Giving High Schools an Occupational Focus

Attempts to integrate vocational and academic education — through academies, occupationally focused schools, and occupational clusters, for example — take seriously the vocational purpose of high schools and may remedy some chronic problems.

W. NORTON GRUBB

If you ask students why they attend high school, many will admit that they are there so they can get jobs. For middle class kids, high school is a necessary step before attending college so that they, too, can get jobs. The high school is an inescapably vocational institution, and, yet, the occupational focus is largely hidden.

Most adolescents seem not to understand how their schooling decisions affect their future careers. As the differences in earnings among high school dropouts, graduates, and those who pursue higher education have increased, so have the consequences of decisions about how far to go in school. Other choices during high school — whether to take math and science, whether to take college prep subjects or the general track, whether to work for good grades — open and foreclose occupational options, often irreversibly.

Since career counseling has all but vanished from most high schools, often no one advises students about the effects of their decisions. They don’t understand how the content of their classes is related to what employers will ask of them, and most academic teachers don’t do a good job of explaining. When we also consider that enrollments in traditional vocational education are dwindling, and graduation requirements are increasingly emphasizing the academic side, it’s clear that high schools are not preparing many youth for specific occupations.

These developments have opened up a paradox: even as the high school has become increasingly crucial to occupational futures, most students regard it as an “academic” exercise. Fortunately, there are ways to restore the high school’s occupational relevance and simultaneously address its most serious failings. Several of these reforms reverse the century-old division between academic and vocational education. There are, in fact, many different approaches to integrating academic and vocational education, supported by business people decrying “narrow vocationalism” within the schools, by vocational educators seeking new relevance for their programs, and by critics of academic education. Last but not least, in the recent amendments to the Carl Perkins Act providing federal funding for vocational education, Congress required that all funds be spent in programs that “integrate academic and vocational education ... so that students achieve both academic and occupational competencies.”

Here I’ll look at three approaches that attempt to reshape both the academic and the vocational components of the high school. In many ways, the approaches are similar; they
differ primarily in terms of scale. In the visits of my colleagues and me to schools around the country, we've seen examples of all of them, and I believe they have the potential for reconstructing the American high school (Grubb et al., 1991).

Academies

Academies — the first approach — usually operate as schools-within-schools. Because their scale is relatively small, academies have less of the chaos and anonymity of large high schools. They exist in many occupational areas, including electronics, computers, health, business, finance, media, teaching, and automotive trades.

Typically, four teachers collaborate: one in math, one in English, one in science, and one in the vocational subject that is the core of the academy. Each class of students takes all four subjects from these teachers, staying with them for two or three years. Other subjects — social studies, history, foreign languages, and other electives — are taken in the "regular" high school.

Some advantages of this format are that students have sustained contact with their teachers, who in turn come to know their students' individual problems and strengths much better than other high school teachers can. The academy structure also provides substantial opportunity for horizontal alignment of academic and vocational courses, as teachers coordinate the topics they teach, and vertical alignment, since teachers stay with a group of students for two or three years and can adjust the sequence of topics over time. Because teachers work in groups, academies also facilitate collective responsibility for student achievement, something usually missing in the traditional high school.

Another element of the model is a close relationship with businesses operating in the core occupational area. For instance, the electronics and computer academies located in Silicon Valley have initiated ties with high-tech firms, a health academy is located near a confluence of hospitals, and a technology academy has established good relationships with aerospace firms. American Express has established a series of Finance Academies. The firms provide mentors to students, send individuals to talk about their operations, give tours of their facilities, and offer summer internships. In these ways, they generate sources of instruction and motivation (cognitive, behavioral, and financial) beyond that provided by teachers. Further, by providing a context for instruction, the contact with businesses makes education at the academies real in a way that schoolwork at conventional high schools is not.

Another advantage is that each academy's clear focus — the occupational area that gives each academy its character — serves as a theme for integrating different subjects. Finally, evaluations of academies in California indicate that they reduce dropout rates and increase enrollments in post-secondary education among students who would otherwise be at risk of dropping out (Stern et al. 1989).

Occupationally Focused Schools

Occupational high schools and some magnet schools are excellent examples of "focus schools," another way to integrate academic and vocational education. Focus schools have clear missions, are organized to pursue their educational goals and solve their own problems, and operate with clear social contracts that establish responsibilities for teachers, students, and parents (Hill et al. 1990).

In some cities, occupational high schools emphasize preparation for clusters of related occupations. These include New York City's Aviation High School, High School of Fashion Industries, and Murry Bergtraum High School for Business Careers; the Chicago High School for Agricultural Sciences (all described in Mitchell et al. 1989); and the High School for Health Professions in Houston. In several ways, such schools are similar to the academy model, except that their scope is schoolwide.

Since all students at a focus school are preparing for a broad occupational area, academic teachers can emphasize the particular applications of academic instruction, and, together with vocational teachers, they can develop appropriate activities. For example, at an agriculture high school, a large chart in the teachers' lounge lists what each teacher is covering in each unit and when, so that teachers can readily discover possibilities for collaboration. The curriculum also includes courses in agribusiness, agricultural communications, food science (with a good deal of chemistry), applied biology, and other hybrids. The school is quite project-centered, providing another way for teachers to come together; some projects are included in conven-

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