” but rather preparing for “a postsecondary degree or an industry-recognized certification.”

The proposition that the high school diploma earned by most students today, by itself, is insufficient preparation for most careers that secure a berth in America’s middle class is probably sound. But Duncan’s argument raises another question: why should American students — almost uniquely among the children in the world’s developed economies — have to wait until after high school to receive serious vocational education? And should the idea of preparing 18-year-olds for the world of work really be out of bounds?

### The origins of ‘college- and career-ready’

The debate over the future of vocational education is, inevitably, shaped by its history — in particular, by the “slow, anguished death” it experienced in the last decades the end of the twentieth century, in the words of Marc Tucker, executive director of the National Center on Education and the Economy.

Vocational programs were first introduced into American high schools on a significant scale toward the beginning of the century, and by the post-World War II era, according to Tucker, many larger communities had selective, free-standing trade schools for high school students. These schools — which in effect represented a “career track” that existed alongside both a selective college-prep track and a general curriculum — often had close connections to local industry, which viewed them as “training partners” and provided access to instructors, equipment, and information about labor market demands, Tucker said.

By the 1970s, though, school districts began to abandon this model and moved toward “comprehensive” high schools, which offered college prep, career prep, and general education in one building. In Tucker’s telling, by undermining the logic that concentrated training resources in one place, that move broke the link between industry and high schools — and, in turn, weakened the quality of many vocational programs.

At about the same time, another development threatened to undercut vocational education. A Nation at Risk, a landmark report produced in 1983 by a commission appointed by Ronald Reagan, issued dire warnings about lackluster achievement of American students. The report helped kick off a wave of standards-based reform, which produced “a nearly three-decade-long increase in traditional core academic requirements,” said James R. Stone, director of the National Research Center for Career and Technical Education. The push for more hours of academic instruction squeezed vocational instruction out of the school day, and helped entrench a college prep curriculum as the only legitimate pathway through high school.

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Meanwhile, with vocational programs stripped of their former institutional home in the selective trade schools, and sidelined in comprehensive high schools, they “became a dumping ground for the kids who were not succeeding in academic studies,” Tucker said. The “career track” still existed, but now it did as much to track students — especially those who were racial and ethnic minorities or hailed from lower-income households — away from opportunities as toward them.

Eventually, this downward trajectory forced a reconsideration on the part of the vocational education community. This rethinking was forced by feedback from employers, who made it clear that the declining quality of vocational programs was not preparing high school graduates for high-level work, said Kimberly Green, executive director of the National Association of State Directors of Career Technical Education Consortium.

But it was also a response to trends in education reform, which had continued to emphasize academic achievement. In effect, Green said, career and technical educators concluded that, “in order to make

sure we don't get pushed out of the high schools, we have to look at what we're teaching and make sure we're able to demonstrate that we're rigorous."

This renewed commitment to rigor was signaled, in many cases, by forging rhetorical and programmatic connections between vocational training and the college prep route. High school programs with vocational themes now often boast of their success in sending students on to college — a goal that is very different, Tucker notes, from directly providing economically useful skills and credentials. Meanwhile, the phrase "college- and career-ready" — a concept that holds that every student should obtain

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a common set of skills that will prepare him or her for both higher education and the workplace — has become an educational buzzword. And a new idea emerged, [one taken up by Duncan's boss early in his presidency](#): every high school student should obtain at least one year of post-secondary education.

In the most complete articulation of this vision, President Obama and others say that it can include apprenticeships or workplace training experiences. Oftentimes, however, the vision is simply expressed and understood as a call for more formal education — an impression that is reinforced by Obama's parallel goal of leading the world in the share of college graduates. And in either case, it reflects an assumption that Americans of high school age cannot be prepared for career success on any significant scale.

That assumption, said Green, is probably well-founded, given the current structure of our education system (and at least at present, her group is not focused on rethinking it). But she added: "Do I believe that we could in the United States graduate kids at the end of 12th grade who are highly successful and ready to transition to careers? Yes" — if we had a system that was designed to do so.

One of the authors of the Pathways report said something similar. The report's call for one year of post-secondary education was "kind of a concession" to the idea that students straight out of high school are not mature enough for work, said Robert Schwartz, academic dean of Harvard's education school, as well as an effort to "ride a bit on Obama's coattails." His own long-term vision, Schwartz said, includes more widespread "opportunities for kids to get into the labor market with skills and credentials without having to pass through a higher education institution."

## What counts as time spent learning?

So what are the obstacles to such a goal? One of the biggest is very basic: time.

Since the Nation at Risk report sounded the alarm about academic achievement in high schools, the standard response has been that “if kids aren’t smart enough, make them take more of the stuff they’re not smart in,” said James Stone. That demand for “more” is typically met by adding hours of classroom instruction — or “seat time,” in educational jargon — onto the requirements for high school graduation.

The expansion of academic requirements has done little to boost nationwide test scores. But it has placed pressure on the amount of time high school students can devote to the hands-on instruction that is central to high-quality vocational education; in many places in the U.S., a full vocational program in high school consists of only three or four credits. The result, Stone said, is that secondary career education in America is more “exploratory” than “preparatory.” Added Tucker, “when you look at the training that they get, these kids are not by and large winding up with an employer-recognized certificate.”

The solution, according to Stone, does not lie in the concept of getting each student “career- and college-ready.” While well-meaning, he said, in practice that goal often amounts to “make sure they’re college-ready, and career-ready is almost sort of the same thing.” But there are meaningful differences between what the two tracks require, he said. While a college prep curriculum now typically requires four years of math classes, many well-paying careers require mastery of core skills like numeracy and basic algebra, but no knowledge of more abstract fields like trigonometry and calculus.

On the other hand, students who are preparing for careers need both technical instruction and “employability” skills that are rarely taught in American high schools. Students often can find that instruction in community and technical colleges — but by that time, they are two or three years behind their counterparts in Europe, Stone noted. Meanwhile, they are often out thousands of dollars — as is the education system, which may have paid for years of schooling that provided little value.

The allocation of time in American high schools highlights deeply embedded beliefs about what types of activity count as learning, what types of subjects comprise an essential education, and what students and schools are capable of. Still, alternative approaches are cropping up.

One was advanced in 2007 by Marc Tucker’s group, the National Center on Education and the Economy. The Center-sponsored report, [Tough Choices or Tough Times](#), made much of the need for greater academic rigor. But it was also informed by the belief that a standard four-year high school program “no longer makes sense” for many students, said Susan Sclafani, the former director of state services for NCEE. “The notion that every student has to have Algebra II as it is currently taught as an abstract course is crazy.”

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So rather than adding more hours of high school instruction, the report proposes a model like the one employed in Scandinavian countries: students would take a demanding common program through 10th grade, when they would sit for an examination that would measure their competency in that common curriculum.

After passing that test, students could choose a college prep route or a career track. Students who chose the latter path would likely enroll in a community or technical college, which, Tucker said, have replaced secondary trade schools as the site of serious occupational training — though if a strong regional vocational high school in the area offered up-to-date equipment, quality instructors, and the ability to confer credentials with labor market value, that could qualify as well.

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NCEE’s model is not yet in effect anywhere. A pilot program focused on academic instruction in ninth and 10th grade will launch this fall, and one state, Arizona, has approved legislation that will allow students to [“move on when ready.”](#) The “Grand Canyon Diploma” allows students at participating high schools to exit after 10th grade if they pass board examinations in math, English, and other core subjects; the students are then eligible to enroll in a community college without taking remedial classes, or in a full-time career and technical program.

A reconsideration of how much “seat time” makes sense for students is being weighed elsewhere, too. A consortium of five New England states, for example, has agreed on policies that focus instead on requiring competency measures that different students would achieve over varying periods of time, and is working to establish new models for high school based on that approach.

A different approach, meanwhile, is already in effect in Massachusetts. Alison Fraser, the director of curriculum and resource development at the acclaimed Blackstone Valley Regional Technical High School, disputed the idea that “college- and career-readiness” is an obstacle to technical education. Every Blackstone Valley student takes four years of math, including at least Algebra II; the school offers Advanced Placement classes in several subjects, and its students score at high levels on state tests.

But they also devote what is, by American standards, a startling amount of time to technical education. After choosing a “shop” halfway through ninth grade — the options include auto repair, culinary arts, health services, IT and more — students alternate between a week in shop and a week in classrooms for the rest of their high school career. The curriculum also includes a common program in workplace and employability skills. And qualifying seniors can get relevant workplace experience through cooperative education agreements with local employers — a rarity for high school students anywhere in the United States.

To fit all this in, Blackstone Valley students take a double block of mathematics and English during each day of the “academic week” throughout their four years in school, so that those subjects account for half of their total classroom time; they also take a double block of science in some years. (In addition, they attend school for 193 days a year, the most in the state.)

That doesn’t leave much room in the eight-period day for other academic classes: a schedule with double blocks of math, English, and science during the alternating weeks devoted to academics might also include one period of history and one of an elective in those weeks, Fraser said. And while electives and foreign languages are offered, the listings are less extensive than they might be at general high schools.

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But upon graduation, Blackstone Valley students — many of whom do choose to go on to college — leave with a certificate of occupational proficiency granted after they demonstrate their technical skills in assessments judged by representatives of local industries. In 2006, a survey of employers in the state found vocational high school graduates are often more “job-ready” than college graduates.

## Offering guidance, or forcing a choice?

The opportunity to devote time to technical education, of course, can only pay off if students receive useful guidance about which fields to pursue. But career guidance in many school districts continues to start in high school, and to emphasize college as the default path.

An exception to this rule can be found in South Carolina, whose guidance program has been deemed “exemplary” by the Organisation for Economic Cooperation and Development. A state law passed in 2005 created a K-12 rubric for career guidance. Students begin to explore careers in earnest in sixth grade; by eighth grade, they must choose a “career cluster” and map out an individual graduation plan that includes the coursework they will need. The plans are re-evaluated annually, and assessments administered in eighth, 10th, and 12th grades guide that process.

In practice, background assumptions about higher education hang over these discussions, said Janice Jolly, who served for many years as a career development coordinator in Dorchester County. “Every eighth-grade parent wants their child to go to college.”

But the planning process may highlight alternative pathways, such as the industry certifications available to students in the state’s secondary schools — or, for some of the students Jolly has worked with, unique apprenticeships with companies like Bosch, and cooperative programs with BAE Systems. (These opportunities may lead to post-secondary study, she noted.) It can also get them focused on a particular area of study tailored to a particular career. “We no longer need general-level education, because we no longer have general-level jobs,” Jolly said.

That emphasis on specialization echoes the thinking of John Bishop, an economist at Cornell who has studied the economic returns to vocational education. A central flaw of the dominant high school model in the U.S. — and a perverse consequence of the upscaling of common academic requirements — is, Bishop argues, the fact that students are not forced to choose a path earlier. A key to the success

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of many European models, he says, is that once students are guided into a concentration they spend extensive time with the same set of students and teachers working toward a shared goal; the positive peer pressure that results boosts both academic achievement and technical skill development. (Bishop found fault with Harvard’s Pathways report for not forcing the issue on choice, though he praised it overall.)

But the precise question of when good guidance means forcing students to make a choice — and what the nature of that choice should be — remains a sticking point. Jay W. Ragley, South Carolina’s deputy superintendent for legislative and public affairs, questioned the expectation that all students should go on to college, and said the state should provide more “flexibility” in granting credit for high school experiences outside the classroom. At the same time, he said, a model like the one proposed by Marc Tucker and NCEE runs afoul of what Ragley describes as American values of choice and chances for “late bloomers.”

“We shouldn’t necessarily lock somebody into something in 10th grade,” Ragley said. “Once we graduate from high school is when we can talk about off ramps.” His caution was the inverse of an argument advanced by James Stone: “We’ve evolved into a system that essentially says...our kids aren’t bright enough to begin thinking purposefully about their future selves, so we’re going to make them wait.”

## Finding ‘other ways of winning’

The debate about guidance and choice is, of course, informed by an overriding fear: that any pathway that does not include college will degenerate again into low-quality vocational “tracking.” Indeed, the Pathways report — whose vision of universal post-secondary education would actually represent an increase in formal schooling after high school from the status quo — [was criticized on these grounds](#).

Advocates for vocational education acknowledge this concern about tracking. But the alternative to college prep for all students, argues Stone, is not an absence of tracking. “We do track in this country,” he said. “The most pernicious track we have is the dropout track.” (Dropout statistics vary widely according to which measures are used, but perhaps one-quarter of students who start ninth grade will not graduate high school with their class.)

A more fundamental case for vocational education, though, is not that it is a strategy to engage low achievers, but that the careers it can lead to hold real value for a broad set of students.

Sometimes, this case is made in financial terms. Students with technical educations tailored to the local labor market can find themselves “very employable and making money — very good salaries with good benefits — when other students are still taking courses and racking up tens of thousands of dollars of college debt,” said South Carolina’s Ragley. And as more parents realize that, those guidance discussions may take on a different tenor, he said.

More broadly, the debate is cultural. “We’ve come to the notion that college is the only way to win,” said Stone, but there are “other ways of winning.” He added, “For a lot of kids, that advanced auto class that leads to an industry credential is really the same thing as an AP class, really the same thing as college prep. And yet we don’t value it that way.”

Ultimately, it is a reconsideration of those values — not just when students are ready to work, but what sort of work we value — that hangs over the education debate. The conviction that good jobs are “college jobs” may do more than keep people in school longer than necessary and impose a circumscribed sense of what our education system can achieve. It may also prevent people from ever finding the right job for them.

And that, said Janice Jolly, is the true stakes in this debate. She quoted a favorite line, borrowed from a local businessman: “When you find a job that you love, you basically never work another day in your life.”

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