Chapter 6
The Education Gospel and Vocationalism in US Higher Education: Triumphs, Tribulations, and Cautions for Other Countries

W. Norton Grubb and Marvin Lazerson

6.1 Introduction: The Education Gospel and International Borrowing

The United States has developed a standard litany of complaints about schooling. We call this ritual the Education Gospel because it has become an article of faith, rather than inviting questions about its empirical assumptions (Grubb & Lazerson, 2004). Starting from condemnation of current schooling, it also brings glad tidings about its potential, in this case the possibility that education reform can lead to social and individual salvation. Like a gospel, it has been accepted by an extraordinary range of report writers, policy makers, reformers, many (but not all) educators, and much of the public. It has also been the subject of constant proselytizing, particularly through its sacred texts: *A Nation at Risk* (NCEE, 1983), other national commission reports, the state and local groups following national reports, writings of prominent academics, and the manifestos of international agencies.

The essential vision of the Education Gospel proclaims that the knowledge revolution (or the Information Society, or the communications revolution) is changing work, shifting away from occupations rooted in industrial production to occupations associated with knowledge and information. This transformation has both increased the skills required for new occupations and updated the three Rs, enhancing the importance of "higher-order" skills including communications skills, problem solving, and reasoning. Obtaining these skills normally requires formal schooling past the high school level, so that some college—though not necessarily a baccalaureate degree—will be necessary for jobs of the future, the claim of College for All (Rosenbaum, 2001).

Another strand of the Education Gospel maintains that individuals are more likely to find their skills becoming obsolete because of the pace of technological change. To keep up with advances in technology, and to change employment

W.N. Grubb (✉)
School of Education, University of California, Berkeley, CA 94720-1670, USA
e-mail: wngrubb@berkeley.edu

A. Barabasch, F. Rauner (eds.), *Work and Education in America*,
Technical and Vocational Education and Training: Issues, Concerns and Prospects 15,
DOI 10.1007/978-94-007-2272-9_6,

as firms innovate, workers must engage in lifelong learning. Other forms of work reorganization—including lean production, the elimination of multiple layers of responsibility—require frontline workers to have a greater variety of skills, including personal skills (sometimes called "soft" skills) like independence and initiative. International competition has also increased and greater levels of education are necessary just to keep up with competing countries. But the good news is that an expanded and reformed education system, oriented around preparation for occupations, can meet all these challenges.

Vocationalism takes many forms. Sometimes, of course, it is manifest in curricula that prepare for particular occupations—lawyers in law schools; nurses in community colleges and four-year colleges; auto mechanics in community colleges, trade schools, and (rarely now) secondary schools; business managers at many levels of the education system. In such cases, we can also ask how successful these occupational or professional programs are, by looking at rates of employment in related occupations; sometimes (especially in short-term credential programs, job training, and private trade schools) programs that intend to be vocational do not in fact place their graduates in related employment. In many cases—the professions are the best examples—an occupational education becomes required, and other routes into the occupation—older apprenticeship-based mechanisms—disappear. But in other cases vocationalism manifests itself as pressure for more education, particularly now when many advocates are pushing for College for All, on the grounds that occupations of the future will require at least some postsecondary education. The rhetoric about teaching "the skills of the twenty-first century" and "higher order skills" (or SCANS skills, from the early 1990s) usually comes from the assumption that jobs now require such competencies as problem-formulation and -solving, communications skills, and teamwork. Sometimes schooling is a prerequisite for subsequent and more overtly vocational kind of education; for example, many secondary school students view high school as necessary for access to college so that its purposes are broadly vocational, even though the curriculum is not (Goodlad, 1984, ch. 2; Pope, 2001). Once the major purpose of formal schooling becomes linked to preparation for occupations, vocationalism manifests itself in many overt and covert ways.

Many international manifestations of the Educational Gospel and of vocationalism have also developed. We borrowed the language of a gospel from Kwon's (2001) contention that "the idea of a knowledge-based economy is enthusiastically treated like a gospel among Korean people." Korea has been calling for an Edutopia, Great Britain searching for "key" or "core" skills, Germany developing *Schlüsselqualifikationen* (key qualifications) or *Schlüsselkompetenzen*, the prime minister of Australia rousing his countrymen with *Sleepers, Wake!* (Jones, 1984), the European Union promoting the Europe of Knowledge, the OECD (2001) emphasizing the implications of the Knowledge Revolution and Tertiary Education for All. All over the globe, countries have discovered the importance of the knowledge revolution requiring higher levels and new forms of human capital as ways of competing.

In the borrowings among countries, the relationship between the United States and Germany has been particularly interesting, though each country has frequently

mistaken what the other country has done. In the last decades of the nineteenth century, the American university—born as an institution to prepare leaders for the new country, with an emphasis on the liberal education of free men (and women)—adopted the purposes of the German research university, as well as innovations like seminars and laboratory instruction. US universities also applied the research mission to science, technology, and business methods, rather than to the humanities that dominated the German university (Reuben, 1996). Their contributions to research as well as the education of the elite therefore made them central institutions in American society, "relevant" and in increasing demand, while German universities remained relatively "academic" and removed from the rest of society. The model Humboldt-style university was to prepare knowledgeable German civil servants, but its research mission was devoted to expanding academic discipline-based knowledge, rather than the applied knowledge that became increasingly important in the land-grant oriented US higher education system.

The development of US vocational education at the secondary level, around 1900, also borrowed heavily from German developments, and the extended visit of Georg Kerschensteiner was influential in promoting vocational education. But the United States, without Germany's history of corporatism and employer responsibility, failed to understand the dual nature of the German VET system, and therefore developed an "academic" or entirely school-based system of vocational education, rather than the combined practice/school nexus of German vocational training. The result of these selective borrowings is that the United States created a particularly dynamic set of elite universities, while Germany developed a VET system that has been the envy of many other countries. Currently Germany wants to emulate the US system of higher education, which it considers the best in the world largely based on their high valuation of the American elite universities. Conversely the United States has often been envious of the German VET system, most recently in the 1990s with efforts to develop an American-style apprenticeship mechanism. We return to these influences in the concluding section.

In this chapter we review the development of vocationalism in US higher education—the orientation of colleges and universities around preparation for vocations.[1] We concentrate on four-year colleges that provide baccalaureate degrees and on universities that provide graduate as well as undergraduate education; we do not say much about American two-year or community colleges, though they too have been thoroughly vocationalized (Grubb & Lazerson, 2004, ch. 3; Grubb & Sweet, 2005). These developments in turn created a series of dilemmas, which we review in the second section—with the overall result that while universities in the United States are highly successful, they are constantly criticized for a roster of sins.

[1] We use the English term *vocations* in the sense of careers or callings rather than mere jobs, employment that provides personal meaning, economic benefits, continued development over the life course, social status and connections to the greater society. The German term *Beruf* is closer to our intended meaning, and *Berufsbildung* is a more comprehensive way to describe preparation for employment in its fullest sense.

The final section explores the ways in which German and other efforts to emulate American universities may be based on false information.

6.2 From Moral to Occupational Purposes: Vocationalizing the University

America's colleges and universities began as institutions to prepare moral, civic, and intellectual public leaders. The fundamental goal was to develop one's intellect and moral character. Going to college was not meant for everyone, but only for a small group of leaders (Reuben, 1996, ch. 1).

Interest grew in using college for more overtly vocational purposes in the early and mid-nineteenth century, with the founding of West Point (1802), Rensellaer Polytechnic (1824), and some agricultural colleges in the 1850s. The passage by the US Congress of the Morrill Act in 1862 formally recognized the role of higher education in preparing people for vocations. Each state received federal land to establish at least one institution "to teach such branches of learning as are related to agriculture and the mechanic arts ... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." This suggested that traditional notions of higher education should coexist with newer expectations that learning be practical and oriented to public needs. The leaders of land-grant universities saw their institutions as universities with broad public responsibilities, and state universities came to symbolize the view that practical knowledge and liberal education could be combined with occupational preparation, offering students a wide range of subject matter.

In practice, most of the land-grant institutions developed curriculums that paralleled those of existing colleges and universities, thereby leaving little to distinguish the Morrill Act schools from others. Even when the practical arts were stressed, doubts persisted that college was the place to prepare for employment; college-based preparation for work was viewed as "academic," irrelevant, even sissified. The industrialist and self-made man, Andrew Carnegie, dismissed school-based learning in favor of the "school of experience":

> While the college student has been learning a little about the barbarous and petty squabbles of a far-distant past, or trying to master languages that are dead ... the future captain of industry is hotly engaged in the school of experience, obtaining the very knowledge required for his triumphs. (Veysey, 1965, pp. 13–14)

Others simply said, "we want no fancy farmers; we want no fancy mechanics" (Bledstein, 1978, ch. 6).

For their part, the land-grant's leaders saw their institutions' future less as technical and trade training schools and more as universities with broad public responsibilities. State universities, more generally, came to symbolize the view that practical knowledge and liberal education could be combined into vocational preparation, offering students a wide range of subject matter from which to choose. In his inaugural address in 1903, President of the University of Wisconsin,

Charles Van Hise (1904) articulated the fundamental rationale that would ultimately shape American higher education:

> Be the choice of the sons and daughters of the state, language, literature, history, political economy, pure science, agriculture, engineering, architecture, sculpture, painting or music, they should find at the state university ample opportunity for the pursuit of the chosen subject. . .Nothing short of such opportunity is just, for each has an equal right to find at the state university the advanced intellectual life adapted to his need. Any narrower view is indefensible. The university should extend its scope until the field is covered from agriculture to the fine arts.

The public universities were not alone in expanding the curriculum in the interests of public service and vocational purposes. During the nineteenth century a number of small "multipurpose" colleges adapted their curriculums to local labor market needs so that they would increase their students' job opportunities and would serve regional and local economic development. Often competing with one another in the same geographic area, the colleges established separate schools and departments of science, engineering, and agriculture, instituted short courses for commercial occupations, and prepared women for teaching (Geiger, 2000).

For women, the rapid growth of public education and the feminization of teaching during the nineteenth century created new occupational opportunities. As states sought to upgrade the quality of teachers, college attendance became almost synonymous with becoming a teacher. As other female professions grew, like nursing and social work, they too expanded the number of women in college and further emphasized the vocational purposes of higher education.

6.2.1 The Rise of the Professions

Between 1880 and the 1930s, American higher education came to define itself in terms of its direct application to specific occupations. Nowhere was this more apparent than in the substantial growth of professional schools, in law, medicine, business, engineering, education, social work, nursing, and dentistry. Multiple explanations account for the explosion in professional preparation. The first was a gradual shift from an apprenticeship system of entering professions—where young professionals would attend college as they found it necessary or thought it useful, but the lack of schooling did not stand in the way of practicing one's vocation—to one where schooling came to dominate professional preparation and entry (Kett, 1994; Douglas, 1921, ch. I). A high school education became the prerequisite for college, and a clear trajectory from high school to college and then to professional life emerged, a sequential rather than simultaneous process in which individuals moved back and forth between school and work.

The movement of the professions into colleges and universities was closely tied to the growing authority of science, in a broad sense. Every profession created a liturgy about the importance of specialized knowledge, whether of biology and chemistry for doctors, of legal procedure and precedent for lawyers, or of applied science for engineers. The expansion of occupational preparation training

in higher education—always called *professional* education to distinguish it from lower-level *vocational* education in high schools—enabled professions to claim a distinct knowledge base, and ever since the process of professionalizing newer occupations has led to more formal schooling. In the process, school-based knowledge came to be more highly prized than work-based knowledge; older conceptions of useful knowledge, arising from the workshop and experience, gave ways to conceptions of knowledge rooted in the university lab and in scientific procedure. While the professions continued to stress the importance of character—every profession adopted a code of ethics, for example—increasingly success in school-based subjects become the necessary condition of entry (Geiger, 2000; Bledstein, 1978, p. 88; Sullivan, 1995).

Patterns of employment also changed. Around 1900, the growth of large bureaucracies and industrial settings created new demands for people to manage complicated work organizations, and the application of scientific discoveries generated new demands for more technical skills. These competencies were largely congruent with university-based education, from the academic learning of business practices and scientific procedures in the classroom to the informal knowledge gained in the interactions of campus life. With these changes, the college degree certified competencies that became highly marketable (Labaree, 1997, pp. 253–258).

The occupational role of higher education was often obscured before World War II. Collegiate enrolment remained limited; as late as 1940, only 9% of the country's 18–24-year-olds were enrolled. Many people viewed college primarily as a social experience, and the liberal arts were still important. But by the 1930s, attendance at college had become tied to "the culture of aspiration" and to upward mobility (Levine, 1986). In cities, the children of immigrants flooded into low-cost, often public colleges where they expected to gain access to the professions and to middle-class status. For many working class young adults, going to college meant part-time evening programs that prepared them to become lawyers, accountants, and business managers. The role of higher education in achieving professional and economic status soon led more and more students to seek entry into higher-reputation universities and colleges, leading for the first time to selective admissions (*numerus clausus*) requiring interviews and tests, and establishing quotas to keep out those who might not fit. With the expansion of enrolments during the 1920s and 1930s came increases in students in professional programs: from 25 and 30% in the teens, when colleges enrolled only 3% of the relevant cohort, to about 35% in the 1920s, when about 6–7% were enrolled, to between 50 and 60% in the 1930s and 1940s, when 7.5–9% were enrolled (Brint, Riddle, Turk-Bicakci, & Levy, 2002).

By World War II, then, the essential elements of a vocationalized higher education system were in place: a large number of institutions emphasized professional preparation to attract students; a majority of students were in professional rather than liberal arts programs; and a quasi-market in higher education existed, with "consumers" choosing among competing institutions on the basis of the advantages they could confer. The monopoly that higher education could claim over routes into the professions, and the increasing adaptability of the college curriculum to labor-market needs, combined to give higher education a new economic prominence. Higher education was still relatively limited, but that was about to change.

6.2.2 The Great Transformation of US Higher Education

The expansion of higher education after World War II reflects the power of a coalition that had already sought universal high school attendance. Policy makers, pressured by middle-class families, supported an expansive higher education system to increase individual economic opportunities and strengthen the nation's economic competitiveness, including the technological training required for the nation's defense and competition with the Soviet Union. States rushed to create low-tuition state universities and to provide generous research funding and financial aid (Douglas, 2000). The clearest result of this was the expansion of public rather than private colleges and universities: in 1947 49% of enrolments were in public institutions, compared to 76% by the end of the century.[2]

While the rhetoric of public purpose justified expansion, the drive by students to attend college has been overwhelmingly based upon individual gain. One measure of this shift has been the attitudes of students. In the late 1960s developing a meaningful philosophy of life was the most important goal of freshmen, rated "essential" or "very important" by 80% of freshmen, while less than 45% of freshmen thought it important to be well-off financially. By the end of the century these two values had traded places: developing a meaningful philosophy was endorsed by only 42%, while 74% wanted to be well-off financially (Astin, 1998). Yet another measure of vocational pressure has been the continued drift toward explicitly occupational majors. The proportion of occupational majors fell slightly during the idealistic 1960, from 62% in 1959–1960 to 58% in 1970–1971; since then the proportion has gone back up to about 65% in 1987–1988, before declining slightly during the expansionary period of the 1990s. These figures are probably underestimates,[3] so by the beginning of the twenty-first century about two-thirds of college undergraduates were in professional fields. Indeed virtually every field of study that grew over the last few decades has been occupational, including business, health professions and biology, computer systems, and various recreation studies; except for psychology and the life sciences, both closely linked to health occupations, and two small fields labeled "liberal/general studies" and "interdisciplinary studies," no liberal arts field grew relative to other fields. The result, as Brint (2002, p. 235) has emphasized, is a substantial shift: *During a period in which the system grew by 50%, almost every field which constituted the old liberal arts core of the undergraduate college was in absolute decline as measured by numbers of graduates.*

A number of institutional transformations helped the development of more vocational forms of higher education. One has been the expansion of student choice, in place of the nineteenth-century college with prescribed courses. For the most part student choice drives what colleges and universities offer, both the choices *among* institutions, and the choices of majors *within* institutions. If humanities departments

[2] Digest of Educational Statistics (2001, tables 172–173, pp. 206–207).

[3] See Brint, Riddle, Turk-Bicakci, and Levy (2002, table 1). On the reasons that these are underestimates, see p. 7.

have declined and business schools increased, if general education seems peripheral, if the balance of "the liberal *and* the practical" threatens to come apart, the combination of professionalism and student choice is to blame. Currently, it seems quaint to envision a college with a single curriculum, and those that try—St. John's College with its Great Books program, the University of Chicago with its prescribed curriculum during the Hutchins era—have not been widely emulated.

Another transformation has been the creation of a relatively new institution: the second-tier, regional public university, especially attentive to regional labor-market demands. Most of these universities emerged from teacher training colleges or technical and agricultural colleges, and therefore originated in explicitly occupational institutions; others emerged from multipurpose colleges, or community colleges adding additional years of study.[4] They are comprehensive institutions, providing both academic and professional offerings, but they are overwhelmingly occupational (or professional), with the majority enrolling 60% or more of their students in professional fields—business, engineering, education, medical occupations like nursing, library "science," information technology, and emerging occupations in environmental issues and web programming. Almost none of them have recreated the old liberal arts colleges. They are much less selective than the first-tier universities, often accepting 80–90% of students who apply; perhaps reflecting this fact, their graduation rates are often abysmally low, in the range of 25–50%. Every state has established such institutions: they are the California State Universities rather than the University of California system, the state colleges in Texas rather than the universities, the Universities of Western and Northern Illinois rather than the flagship University of Illinois at Champaign-Urbana— institutions that most Europeans have never heard of. These regional institutions account for about 57% of enrolments in all public four-year colleges and universities, and about 37% of all public and private enrolment. These are now the modal institutions of American higher education, even if ideals of a "real college" are dominated by private liberal arts colleges like Swarthmore or Oberlin, or large research universities like Harvard or Berkeley.

Among private institutions, the great transformation has been the evolution of most liberal arts colleges into vocationalized institutions. When David Breneman (1994) went in search of liberal arts colleges, he found that most of them had become "small professional schools with a liberal arts tradition, but little of the reality of a traditional liberal college." Of the liberal arts colleges defined by the Carnegie Commission, professional degrees increased between 1972 and 1988 from 11 to 24% in the elite colleges, and from 41 to 64% in the less-selective colleges. He concluded that "we are indeed losing many of our liberal arts colleges, not through closures but through steady change into a different type of institution"—driven once again by the combination of student choice and vocational pressure.

[4] Dunham (1969, p. 28) provides a useful table showing the origins of state colleges and universities: 59% originated as teachers' colleges, 14% as technical or agricultural colleges, 10% as multipurpose colleges, 8% as junior colleges, 6% as academies, and 3% as religious or YMCA institutions.

Overall, then, a mass system of higher education in the United States has been inextricably tied to its occupational purposes. Students come in order to get ahead, to become credentialed and licensed and valuable in the labor market. Many believe, rightly, that they have no choice; the deterioration of the labor market for high school graduates, who have to settle for low-skilled, low-paid, and insecure work, has meant that going to college is a much better bet than finding a job right after high school.

6.3 The Dilemmas of the Professionalized University

The development of US higher education has brought with it a number of triumphs: expanding enrolments, greater funding, a central role in the economy, and greater access for "nontraditional" students. Colleges and universities are treasured places, respites from the competition outside their doors, where dissent and free speech are valued and where culture and intellect can thrive in many forms. The research universities of the country are revered for their national and international contributions; comprehensive state universities are important to their regional communities in similar ways. The benefits of an expansive higher education system are extraordinary.

And yet criticism abounds, captured in such book titles as *The Fall of the American University*, *Dry Rot in the Ivory Tower,* and *The Moral Collapse of the University*. Some criticize the faculty, some the students, and others contrast the older image of college with the more utilitarian reality of a vocationalized university (Lazerson, 1998). The irony is that vocationalism, which has allowed postsecondary education to expand, has created many of these controversies.

6.3.1 The Fragility of Liberal Education

Critics of rampant vocationalism have often concentrated on strengthening intellectual and civic purposes, general and liberal education, and the humanities—often without recognizing the rise of vocational pressures. They invariably have battled against overwhelming trends: the rise in professional majors, the large number of new professionally dominated institutions with weak traditions of liberal education, and the conversion of many liberal arts colleges into vocationalized institutions. With the coming of vocationalism, faculty are themselves divided about higher education: business and medical faculty vote along with philosophers and English professors, and in many institutions the occupational faculty outweighs the academic faculty.

Other aspects of student choice have further weakened coherent programs of liberal education. Both traditional-age and older students have adopted a pattern sometimes referred to as "swirling," taking courses in a variety of institutions and accumulating degrees credit by credit. Often the result is a patchwork of courses

without any coherence, a potpourri from several institutions where the consistency that might emerge in a single institution is destroyed (Smith, 1993).

Finally, the courses included in general education requirements have been redirected toward the ubiquitous "skills of the twenty-first century." George Mason University requires students to take courses in oral communications, written communications, quantitative reasoning, information technology, and global understanding as well as more conventional breadth requirements. James Madison University has defined Cluster One of its general education program as "Skills for the twenty-first century" including "effective oral and written communication, critical thinking, and technology used for interpersonal communication and information retrieval." The California State University campuses require oral communication, written communication, and critical thinking, as well as what Chico State calls "lifelong learning," which includes "life skills" like child development, human sexuality, basic nutrition, and leisure pursuits. Southwest Texas State requires a physical fitness and wellness course as part of general education, something that can be fulfilled with a varsity sport, the marching band, or "Strutters" (a drill team). It is easy to get on the web and find examples of general education run amuck—all related to some worthy purpose, but far from the intellectual discipline and moral intention of the liberal arts.

The decline of liberal education is an example of "death by a thousand cuts," particularly the transformation of student and faculty goals and the exaltation of student choice as part of vocationalism. The intellectual and moral traditions associated with liberal education are most vibrant in institutions where occupational pressures are postponed, in the elite private and public colleges where most students go on to graduate school for their occupational preparation. The defenders of intellectual and civic traditions continue to fight, but with limited success.

6.3.2 The Dilemmas of Professional Preparation in the University

While complaints of the Education Gospel have critiqued K-12 schooling for its inadequate preparation of the "workforce of the twenty-first century," we might expect education and employment to be most congruent at the level of professional preparation, partly because professionalism has been founded on specialized knowledge available through formal schooling. However, the content of professional education has itself been a source of unending complaint, with amazingly identical attacks on one profession after another.

Most obviously, critics have regularly faulted professional schools for providing the wrong kinds of skills. The critics of medical education have cited a bloated curriculum, emphasis on rote memory, and inattention to patients as people.[5] Reformers

[5] This section draws on Grubb and Lazerson (2004, pp. 74–77); see this source for the many citations to commission and reform reports related to the different professions.

of nursing education have listed "twenty-one competencies for the twenty-first century," with greater attention to higher order and interpersonal skills. The American Bar Association regularly complains about the lack of attention to written and oral expression, problem solving and legal analysis, communication, counseling, and negotiation. Business education is exhorted to improve "creative analytical power" including imaginative thinking, interpersonal abilities, communication skills, and willingness to take responsibility. The criticisms of education schools have followed the same pattern, pushing intellectually more demanding preparation and professionally relevant standards of entry.

A second strand of critique has attacked professional schools for elevating research and academic knowledge over practice and on-the-job learning—an obvious consequence of locating professional preparation in the research university. The American Bar Association has criticized law professors for failing to provide a "practitioner role model," and complained that new lawyers cannot draft contracts or complete forms routinely required by courts. In teacher education, the complaint about overly academic teaching—of theory with few classroom applications and of new teachers poorly prepared to manage their classrooms—has been common. The National League of Nursing has called for more collaboration between nursing programs and practice. In engineering, the Olin Foundation became so disgusted with the separation of professional education from practice that it set up a new engineering school—Olin College—rather than attempting to reform existing schools. The antidotes in these examples include recruiting more practitioners to teach, incorporating more practice-oriented coursework, and introducing more intensive internships.

Other efforts to overcome the separation of professional education from practice have included calls to incorporate social and ethical dimensions, as in the demand that doctors and nurses treat the "whole person" and respect patient and familial desires, rather than emphasizing the technical dimensions of care. Lawyers have been criticized for not considering the personal costs and ethical questions that affect their clients. In the wake of Enron and WorldCom scandals and now the financial collapse of 2008, business professionals are now told to make ethics central to their practice. Especially in the caring professions like teaching and social work, professionals are exhorted to recognize the economic, social, and cultural conditions in which their clients live, to be more sensitive to low-income and minority clients and to linguistic differences. These are calls for conceiving of professional competence in context, rather than equating professionalism with the individual and technical skills that have dominated professional education.

The similarity in the critiques of professional education is stunning, and it reflects the same criticisms the Education Gospel has leveled at K-12 schooling. Even at the professional level, where the linkages between education and employment are the most consistent, and where the need for school-based learning has been best established, the mismatch between school-based learning and job requirements remains pervasive. Even as vocationalism has given the university new goals and greater stature, it has brought to it new and greater conflicts.

6.3.3 Utilitarian Conceptions of Education

The expansion of occupational purposes in higher education is one form of a larger problem: the tendency to turn education into a commodity with economic value. At the social level, the rhetoric of the Education Gospel assumes that the expansion of higher education serves the goals of economic growth and competitiveness, a utilitarian conception of education. At the individual level, students in vocationalized systems of schooling may adopt similar attitudes toward learning that are counterproductive. In many countries—the English-speaking countries are good examples—students have adopted highly utilitarian and credentialist views of schooling: utilitarian in the sense that they see their schooling as useful only to future employment, and credentialist in the sense that they concentrate on accumulating the credentials they think necessary for further success, rather than the learning that credentials are supposed to represent. Under such conditions, there's a great deal of talk about the practical side of education over theory, about "relevance" and "hands-on" approaches in preference to book learning, about "learning by doing."[6]

As Cox (2009) has shown for community college students in the United States, such attitudes may get in the way of learning. Students with overly vocational goals avoid any instruction that seems to be "academic" or "not relevant," they see learning in terms of accumulating facts and discrete skills necessary to pass tests and earn credentials rather than broader understanding; and instructors are often unaware of their students' attitudes that may conflict with their conceptions about the purposes of schooling and the nature of learning. Pope (2001) has identified similar reactions among US secondary students, and Grubb (2009, ch. 5) has documented that more vocational attitudes among high school students actually lower their test scores. There is a great deal of anecdotal evidence and faculty complaint about students with limited and utilitarian conceptions of learning. Paradoxically, then, the constant insistence in education on "skills" for occupations may undermine the effort to develop a broader variety of conceptual abilities and other higher-order competencies; the focus may actually decrease learning-important competencies necessary for future success.

The sarcastic comments, particularly in the United States and the United Kingdom, about such vocational fields of study as golf course management, leisure studies, and subfields of business like fashion accessories merchandising also reflect the sense that vocationalism run amuck has taken over the university, that it does not even stand for any form of genuine learning, but is essentially a process of lengthening schooling as a form of licensing. Of course, there are older models that continue to exert some power: the liberal arts colleges in the United States, intended to prepare generations of leaders; the Oxbridge tradition in England, with its distaste for

[6] John Dewey has been widely misunderstood on this point. He called for integrating classroom-based "knowing" and experience-based "doing"—"learning *and* doing," not "learning *by* doing." As he wrote, "Learning by doing does not, of course, mean the substitution of manual occupations or handwork for textbook studying" (Dewey & Dewey, 1915, p. 74).

commonplace subjects like business and education; the University of Helsinki with its links to early nation-building. In some countries, a principled stand in favor of broad education has helped prevent an overly utilitarian approach, as in the broad disciplinary learning in the German *Gymnasium* or Finland's national curriculum with its wide array of subjects at every level. But the pressure from vocationalism is to transform education thoroughly, leading under extreme conditions to universities offering narrow work skills for routinized employment and the search among students for fast access to employment.

6.3.4 The Dangers of Overeducation

In a vocationalized system of schooling, appropriate levels of schooling are defined by the schooling required for jobs—not by the requirements of political participation, or conceptions of liberal education, or vague notions of "educating all children to the limit of their abilities." In turn, the quasi-markets in formal education created by vocationalism should establish an equilibrium between the supply and demand for skills. As occupations become more complex, young people and schools should receive information about the requirements for skilled occupations; students should stay in school long enough to gain the necessary competencies, and there should be no undereducation. Similarly, employers have no incentive to hire workers with more schooling than they need, and the problem of overeducation should be avoided. When markets work as they are supposed to, with earnings as an equilibrating mechanism, there ought to be a perfect match between the amount of schooling and skills individuals attain and the amount that employers require. In practice these quasi-markets don't work perfectly and mismatches can occur. The dominant fear and focus of most public debate and policy has focused on *undereducation*—the complaint that people are not acquiring enough school-based skills for the jobs of the knowledge revolution.

At the same time, there has been an equally persistent concern with individuals completing more formal schooling than their jobs require—usually termed overeducation. In the 1970s, for example, Freeman (1976) wrote about *The Overeducated American* based on evidence that economic returns were declining, and Bird (1975) exposed *The Case Against College* by describing the large number of worthy jobs that required no postsecondary education. Another way to document overschooling has been to compare the schooling *requirements* of occupations with the average *attainments* of people holding these jobs. This exercise shows an increase in overschooling during the 1960s and 1970s (Rumberger, 1981, table 6). In 1991 the Department of Labor measured overschooling by asking individuals about the requirements of their work (Eck, 1993). Only 65% of college graduates said that their jobs required a four-year college education, indicating that about 35% were overeducated. Nearly 66% of those with some college and 85% of those with a high school diploma responded that the levels of schooling they attained were unnecessary, suggesting that overeducation is greatest at the lowest levels of schooling, where individuals find only unskilled work. More recent results confirm that about

35–40% of the labor force in the United States may have too much schooling for their jobs, and that overeducation is substantially higher than it is in Germany with its highly regulated education and labor markets.[7]

Where formal schooling becomes the dominant route to occupations, individuals competing with one another tend to accumulate more formal schooling than their jobs require, as a way of beating out competition or of attaining the status of professionals. In addition, where the information about the qualifications of individuals seeking employment is imperfect, as it is with "informal" credentials in the United States, then individuals obtain more schooling to signal their greater ability—a *socially* irrational escalation of schooling that is still *individually* rational.[8] Politically, the pressure from virtually all members of the Education Coalition has been to escalate years of schooling, most recently in College for All. But when individuals are overeducated, the economic benefits of schooling are lower, about one-half to three-quarters of the returns for required schooling (Groot and Van den Brink, 2000). Berg and Gorelick (1970) labeled overschooling "the great training robbery," because it requires individuals to invest more in schooling than is strictly necessary. Finally, overeducation has powerful effects on equity as well, since low-income and minority Americans who increase their schooling still find that they lack the education required for middle-level positions.

A different mechanism also leads to overeducation, one rooted in the workplace rather than in the expansion of schooling—the deskilling of work. Employers can minimize costs by substituting cheaper unskilled workers for more skilled workers (Braverman, 1974). Deskilling often takes place as occupations are divided into components—for example, as medical practice became divided into a hierarchy of doctors, physicians' assistants, nurses, licensed vocational nurses, and practical nurses, or as computer operations have been divided into systems design, routine programming, and low-level applications (like word processing) that require no programming skill. Deskilling can undermine both experience-based skills as well as school-based skills. When it creates low-skilled work with lower educational requirements, it contributes to overeducation as those individuals whose jobs are deskilled have more schooling than they need.

Overeducation may preserve the individual benefits of schooling, but undermine its social value. Indeed, most Americans believe that college is now necessary for jobs that high school graduates used to perform: 87% of the general public agree that a college diploma has become as important as a high school diploma used to be (Immerwahr & Foleno, 2000). Under these circumstances a great deal of post-secondary education looks like overeducation—students getting master's degrees where baccalaureate degrees were once sufficient, or earning baccalaureate degrees

[7] See Daly, Büchel, and Duncan (2000, table 1); the review in Hartog (2000), especially Tables 1 and 2; and the special issue of *Economics of Education Review* on overeducation, Vol. 19 (2000). Most of the public debate in Germany has focused on the undereducation of its young people, with too many leaving school before receiving their diplomas and not receiving adequate preparation in technological competences.

[8] See the review of signaling by Riley (1979), especially Section 5.1 on educational screening.

for jobs that a high school or community college graduate could perform. The pressure for College for All can only intensify this process, as levels of formal education outrun the demands of jobs.

6.3.5 The Equity Effects of Postsecondary Vocationalism

One consequence of vocationalism has been the differentiation of the *system* of higher education, along largely vocational lines. At the bottom level are the community colleges, with open access allowing second chances for students who did poorly in high school. The second-tier regional universities and unselective private universities, for students with a little more money and somewhat better high school records, have minimal admission standards and offer a great variety of occupational majors for middle-level managerial positions and for the less prestigious, lower-paid professions (like teaching and social work); like the community colleges, they have low graduation rates. The public universities and flagship campuses stand above them, and the elite research universities rise triumphant at the apex, preparing their students for professional and graduate schools and access to well-paid, high-status professions.

State systems of higher education after World War II have reflected this duality of expansive opportunity and inegalitarian differentiation. California provides the most formalized example: the 1960 Master Plan designated universities for professional education and PhDs, and reserved them for the top 12.5% of graduating high school students. The state colleges admit the top 33% of the graduating class and provide baccalaureate degrees and a few master's degrees, but (until very recently) no PhDs. The community colleges are accessible to all, virtually without cost, and offer both occupational preparation and academic transfer to four-year institutions. Equity and meritocracy can coexist: such systems have simultaneously opened up tertiary education for millions of Americans—College for All—and have still allowed a variety of elite institutions.

One consequence of a highly differentiated higher education system is that debates about access to different types of institutions are constant. The most desirable institutions are highly selective, and lower-income students, as well as racial minorities like black and Latino students, are much less likely to enroll. The community colleges and some regional universities are unselective, and enroll more lower-income and minority students. In between is a vast array of universities of different levels of selectiveness, with enrolments varying with class, race, and high school preparation.

The conflict between selective admissions and egalitarian goals (including College for All) has been most strident around affirmative action, the practice where some students who might not have been admitted on their academic merits are accepted—black and Latino students, sometimes lower-income students, sometimes athletes, or artists, or other groups. On the one hand, nineteenth-century conceptions of elite higher education and early-twentieth-century notions of meritocratic access through grades and test scores are hostile to any form of affirmative action.

On the other hand, equality of educational opportunity and the ethic of College for All argue for a greater inclusiveness in postsecondary education. Equally vitriolic debates have taken place over outreach programs to high school students, the standardized testing used in admissions (especially the Scholastic Aptitude Test), the extent of public funding and levels of tuition, and federal funding for grants and loans.

These equity issues are cases where public policy takes a clear stand on who will win and who will lose—on who will have access to which colleges and to which degrees. As things now stand, postsecondary education is very much a *filtering* system—where those students with the most promise are selected into elite institutions and have lavish sums spent on them, while those who have not proven themselves and who have the fewest resources are relegated to institutions (like community colleges and unselective regional universities) where they receive the bare minimum of a college education. Vocationalism has shaped these battles and given them much of their significance: if higher education were not the gateway to professional occupations, levels of public funding and debates over entrance requirements (including affirmative action) would not have the political and emotional intensity they currently possess. The role of higher education in providing access to the American Dream—the vision of upward mobility through individual efforts— is simultaneously its foundation and its burden, and conflict is the price it has to pay.

6.4 The International Influence of American Higher Education

Currently the American university is embattled on many fronts. Its critics call it elitist, and unwelcoming to low-income students, African American, and Latino students, while others bemoan the low standards and vocational majors of many universities (especially the regional universities). Government support has expanded enormously since World War II; but with the increased fraction of students going to tertiary education, government funding per student has been dwindling, tuition has been increasing, and there are substantial pressures to limit costs. Higher education is simultaneously criticized for abandoning general education and for being "irrelevant" to many students. Professionalism and professional schools have helped expend the university, but the critiques of professional education are constant and amazingly similar across the professions. Very few in the United States seem satisfied with the condition of the American university, even though everyone wants to be part of it.

Yet internationally the American system is often seen as "the best in the world," and many countries have modified their systems of higher education to emulate American universities. However, these efforts mistake the nature of the American system in several ways. While the well-known elite research universities may well be among "the best in the world," the largest number of American institutions are the regional universities, highly vocational (or professional) in their subjects and well oriented to local labour-market demands, but their quality is unclear and their

graduation rates low. The expansion of tertiary education in other countries needs to be careful about the quality of new institutions; otherwise an undesirable aspect of the American system—the enormous range in quality— may be replicated. (This is, for example, a serious problem in Korea, where the expansion of private universities has introduced a large number of profit-making institutions of unknown quality.) Furthermore, the expansion of a university system invites the problem of overeducation, as students decide to pursue more and more schooling as a way of staying competitive in labor markets, even without a substantial need for new university graduates.

As universities expand, they also become more vocationalized, or professionalized—at least if they follow the logic of the American system and the Education Gospel. But this brings several problems. One is that the prevocational goals of universities—civic and moral goals in the United States epitomized by general education, humanistic goals in Germany,[9] Confucian values in Korea and China—tend to be undermined by vocational purposes, and so the "new" universities" fail to live up to the ideals of the "old" universities. If students become overly preoccupied with individual advancement and occupational success, then this utilitarian attitude may itself undermine learning. Paradoxically, then, the expansion of universities without attention to student motivation may actually undermine learning and bring an anti-intellectual dimension to student attitudes (Cox, 2009). And of course the expansion of higher education brings with it increased costs, either for students or for governments, and the debate over who should pay these expanded costs is one of the costs of expansion.

In Germany, emulation of the United States has also taken the form of introducing the elite *Spitzenuniversitäten*, to create universities that can compete with world elite universities, provide research in more applied areas of the economy, and become less rigid and "academic." But emulating the elite American universities is not simple. Most of these universities were well developed before 1900; very few universities established since then have been able to break into the front ranks (Kerr, 1991). They have also become what Clark Kerr called "multiversities," serving many goals simultaneously—undergraduate education (including its recreational component like clubs and sports), both pure and applied research linked to graduate education, local economic development goals, and several cultural purposes—some of these unfamiliar in German universities. It is also likely that Germany leaders pushing for such institutions vastly underestimate the fiscal costs of establishing and maintaining them, costs that in the United States are borne by high tuition, huge federal investments in research, a rich array of alumni giving, and a long history of philanthropy directed at colleges and universities. Moreover, there appears to be limited understanding of the enormous fiscal costs of establishing and maintaining US-style elite universities, many of which are private with large endowments

[9] Germany, like most European countries, is in the process of shifting to three-year bachelor degrees and away from its tradition of professionally oriented diplomas. The outcome of this shift in terms of professional preparation is unclear, though there are substantial complaints that the B.A. is of insufficient worth in the labor market.

and vast fundraising activities. With no tradition of alumni giving and attention to the student experience, both of which are pervasive in the United States, and with very low tuition charges, almost all of the costs of creating German elite institutions have to be borne by government and dramatic increases in corporate research funding. The tasks are daunting. Most of the top universities in the world teach in English, the world language—19 of the 20 top-10 universities in the Shanghai rankings are in the United States or the United Kingdom—and it's unclear whether German-speaking universities can have such drawing power. And once the relatively egalitarian status of German universities system is compromised, it may be difficult to keep other kinds of inequalities from proliferating—and this would lead in the end to something like the US system of amazingly unequal universities.

Above all, the logic of the Education Gospel, the major rationale for expanding formal schooling, is itself flawed. At the individual level, such expansion may indeed accommodate the demand by students and their families for places in higher education, as is occurring throughout Europe, but in the absence of substantially increased demand for well-educated workers, this simply fuels overeducation. The Education Gospel proclaims much greater needs for highly educated workers, but these forecasts are in most cases exaggerated[10] —and Germany should be careful what its own forecasts say about the demands for educated workers. At the social level, the belief that more education will contribute to economic growth and international competitiveness is an overly simple model of growth, particularly in contrast to micro-growth models that include dozens of factors necessary for growth of which education is only one (e.g., Landau, Taylor, & Wright, 1996).[11] Furthermore, the choice to expand tertiary education rather than improving secondary education leads to unequal growth rates (Barro, 2000), a special problem in countries like the United States which already have highly unequal distributions of earnings (typically a lesser problem in Germany with its strong welfare state, which is itself under serious challenge even as income inequality in Germany is increasing). So the basic rationale for the continued expansion of tertiary education is at best precarious, and at worst deceiving.

An alternative to emulating the United States is to draw on the strengths of the German system, rather than the imagined strengths of the American system. Its secondary dual system is among the strongest VET systems in the world, though from an American perspective the academic component seems somewhat weak, and the coordination between the academic component operated by the *Länder* and the vocational component overseen by national employer associations could be stronger. One reform might therefore concentrate on coordinating the academic and the occupational components of the dual system, wherever it is practiced. The *Fachhochschulen* appear to be superior to our community colleges because of their

[10] For the United States, see Grubb and Lazerson (2004, ch. 7); for the United Kingdom, see Grubb (2004) and Wolf (2002).

[11] See Grubb and Lazerson (2004, ch. 6) and Wolff (2006) for this argument for the United States; see Wolf (2002) for a similar argument for the United Kingdom.

more advanced level, and they combine both occupational and related academic preparation. The current efforts to introduce more work experience and internships into the university build on the rationale for the dual system and the history of employer involvement in education, and might prevent the critique of professional education in the United States for being too academic, too research-oriented, and too far from the reality of practice. On the other hand, the efforts to maintain even levels of quality among universities has been consistent with the more egalitarian nature of German society, and the efforts to develop a tier of *Spitzenuniversitäten* is both inconsistent with this history and unlikely to attract large numbers of international students.

In the end, the United States and Germany come from two quite different traditions in education, and borrowing the practices from one country to the other is inevitably awkward. Both have vocationalized their education systems, to be sure, but in quite different ways. The United States envies Germany or its dual system of VET, but lacks the institutions—including strong unions, employer associations, and government interventions in labor markets—that shape the German system. Consistent with its other institutions, the American system is more *laissez faire* and much less regulated than the German system, a difference extending even to variation in testing and assessment practices. US research universities have developed in very different ways from the German models the Americans emulated near the end of the nineteenth century, and have always been better integrated into both national and regional economic development, vocational or professional preparation, and other utilitarian goals than their German counterparts are. And above all, the attitudes toward equity and inequality in the two countries is quite different, with a weak and *laissez faire* welfare state in the United States in contrast to a much greater support for equity and a strong corporatist welfare state in Germany (Esping-Anderson, 1990)—a difference that is most evident in the enormous variation in the quality of both American K-12 schools and its postsecondary institutions. Even when ideas travel lightly from country to country, like the claims of the Education Gospel, it is much more difficult for institutions to follow.

Acknowledgments Tobias Schulze-Cleven, Esther Winter, and an anonymous referee made helpful comments on an earlier draft.

References

Astin, A. (1998). The changing American college student: Thirty-year trends, 1966–1996. *Review of Higher Education, 21*(2), 115–135.

Barro, R. (2000). Inequality and growth in a panel of countries. *Journal of Economic Growth, 5*, 5–32.

Berg, I., & Gorelick, S. (1970). *Education and jobs: The great training robbery*. New York: Praeger Publishers.

Bird, C. (1975). *The case against college*. New York: David McKay.

Bledstein, B. (1978). *The culture of professionalism: The middle class and the development of higher education in America*. New York: W. W. Norton.

Braverman, H. (1974). *Labor and monopoly capital: The degradation of work in the twentieth century*. New York: Monthly Review Press.

Breneman, D. (1994). *Liberal arts college: Thriving, surviving, or endangered?*. Washington, DC: Brookings Institution.

Brint, S. (2002). The rise of the "practical arts". In S. Brint (Ed.), *The future of the city of intellect: The changing American university* (pp. 231–259). Stanford, CA: Stanford University Press.

Brint, S., Riddle, M., Turk-Bicakci, L., & Levy, C. (2002, August). *Colleges and universities of the "practical arts": Correlates of a resurgent form*. Department of Sociology, University of California, Riverside.

Cox, R. (2009). *The college fear factor*. Cambridge: Harvard University Press.

Daly, M., Büchel, F., & Duncan, G. (2000). Premiums and penalties for surplus and deficit education: Evidence from the United States and Germany. *Economics of Education Review, 19*, 169–178.

Dewey, J., & Dewey, E. (1915). *Schools of to-morrow*. New York: E.P. Dutton.

Douglas, J. (2000). *The California idea and American higher education: 1850 to the 1960 master plan*. Stanford, CA: Stanford University Press.

Douglas, P. (1921). *American apprenticeship and industrial education*. Studies in History, Economics, and Public Law Vol. XCV, No. 2. New York: Columbia University.

Dunham, E. A. (1969). *Colleges of the forgotten Americans: A profile of state colleges and regional universities*. Carnegie Commission on Higher Education. New York: McGraw-Hill.

Eck, A. (1993). Job-related education and training: Their impact on earnings. *Monthly Labor Review, 116*(10), 21–38.

Esping-Anderson, G. (1990). *The three worlds of welfare capitalism*. Princeton, NJ: Princeton University Press.

Freeman, R. (1976). *The over-educated American*. New York: Academic.

Geiger, R. (2000). The era of multi-purpose colleges in American higher education, 1850–1890. In R. Geiger (Ed.), *The American college in the nineteenth century* (pp. 127–152). Nashville: Vanderbilt University Press.

Goodlad, J. (1984). *A place called school: Prospects for the future*. New York: McGraw-Hill.

Groot, W., & Van den Brink, H. M. (2000). Over-education in the labor market: A meta-analysis. *Economics of Education Review 19*, 149–158.

Grubb, W. N. (2004). *The Anglo-American approach to vocationalism: The economic roles of education in England*. Research Paper 52. Oxford University: Centre on Skills, Knowledge, and Organisational Performance (SKOPE).

Grubb, W. N. (2009). *The money Myth: School resources, outcomes, and equity*. New York: Russell Sage Foundation.

Grubb, W. N., & Lazerson, M. (2004). *The education Gospel: The economic power of schooling*. Cambridge: Harvard University Press.

Grubb, W. N., & Sweet, R. (2005). Alternative to universities revisited. In R. Sweet & D. Hirsch (Eds.), *Education policy analysis 2004* (pp. 15–46). Paris: OECD.

Hartog, J. (2000). Over-education and earnings: Where are we, where should we go? *Economics of Education Review, 19*, 131–147.

Immerwahr, J., & Foleno, T. (2000, May). *Great expectations: How the public and parents—White, African, and Hispanic— view higher education*. New York: Public Agenda Foundation.

Jones, B. (1984). *Sleepers, wake! Technology and the future of work*. Melbourne: Oxford University Press.

Kerr, C. (1991). The new race to be Harvard or Berkeley or Stanford. *Change, 23*(3), 3–8.

Kett, J. (1994). *The pursuit of knowledge under difficulties: From self-improvement to adult education in America, 1750–1990*. Stanford, CA: Stanford University Press.

Kwon, D. B. (2001). *Adult education in Korea*. Unpublished paper, College of Education, Korea University, Seoul.

Labaree, D. (1997, Spring). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal, 34*(1), 39–81.

Landau, R. T., Taylor, T., & Wright, G. (1996). *The mosaic of economic growth*. Stanford, CA: Stanford University Press.
Lazerson, M. (1998). The disappointments of success: Higher education after World War II. *Annals of the American Academy of Political and Social Science, 559*, 64–76.
Levine, D. (1986). *The American college and the culture of aspiration, 1915–1940*. Ithaca, NY: Cornell University Press.
National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for education reform*. Washington, DC: U.S. Government Printing Office.
OECD. (2001). *Education policy analysis: Education and skills*. Paris: OECD.
Pope, Denise. 2001. *Doing school: How we are creating a generation of stressed out, materialistic, and miseducated students*. New Haven: Yale University Press.
Reuben, J. (1996). *The making of the modern university: Intellectual transformation and the marginalization of morality*. Chicago: University of Chicago Press.
Riley, J. (1979). Testing the educational screening hypothesis. *Journal of Political Economy, 87*(5), part 2:S227–S252.
Rosenbaum, J. (2001). *Beyond college for all: Career paths for the forgotten half*. New York: Russell Sage.
Rumberger, R. (1981). *Over-education in the U. S. labor market*. New York: Praeger Publishers.
Smith, V. (1993). Phantom students: Student mobility and general education. *AAHE Bulletin, 45*(10), 10–13, 7.
Sullivan, W. (1995). *Work and integrity: The crisis and promise of professionalism in America*. New York: Harper Business.
Van Hise, C. (1904). Inaugural address of president Charles Richard Van Hise. *Science, 12*(August), 193–205.
Veysey, L. (1965). *The Emergence of the American University*. Chicago: University of Chicago Press.
Wolf, A. (2002). *Does education matter? Myths about education and economic growth*. London: Penguin Books.
Wolff, E. (2006). *Does education really help? Skill, work, and inequality*. New York: Oxford University Press.