# Bridging the School-to-Work Divide





### **America's Vocational Education Reform**

With the School-to-Work Opportunities Act of 1993, the United States embarked upon another chapter in a century-long movement to prepare young people for a smooth transition from education to employment. Ambitious though the program is, critics question whether the legislation will be sufficient to solve youth unemployment problems in a rapidly changing workplace.

#### by Meredith Honig

Johnny Lane can take apart the engine of his Chevy truck and put it back together again. Though in high school he earned a 'C' average in his mostly vocational education classes, after graduation he achieved a Skills Certificate with distinction from a local automotive training program. At 18, Lane can now claim many inventions to his name, including a motorized skateboard. He has meticulously recorded his work in pictures and would captivate even the most short-tempered with his detailed explanations of how the parts assembled on drop cloths in one photograph became the engine of a paddle boat in another—a boat which he is now waterproofing for a test run on Rhode Island's Seekonk River.

With such early achievements, the question naturally arises: is there anything Lane cannot do? Ask him and he will be the first to tell you. He cannot find a job.

Lane is not alone among his American peers in his inability to find work: neither can over 70 percent of black teenagers

Meredith Honig currently lives in Washington, D.C. where she works on education and welfure policy.

and almost 40 percent of white teenagers, both those who have graduated from high school and those who have not. There is a growing fear across the political spectrum that this new generation of American workers—unable to find jobs or keep them for a significant period of time—will become a class of people permanently alienated from the United States' workforce.

There is no shortage of blame for the problem. Analysts assert that the growing diversity of America's young people has outpaced the ability of communities and social institutions to deal with their varying needs and prepare them for the working world. Young people are faulted for their lack of interest and motivation. The economy is blamed for the shrinking number of jobs available to young workers. The service-oriented, high technology workplace of the 1990s is charged with requiring adaptable workers capable of filling high-skill jobs, but not providing training, support or re-education to new and current employees.

Whatever the alleged cause of youth unemployment and high school drop-out rates, a consensus has emerged among education analysts and politicians that U.S. education and training institutions are ill-equipped to produce workers with the skills and flexibility necessary for the labor market of the twenty-first century. Numerous recent studies point in particular to the failure of public schools to ease the transition from school to work.

While agreement reigns over the existence of a problem, what to do to solve it remains fiercely debated. Questions of how best to prepare young people to become productive workers, to define the content and purpose of work-oriented education, and to decide which students should participate, are over a century old and have been the subject of many decades of programs and reform. Recent discussions have often centered around renovation of America's existing vocational education programs.

In its broadest sense "vocational education" can be under-

stood as an educational program that prepares a student, directly and/or indirectly, for work of any sort. Yet, the term has come generally to be understood in a much more narrow sense, referring to specific manual skills training. Today, "voc. ed." includes a patchwork of education courses, programs, and schools operating with little coordination or collaboration for program development and without a coherent system of viable work-preparation options for youth.

Critics describe existing "vocational" programs as "warehouses" for students who perform poorly in academic subjects and which train these students on outdated equipment for disappearing, low-skills jobs. They argue that students who are considered bored or low-achieving in traditional academic classes opt for or are placed in some kind of vocational education program. Such is said to be particularly true for black and Latino teenagers, as well as low income students, who have "chosen" vocational education options in greater numbers than other social groups. Generally, "voc. ed." students receive little guidance or high quality instruction. Upon completion of their vocational program, they find it difficult to secure enrollment in institutions of higher education or to find work with possibilities for advancement.



Learning the skills of the new industrial economy, c. 1910.

#### School-to-Work '93

The most recent installment of efforts to bridge the school-work divide—the School-to-Work Opportunities Act of 1993—became law in June, 1994. The Act, sponsored by the Clinton administration, promises to help states develop a statewide plan for the coordination and improvement of vocational education courses and programs. The Act's proponents hope that in the next decade all states will have developed such a comprehensive system to prepare students for tomorrow's workplace.

The plan is simple. Students like Johnny Lane would choose to participate in a school-to-work program as part of their regular high school coursework. They would receive both high-quality on-the-job training and school-based academic instruction. Benefits include workplace mentoring, possible paid work experience, and other support services. Most significantly, the plan requires that programs provide both high-quality academic training and a strong overall structure so that all graduating students will meet the standards required for a portable skills certificate, a high school diploma, and, where appropriate, a post-secondary credential. With documented work and academic achievement to help them, graduates would then enter the work force, participate in a work training program or attend college.

The question remains: what will this new system of school-to-work transition offer a young person like Johnny Lane that he does not already have? He is a highly skilled worker able to apply his knowledge to a variety of related work settings. Lane has both an academic and a work credential and a clear sense of his professional goals. Could such a program have made his transition from school to work easier? And what of those with lesser skill and interest?

What is most striking about the Act is that it has emerged under conditions not dissimilar to past school-to-work legislation and has resulted in familiar education reforms. Indeed, substitute "blacksmithing" for "automotive training" and Johnny Lane is a young man in turn of the century America caught in another period of rapid social and economic change. As the present problems underscore, developments over this century have been consistently unsuccessful in improving what is now known as vocational education.

### The campaign to vocationalize America's schools

The institutionalization of vocational education—and the arrival of the very term itself—did not occur until the beginning of the twentieth century. Since then, pedagogical and political battles have been waged over the specific content and structure of school-to-work programs.

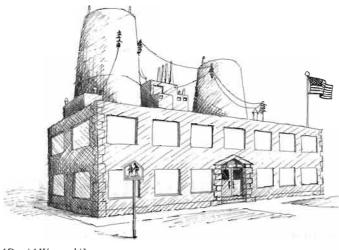
When the campaign to "vocationalize" America's schools began at the turn of the century, the circumstances under which it emerged were not unlike the social changes driving the School-to-Work Opportunities Act of 1993. It was a time of drastic change in the demographics of school-age populations. Public schools were attended by greater numbers of students and by more diverse student populations. Between 1900 and 1920 the percentage of 14 to 18 year-old boys at work decreased from 43 to 23 percent and to 12 percent in 1930. For 14 to 18 year-old girls, the percentage decreased from 18 to 11 to five percent during the same intervals.

Much as they continue to be today, school and work were considered separate and distinct, one being the main alternative to the other. Trends in the labor market reflected corresponding changes in school populations: high school enrollments of 14 to 17 year olds increased from approximately eight percent in 1900 to over 44 percent in 1930. How could schools be managed to handle this influx of new and diverse generation of young people?

At the same time, industry was undergoing a dramatic

shift. A typical mid-nineteenth-century firm operated in a limited geographic area, engaged in a single economic activity (i.e. production but not distribution), and dealt with a single production line. In the 1850s, most workers were employed in shops with fewer than ten employees. Factories with over 100 employees were considered manufacturing giants. In contrast, by the early 1900s factories such as the Ford plant at Highland Park Michigan—admittedly an exceptional example—employed over 30,000 workers. Industrial output quadrupled between 1870 and 1900 and doubled between 1900 and 1920. By that year the largest five percent of all industries earned 70 percent of total corporate net income.

With such economic shifts came the rise of corporate capitalism, characterized by an expanding number and variety of white-collar workers, managers and firms. Taylorism, a new form of production which differentiated tasks and workers for maximum factory output, was gaining a strong hold on the organization of businesses of all sizes. Economic expansion and corporate development led business leaders of necessity to question how best to train workers for the new mechanized workplaces of the young century. How could the growing numbers of diverse employees



[David Wysotski]

be socialized to their new roles in this modern workplace?

## Business, government and educators debate the school-work nexus

The first business and industrial interests to advocate job training in public schools, such as the National Association of Manufacturers, wanted students educated in specific trades. Besides promoting industrial needs vital to the United States' economy, they argued that education was most efficient when it taught an individual only those precise skills and knowledge which she/he would need to know for the specific work of their adult lives.

Industry-minded educators also promoted such "social efficiency" as a rationale for changes to the way that students prepared for work. John Franklin Bobbit, an instructor of School Administration at the University of Chicago, perhaps best represented the new movement of efficiency-driven education. In 1910, Bobbit described four principles on which an efficient school would be based. Three of these dealt with school administration, but the fourth promoted his theory of "education according to need."

According to this idea, school curriculum was to be carefully adapted to categories of individuals. Schools were to teach each group of students only those things they required in their future roles in society. Such "necessary knowledge" consisted of the actual skills they would be called upon to perform in their future workplace. Courses were to be classified as either "academic" or "vocational." Educators would employ a

process of scientific measurement to predict future roles and place young people in appropriate school classes. This overtly included the separation of girls and boys along gender-specific vocational tracks. In practice, this often covertly included the segregation of racial, economic, and ethnic groups by job types of unequal value.

Building on these ideas, others within educational sociology proposed a dual system of education for social efficiency. Chief among these was Columbia University professor David Snedden who was appointed Commissioner of Education for the State of Massachusetts during the early 1900s. Snedden rejected the notion that knowledge could reduce human

inequality. Rather, he believed that human educational potential existed within biologically determined constraints. Implied in such views was a primary role for educators in measuring student ability and selecting out students with lesser intellectual ability for specific skills training. The latter would grow to fill manual jobs; academically talented students would fill professional and white-collar positions.

Each branch of this dual system, it should be noted, had vocational implications in the broader sense: to prepare students for a specific type of

career. Nonetheless, both Bobbit and Snedden used the term "vocational education" to designate job-specific skills training for the non-college-bound. This distinction was fueled by support from the American Federation of Labor (AFL). As an expression of concern for their children's economic future, the AFL supported the definition of vocational education as separate, specific skills training. If their children were to remain workers, then practical skills training could lead to higher pay.

The AFL did fear that a stratified system of vocational education would curtail the upward mobility of their children. But they were more concerned that private business interests might gain control of a separate vocational education system. They worked primarily to ensure that vocational programs would remain within the jurisdiction of public education regulated by the state.

The philosopher John Dewey raised the loudest objection to this narrow definition of vocational education. Dewey, like the AFL, feared a stratified system. Unlike the AFL he did so not on grounds of school governance but out of his concern for how students learn best. For Dewey, vocational education was a pedagogical and curricular method which required that students be taught through hands-on activities tied to real-world responsibilities and roles. In order to study science and math, for example, students might plant a garden or construct a building.

Dewey used such skills and tasks as tools to help students develop their higher-order thinking and provide students with a context for expanding their knowledge. They would learn to become adults by engaging in adult activities with the guidance and support of teachers, schools and their peers. In this way students would develop a strong sense of responsibility to become productive members of their communities combined with the capacity to fill many roles in society and the workplace. Thus, Dewey saw vocational, experience-based education as appropriate for all young people, regardless of their future occupation.

Jane Addams, a close friend of Dewey and founder of the Hull (settlement) House in Chicago supported vocational education on similar grounds. As she wrote in *The Spirit of Youth and the City Streets* (1909): "If a child goes into a sewing factory with a knowledge of the work she is doing in relation to the finished product; if she is informed concerning the material she is manipulating and the processed to which it is subjected; if she understands the design she is elaborating in its historic relation to art and decoration, her daily life is lifted from one of drudgery to one of self-conscious activity, and her pleasure and intelligence (are) registered in her product."

Throughout 1915, Dewey and Snedden engaged in a debate in *The New Republic* over what direction vocational education should take. The division of these debates was clear: Dewey argued for vocational study for all students to

lead to broad educational ends; Snedden promoted education in job skills for certain students to lead to specific vocational goals.

In the end, the movement for federal support of vocational education, initiated by business interests, was passed as an issue of national development and security. The purpose was to tie schooling more closely to business and industry. "Vocational education" became not a teaching tool but the end product: direct skills training for students who would not attend college. Snedden's vision became predominant and the fate of vocational schooling in America was narrowly prescribed.

### Federal funding begins

These debates were the precursors to the passage of the Smith-Hughes Act of 1917 whereby the federal government provided aid for vocational education programs separate from existing public schools. Federal funds were allocated for specific skills training in strict occupational categories—trade and industrial subjects, home economics and agriculture—for students older than 14. All-day trade schools, continuation schools for young workers, and vocational evening classes were the types of schools eligible for such federal assistance; public schools

## Vocational Education, Swedish Style

### by Marisa Rizzuto

on't guarantee them income; guarantee them a job" is a theme which dominates Sweden's economic, political and social life. And it has translated itself into a vocational education system—very different from the North American variety—which strives, with notable success, to guarantee employment to Sweden's children as they look towards the next century.

Work stands firmly at the center of Swedish life. Swedes equate employment with the well-being not only of the individual but of society as a whole. Tied in with comprehensive employment policies, social services and socially involved business interests, education is viewed as both the means to ensure ample work and a prerequisite to good citizenship.

In order to prepare children for the competitive labor market, the Swedish government has recognized the importance of a smooth transition between school and the world of work. In fact, the boundaries between school and work are far less clear in Sweden than they are in North America. At all levels of schooling, Swedes are rarely far removed from the workplace.

Children first encounter Arbetsliv—the Worklife—in first grade, at the age of seven. From primary school on, students spend a few weeks each year experiencing Arbetsliv in commercial, manufacturing and public workplaces. In the standardized system of upper secondary school the relationship between school and work is strengthened.

The majority of university students work full-time, arriving on campus only to attend lectures. Notably, universities all but require students to have work experience before they will be accepted. Working adults find a vast array of study circles, on-the-job training, job retraining and other recurrent education options available to upgrade themselves and their skills.

As the quintessential post-World War II welfare state, Sweden has remained committed to human investment as a basic economic principle. From the 1940s on, successive Social Democratic governments have striven to democratize all aspects of Swedish life. In the process, they have built one of the most comprehensive and universal sets of social supports known in the Western world.

Education has formed a key component of such social equalization. A 1944 School Commission report asserted that school instruction must "satisfy the demands of modern society and its labor market and that the individual student be given the education best suited to his ability... (I) tis the duty of society and therefore the school to help him get such education." Specific legislation towards these ends was being shaped through the 1960s as the outlines of today's system slowly came into place.

In the late 1970s, Sweden experienced both a population surge and a recession. As Swedish youth are only required to attend school until the age of 16, many found themselves both out of school and out of work upon graduating. New jobs were high-skilled labor jobs for which the nation's youth was untrained and unskilled. Youth unemployment figures rose dramatically. In tandem with an extensive reform of their employment policies—including mandatory job retraining, workfare and labor-market programs—the government responded to the problem by encouraging young Swedes to stay in school and acquire the skills needed for high-skilled labor, often through government-sponsored youth apprentice-ships.

By the end of the decade, as the Swedish economy improved, the implementation of an integrated basic and vocational educational system for 16 to 18-year-olds known as upper secondary school was completed. Students enter upper secondary school upon completing compulsory school and

were not included.

Despite the government's effort to separate vocational education from regular public schooling, "vocational education" courses had already been introduced into American high schools early in the twentieth century by local authorities. A 1910 study of public schools conducted by the National Society for the Promotion of Industrial Education found that 29 states already had some form of vocational education in the educational categories indicated by the Smith-Hughes Act.

Although they were part of the public school system, these courses and programs were not dissimilar to those supported by Smith-Hughes. They reflected a clear bias against white-collar work and reinforced the prevailing definition of "vocational education": to provide specialized manual skills training for non-college bound students as a cure for poverty, unemployment, and national decline. The scope of these independent and unconnected public school vocational programs financially dwarfed Smith-Hughes. Funding through the Act was relatively marginal. By 1925-26, the total federal allotment for vocational education accounted for only 24 percent of total U.S. vocational education expenditures and 23 percent of trade and industrial education.

may enter university after it.

The upper secondary school system combines academic study (Swedish, Math and English) with practical study, training and "worklife" experiences in one of six disciplines: arts and social sciences, the care professions, economics and commerce, technology and science, technology and industry and agriculture, horticulture and forestry. In their final year, parttime internships allow students to work in their chosen profession.

While successful, Sweden's vocational education school structure is by no means flawless. It is a conformist system. And young Swedes who refuse to cave into the pressures of regimentation and standardized education fall through cracks, leaving them alienated and unemployed. (However, it is estimated that a full 90 per cent of Swedish youth attend upper secondary school). Cognizant of the flaw, Swedish parliament passed the "Youth Guarantee" in 1980 making municipalities legally responsible for finding work and education for every 16 to 18-year-old in their municipality not attending upper secondary school.

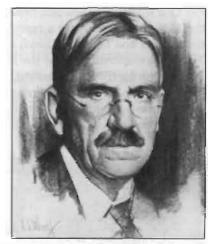
Youth Centers, designed to recognize and encourage differences among individuals, were set up across the country to help disadvantaged and disaffected youth join the labor market. Each year approximately 15,000 Swedish youth receive guidance and training from Centers.

In the 1990s, rising debt and a stalled economy have further challenged Sweden's social service net, along with the educational structure. With unemployment as high as 14 percent over the past few years—considered a national catastrophe—many leaders are questioning past methods of ensuring the full employment so vital to Sweden's collective psyche.

Nonetheless, Sweden, a nation of 8.5 million inhabitants, boasts a youth unemployment rate of only five percent. Its commitment to its citizens of tomorrow has secured a place for this northern European nation in the ever-expanding global economy.

## Not living up to expectations

Despite the spread of vocational education both with and without federal support, it became clear by the 1930s that fewer students were choosing vocational education than had been anticipated-the cause of growing concern. In the 1950s, a panel of consultants commissioned by the federal government found although 80 percent of



Educator John Dewey (1859-1952): Learning through experience.

all youth would not complete college, only 18 percent of high school students were enrolled in predominantly vocational courses. Proponents of skills-specific vocational education courses had envisioned a public school system in which the majority of students—namely those who would not attend college—would be enrolled in vocational training. This was to be a welcomed alternative to such students. Why then were they not enrolling in vocational education classes?

Student disdain stemmed from the relative social value of options available to them. In the early 1900s, as today, there was no mistaking that longer stays in public school and participation in predominantly academic coursework lead to higher-status professional jobs than did work in vocational courses and schools. It was in academics that students found the training in literacy and math skills necessary to any profession. And it was this track that held the greatest promise for advancement—upper level managers came from academic tracks while front-line workers arose from vocational education.

Moreover, separate tracks had been created in schools to meet vocational ends despite the widespread (albeit quiet) acknowledgment that basic public schooling already served vocational ends. For all intents and purposes, schools have always prepared young people for work both implicitly and explicitly—for example, by teaching reading and writing that will later be used in clerical positions. During the nineteenth century, although work skills were generally taught on the job site, schools had long aimed to teach such habits as steady work, punctuality, competition, and respect for manual labor—important lessons at the core of the new industrial economy.

Efforts to change these enrollment trends focused on improving the separate vocational education courses, not on the basic academic programs in which most students were engaged. The call was to fix the separate system of skills-based training called "vocational education" in order to increase opportunity, address manpower needs, and accommodate "average" and "low-achieving" students. These efforts did little to revalue vocational education, particularly as it became more closely associated with poor academic skills. Vocational education had fast become "remedial education."

#### HERE IN NORTH AMERICA -

One significant departure from "remedialization" came in the 1950s in response to a report on vocational education enrollments and the 1957 launch of Sputnik by the U.S.S.R. These developments fueled the National Education Act of 1958 to provide federal funds for a high-level math and science curriculum. Unlike 1917, the response was not a call for better worker training but for the cultivation of intellectuals: scientists, mathematicians, and engineers.



Learning skills for the next century.
[Metro Toronto School Board]

Indeed, international and domestic events of the 1950s fueled education reform of the most technical subjects and the most talented students—meaning further differentiation within schools. A new kind of work-oriented education developed and broke away from what had come to be considered vocational education. "Technical education" emphasized high skills and attracted the highest achieving students for its intellectual rigor and its link with prestigious jobs. The distance was furthered between vocational education and the more valued academic education.

### Re-evaluating vocational ed. today

The passage of the Perkins Amendments in 1990—amendments to the Smith-Hughes Act of 1917—were the first federal attempt to address recent reports that today's students will not be prepared to enter the high-skilled workforce of the twenty-first century, least of all the 75 percent of all students who do not receive college degrees. The amendments called for four major changes in the direction of vocational education. Most significantly, Perkins marked a shift away from defining "vocational education" as narrow job-skills training and emphasized that all students should learn academics. Teachers would use workplace experiences and job-related curriculum as vehicles to help students develop reading, writing, math and problem-solving skills necessary to today's workplace—much

as Dewey urged 85 years ago.

Under Perkins, students would be trained in "all aspects of the industry" they were preparing to enter—education in planning, finances, technology and production skills, labor and union issues, and health, safety and environmental issues. Such efforts were to be encouraged as a leverage for overall school reform. States were to provide greater leadership in stimulating innovation and develop performance assessments for measuring how well teachers and students were faring in the attainment of high performance goals. In general, federal funding was to be targeted to programs which integrated vocational and academic education through a coherent sequence of courses and work experiences. However, early returns on this effort have revealed little progress.

In the context of further redefining vocational education comes the School-to-Work Opportunities Act of 1993. Essentially, this program is based on the main principles of Perkins and has been designed to support states better as they create systems of vocational training based on these principles.

Perhaps this renewed federal effort and redefinition of vocational education is once again a reflection of business and industry power in directing schools to address manpower needs—needs that now require high-skilled, flexible workers with strong literacy, math, and reasoning skills. Perhaps it is due to expanded and strengthened capacity to develop and assess such coordinated statewide systems.

Equally likely is that over the past century our understanding of effective teaching and expedient social policy-making has revealed that narrow, skills-based training leads to neither academic nor work skills for students. Redefinition in the 1993 Act has meant the improvement of the vocational aspect of basic schooling for all children: i.e. not providing students with vocational alternatives to college but rather with an educational setting that better facilitates academic education and the expansion of options both in the workplace and in higher education. It is a realization that if we want more students to receive high quality vocational training, "vocational education" needs to be redefined both in content and in the social meaning and value ascribed to it.

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