Work, Education, and Vocational Reform: The Ideological Origins of Vocational Education, 1890–1920

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This essay examines the ideological origins of vocational education in the early twentieth century. Focusing on the leading participants in the vocational movement, it asks why people across a broad spectrum of political and economic opinion seized on vocational education as an instrument of economic reform. The essay argues that vocational reformers often differed with one another about the form that vocational education should take and the purposes it should serve but that what united them all was a desire to rationalize the operation of the economy without directly attacking private property or the class structure. The result was to transform questions about the nature of work and inequality into matters of socialization and training, thereby institutionalizing the idea that preparation for work was a primary function of American education.

At the turn of the twentieth century, the idea of using school to train youth for work energized a major movement to reform American education. Concerned that preparation for work had become problematic in a modern industrial society, reformers inside and outside the school system became convinced that the central task of the school was to train youth for jobs and to integrate them into the occupational structure. To accomplish this, they proposed to replace the standard literary curriculum with practical, vocationally oriented courses and to infuse the school with a new spirit of vocationalism. As one proponent put it, school life should be permeated with the idea that "school is to prepare for a vocation and that vocation is to be wisely selected" (quoted in Ryan 1919, p. 28).

By the 1920s, this movement had sparked a flurry of changes designed to adapt the school to the needs of the workplace. Assuming functions
that had formerly taken place outside the classroom, schools added courses to teach specific vocational skills, extended vocational training to much larger numbers of students, and introduced new procedures in guidance and placement to sort and select students for jobs and into educational tracks. The president of the Muncie, Indiana, school board succinctly summarized these changes. “For a long time,” he told Robert and Helen Lynd in the mid-1920s, “all boys were trained to be President. Then for a while all boys were trained to be professional men. Now we are training boys to get jobs” (Lynd and Lynd 1929, p. 194).

Few historians of education question the significance of these changes in American education. There is much less agreement, however, about the purposes that these changes were intended to serve. The movement’s first chroniclers—often participants themselves—applauded the rise of vocationalism, viewing it as a liberal movement to democratize the educational system and to expand occupational opportunities for working-class and immigrant youth. Only by adding practical, relevant courses, they argued, could the high school meet the diverse needs of an expanding clientele without abandoning public education’s commitment to equal opportunity for all members of American society (see, e.g., Bennett 1937; Koos 1927; Prosser and Allen 1925). During the last two decades, however, revisionist historians have painted a very different picture of these events. Vocational education, they say, was hardly the product of democratic sentiments but was pushed by businessmen and efficiency-minded educators interested in using the schools to control workers and stabilize the corporate industrial society that was emerging in the early twentieth century. The result, they contend, was a school system that socialized youth for their new economic roles and sorted them into their appropriate niches in the expanding capitalist division of labor (see. e.g., Karier, Violas, and Spring 1973; Spring 1972; Violas 1978).

These revisionist studies have reshaped our understanding of the development of American education. Above all, they have made clear that the history of educational reform has not been automatically

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progressive and that the rise of vocational education cannot be understood apart from the realities of class and unequal power that characterized early-twentieth-century American society. Yet the picture of social control in revisionist literature also carries its own risks of distortion, for the vocational movement was far more diverse in its constituency and interests than the revisionist perspective suggests.

At the turn of the twentieth century, vocational education attracted support from people across a wide spectrum of political and economic interests. Not only businessmen, corporate apologists, and efficiency-oriented educators but also labor leaders, liberal reformers, and radical intellectuals joined the campaign to vocationalize the schools. These groups often differed with one another about the aims and organization of vocational education. Some advocated specific skill training, while others placed their faith in a “life-career motive” that would penetrate all phases of instruction. Some wished to turn out docile workers; others hoped to restore the “creative impulse in industry” (Marot 1918). Yet all agreed that the industrial revolution transforming the American economy meant that the school had to assume new vocational responsibilities (on the diverse constituency supporting vocational education, see also Peterson [1985], chaps. 1, 3).

That vocational reform attracted support across such a wide political spectrum does not of course deny the revisionist contention that class interest played a central role in shaping educational policy. Clearly, businessmen had much to gain from an educational system that taught attitudes and habits conducive to large-scale, hierarchical production and that sorted students with efficiency and precision. But the revisionist picture generally forgets that policies can generate conflicts of power and interest even in a system in which people agree on fundamentals (on this point, see Brody [1980], p. 127). Consequently, it not only obscures genuine differences that did emerge but fails to explain adequately why people with such apparently diverse and contradictory interests all joined the campaign for vocational education.

This essay explores these issues. Focusing on the leading participants in the vocational movement, it asks why vocational education appealed to such a wide spectrum of groups, including some who generally regarded each other as adversaries. It suggests that important distinctions differentiated vocational reformers from one another. What united all these groups, however, was a desire to make the existing society work better without directly attacking private property or the class structure. Thus, even though reformers often disagreed with one another about vocational policies, their disputes seldom raised questions about who controlled the economy or for what purposes. Instead, they all viewed the conflicts and problems that accompanied the industrial-

Kantor

August 1986 403
ization of work as matters of socialization to be resolved through better training in school.

Business and Vocational Education

Of all the advocates of vocational education, one of the earliest and most vocal was the National Association of Manufacturers (NAM). Formed in 1895, the NAM began asking shortly thereafter how schools might help American manufacturers in the growing international competition for markets. Alarmed by Germany’s rapid rise to international economic power and impressed by its elaborate system of trade and industrial schools—which were calibrated closely with the specialized needs of industry and commerce—the NAM warned that the United States had to follow the German educational example or be left behind in the worldwide battle for commercial supremacy. Over the next two decades, it pushed hard to introduce trade schools, continuation (part-time) schools, and vocational guidance into American education (on the NAM and vocational education, see Wirth [1972], chap. 2; Fisher [1967], pp. 115–19).

How could vocational education aid American business in the escalating international competition for markets? Over the years, NAM officials advanced several arguments, of which three stand out. First, NAM leaders argued that changes in work had created a demand for workers with new or initially scarce skills. Although mechanization and specialization had stimulated a demand for a cheap grade of labor to run automatic machines, they explained, it had also created a need for skilled mechanics to build and repair these machines. “A dull machine hand may manipulate the screw machine,” one observer remarked, “but it takes a mechanic of skill and intelligence to read the drawings and to make the jigs and fixtures in building the machine” (NAM 1907, p. 129). The problem, however, was that the division of labor had eroded the apprenticeship system and made on-the-job training impractical. Consequently, they concluded, the demand for skilled workers could only be met by systematic training in specialized vocational schools.

Second, equally important to NAM officials was how to adjust less skilled workers to the demands of routine factory labor. They worried that the expansion of industry and the subdivision of tasks had contributed to industrial unrest and hoped that better-trained workers would be more stable and cooperative because they would understand their role in the larger industrial system. Vocational education, one NAM official explained, would make “every child at work, and the
Kantor

men, too, understand the relationship of their several tasks to the whole of industry." In addition, it would help them see "the way of advancement from the task at hand to the highest position that their developing faculties will entitle them to." This, he predicted, will "greatly relieve friction and misunderstanding and develop an intelligent sense of mutual dependence" (NAM 1912, p. 15).

Finally, the NAM was alarmed by the growth of union membership that followed the recovery of the depression of the 1890s and expected that vocational education would erode union power in the labor market by providing an alternative source of trained workers. They charged that unions had wrecked apprenticeship, poisoned the master-apprentice relationship, and unfairly restricted entrance to trades to the detriment of workers and employers alike. Indeed, NAM officials claimed that union restriction harmed workers as much as, if not more than employers did, because they interfered with the right of every youth to learn a trade. The only solution for this evil, said Anthony Ittner, chairman of the NAM Committee on Industrial Education, was to organize trade schools where we can "undo the monstrous crime which labor has committed against its own people" and make our boys "skilled artizans [sic], educated mechanics, and hustling, adaptable, willing workmen, capable of filling any position" (NAM 1905, pp. 143, 149).

The NAM's concern about union restrictions on apprenticeship and job entry is a bit puzzling since most evidence suggests that union regulations had long since ceased to be effective in controlling entry to the labor market. In his study of apprenticeship, for example, Paul Douglas pointed out that nationwide in the late nineteenth century the number of apprentices in industry fell far short of the number permitted by union regulations, although conditions varied by industry and locality (1921, pp. 72–74). On the other hand, however, the number of unions that attempted to control job entry through formal apprenticeship requirements did increase between 1890 and 1904. One study indicated, for instance, that whereas, in 1890, 17 of 48 national unions regulated or attempted to regulate job entry through union rules, in 1904, 70 of 120 attempted to do so, representing an increase from 35 percent to 58 percent (cited in Douglas 1921, pp. 69–70). Coupled with an expansion of union membership from a half-million in 1897 to nearly 2 million in 1902, these developments filled NAM officials with alarm, and they seized on vocational education as a key weapon in their battle to combat the spread of union power, even though unions had already lost a good deal of control over job entry.

Initially, NAM officials were skeptical that their objectives for vocational education could be achieved in the public schools. The schools, they said, were overly bookish and theoretical and were ill suited to

August 1986 405
the intensely practical type of training that industry demanded. Moreover, the public schools were subject to union influence and pressure that would make vocational education, in Anthony Ittner's words, "a useless piece of machinery" (NAM 1905, p. 46). Instead, Ittner and the other NAM leaders looked to the all-day trade schools that had begun to appear in American cities in the last two decades of the nineteenth century. Sponsored by private individuals and usually supported by financial contributions from local businessmen and manufacturers—J. P. Morgan donated $500,000 to the New York Trades School, for example—NAM leaders believed that these schools would be free from the culturizing pretensions of educators and the influence of organized labor (see, e.g., NAM 1906, pp. 49–63).

By 1911, however, the NAM's enthusiasm for private trade schools had begun to wane, largely because of a growing conviction that these schools were ineffective and inefficient. According to H. E. Miles, Ittner's successor as chairman of the association's Industrial Education Committee, the idea of trade schools had been around for over 30 years yet only a few had been established and those that had been were exceedingly costly to maintain. In addition, Miles argued, trade schools did little for thousands of youth who left school each year at age 14 and went directly into the labor force. Unable to forgo present earnings to attend trade school, Miles said, these youth had no opportunity to learn needed vocational skills. Consequently, they became trapped in dead-end jobs at great cost to industry and to themselves as well. "We all love the little newsboys, busy, efficient, honest little businessmen," Miles wrote, yet "we little realize that their earlier efficiencies offer no hope of later success but the reverse" (NAM 1912, pp. 20, 21–22).

Miles and his committee made several recommendations to remedy these deficiencies in trade schools. Most important, they proposed that every community adopt a system of continuation schools like those set up in Wisconsin in 1911. Modeled on the German continuation schools pioneered by the Munich educator Georg Kerchensteiner, these schools provided four to eight hours of general and practical instruction each week to youth aged 14–16 who had left school and entered the labor force. By closely correlating school instruction with actual employment, NAM officials claimed, these schools provided necessary vocational training to those who would never go to trade school. Moreover, because youth received practical experience on the job, these schools had no need to purchase elaborate equipment. Thus, they could provide needed vocational instruction much more cheaply than trade schools ever could (on continuation schools, see NAM [1912], p. 29).
Kantor

In addition to continuation schools, the NAM committee proposed that the public schools be geared more closely to industrial needs. First, the committee recommended the introduction of manual and prevocational training in the grammar grades so that youth under age 14 might develop an “appreciation for the dignity of labor of all kinds and such moral qualities as diligence, concentration, perseverance, and respect” (NAM 1912, p. 13). Second, the committee argued for a differentiation of the high school curriculum into cultural, commercial, and industrial branches. The latter two, the committee explained, should be “intensely practical, and make the best form of intelligent and efficient working people, with as much culture included as may be” (NAM 1912, p. 29). Third, the NAM committee urged that this system of vocational education be complemented with vocational guidance “so that the great majority of the children who now enter industry at fourteen with no direction . . . may enter, under advice, intelligently and properly into the progressive and improving occupations” (NAM 1912, p. 21).

By 1912, then, the conclusion that trade schools were too costly to maintain and irrelevant to all but a small minority of youth had led the NAM to look more favorably on training youth for jobs in the public schools. Still, the NAM never entirely lost its original enthusiasm for the trade school. Rather, what the NAM leadership envisioned was a complete system of vocational education in which the trade school still had a role to play in training highly skilled workers. As Miles put it in 1912, trade schools would always have a place at the “apex of the pyramid” of any system of vocational education, teaching the higher reaches of the industrial occupations to those successful students who might become “engineers and captains of production” (NAM 1912, p. 21). Most workers, however, would never reach such heights, and even those that did needed a firm foundation on which to build. Consequently, by the beginning of the second decade of the twentieth century, the NAM looked increasingly to the public schools to provide vocational training—eager to expand the impact of vocational education and to socialize the cost even if this risked greater union participation in vocational programs.

One other alternative that attracted employers was to set up their own programs to train their own employees. Hoe Publishing Company, manufacturers of printing presses, established the first such corporation school in 1872, and in the next three decades several other manufacturers followed suit, particularly large machinery builders who were plagued by a shortage of trained machinists at the top of their factory structures. By 1905, for example, General Electric, Westinghouse, International Harvester, and Baldwin Locomotive had all established special de-
partments to train their factory employees as well as their growing number of white-collar workers. In 1913, representatives from 37 manufacturers and railroads formed the National Association of Corporation Schools (NACS) to share information about factory-based education programs and to promote an interest in corporation training (NACS [1913]; on corporation schools, see also Beatty [1918]; Noble [1977], chap. 10).

These corporation schools appealed to employers for the same reasons that private trade schools did: they could be geared to specific industrial needs, and they could be kept free from interference by organized labor. For these same reasons, many advocates of corporation training doubted that public school vocational training would ever be of much value. One supporter of corporation training, for instance, ridiculed the idea of training youth for industrial jobs in the public schools, labeling it a "dream of the schoolmaster and the professional or dilettante social reformer." The American school system, in his view, was "politics ridden" and subject to outside pressure from organized labor. Corporations, he said, would be better off running their own training programs tailored to meet their own needs (NACS 1913, p. 131).

Few manufacturers in the NAM, however, could afford to set up their own schools to train their own employees. Even industrial giants such as General Electric and Westinghouse could never be entirely certain that their investment in training would pay off, since workers could always change jobs once they had been trained. Thus, while many large employers continued to look to corporation education to provide immediate job-specific training, they rarely relied exclusively on these private factory-based programs to solve their labor problems. Anxious to have a steady supply of labor equipped with general industrial skills and habits, they too urged that public schools adapt their curricula to industrial needs and joined with other businessmen in the NAM in the movement for vocational education.

Organized Labor and Vocational Education

Labor leaders were understandably reluctant to join a movement with such anti-union backing. Experiences with private trade schools—which had, in a few cases, provided students as strikebreakers—reinforced their doubts. Trade schools, said John Golden, president of the Textile Workers, were "nothing but scab hatcheries, turning out misguided young men to take the place of union men" who were trying to win "better conditions or better wages for themselves, and
those who come after them" (NSPIE 1907b, p. 24). In addition, union officials were suspicious of business influence in the public schools and believed that teachers were hostile to organized labor and working-class children. But, as the vocational movement gathered momentum, union opposition to vocational education began to erode and the AF of L leadership adopted a more favorable stance. In 1907, AF of L President Samuel Gompers joined the National Society for the Promotion of Industrial Education (NSPIE), the nation's major lobbying group for vocational education, and in 1910 the AF of L Special Committee on Industrial Education—headed by Gompers's close associate John Mitchell—came out in favor of vocational education in the public schools (on the AF of L and vocational education, see Wirth [1972], chap. 3; Curoe [1926], pp. 162–77).

Several considerations combined to overshadow the federation's initial doubts about vocational education and to move the AF of L leadership toward a more positive view of vocational education. First, union leaders agreed with businessmen that apprenticeship was obsolete and that on-the-job training was inefficient and impractical under modern industrial conditions. Thus, even though they feared that vocational training might erode their position in the labor market and jeopardize the principle of craft exclusivity on which their economic power had traditionally been based, AF of L leaders also thought that new forms of vocational education were needed for those who wished to enter the skilled trades (AF of L 1909, pp. 133–39).

Second, AF of L officials shared with businessmen and many other vocational reformers the conviction that schools were abstract, boring places that failed to hold the interest of working-class youth. "The pupils," it was reported at the 1909 AF of L convention, "become tired of the work they have in hand and see nothing more inviting in the grades ahead. They are conscious of powers, passions, and tastes which the school does not recognize. They long to grasp things with their own hands and test the strength of materials and the magnitude of forces" (AF of L 1909, p. 137).

Finally, as Norton Grubb and Marvin Lazerson have stressed, by 1910 union leaders recognized that the vocational movement was growing, feared that excessive business influence would be harmful to organized labor, and felt compelled to act to counter business domination. They believed that union participation could mitigate ill effects by insisting on public rather than private sponsorship of vocational education, union participation in educational decision making, and the avoidance of extreme specialization in trade training. As one AF of L member stated in 1912, "We cannot stop the trend in the direction..."
of this kind of education in the school; but, we can, if we cooperate with educators, have it come our way” (quoted in Grubb and Lazerson 1974, p. 21).

But what was “our” way? And how did it differ from what the businessmen in the NAM proposed? Indeed, did it differ at all? The 1910 Report of the AF of L Special Committee on Industrial Education tried to put some distance between the AF of L position and that outlined by the NAM, but its major recommendations were remarkably similar to those of the businessmen: part-time schools for youth already employed and the establishment of independent industrial schools at the secondary level. The major differences were the AF of L’s insistence on public rather than private control of vocational education and the avoidance of extreme specialization so that youth might learn the “principles of the trades” (AF of L 1912). The AF of L’s stand on these issues did push the NAM to modify its original insistence on private trade schools and narrow trade training. But, as we have seen, the NAM was moving toward support for public control on its own, and even the emphasis on broad trade training was not entirely at odds with the needs of businessmen who hoped that vocational education might produce highly trained machinists.

The failure of the AF of L to stake out a truly independent position on vocational education is not altogether surprising, since the union shared many of the same concerns that attracted businessmen and others to the vocational movement. Yet there were other reasons for this failure as well. One was that the AF of L was responding to policies first proposed by businessmen and educators. They rarely had time, as one historian has commented, “to ponder first and act later” (Fisher 1967, p. 127). Consequently, the AF of L defined its position on terrain outlined by others and clarified its views primarily by making clear what it was against rather than what it was for. As Arthur Wirth has put it, if Anthony Ittner favored private trade schools with short courses to turn out workers with specific industrial skills, the Mitchell Committee would emphasize the necessity of public vocational education and oppose flooding the labor market with workers trained in industry-dominated schools (1972, p. 55). These differences were certainly not marginal, but neither were they fundamental. Nor did they lead to alternative proposals for vocational education.

At a deeper level, the AF of L’s inability to define an alternative position on vocational education reflected the ambivalent position of skilled craft workers within the expanding trend toward greater division of labor. On the one hand, as federation of labor aristocrats, the AF of L feared that vocational education would undermine the traditional principle of craft exclusivity by flooding the labor market with workers.

410 American Journal of Education
On the other hand, however, they were threatened by the de-skilling of labor and thought that vocational education might provide their children with the technical knowledge needed to rise to foreman or other supervisory positions in the factory. The union thus viewed vocational education with a mixture of fear and hope but eventually focused on guarding against extreme specialization in trade training, expecting that this would serve both its needs: protect union members against the flooding of the labor market with “half-baked mechanics” and provide them and their children an opportunity to learn the principles of the trades that would preserve their privileged position in the factory hierarchy (AF of L 1912, pp. 7–8).

Finally, the AF of L’s position on vocational education reflected the influence of Samuel Gompers and the ideals of business unionism. Having consolidated his hold on the AF of L leadership after bitter struggles in the 1890s with Daniel De Leon and other socialists, Gompers committed the AF of L to a policy of accommodation with large-scale industry. Accordingly, the AF of L leadership in the early twentieth century concentrated primarily on protecting and advancing workers’ interests within the existing system instead of defining alternatives to it. Its stance on vocational education reflected this (see, e.g., Weinstein 1968).

The 1910 report nevertheless marked a turning point for the AF of L. During the next few years, the union participated more actively in the movement for vocational education, and AF of L leaders joined with businessmen, educators, and other reformers in the drive to secure federal funding for vocational training in the public schools. Still, the AF of L’s position always remained an uneasy one. In 1915, the federation’s Committee on Industrial Education repeated earlier warnings that vocational education would be subordinated to commercial and business interests and urged the AF of L to reject narrow trade training in favor of an education that would develop “leadership,” “the power of self-direction,” and “the ability to assume powers of responsibility.” Indeed, the committee questioned whether vocational education had any value at all in the mechanized, highly subdivided modern factory. What good would it do, the committee’s report asked, to have industrial education if children were “to be fastened to a machine, requiring but the repetition of a few muscular motions? Vocational education is not enough: extreme specialization must be abolished” (AF of L 1915, p. 322).

These sentiments might have led the AF of L to reject vocational education altogether or to question capitalism itself. But by 1915 the union had already rejected the first option, and, under Gompers’s leadership, it was hardly prepared to follow the second one. Instead,
the AF of L joined the movement for vocational reform, hoping that union participation would prevent business domination while advancing workers’ interests within the emerging corporate economy.

Vocational Education, Industrial Alienation, and Social Efficiency

Representatives of business and labor were by no means the only ones who thought that vocational education would adjust American society to the industrial transformation of work. Vocational education also attracted several middle-class reformers and social scientists, many of whom were involved in other reform efforts during these years. Among the supporters of vocational education, for example, were Jane Addams, John Dewey, the economist Paul Douglas, and the child-labor reformer Owen Lovejoy. But while businessmen and union officials focused primarily on issues of control and the economic returns to vocational education, these reformers had other concerns. Alarmed that mechanization and the division of labor had created thousands of routine, monotonous industrial jobs, they hoped that vocational education would help workers understand the social and scientific bases of their daily tasks and thereby restore meaning to fragmented factory labor.

Of all these middle-class reformers, few were more sensitive to the human consequences of changes in work than Jane Addams. Like many of those concerned about work, she had been influenced by the arts and crafts movement that flourished in the United States and England in the 1890s, and she shared the handicrafters’ fears that fragmented factory labor had robbed work of its meaning and creativity. Unlike many in the handicraft movement, however, Addams did not idealize the world of the preindustrial artisan. Rather, she believed that the factory contained untapped possibilities for workers, if they could learn to labor in cooperative association (Rodgers 1978, pp. 78–82). “A man who makes, year after year, but one small wheel in a modern factory,” she wrote, “may, if his education has properly prepared him, have a fuller life than did the old watchmaker who made a watch from beginning to end. It takes thirty-nine people to make a coat in a modern tailoring establishment, yet those same thirty-nine people might produce a coat in a spirit of ‘team work’ which would make the entire process as much more exhilarating than the work of the old solitary tailor, as playing in a baseball nine gives more pleasure to a boy than that afforded by a solitary game of handball on the side of the barn” (Addams 1909, pp. 126–27). Collective labor, she said, would give meaning to the life of the factory.
As Daniel Rodgers has commented, these reflections might have led Addams to call for the socialization of the economy. But Addams came to a different conclusion. Instead, as Rodgers has put it, she placed her "primary faith in the mind" (1978, p. 82). Other than that they were overworked and underpaid, the chief complaint of factory workers, she said, was that they did not know what their work was all about. They had no idea of the origins of the product that they produced, no knowledge of the scientific processes involved in its manufacture, and no comprehension of their role in the larger industrial system. If these things could be revealed, she believed, the daily life of the young girl entering the sewing factory would be "lifted from drudgery to one of self-conscious activity" (NSPIE 1907a, pp. 42–43).

One way that Addams tried to put her ideas into practice was through the establishment of a Labor Museum at Hull House in Chicago. Started in the 1890s so that young people at work in the factories near Hull House might discover the "inherited resources" of their daily work, the museum reflected her lifelong concern with industrial alienation and her belief that education would alleviate the worst abuses of industrial development. Through demonstrations of early methods of spinning and weaving, exhibitions, and lectures on industrial history, she hoped that the museum would demonstrate "that there is no break in orderly evolution if we look at history from the industrial standpoint" and thereby comfort workers with the knowledge that "other historical periods have existed similar to the one in which he finds himself" ([1910] 1961, p. 173).

The Labor Museum was only a beginning, however. To reach a larger audience, she increasingly placed her faith in vocational education and in 1906 joined the NSPIE. But the type of vocational training that she had in mind differed from the vision of practical trade training that so enthralled the businessmen and efficiency-minded educators who also enlisted in the vocational movement. What was needed, she argued, was an education that unified practical and cultural training so that every youth might develop an understanding of the principles of industry, not an education that would fit the future wage earner unthinkingly to monotonous work. Vocational education, she insisted, must not simply mirror the needs of the existing industrial system but must pervade it with a "human spirit" and make it a "kingdom of the mind" (NSPIE 1908, p. 94).

Jane Addams was one of the most eloquent advocates of the idea that training in broad vocational concepts might offset the dehumanizing effects of fragmented factory labor. But she was hardly the only one who thought that vocational education had such potential. The liberal economist Paul Douglas also believed that vocational education might
Work, Education, and Vocational Reform

help the specialized worker see the larger significance of his tasks. "The worker on the specialized machine," he wrote, "is likely to forget that he is part of a complicated structure of industrial society. He needs to know the industrial processes and to see the interrelation of industries and their cooperation toward the production of goods." A vocational education that gave insight into the "history of manual labor, tools, and machinery," he said, would make the specialized employee "more conscious of the importance of his particular niche and allay much of the dissatisfaction which necessarily arises from the minute and isolated nature" of factory labor (Douglas 1921, pp. 128–29).

Others too thought that vocational education might somehow humanize—indeed, even revolutionize—factory work. Owen Lovejoy, president of the National Child Labor Reform Committee, told a convention of the NSPIE in 1913 that vocational educators must demand jobs worthy of young people. To the "captains of industry" who say "Here are your jobs: what kind of children have you to offer?" educators must reply, said Lovejoy, "Here are your children: what kinds of jobs have you to offer?" (quoted in Wirth 1972, p. 113). Frank Leavitt of the University of Chicago posed a similar question. "Why," he asked, "should we hesitate to lay hands on industry in the name of education when we have already laid hands on education in the name of industry?" (quoted in Wirth 1972, p. 114). Even the National Education Association joined the crusade to transform industry through education. Caught up in the post–World War I fervor for industrial democracy, the association passed a resolution that declared that "all industry must become educational to those who engage in it. . . . Human—not commercial—values must be placed first in our great industrial establishments" (quoted in Wirth 1972, p. 137).

Not every advocate of vocational education expressed such sentiments, however. The idea that vocational training might somehow make industry more educational for factory workers clashed with the desires of employers who hoped that vocational education would impart skills and attitudes conducive to large-scale, hierarchical industrial production. It also differed from the views of leading vocationalists such as David Snedden, Massachusetts commissioner of education and one of the nation's foremost authorities on vocational education, and Charles Prosser, executive secretary of the NSPIE. Mindful of the needs of employers and fully accepting the imperatives that derived from the division of labor and the expansion of industry, they stressed the need for efficiency—for an education designed to teach the particular skills and attitudes that would help workers fit smoothly into industrial
occupations and perhaps move up a notch or two on the occupational ladder.

To these vocationalists, the vision of Addams and her colleagues seemed vague, impractical, and more than a bit naive. Enthusiastic about industrial progress, they scorned the idea that vocational education might transform the factory or even that this was desirable. Snedden, for example, ridiculed critics of the factory system, labeling them "romantic impracticalists" who yearned for a time long past (quoted in Wirth 1972, p. 154). To wish for a return to earlier forms of production merely because of the educational possibilities that they contained, he stated, was the "sheerest folly" (Snedden 1910, p. 16). Even if such a return were possible, it would hardly be desirable because of the great material sacrifices that it would entail. Instead of trying to recreate earlier methods of production, Snedden advised, educators would do far better to face the realities of the division of labor and train workers and future workers in accordance with "right standards of efficiency in the economic world ((1913], p. 133; on Snedden, see also Drost [1967]).

Prosser shared this outlook. An ardent advocate of industrial progress and economic efficiency, he too doubted whether it was either desirable or possible to reconstruct industry along other lines. "One might as well attempt to suspend the law of gravity," he stated, "as to stem the evolution of modern industry toward large scale production, the division of labor, and specialized processes by which it makes goods at a cheaper price to supply human wants and needs." Even if it were advisable to do so, he added, "it would be impossible to regulate modern methods of production to insure each worker an all-round experience in every phase of the processes used." Like Snedden, he maintained that educators should accept the existing industrial system "as a fact" and bend their efforts toward making it run more smoothly and efficiently (Prosser 1915, p. 305).

This could hardly be accomplished by teaching courses on the history of textiles or by demonstrations of hand weaving, as Jane Addams had proposed. In contrast to her ideas about an education that would unite work, science, and history into an integrated whole, they argued that vocational education should reproduce the conditions of the factory so that the student would be thoroughly acclimated to the practical demands of industrial production. Vocational education, Snedden said, had to get "near to reality" both in its social environment and its techniques of production. In the length of the school day, surroundings, maintenance of discipline, and methods of instruction, "shop standards not school standards must prevail" (1910, pp. 36, 38). In fact, he
Work, Education, and Vocational Reform

maintained, during the first few months at industrial school, the student should spend "the full working day in the workshop under shop conditions . . . mastering the elementary conditions of productive work." Anything less, he warned, would lead "to trifling, to dilettantism, and to the formation of bad habits" (1913, pp. 190, 205).\(^2\)

To those vocational reformers who worried that subdivided factory labor had stripped work of its meaning and creative potential, this vision of trade efficiency and narrow practicality seemed to reduce the worker to a mere cog in the industrial machinery. Some even argued that it was hardly better than no vocational training at all. But Snedden and Prosser thought otherwise. To their minds, alienation and discontent at work existed not because of the fragmented nature of factory labor but because workers were poorly trained and adapted to the jobs that already existed. If workers were trained for jobs that suited their talents and interests and that matched the economic needs of their communities, they said, the outcome would not only be greater economic efficiency but happier, more contented workers as well. As Prosser put it, when workers were well adjusted to their jobs, they would experience the "joy" and uplift that "blesses every man who finds himself at a task in which he is interested and at which he is able to render service creditable to himself and beneficial to his fellows" (1912, p. 647).

In effect, Prosser and Snedden ignored the fact that "right standards of efficiency in the industrial world," to use Snedden's phrase, were the result of social and political struggles—that the organization of the factory did not derive solely from a technical imperative but also from a social one. Indeed, their vision of education and work thoroughly depoliticized the issue of industrial labor. Where there was conflict between bosses and workers, they saw problems of individual maladjustment. In their view, therefore, the chief issue confronting vocational education was not the way in which class conflict shaped the organization of the workplace. It was rather one of adjusting individual workers to their appropriate places in the division of labor (Prosser and Allen 1925, pp. 182–85; Snedden 1920, pp. 396–97).

But Prosser and Snedden could never convince Jane Addams. Nor could they convince her friend and colleague, John Dewey. From the beginning they protested against the equation of vocational education with narrow trade training. "I am not willing to agree," Addams told the NSPIE in 1908, "that industrial education is one thing, and cultural education is of necessity quite another. . . . Every factory filled with complicated machinery has in it possibilities of enormous cultural value," she maintained, "if educators have the ability to bring out its long history, the human as well as the mechanical development it represents" (NSPIE 1908, p. 94).

416 American Journal of Education
Dewey expressed similar sentiments. Concerned that the de-skilling of work had reduced factory labor to a mere "pecuniary" pursuit without "intrinsic" value, he too hoped that instruction in broad vocational principles would help workers find meaning in their daily tasks. In a series of articles in the New Republic in the winter of 1914 and the spring of 1915, he mounted a vigorous verbal attack on Snedden's notion of practical trade training. Given the division of labor and the mechanization of production, Dewey wrote, Snedden's proposals for training in specific industrial skills made no sense at all. What was needed, he maintained, was training not for particular jobs but for the "development of such initiative, ingenuity, and executive capacity as shall make workers, as far as they may be, masters of their own industrial fate." Indeed, he argued, the aim of vocational education must not be to "adapt' workers to the existing industrial regime," but to "first alter the existing industrial system, and ultimately transform it" (1915a, p. 42; see also Dewey 1914, pp. 11–12; 1915b, pp. 71–73; 1916, chaps. 15, 19, 23).

In contrast to the efficiency-oriented outlook of Snedden and Prosser, these sentiments certainly had a radical flavor to them. Teaching workers about the social meaning of their labor might, as Dewey seemed to suggest, rekindle interest in work and thereby lead to a demand for meaningful labor. It surely was not the same thing as teaching workers the specific skills and habits that would fit them neatly into their appropriate places in the division of labor, as Snedden and Prosser proposed. But these ideas about school and work were also problematic, not least because they were often used by others to justify a type of vocational training that Dewey opposed but, even more important, because they were profoundly misleading. For when put in terms of consciousness alone, as they almost always were, they implied that education could do the job that only politics could do—that labor unrest in the cotton mills could be eliminated, in Joseph Featherstone's words, by "edifying lectures about the history of the textile industry" without addressing the institutional arrangements on which the economy was based (1972, p. 29; see also Hogan 1985; Karier et al. 1973; Lasch 1965, chap. 5).

Part of the reason for this faith in educational reform was that Dewey held a utopian view of the future of American society. Like many liberal progressives (and socialists, too, for that matter), he believed that a new collectivism lurked within the depths of American industry and that workers only had to be properly educated to guarantee its realization (Featherstone 1972). Interest in work, he wrote in 1916, was still far from being "uncoerced and intelligent," but social progress pointed in that direction. No "insuperable obstacles" stood in the way.

August 1986 417
Work, Education, and Vocational Reform

To get there, he said, depended "more upon the adoption of educational methods designed to effect change than anything else" because the desired change was "essentially a change in mental disposition—an educational change" (Dewey 1916, pp. 260, 316–17).

Yet Dewey's reliance on education to reform the workplace was not only a reflection of his belief in the potential of American society. It also betrayed more fundamental concerns. As Christopher Lasch has observed, what troubled Dewey as well as Addams and other liberal progressives was not so much the existence of classes but the growing distance between them and the conflicts that this created (1965, p. 162). Accordingly, even though their sentiments about work pointed toward a systematic class analysis of the economy, these vocationalists hoped that work might be reformed without attacking those who "profited most from the existing system." They proposed instead to reform work in an orderly, rational fashion and, like many liberals then and since, believed that this could be done by reconstructing education to gradually eliminate, in Dewey's words, "the larger and more recalcitrant features of adult society" (1916, p. 317; more generally, chaps. 17, 19, 23).

Vocational Education and the Dropout Problem

While Dewey asked how vocational education might combat industrial alienation and Snedden stressed the importance of vocational education for social and economic efficiency, many educators, social scientists, and middle-class reformers grappled with another set of issues. Foremost among these were high attrition rates from school and the condition of the youth labor market. Fearful that school dropouts would be trapped in blind-alley, dead-end jobs and convinced that early school-leaving was primarily due to the artificiality and lifelessness of the secondary school curriculum, these reformers hoped that vocational education would make the course of study more relevant to the economic needs of working-class youth, thereby holding them in school and giving them the skills needed to advance in modern industry.

Beginning in the early twentieth century, educators and social investigators turned out scores of studies on early school-leaving and the conditions of young workers (for a review of these studies, see Douglas [1921], chap. 4; Ryan [1919], pp. 38–59). Study after study indicated that urban schools typically lost one-half of their pupils between the ages of 13 and 15 and that only 40 percent of all school children ever completed the eighth grade. Almost without exception, they discovered similar reasons for early school-leaving: the children

418 American Journal of Education
disliked school and preferred to work, poverty made the child’s help at home indispensable, and, most important, the child’s wages were needed to supplement family income. Indeed, most studies indicated that anywhere from 25 to 50 percent of those youth who left school before age 16 did so because their families needed the additional income. Most researchers defined economic need so stringently that only children from the poorest families were placed in this category (Douglas 1921, pp. 90–94).

The studies also reached similar conclusions about the types of jobs these children found: unskilled, poorly paid, often seasonal with high turnover, poor working conditions, and few opportunities for advancement—what the investigators labeled “dead-end” or “blind-alley” jobs and economists today often call the secondary labor market. One study of 14,000 working children in Philadelphia in 1912 reported that only 3 percent were in skilled trades; the others entered jobs with “little or no opportunity for improvement and competence at maturity” (quoted in Ryan 1919, p. 47). Surveys of working children in Chicago, New York, and St. Louis reached similar conclusions. In Chicago, for example, a study of working youth between ages 14 and 17 reported that only 7 percent were in skilled occupations; in New York, only 5.2 percent were in such occupations; and in St. Louis, 88 percent entered unskilled jobs (Douglas 1921, p. 97).

In addition, surveys indicated that young people only remained at jobs for a few months. In Rochester, New York, for instance, young people aged 14–16 changed jobs about three times a year; in New York City, about one-third of working youth changed jobs six times a year; and, in Maryland, over 50 percent reported that they had held their present job for less than two months. The investigators uniformly labeled these youth as victims and losers—children whose health was poor, whose parents exploited them, and who were frequently mentally subnormal—and predicted that they faced bleak economic futures. Summarizing the findings of these numerous studies, Paul Douglas described the experience of these youth as “drifting from job to job, from industry to industry, still unskilled and exposed to all the evils which threaten adolescence.” Consequently, he concluded, when the child becomes an adult he or she “finds himself one of the class of the permanently unskilled with the attendant low wages and unemployment of this class” (1921, p. 85).

A few investigators doubted whether vocational education could do much about the conditions described in these studies. Pointing to the economic reasons for early school-leaving, Ernest Talbert, a social researcher in Chicago, argued that vocational education alone could do little to hold youth in school. Equally important, he said, was an
adequate minimum wage so that every family would have sufficient income to keep their children in school (Bloomfield 1915, pp. 396–453). Arthur Leake, author of an influential study of vocational education for girls, also stressed that economic necessity was a primary reason for dropping out and suggested even more direct redistributive measures to keep youth in school. In addition to vocational education and stiffer compulsory-attendance laws, he proposed a system of government subsidies to compensate poor families for the income lost when their children went to school. Otherwise, he said, more schooling would simply add to the economic burden on poor families, and they would be unable to take advantage of the new vocational programs (1918, pp. 260–69).

Most educational researchers, however, found little merit in these proposals, especially ones like Leake’s. They rejected the idea that early school-leaving was an economic necessity for many youth and focused instead on reforming the schools. In their view, the problem was that the traditional curriculum failed to appeal to the needs and interests of working-class youth. “The great lack,” the Massachusetts Commission on Industrial Education stated in 1906, “is in the system, which fails to offer the child of fourteen continued schooling of a practical character.” What these children wanted and needed, this report stated, as did many others like it, was an education geared specifically to future employment—one that would keep them in school because of its relevance to their economic futures and that would give them the practical skills needed to advance in industry (1906, p. 87).

Why did most reformers focus on educational rather than economic remedies to the dropout problem, particularly when a good deal of evidence indicated that young people left school early because their families needed the additional income? Part of the reason was that educators and social investigators had a low opinion of the intellectual abilities of working-class youth. They argued that these young people were “hand minded” and easily frustrated by the scholastic content of the regular school curriculum (on this point, see the readings in Bloomfield [1915]). It followed, then, that making school more attractive to working-class youth required a more practical course of study irrespective of the economic circumstances of their families.

The class bias of investigators was only one reason for their emphasis on educational solutions to the dropout problem. There were several other reasons as well. First, young people told investigators that they disliked school, found it boring, and thought it irrelevant to their economic needs. Indeed, many young people disliked school intensely. When Helen Todd, a factory inspector in Chicago, interviewed 500 working children, 412 told her that they would prefer to work in a
factory than attend school, even if their families did not need the additional income (1913, p. 74). In Milwaukee, in 1922, the school system offered working children 75 cents a day—comparable with a young worker's daily wage—to attend school full-time; out of 8,000 youth only 16 accepted this offer (Waterfall 1923, pp. 154–55). The responses of young people themselves, therefore, gave support to the idea that early school-leaving was due not only to economic necessity but also to the inadequacies of the school.

Second, reformers were influenced by new ideas about adolescence (see Kett 1977). Popularized by G. Stanley Hall, the term itself had by the beginning of the twentieth century come to signify a vulnerable period in life when young people had to make significant decisions about their sexual and occupational identities. To assure that these decisions were properly made, reformers believed, youth had to be sheltered from premature contact with adults and the world of work; they had to have time to think and reflect free from the pressure of adult economic responsibilities. None of this, of course, precluded more direct measures to attack the economic conditions that forced working-class youth to leave school. But it implied that the dangers of dropping out were primarily developmental rather than economic, thereby legitimating the idea that all young people should be in school whatever their families' economic needs might be.

Third, vocational reformers concentrated on curricular remedies to the dropout problem because reforming education appeared to be easier than reforming the economy. As Daniel Rodgers and David Tyack (1982) have pointed out, schools were one of the few clearly public institutions in American society. They had long been endowed with expansive public purposes and thus were much more accessible to middle-class reformers than the levers of economic power. Moreover, educational reform risked much less economically entrenched opposition than more direct measures such as redistributing income or changing the labor market. For practical reasons alone, then, vocational education exerted a strong appeal.

Finally, educators and social reformers turned to vocational education because it reflected their underlying belief that the reasons for dropping out—such as poverty, unemployment, and lack of opportunity—were largely due to individual attributes, not the structure of the economy (see, e.g., Dean 1910, pp. 145–46; Douglas 1921, chap. 11; Lapp and Mote 1915, pp. 317–18). People were poor, they believed, because they lacked the skills for the available jobs or because they had bad attitudes toward work. Thus, they reasoned that eliminating the conditions that forced young people out of school into dead-end jobs was a matter not of changing the labor market itself but of helping those
on the bottom of society acquire the skills and attitudes that would help them compete more successfully in it. As Thomas Nixon Carver of Harvard explained in 1915 in his Essays on Social Justice, “Because vocational education and guidance go at the underlying cause instead of attacking symptoms, they must appeal to every real progressive. By training the rising generation out of those occupations where labor power is over-abundant and into those where it is under-abundant, you not only increase the productivity of every individual so trained, and therefore society at large which is very important; but you accomplish the still more important result of tending to equalize incomes in different occupations” (quoted in Kett 1982, p. 102).

This notion was not just a convenient rationalization for middle-class privilege (though it was partly that). As many studies indicated, working-class and immigrant youth not only found school economically irrelevant; many also could not compete for those skilled jobs that did exist because they lacked appropriate training. But in focusing on curricular reform at the expense of strategies aimed at changing the operation of the labor market, vocational reformers overlooked the evidence that indicated that economics and the need to earn wages were basic to the dropout problem and that most jobs open to working-class youth did not require extensive skill training. Instead, as Marvin Lazerson has commented, the school as part of the problem became the school as the entire problem (1981). The result was to shift concern about poverty, low wages, and enervating work from the economy to the school, thereby intensifying the drive to vocationalize education.

The Triumph of Vocational Education

These diverse groups battled vigorously with one another over who should control vocational education and how it should be organized and administered. But, despite such disagreements, by 1910 they had joined in an uneasy but powerful national political coalition and launched a concerted drive to win federal support for vocational schooling. Coordinated by the NSPIE and directed primarily by Charles Prosser, the society’s executive secretary during 1912–15, the campaign reached its chief objective in 1917 when Congress passed the Smith-Hughes Act. The act mandated federal aid for vocational training of less than college grade in trade and industrial subjects, home economics, and agriculture for youth over age 14 who were enrolled in the public schools (on the NSPIE, see Blauch [1933]; Hawkins, Prosser, and Allen [1951], pp. 62–72; Struck [1930], chap. 8).

The passage of Smith-Hughes marked the high point of nearly a decade’s activity for federal aid for vocational education, though it
would be erroneous to assume that vocational education originated with the passage of federal legislation. Not only had vocational subjects become part of the high school curriculum in many districts prior to Smith-Hughes, but the act also failed to provide support for many vocational subjects that had been introduced into American high schools in the first two decades of the twentieth century. For example, practical training in commercial and business subjects had become commonplace—and very popular with students—in many urban high schools, but Smith-Hughes did not provide aid for these subjects. Nevertheless, passage of Smith-Hughes was not an empty gesture. More important than its particular provisions or the amount of aid that it provided, the act helped to institutionalize the idea that preparation for work was a primary function of secondary education. Subsequently, how, not whether, school should train youth for work became a central focus of educational debate and discussion.

This conceptual linking of education and work had at least two important consequences. First, it reinforced the traditional American belief that occupational success or failure was the result of individual effort, not the structure of opportunity. Second, by translating fundamental questions about the nature of work and inequality in American society into policies aimed at proper socialization and training, it focused discontent about the operation of the economy on the character of schooling, not the nature of capitalism. As a result, when confronted with subsequent crises of unemployment, dead-end jobs, and declining industrial morale, educators, social reformers and policymakers have continued to look to the schools for remedies rather than to more direct interventions in the labor market and workplace.

Few education reforms have exerted such influence. Although times of acute economic crisis—especially in the 1930s and the 1970s—have produced some cracks in this consensus and generated alternatives to vocational education to train youth for work, the ideology and practice of vocational education have proved remarkably resilient. Indeed, despite a good deal of evidence that it has failed to solve the problems that it claims to address, vocational education in its various forms still attracts widespread support as a key solution to problems of youth unemployment, job dissatisfaction, and other ills plaguing the American economy (for data on evaluations of vocation education, see Menefee [1942]; Reubens [1974]; Cuban [1982]).

Notes

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August 1986
Work, Education, and Vocational Reform

1. The idea of using school to train youth for work was not of course novel to the twentieth century. From the mid-nineteenth century on, the idea of using school to teach steady work habits and to increase the efficiency of wage earners had appealed to educational reformers concerned about work. It was not until the early twentieth century, however, that what had been a loosely articulated desire to use schools to prepare youth for jobs blossomed into a major campaign to vocationalize public education.

2. Given the de-skilling of work that accompanied the expansion of industry and the division of labor, it is somewhat puzzling why Snedden and Proser believed that industrial labor required any skill training at all. For a discussion of this issue, see Kett (1982, pp. 92–93) and Kantor (1985, pp. 69–70).

3. The most acrimonious dispute pitted those who favored separate vocational schools against those who wished to integrate vocational education into the existing schools. Perhaps the sharpest conflict concerning this issue arose over the Cooley Bill in Illinois. For accounts of this conflict, see Hogan (1985, pp. 175–81) and Wrigley (1982, chap. 1).

References


Kantor

National Association of Corporation Schools (NACS). *Annual Convention, Papers, Reports, and Discussions,* 1913.
National Society for the Promotion of Industrial Education (NSPIE). Bulletin no. 1, 1907. (a)

August 1986    425

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Work, Education, and Vocational Reform

National Society for the Promotion of Industrial Education (NSPIE). Bulletin no. 3, 1907. (b)