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ABSTRACT

This report, one of a series of country studies on higher education and employment particularly in continuing professional education, looks at recent developments in the United States. A foreword briefly sketches the state of higher education in general that provides the context for professional continuing education in the United States. The report goes on to focus on what is known concerning the further education and training of qualified postsecondary graduates outside of regular graduate level degree programs noting that data available on continuing education of any kind are not extensive. A short section formally defines the subject by specifying the meaning of adult and continuing education generally, postsecondary adult and continuing education, and finally continuing professional education. A central section then presents a general idea of the scope of continuing professional education with available data indicating that continuing professional education tends to be oriented more toward perfecting specific skills or competencies and that trend data comparing 1969 with 1984 indicate that there was an increase in employer-provided and employer-sponsored continuing professional education during this period. A final section discusses issues of current importance such as regulation, organization, delivery, and evaluation. (Contains 21 notes.) (JB)

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**HIGHER EDUCATION AND EMPLOYMENT:
THE CHANGING RELATIONSHIP**

**RECENT DEVELOPMENTS IN CONTINUING
PROFESSIONAL EDUCATION**

COUNTRY REPORT - UNITED STATES

HE 026 200

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COUNTRY STUDY: UNITED STATES

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HIGHER EDUCATION AND EMPLOYMENT: THE CHANGING RELATIONSHIP

Project iii): Recent Developments in Continuing Professional Education

COUNTRY STUDY: UNITED STATES

This report is one of a series of country studies prepared in the framework of the OECD Education Committee activity on Higher Education and Employment: The Changing Relationship. It deals with one of the three main topics covered by this activity, Recent Developments in Continuing Professional Education. Together with other country studies on this topic, it provides the background information for the preparation of a Secretariat general report that will be published by the OECD in 1992.

Country studies and general reports are also being made available for the other two projects included under this activity: The Flows of Graduates from Higher Education and their Entry into Working Life: Higher Education and Employment: The Case of the Humanities and Social Sciences.

The present country study on Recent Developments in Continuing Professional Education has been written by Dr. E. Stephen Hunt, senior research analyst with the Higher Education and Adult Learning Division of the Office of Research, US Department of Education. The author acknowledges the support of the Divisional and Departmental colleagues in the preparation of this paper, especially Dr. Clifford Adelman, Director of the Higher Education and Adult Learning Division. The views expressed are those of the author and do not necessarily commit the national authorities concerned or the Organisation.

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FOREWORD

The investigation of the relationship of postsecondary education to employment is an important issue in the United States, especially in light of recent public concern regarding the quality of undergraduate education and its actual contribution to improving the life chances of students. The National Education Goals have been established, in part, in response to these quality concerns which are acknowledged to affect all levels of education. A great deal of independent research and scholarship is now being devoted to exploring the education and employment connection.

Obtaining a national perspective on this relationship has been the goal of the US contribution to the OECD activity, "Higher Education and Employment: The Changing Relationship". While the US contributed to all three projects of this Activity (and thus this foreword summarises the overall US contribution), this monograph focuses on continuing professional education. The overall US contribution uses descriptive data derived from both government and non-government sources, the author has attempted to present a statistical impression of the flow of students through US postsecondary education and into the workforce. This picture is constrained by the necessary realities of US national data, especially the complexity of the US educational scene (a multiplicity of informal "systems" rather than an organised national system) and the limitations on intrusive and exhaustive data collection.

The picture that emerges, despite the limitations, is of a huge postsecondary educational enterprise that has continued to grow through most of the 1980s, in terms of expenditures, enrollments, graduates and numbers of institutions. There has been a steady erosion of degree attainments in the humanities and social sciences (and education), with a corresponding expansion of qualifications in the sciences, technical professions and business. Women and ethnic minorities have significantly expanded their presence in all areas of study and at all degree levels, with women now comprising a definite majority of all US postsecondary students. A majority of all undergraduate degree earners are women, as are master's degree earners, with professional degree and doctorate earners still dominated by men (the trend is toward female predominance at these levels, too).

Undergraduate degree earners tend to follow two distinct paths upon graduation, depending on the subject of study. Individuals who earn degrees in the biological sciences, the arts and humanities and the social sciences tend to go on to graduate studies and -- if in the workforce -- hold part-time or low-status jobs. Those who concentrated in the physical sciences, engineering and the professions (including business and education) tend to enter the workforce rather than pursue further studies, and they are more likely than other students to hold full-time jobs that are related to their studies and that have career potential. It is noteworthy that persons -- from whatever field -- who obtain full-time jobs in their fields do not appear to differ radically in such characteristics as starting salaries, except for engineers.

Post-graduate students who earn the research doctorate have experienced a fall-off in employment opportunities in recent years, especially in the humanities and social sciences, but this trend must be measured against the relatively high job success rate of doctorate earners across all subject fields -- especially compared with undergraduate degree holders. Despite problems, it is still generally true that the more education one possesses, the greater the opportunity for satisfying work. The increasing presence of overseas students in US graduate programmes is evident from the data for the decade 1977-87. The largest concentrations of such students are, rather unsurprisingly, in business, engineering and the sciences -- the fastest growing areas overall.

Comprehensive research on continuing education for the professions in the US -- as with other countries -- is only beginning. Nevertheless, it is a large educational enterprise in the US, and an even more diverse one than traditional postsecondary education. In addition to traditional postsecondary institutions, firms, professional associations, unions and independent entrepreneurs offer a myriad of programmes for academic credit, for professional licensure credit, or simply as enrichment or upgrading opportunities. National data on this issue are only beginning to be collected in systematic ways, but the information that is available points to a fast-growing multi-billion dollar industry.

Washington. DC

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INTRODUCTION

The nature of the federal system in the United States, and the consequent limited role assigned to national agencies such as the Department of Education, means that national data collection in the US is not a function of central regulatory authority. States, local governments, and private organizations are not compelled by law to report data to the Department except in certain limited circumstances (such as enforcement of the civil rights acts). Data collection is voluntary, not mandatory. Furthermore, the data that may be requested are limited by strong policies and oversight bodies (such as the Office of Management and Budget and the Reduction in Paperwork Act), not to mention a customary suspicion of governmental inquisitiveness that is ingrained in the American political character. Thus the data available from national agencies in the United States may be less extensive, less regular and consistent, and less penetrating (in terms of analytical depth) than what might be expected from societies with a tradition of tolerating both more centralized authority and more detailed governmental examination of education issues.

Lack of such Federal power, however, does not mean that the data available are inaccurate, merely that they are limited in scope and often episodic in nature, as political leaders seek to repond to specific concerns which -- once dealt with -- are not transformed into ongoing, regular data collection demands.

State governments do the real work of close regulation in US education. and their data on local practices are usually quite detailed -- closer to what many other national governments might do. Unfortunately, turning to US state data for the information unavailable from Federal sources is no solution, since no state has data collection jurisdiction beyond its territory, and each state has education regulations, traditions, political interests, and socio-economic concerns of its own. California data, for example, cannot serve as a representative of US national practice, since California operates a highly regulated (by US state standards) education system. and has demographic. economic and cultural characteristics that make it unrepresentative of the whole country. (The same could be said of any other state.) Equally important is the fact that each state sets its own legal definitions of education concepts, so that compiling a national picture requires knowing each of these systems and how to reconcile the various statistical procedures employed.

THE CONTINUING EDUCATION OF PROFESSIONALS

This report concentrates on what is known concerning the further education and training of qualified postsecondary graduates outside of regular graduate-level degree programmes. Anyone who completes a regular degree programme, even if they do so as a part-time or older student, is more than likely to be picked up in the annual statistical reports of US degree completions compiled by the US Department of Education and other organizations. Degree programmes, including the associate, bachelor's, first-professional, master's, and doctorate, are described in detail in the other two projects included under this activity: The Flows of Graduates from Higher Education and their Entry into Working Life; Higher Education and Employment: The Case of the Humanities and Social Sciences.

Postsecondary education certainly does not end with degree programmes, nor are some important social and economic needs even served by such programmes. Changing jobs (an important consideration in the US), obtaining a license, learning a new technology, acquiring a special skill, qualifying for a job or a promotion, or meeting mandatory study requirements are some of the circumstances that are met by participating in continuing professional education. This type of education is often shorter than a standard course of study, more narrowly focused, and frequently not offered for formal academic credit. Continuing professional education may not be provided by a postsecondary educational institution at all rather by an employer, professional association, or private firm or entrepreneur.

The data available on continuing education of any kind are not very extensive or current, and those that exist have usually been lumped together with other kinds of adult education. Sorting out the evidence on actual continuing professional education activity from the rest of these data is often a speculative exercise at best, but must be attempted in order to get some idea of the nature and extent of work-related continuing education and training. This short report provides the latest available national information, and it also discusses plans for acquiring more detailed and up-to-date data in the near future.

Formally Defining the Subject

The postsecondary education system of the United States and the flow of students through that system have been discussed under the other two above-mentioned projects. It is obvious that the nature of the American student has been changing. An increasing number of postsecondary students are older, employed part-time, and enrolled at irregular intervals. Unsurprisingly, these data go hand in hand with evidence that students are taking longer to complete whatever postsecondary course of studies they begin, and many never complete their studies. Such developments point up the degree to which traditional postsecondary education in the US has become blended -- some might say confused -- with what used to be two very different sorts of educational enterprises, adult education and continuing education.

Adult and Continuing Education. Adult education, historically, has meant the provision of basic through advanced general education to people who are over the normal age for the level of schooling they seek. Normal age -- a conceptual artifact of traditional educational organization -- was based on an assumption that American students began formal education in pre-school (kindergarten) at age four, left primary school between ages 10-13 (depending on local school organization), and finished secondary school around age 17 or 18 (unless they quit at 16). For those who continued to postsecondary education, traditional undergraduate studies would end with a bachelor's degree at age 22. Allowing for a year or two of variation along the way, this concept lies behind the common statistical assumption that "adult" data start around age 24. Thus, adult education was considered to be the provision of formal primary, secondary, or undergraduate postsecondary education to anyone over the general graduation or school-leaving ages of 17-18 (high school) or 21-24 (college).

The terms adult education and continuing education are used interchangeably to denote programmes of study offered at all levels that enable persons over the traditional age to pursue their educations. Some of these programmes provide basic literacy skills, some remedial instruction, and others are intended for persons who are continuing their studies beyond the point at which they last left school. Basic adult and/or continuing education refers to the provision of basic literacy skills and primary and secondary educations to adults. Adult and/or continuing education also occurs at the postsecondary level. College- or university-level adult/continuing education constitutes the organization and provision of classes, courses, and degree programmes to people over the traditional college age range of 18-22.

While adult basic education, including the teaching of literacy skills (and English to non-native speakers), low-level job skills, and the completion of primary and secondary education, is very important, it is not the focus of this Report. Nor is remedial instruction, for those who failed to acquire the education that they were supposed to have received. The discussion that follows deals exclusively with postsecondary adult and continuing education.

Postsecondary Adult/Continuing Education. Postsecondary adult and/or continuing education programmes may be general in nature, focused on a major subject like a traditional degree programme, or focused on work-related knowledge and skills. General programmes are so-called because they do not prepare a person for a specific occupation, for professional certification or recertification, or for further study in a particular field. In many instances general adult/continuing education programmes do not even formally concentrate on a single identifiable subject, and are often called "general studies" or "liberal arts".

Confusion can arise, however, in that some programmes that are identical to regular degree programmes are also called general studies. This is because accreditation rules often prevent colleges and universities from allowing non-traditional programmes to be called by the names normally used for them, such as bachelor of science, bachelor of accounting, master of business administration, etc. Since nearly all adult or continuing education programmes are non-traditional in that they serve non-resident students on irregular schedules, they are frequently forced to use these generic labels -- sometimes to the disadvantage of their student clients. A growing number of adult/continuing education programmes have successfully overcome the constraints imposed on them by traditional rules, however, and their programme and degree titles are indistinguishable from those enrolled in and completed by regular students.

Postsecondary adult or continuing education also consists of programmes that allow interested adults to pursue shorter courses of study than full degree programmes. The goal of such study is usually to acquire additional knowledge in an area of personal interest, which may or may not be related to a student's career plans or needs.

Continuing Professional Education. Continuing professional education is a special subset of postsecondary adult and continuing education that is focused on the work-related education and training needs of persons who already possess qualifying degrees in the liberal arts or occupational fields. These programmes enable practicing professionals, selected employees, or ambitious individuals to improve their job-related credentials or retain the right to a renewable license or qualification. Continuing professional education may or may not lead to an academically recognized credential, but almost always leads to professionally recognized credentials or proficiency levels. A recent panel of experts in this area, convened by the US Department of Education, defined continuing professional education as follows:

Continuing professional education means the varied modes and content of education and learning that contribute to the knowledge, competence, development, and performance of individual professionals and professional groups (1).

This definition includes the various types of further education and training that exist, the different providers, and also the various work-related training and skills development activities that individuals may pursue on their own. In addition, the panel responsible for the definition suggested that the term "profession," as it relates to continuing professional education, be restricted. Professions include only occupations recognized by the US Department of Commerce (Office of Federal Statistical Policy Standards) as requiring possession of a postsecondary academic degree in order to qualify for admission to training, practice, or both. Such a restriction follows widely accepted conventions that distinguish between professional fields and other trades and occupations by the level of training and education they require. The definition of continuing professional education cited above, together with the definition of a profession, forms the basis of the discussion in the remainder of this report.

The Extent of Continuing Professional Education

Specific, detailed, statistics on continuing professional education do not exist in the United States because they have never been collected on a national basis. Past reasons for this situation have included lack of interest, the difficulty of efficiently sampling so diverse a subject population, and lack of a common record-keeping process for such education that could facilitate unobtrusive analyses. Recent developments have begun to change this situation, however. Nationwide concern for the quality and competitiveness of the US workforce has invigorated studies of how US workers are prepared for their jobs and subsequently maintain and improve their skills. It is now recognized that most of the modern workforce requires some form of postsecondary education to qualify for, or advance in, nearly any type of good

job; and requires continuing professional education in order to remain competitive (2). In addition, the growth of the continuing professional education industry has begun to produce an interest in collaboration and cooperation among providers and consumers. This cooperation may lead to the sort of information coordination and databases that will allow developments to be tracked and studied.

Despite the current data problems, we can present a general idea of the scope of continuing professional education in the United States. This overview is derived from isolated pieces of information about specific portions of the activity, and from statistical data on adult education in general from which some relevant clues can be extracted.

To begin with, we know that most postsecondary institutions offer programmes that working adults can take, and which may be directly related to their career needs. Not all of these programmes are degree-length, and many have been developed in order to serve local economic needs. Cooperative or subcontractor relations with interested employers, where employees' educational costs are underwritten, are not uncommon. To these 3,000-plus institutions must be added over 8,000 postsecondary proprietary schools (institutions operated for profit) that specialize in training in different occupational skills (3).

Also important are the non-institutional providers of continuing professional education: thousands of private consulting firms and independent training consultants, and hundreds of employer-run programmes. An idea of the size of the educational consulting industry may be gleaned from realizing that in 1982, the American Management Association alone (the umbrella professional association for business executives) was contracting with some 7,500 individual presenters to deliver over 100,000 courses and seminars on various topics (4). The estimated total number of consultant-provided courses in 1984 was over 2.3 million. Employer-provided continuing professional education is also a huge enterprise. Total training expenditures by US employers have been estimated to range from \$32 to \$100 billion; the latter figure is three-fourths of the annual national expenditure on all forms of institution-based education (5). An unknown percentage of this outlay is for continuing professional education (6).

As stated above, data on continuing professional education must be extracted indirectly from more general databases. In order to accomplish this, operational criteria need to be created that permit the isolation of portions of general adult or continuing education data that may be related to continuing professional education. The operational criteria we will use include the following:

- data on individuals over the general school-leaving ages of 17 (high school) or 21 (college);
- persons within the appropriate age category who possess at least an associate or bachelor's degree; and
- persons meeting the age and degree requirements who fall into the executive/managerial and professional/technical occupational group classifications (7).

Based on these operational criteria, we can estimate the size and extent of continuing professional education activity from data collected by the US Bureau of the Census. The database used is the former Household Survey of Adult Education, conducted for the National Center for Education Statistics on a triennial basis from 1969 to 1984. (Data since 1984 are unavailable because the Adult Education Household Survey was discontinued after that year.)

Table 1 presents data from the Household Survey that give a crude approximation of the size of the continuing professional education enterprise in the US as of the mid-1980s. The data in this Table exclude instruction offered by or in primary and secondary schools. The same study from which these data are taken provides a comparison of the total number of participants in 1984 with those in 1969, the first year of the Survey. Total participation in 1969 amounted to approximately 5,738,000, which works out to an annual increase in the participation rate of 2.2 percent. Current participation in continuing professional education, based on these estimates, might thus be expected to involve around ten million individuals.

TABLE 1: Estimated Participation in Continuing Professional Education as of 1984

CHARACTERISTIC	NUMBER	PERCENT
Total All Participant Categories	8,626,000	100.0
Professionals	4,955,000	57.4
Executives/Managers	2,747,000	31.9
Technologists/Technicians	924,000	10.7
Total Male Participants	4,313,000	50.0
Male Professionals	2,237,000	25.9
Male Executives/Managers	1,600,000	18.6
Male Technologists/Technicians	476,000	5.5
Total Female Participants	4,312,000	50.0
Female Professionals	2,718,000	31.5
Female Executives/Managers	1,146,000	13.3
Female Technologists/Technicians	448,000	5.2
Total Job-Related Courses Completed	26,036,000	100.0
Completed by Men	12,567,000	48.3
Completed by Women	13,469,000	51.7

NOTE: All numbers and percentages are rounded.

Source: Susan T. Hill, Trends in Adult Education: 1969-1984, (Washington: US Government Printing Office, 1987).

The 1984 Survey also asked respondents who took job-related courses why they did so. The majority, 75.3 percent (79.4 percent of the men and 71.6 percent of the women), took such courses in order to qualify for or advance in their current jobs. Eighteen percent said they took courses to help them get a new job (14.5 percent of the men and 22 percent of the women), while the remainder did so for other reasons (8).

Alongside the rise in the number of people participating in continuing professional education have come important developments in the type of instruction taken and who provides it. Table 2 presents data from the Household Survey regarding these questions. Immediately obvious from the data are the facts that continuing professional education tends to be oriented more toward perfecting specific skills or competencies than toward credentials of any kind, and that as much of it is provided by non-academic sources as by educational institutions. Indeed, the largest single source appears to be employers themselves -- businesses and manufacturing, research, and service firms -- who, it may be argued, are also the main beneficiaries of a highly trained work force.

TABLE 2: Estimates of Who Provides Continuing Professional Education and the Type Provided, as of 1984

CHARACTERISTIC	NUMBER	PERCENT
Total Job-Related Courses Completed	26,036,000	100.0
For Academic Credit	5,329,000	20.5
Not for Academic Credit	20,707,000	79.5
To Obtain/Renew a License/Certificate	5,969,000	22.9
No Such Requirement or Goal	20,067,000	77.1
Total Courses Provided by All Sources	26,036,000	100.0
Provided by 2-Year Institutions	3,666,000	14.1
Provided by 4-Year Institutions	4,880,000	18.7
Provided by Other Institutions*	3,780,000	14.5
Provided by Business and Industry	6,286,000	24.1
Provided by Associations/Unions	2,157,000	8.3
Provided by Other Organizations	3,034,000	11.7
Other Sources	2,233,000	8.6

NOTE: All numbers and percentages are rounded. Other institutions (*) include specialized for-profit schools, such as those teaching business, computer, and technical skills.

Source: Susan T. Hill, Trends in Adult Education: 1969-1984, (Washington: US Government Printing Office, 1987).

Trend data comparing 1969 with 1984 indicate that there was an increase in employer-provided and employer-sponsored continuing professional education during this period, and a decline in the amount of such work that was taken for credit. It is impossible to be more precise in the absence of statistics specifically derived for continuing professional education.

One other source permits us to refine the estimate of the nature and extent of continuing professional education: a study conducted by the US Department of Labor in 1983 as a Supplement to the Current Population Survey (CPS) of that year. The CPS is an annual survey conducted by the US Department of Commerce, Bureau of the Census, to which other agencies may append supplemental questionnaires. The data collected by the 1983 Labor Supplement are derived from two questions, "Did you need specific skills or training to obtain your current (last) job?" and "Since you obtained your present job, did you take any training to improve your skills?". We are concerned with responses to the second question only, even though this eliminates those respondents who may have changed jobs and had to qualify for their new work. (There is no way to separate such respondents from pre-employment students, given the wording of the first question.) The data from this very general study are presented in Table 3.

TABLE 3: Estimates of Continuing Professional Education Based on 1983 Current Population Survey Data

CHARACTERISTIC	NUMBER	PERCENT
Total Workers Obtaining Training	14,488,000	100.0
Executives/Managers/Administrators	5,098,000	35.2
Professionals	7,802,000	53.9
Technologists/Technicians	1,588,000	10.9
		(% CPE)
Total Professional Workforce (Est.)	26,691,000	100.0
Executives/Managers/Administrators	10,847,000	47.0
Professionals	12,790,000	61.0
Technologists/Technicians	3,054,000	52.0
Sources of Training*	17,100,000	100.0
4-Year Institutions	4,418,000	25.8
2-Year Institutions	1,566,000	9.2
Other Institutions	268,000	1.6
Business and Industry Formal	4,313,000	25.2
Business and Industry Informal	4,107,000	24.0
Other	2,428,000	14.2

NOTE: Numbers and percentages are rounded. The number of persons indicating sources of training (*) exceeds the number trained due to multiple responses; many individuals received training from more than one source.

Source: US Department of Labor, Bureau of Labor Statistics, How Workers Get Their Training, Bulletin No. 2226, (Washington: US Government Printing Office, February 1985), pp. 51-56.

These data indicate that a much larger continuing professional education enterprise existed in the mid-1980s than was picked up in the 1984 Household Survey (see Tables 1 and 2). Since the question upon which the Table 3 data are based specifically addressed the issue of in-service work-related training, we may be somewhat confident in concluding that the total number of persons served by continuing professional education programmes in 1983-1984 fell between the two reported figures, but was closer to 14 million than eight million.

Table 3 also indicates that professional workers, those who are members of licensed or otherwise publicly recognized occupations, are more likely to engage in continuing professional education than are persons who hold equally high-level jobs (executives or technical workers with advanced qualifications) in occupations that do not have such status. This result is consistent with the fact that all states, and occasionally local governments and the Federal Government, regulate the practice of certain occupations -- such as law, medicine and allied health fields, teaching, accounting, and engineering -- and some others (such as the theological vocations) are regulated by private authorities.

Despite some differences, both Tables 2 and 3 tend to confirm the importance of non-school providers in US continuing professional education, as well as the predominance of four-year postsecondary institutions among all types of school providers. In addition, the "other" source category in Table 3 includes professional associations and union-provided training (listed separately in Table 2). These numbers are in relatively close agreement.

The general and imprecise quantitative indicators that we possess on the subject paint a picture of continuing professional education as a large and growing national enterprise. Indeed, available figures indicate that the total enrollment in various types of continuing professional education -- around ten million people (probably more) per year -- constitutes at least three-fourths of the total annual enrollment in all of traditional postsecondary education. Continuing professional education appears to be engaged in by over half of all professional-level workers in the country, and especially by persons working in licensed occupations. Relatively little of this activity is done for academic credit or to earn further credentials, and a great deal of it is conducted by employers, associations, and professional providers rather than by educational institutions.

The Nature of Continuing Professional Education

Evidence already presented in this report has shown several important differences between continuing professional education and other forms of postsecondary education. Recapitulated briefly, these are:

- continuing professional education is not primarily an academic educational enterprise, but is focused on work-related knowledge and skills improvement;
- continuing professional education is denominated in small units of instruction, such as single courses or modules, that can be taken alone or in combination or sequence;
- continuing professional education is not primarily provided, or governed, by traditional educational sources such as colleges or universities; and
- continuing professional education is a clearly defined part of the postsecondary education universe that does not have to do with basic or general education, preparatory training or traditional graduate-level research.

These differences, plus other implications of the quantitative data, point to several other aspects of continuing professional education that need to be discussed. In order of discussion, these are: regulation, organization, delivery, and evaluation.

Regulation. Since continuing professional education is intended to improve the quality of the professional workforce, and since this activity is of considerable concern to various educational, economic, and political interests, it is an activity that is extensively regulated. Regulation is conducted by a wide variety of different, frequently overlapping, and sometimes competing oversight bodies. Continuing professional education is governed in a more complex manner than is the rest of postsecondary education.

The need for continuing professional education grew out the perceived needs of employers and worker/practitioners, sometimes in consort with educational institutions and faculties, but often not. Concern for the content and quality of such education, as well as for the amount of it required, has been delegated to the professions themselves and to their regulators. This evolution has produced a myriad of standards and practices at every layer of government and within each separate group of organized occupations. Educational regulators, such as state higher education offices and accrediting bodies, are involved in this regulatory mix, but so are professional associations, licensing boards, employment and labor offices, industrial associations and labor unions, justice systems, and specialized agencies that oversee such activities as health, scientific and technical research, and business. Only some of these actors are public; many are private; and some are quasi-public, i.e., private organizations authorized by state law to regulate professional practices.

This complicated picture is not as daunting to analyze as it appears. There are two types of continuing professional education: that which is closely regulated and that which is less so. There are also two types of regulation: standards imposed by authorities acting in the public interest, and standards established by private providers and consumers of such education.

Imposed regulations have typically come about as the result of local, state, or national problems with incompetent or fraudulent practices in the occupations concerned. Solutions to such crises have often involved requiring practitioners to institute continuing professional education programmes as well as tighter and more sophisticated entry qualifications (9). The reasons for such regulation thus involve issues of consumer protection, public safety and health, economic policy, and security. States vary considerably in the amount of regulation they impose and the number of professional occupations they regulate, often a function of their particular needs and historical experiences. Over 800 different occupations are regulated across the nation, and the number of oversight boards to implement the regulations varies by state, from four in Wyoming to 29 in California (10). The Federal Government is also involved in regulation, including requiring continuing professional education, in occupations ranging from its own specialized employees (such as military personnel) to professionals who use Federal facilities (such as lawyers who practice in Federal Courts).

In some cases, continuing professional education is mandated by law as part of the periodic re-licensing requirement imposed on certain occupations. Prominent among the professional fields thus affected are those related to business, law, and public health. Table 4 presents a picture of the extent of mandatory continuing professional education and its growth in recent years. The pattern of growth shown is noteworthy, especially in law and the business professions.

While there is a tendency toward more mandated continuing professional education rather than less, such mandates are not imposed simply because legislators, courts, and administrators are responding to scandals or actively seeking opportunities to expand their powers. They are also imposed because occupational groups themselves seek the protection of regulation, which can accomplish such ends as reducing the costs of professional insurance.

Professional and economic ambition also plays a role, as when new occupational groups lobby for the status of licensed professions in order to protect their jobs and increase their potential incomes. Recent interest in public accountability, fueled by growing consumer demands and recognition of the economic bottlenecks that highly regulated personnel can create, has led to reviews of the need for so many licensed occupations in several states. Health care is an area that has received particular attention, because licensing and training requirements abound in the health-related fields. Much of the proliferation of health professions is recent and relates to the requirements of patients' health insurance plans, which allow separate fees to be charged only for licensed professional services (11).

TABLE 4: Growth of State-Mandated Continuing Professional Education, 1979-1989

PROFESSIONAL OCCUPATION	NUMBER OF STATES MANDATING	
	As of 1979	As of 1989
Accounting	28	48
Real Estate	11	33
Law	8	33
Social Work	10	26
Nursing Home Administration	42	45
Psychology (Clinical)	7	19
Nursing (Registered)	10	11
Nursing (Licensed Practical)	8	12
Physical Therapy	3	10
Dentistry	9	14
Optometry	45	47
Pharmacy	21	42
Medicine	20	22
Veterinary Medicine	19	28
Architecture	1	1
Engineering (Professional)	1	1

Source: Louis Phillips, "Mandatory Continuing Education Update", Newsletter. (Athens, GA: Louis Phillips and Associates, Summer 1989), p. 1.

The fact that members of professional occupations sometimes seek regulated status leads us to consider the second kind of regulated profession. Those that are self-regulated. A profession can be "less regulated" in an official, public sense yet still possess a considerable body of standards, including continuing professional education requirements. Self-regulation can even be supported by the state, as in the well-known US cases of lawyers and physicians. Medicine, in fact, provides the best-known historical example of a professional occupation that developed an extensive self-regulatory programme in order to prevent the imposition of regulations by outside authorities, as well as in response to widespread criticism of its educational practices and standards (12).

Most occupations that seek to protect their professional interests and obtain public recognition will, at some point, consider developing practitioner standards that include some form of ongoing training or skills improvement. Those that intend to seek licensure authority will most definitely do so. Even the academic disciplines possess clear -- if informal -- standards for their professional practitioners. Expectations of continuing education (attending seminars and presentations, and keeping up with new developments), and demonstrations of continued competence (refereed publications, etc.) are among these informal standards.

Organization. One aspect of the organization of continuing professional education concerns the types of providers who exist. We have seen that estimates of how much continuing professional education is provided by different sources varies due to the poor quality of available data. The data also indicate that the proportion provided by different sources varies by profession, although all that can safely be reported is that licensed occupations appear to rely more heavily on educational institutions and professional associations than do non-licensed fields, where employers appear to be the largest providers (13). What we do know is that at least half of all continuing professional education is provided by organizations and individuals outside educational institutions, and that most of this instruction is non-credit in nature.

The chief providers of continuing professional education can be listed in rough order of their importance:

- employers;
- postsecondary 2- and 4-year institutions;
- professional associations and unions;
- consultants; and
- proprietary institutions.

As in the case of regulation, the salient feature of the organization of continuing professional education is that it is carried out by and through the occupational groups themselves and their professional oversight boards. These bodies decide who will and can deliver such instruction, how it will be credited to the benefit of those taking it, and even where and how it can be provided. In some cases the providers of continuing professional education must themselves be licensed by the state or approved by a professional association. And in other cases, the providers must follow an organizational syllabus and graduated schedule of offerings that is keyed to a certification or licensure process.

Little cooperation or coordination exists across occupational boundaries. In order for separate professional bodies to jointly offer continuing professional education, formidable obstacles of self-interest, professional cultures, and job-specific requirements must be bridged. Regulations and laws often make such cooperation impossible. Despite the difficulties, there is some indication that interprofessional cooperation succeeds if several occupational groups perceive a need to learn about a particular development, such as a new drug or computer software package, or if they are required to collaborate by some oversight authority (14). It may also be helpful if the occupations involved are actually components of the same broad profession and thus see their roles as complementary rather than competitive, as in the case of US lawyers and judges.

Perhaps the most fundamental issues of organization in continuing professional education are those involving different types of providers, especially the differences between postsecondary educational institutions and non-institutional providers. These differences reach to the heart of the troubles that traditional academic institutions have in working with organizations that do not share the worldview or values of the academy, and vice versa. Surveys of institutional faculties and those responsible for non-institutional programmes (personnel officers, association heads, etc.) have pointed up specific and rather consistent problems. Among the complaints that business and professional leaders make about institutional continuing professional education programmes are:

- lack of convenience in terms of scheduling, locations, counseling, and facilities;
- little or no recognition of knowledge and skills learned outside of postsecondary education;
- poor understanding of the educational needs of employers and how to instruct adult professionals;
- faculty who are frequently unprofessional in conduct and antagonistic toward occupationally-related education or business in general; and

- insufficient flexibility to handle personal and professional priorities that interrupt, reorder, or truncate educational programmes (15).

By comparison, postsecondary faculties possess a list of their own doubts about cooperating closely with employers and others. They cite:

- fear of being entangled, and having academic freedom stifled, by corporate and professional association requirements to maintain proprietary secrecy and defend various interests;
- a belief that employers are chiefly interested in accessing and supporting occupationally specific programmes, and will both ignore other programmes and steer resources away from them;
- a concern that political leaders will short-sightedly endorse institution/business cooperation, and then penalize the institution in a backlash if goals are not quickly met; and
- a reluctance to cooperate with education consultants on the grounds that this harms institutional credibility and only benefits the marketing strategies of the consultants (16).

The concerns expressed in both of these lists are legitimate, but they do not prevent fruitful cooperation. Incentives to cooperate, ranging from the financial to the technical, are many and often turn otherwise formidable obstacles into minor items for negotiation. Academic institutions are motivated to cooperate with employers by perceived financial benefits, faculty research and consulting opportunities, and increased institutional credibility and visibility with the public. Businesses and professions likewise seek access to institutional research resources, the prestige of associating with well-known schools, and the cost savings associated with contracting for their training needs rather than maintaining in-house facilities. Indeed, some research has indicated that continuing professional education is provided as often for reasons of corporate -- and institutional -- interest as it is to serve the needs of individual professionals (17).

Delivery. Much of the content of continuing professional education programmes is tailored to the needs of the specific group for which it is provided, and such material can only occasionally serve the needs of other groups. Content aimed at helping professionals pass relicensing examinations, or that deals with technical issues exclusive to a particular profession, is not transferable across professional boundaries. There are, however, broad issues of delivery that cut across occupational fields.

One of these is the issue of effective counseling. For continuing professional education to be meaningful requires that it proceed according to a plan. This means that the needs of the prospective student, the needs (or requirements) of the employer and/or professional association, and the available resources must be melded into a coherent programme that is likely to lead to mutually satisfactory goals. Counseling, and the planning that goes with it, is needed regardless of the profession concerned. It is also helpful for the appropriate oversight authorities to have anticipated this need by

developing and implementing a continuing education plan for the whole profession, including standards, content, sequences, assessment procedures, and lists of approved providers (18). To do this an employer or occupational group may find it useful to prepare a self-study that spells out those domains of knowledge, responsibilities, tasks, techniques, and procedures that practitioners must master at different stages of their careers, and then update this self-study as needed.

Another issue is the question of who will deliver the necessary instruction, and how. Educators tend to argue that the formal institutional structure provides the best way to provide continuing professional education, in spite of the misgivings of many employers and practitioners. Those who need further education, it is said, are not always the best judges of what they need or how to get it, especially in professions where competence and broad knowledge are in the public interest. Often, education that might once have been considered unrelated to practice, such as multicultural skills, foreign languages, applied ethics, and communications skills, has actually proven to be as important as traditional technical subjects (19). But such non-traditional subjects are being provided by employers and consultants as often as by schools, mainly because the courses provided by academia are frequently too long, too unfocused, or too hedged about by prerequisites and other ancillary, degree-oriented hurdles to be useful or even accessible to interested professionals.

Technical subjects related to a profession, such as accounting or engineering courses, are no easier for academic institutions to deliver than liberal arts fare. All instruction offered by institutions is subject to the requirements of the overseers of postsecondary education, the accrediting agencies for general and pre-service education and for degree programmes. Their regulations are often aimed at a traditional view of higher education's clientele and form a serious obstacle to serving contemporary adult learners, including practicing professionals. A few examples of these inhibiting regulations are residency requirements, restrictions on how to pay for obligations, a bias against modified-credit or non-credit offerings, curriculum content restrictions, and rules for counting students and services in order to qualify for funding support.

Identifying what needs to be provided, and by whom and what method, requires understanding the nature of the occupation for which a programme is designed. It is not enough, for example, to assume that a standard foreign language course will satisfy a continuing professional education requirement for international banking personnel. The subject may be important, but its delivery must be focused on what adults in a specific profession need to learn rather than what someone else assumes they should learn. At least four elements that need to be examined in the needs identification process:

- the nature of the profession, including how the professional culture and environment influence learning styles and needs, in order to employ effective teaching methods;
- the location of the work done, in order to understand further how professionals function and to design delivery methods (such as distance learning) that can reach them effectively;

- the work setting, in order to refine the choice of both teaching and delivery methods for particular groups; and
- the content required, i.e., the critical mix of elements that will be taught and that will also determine how the programme is designed and structured (20).

These elements are not only crucial to developing effective programmes; they are equally critical to the evaluation of programme effectiveness.

Evaluation. Once arranged and delivered, continuing professional education must be assessed and evaluated. For groups that have developed a comprehensive plan, continuing professional education evaluation is relatively easy. Individuals can be assessed on how well they have learned what they are required to know or have undertaken to learn, and providers can be evaluated as to how well they have delivered the curriculum. Recognizing that classroom learning is not the real goal of continuing professional education, some professions have developed evaluation models that assess improvements in practice or on-the-job performance as well as using academic measures. One way of doing this is called the Practice Audit Model. It links the self-study concept described above with specific outcome measures tied to how well practitioners implement the elements that they learnt (21). An effective practice audit model will also provide a means to evaluate the provider's effectiveness and the effectiveness of the profession's continuing education programme.

Conclusion

The US Department of Education has plans to improve our knowledge of the scope and effectiveness of continuing professional education, but these efforts will bear fruit only in future years.

There is little doubt that continuing professional education is an economically important aspect of the national strategy to improve US education and, by extension, the ability of our society to compete effectively in the global marketplace. It is also an important subject of educational research insofar as it touches upon the areas of adult and lifelong learning, work-related skills, and postsecondary education.

What is known about the continuing education of professionals indicates that the study of this subject must, by necessity, expand the scope of what we view as education's territory. This type of learning is not just the province of educational institutions, nor is it even structured in ways familiar to traditional educators. Its links to the rest of postsecondary education are nevertheless undeniable. There are indications that educational insights are already being shared between these two worlds, and that more could come if continuing professional education was better understood. It is time that such a research enterprise began.

Notes

1. From the unpublished transcript of proceeding. Conference on Continuing Professional Education: An Empirical Needs Assessment, Washington. June 3, 1991.
2. The US Department of Labor and other sources estimate that professional-level jobs will grow faster in the foreseeable future than will jobs that do not require postsecondary preparation. See the Hudson Institute, Workforce 2000: Work and Workers for the 21st Century, (Indianapolis. IN: Hudson Institute, June 1987), pp. 96-101; US Congress, Office of Technology Assessment, Worker Training: Competing in the New International Economy. (Washington: US Government Printing Office, September 1990), pp. 8 and 96-97; Anthony P. Carnevale and Leila J. Gainer, The Learning Enterprise, (Washington: US Government Printing Office, 1990), pp. 2-9; US Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, monthly tabulations of occupational data; and US Department of Labor, Bureau of Labor Statistics, Occupational Projections and Training Data: 1990 Edition, Bulletin 2351, (Washington: US Government Printing Office, April 1990), Tables 1-3. pp. 9-15.
3. Nevser Stacey and Duc-Le-To, "Adult Education and Training Markets". in Thierry Noyelle, ed., Skills, Wages and Productivity in the Service Sector. (Boulder, CO: Westview Press, 1990), pp. 160-186.
4. Stacey and To, pp. 174-176.
5. Stacey and To, p. 172.
6. Carnevale and Gainer, on p. 2, point out that the average professional or managerial-level worker receives more training than workers on lower-level. non-supervisory jobs. This implies that the percentage of total employer training costs that goes to the continuing education of their professional workforce is significant, even though a majority of the outlay may still go for basic skills training. For a history and analysis of employer-run postsecondary education programmes, see Nancy S. Nash and Elizabeth M. Hawthorne, Formal Recognition of Employer-Sponsored Instruction: Conflict and Collegiality in Postsecondary Education, ASHE/ERIC Higher Education Report. No. 3, Washington: Association for Study of Higher Education, 1987), pp. 7-28.
7. For a detailed list of the occupational groups included in these classifications, see Office of Federal Statistical Policy Standards. US Department of Commerce, Standard Occupational Classification Manual 1980. (Washington: US Government Printing Office, October 1980). In general. professional workers include those in Series 10-34, as well as technologists and technicians (Series 36-39).
8. "Participation in Adult Education, May 1984", OERI Bulletin, US Department of Education, CS-86-308b, October 1986, p. 6.

9. John F. Azzaretto, "Quality Control in Continuing Professional Education: Accountability, Effectiveness and Regulation", unpublished paper prepared for the US Department of Education, Conference on Continuing Professional Education: An Empirical Needs Assessment, Washington. June 2-3, 1991.
10. Azzaretto, p. 9.
11. Azzaretto, p. 11.
12. This development, in fact, was probably the most spectacular public success of the former US Department of Education. The individual responsible for developing and publicizing the evidence that led to the reform of medical education and professional standards in the US, Abraham Flexner, wrote his class Report on Medical Education in the United States as an employee of the Office of Education.
13. How Workers Get Their Training, pp. 51-56.
14. Ronald M. Cervero. "Cooperation and Collaboration in the Field of Continuing Professional Education", paper prepared for the US Department of Education-sponsored Conference on Continuing Professional Education: An Empirical Needs Assessment. Washington, May 2-3, 1991.
15. See Elinor M. Greenberg, "What are Business' and Industry's Concerns about Postsecondary Education and Training?", comments delivered before the Panel on Postsecondary Education. sponsored by the National Center for Education Statistics and the American Council on Education, Washington. March 8, 1990; and Cervero, p. 18.
16. James S. Fairweather, Entrepreneurship and Higher Education: Lessons for Colleges, Universities and Industry, ASHE/ERIC Higher Education Report No. 6, (Washington: Association for the Study of Higher Education, 1988). p. xvii; and Cervero, pp. 23-24.
17. Cervero, pp. 29-36.
18. Donna S. Queeney, "Problems of Content and Delivery in Continuing Professional Education", paper prepared for the US Department of Education-sponsored Conference on Continuing Professional Education: An Empirical Needs Assessment", Washington, May 2-3, 1991.
19. Queeney, pp. 8-9 and 14-15. The importance of human relations skills and social awareness in most career paths has led to renewed interest in the liberal arts as a part of continuing professional education as well as pre-professional education. See Michael Useem, Liberal Education and the Corporation: The Hiring and Advancement of College Graduates, (New York: Aldine de Gruyter, 1989). pp. xiii-xvi and 28-71.
20. Queeney, p. 17.
21. Queeney, pp. 5-9 and 20-24.