

The Bedford Report

Future Accounting Education: Preparing For The Expanding Profession

Part III: The Future Scope, Content, and Structure of Accounting Education

Scope, Content, and Structure

Scope and Content. The major changes that have occurred in the accounting profession, and the even greater developments expected during the remainder of this century, dictate expanded and updated educational programs and a serious rethinking of the optimal education for an accountant. Successful achievement of an effective education program that will meet the demands of the twenty-first century will require (1) a revised expanded curriculum, (2) a more effective education delivery process, and (3) a better articulated structure for the institutional units through which the programs will be offered.

The basis for future accounting education is the realization that accounting, as an information development and disclosure function, has been expanding rapidly in importance as a professional and social discipline. Identification of the concepts and skills that future accountants must learn at universities should focus on the central theme of information identification, measurement, and communication. In practical terms, the concept of accounting information is typically limited to economic or decision-making information.

To understand accounting information as decision-making information systematically collected and developed, future accountants will first have to understand the use of a system or systems for developing and disclosing information. Accordingly, an early topic that accounting students should learn is the nature, design, and implementation of information systems. As illustrations of accounting information system design and implementation, both the traditional accounting system and a computer-based information system should be learned.

The scope and content of future accounting education should, however, extend well beyond technical skills. In a rapidly growing and diverse profession, the need for strong professional identification becomes increasingly important. Professional accounting education must not only emphasize the needed skills and knowledge, but it must also instill the ethical standards and the commitment of a professional. The general effort to develop in students a concern for individual needs and for the overall advancement of society must therefore be given more emphasis.

Universities obviously cannot graduate completely educated nor completely matured accountants. The emphasis must be on preparing graduates for career-long professional learning. Essential for the pursuit of a professional accounting education is a student's understanding of the concepts and implications of knowledge derived from the natural and social sciences, the arts, and the humanities. The comprehensive professional accounting education program must thereby develop in students an understanding of the nature and skills of logical reasoning; a capacity for creative thinking and problem-solving; an appreciation of ethical standards and conduct; and a facility with the methods of effective communication and interpersonal relations. Only through the development of these expansive skills and concerns will the accountant be equipped for lifelong learning.

Structure. The minimum objective of accounting educational programs should be to prepare students to begin and to develop in a wide range of professional accounting careers. An increasingly popular belief is that the minimum education necessary for the professional accountant cannot be provided in four years of undergraduate study. In time, a broad undergraduate program followed by a graduate

program may be recognized as the ideal model for a professional accounting education.

The full scope and content of university professional accounting education spans three educational components: general education, general professional accounting education, and specialized professional accounting education. Two additional components to be considered in the overall structure of accounting education are doctoral programs and continuing education programs.

General Education

All college graduates should have a strong, broad general education. A recent report on American Higher Education made extensive recommendations focusing particularly on the need for a stronger liberal arts education. In October 1984, the Study Group on the Conditions of Excellence in American Higher Education, sponsored by the National Institute of Education, issued a report entitled Involvement in Learning: Realizing the Potential of American Higher Education. Among its recommendations², two are particularly relevant:

Liberal education requirements should be expanded and reinvigorated to ensure that (1) curricular content is directly addressed not only to subject matter but also to the development of capacities of analysis, problem solving, communication, and synthesis, and (2) students and faculty integrate knowledge from various disciplines.

Another recommendation stated:

All bachelor's degree recipients should have at least two full years of liberal education. In most professional fields, this will require extending undergraduate programs beyond the usual four years.

More specifically, the report of the Association of American Colleges' Project on Redefining the Meaning and Purpose of Baccalaureate Degrees proposed a minimum required content in a program of study for all college students that should consist of "the intellectual, aesthetic, and philosophic experiences that should enter into the lives of men and women engaged in baccalaureate education."³ The minimum program would develop in students the capacities for inquiry, abstract logical thinking, and critical analysis; literacy, which includes writing, reading, speaking, and listening; understanding numerical data; historical consciousness; an appreciation of science; the study of values; the experience of art; international and multicultural experiences; and study in depth.⁴

The call for accounting educators to assure that students possess a knowledge of the humanities, arts, and sciences rests in the need to develop the capacity of accountants to use an expanded knowledge base to help determine what information will be useful in making decisions and applying accounting skills. The capability of accountants to be creative, sensitive, and aware of the needs of society and individuals depends to a large degree on their accumulated knowledge or education. Without a knowledge of history, the accountant may not be sufficiently aware of the evolutionary nature of society. Nor will the professional accountant function well in the international world of business without knowledge of different cultures as introduced in cultural anthropology, literature, and the social sciences. Macro- and micro-economic theory will provide a base for systematic professional insights into means of improving the economic efficiency and effectiveness of organizations. It is important for the professional accountant to possess an awareness of the potential for technological change through a knowledge of the natural sciences. Also, the creative insights provided by the study of the arts and philosophy may well enable the professional accountant to perceive opportunities for the profession to contribute to the continuing development of civilization.

Accountants should have a broad education. Such breadth should be recognized not only as an element in the content, but also as a component in the structure, of accounting education. However, breadth is more than a random collection of a variety of courses. Because individuals differ in their perspectives and abilities, the broad study appropriate for accountants differs for each individual. Accounting students should be encouraged to select those areas for study in the arts, sciences, and humanities which are compatible with their own innate abilities and interests and which will result in a coherent program of inter-related educational experiences.

A major question arises regarding the content of the general education program preceding a professional accounting program: Should it be completely unspecified or should there be some specified content? A large number of specified courses defeats the purpose of a general education. However, the general professional accounting program which follows will be more effective if all students enter with a certain minimum background. This minimum should include basic courses in mathematics (through calculus), statistics, computer systems, and economics.

General Professional Accounting Education

The next stage is the general professional accounting education program, where accounting should be taught as a process of information development and disclosure. The primary purpose of general professional accounting education is to provide a means for students to acquire both (a) the knowledge, techniques, sensitivities, and abilities all accountants should have for entry into the accounting profession and (b) the capacity to apply these qualities under reasonable supervision. This education may be provided by accounting courses, courses in supporting fields, and by extracurricular activities pursued in association with the academic program.

Through these three sources, the accounting student should acquire the knowledge required for entry to an accounting career and for subsequent career success. The essential components of the general professional accounting education should include:

Design and use of information systems, including:

The concepts and principles underlying the general structure, design, and implementation of information systems.

The methods and process to be used in designing and implementing particular information systems for different purposes and users.

Role of accounting information systems in financial, managerial, and entrepreneurial decision making.

Principles of system review: its design integrity and its effectiveness in operation.

Communication, including:

Application of organizational concepts and interpersonal relationships in both formal and informal settings.

Decision problems and information in organizations, including:

Definition, structure and analysis of decision problems and the requisite financial and economic understanding and quantitative skills necessary for effective problem solving.

Knowledge of the functional activities of business, government, and not-for-profit organizations and of the international, legal, social, and political environment within which they operate.

Strategic analysis and the integration of concepts from a variety of disciplines and areas of application in designing appropriate accounting systems.

Assessment of the comprehensive information needs of all types of organizations and issues in developing and maintaining broad and effective accounting systems.

Financial Information and Public Reporting, including:

Knowledge of the financial markets, the information needs of decision makers, and the role of accounting information in satisfying those needs.

Auditing and attestation and their role in the assurance of the integrity of accounting and other information systems.

Collection, summarization and presentation of economic/financial information in compliance with reporting standards promulgated by professional bodies and governmental units. Policy issues, environmental factors, and the regulation of accounting, including the role of such relevant institutions as the SEC, FASB, GASB and related state and international units.

Taxation and its impact on financial and managerial problems.

Knowledge of the accounting profession, including:

History of accounting and its role as an information system in society.

Ethical and professional responsibilities of an accountant.

In addition, when accounting faculties accept a greater responsibility for student learning at the general professional accounting education level, they also implicitly assume a responsibility to recognize, foster, and encourage the following personal capacities in students:

- Ambition and persistence
- Empathy
- Creative thinking
- Understanding of cultural and intellectual differences
- Logical reasoning
- Sensitivity to social responsibilities
- Leadership

Specialized Professional Accounting Education

Certain specializations have developed sufficient bodies of knowledge to be recognized as functional areas within accounting, and others may emerge in the future. When this occurs, they become potential areas of additional specialized professional accounting education. Taxation, information systems, and auditing are current examples of such areas; examples of possible emerging areas are nonprofit, government, and international accounting. Specialized accounting education is necessary to meet the expanding needs of society.

Specialized accounting education follows the attainment of the broad introductory knowledge and skills spanning the entire spectrum of the accounting discipline and included in general accounting education. Therefore, it must only be offered at the graduate level. The objective of specialized accounting education is to provide the student with an advanced, clearly usable level of accounting knowledge and skills. A graduate of a program of specialized accounting education should be able to function at the entry level as a qualified professional in performing a valuable service for society in a specific area.

Continuing professional education objectives and content may overlap to some extent with university specialized accounting education. Those who offer these two types of programs should work together toward the goal of mutual reinforcement and enrichment. For example, universities may prove to be better at establishing conceptual foundations, while continuing professional education may be better at applying emerging specific knowledge and skills to individual work situations. University coverage of specialized accounting fields should educate rather than train, emphasizing the concepts, systems, and principles associated with the advanced level of specialized practice. The objective of specialized education should be to provide conceptual and theoretical material to facilitate change as needed and to provide an ability to develop creative applications of the rules and procedures used in the specialization. The professional specialist must learn not only how to deal with involved aspects of the area but how to extend the specialization through research, planning, and design into new areas of application.

Research and Doctoral Education

Doctoral programs in accounting should teach students how to do research. Teaching students how to teach is also an essential part of the doctoral program, but it is subordinate to developing research skills. Further improvements in doctoral programs should be made by upgrading the quality of the research methods doctoral students learn and by expanding the areas in which research is undertaken to correspond to the broader scope and content of accounting education and practice.

Without an extensive research program, a profession and its practitioners often fail to perceive opportunities for growth and change in knowledge and its application. The accounting profession is no exception. Statistical sampling in auditing was not discovered in practice by trial and error. Information economics, artificial intelligence, mathematical financial modeling, behavioral budgeting, stock market efficiency, computer-based information systems, and a host of similar developments that professional accountants are now relating to their practice were not invented on the job. Extensive research preceded their development.

Accounting faculties at universities provide basic research for the profession. This alone would justify requiring accounting faculties to conduct research as a condition for their teaching. However, a further justification is that accounting students need to be aware of new ideas, hypotheses, and research findings related to their field. To maintain an interest in accounting, higher quality students require a sense of intellectual excitement in their studies.

Continuing Education

Changes in technology, social and political environment, and professional standards create a need for professional accountants to continue their education throughout their careers. As their careers develop, accountants must both broaden their education and deepen it in one or more specialized areas. This continuing education will include learning on the job as well as educational programs provided by employers, professional associations, and educational institutions. The optimal mix among these different entities will vary with particular educational topics, and will depend on the employment status, location, and needs of the individual.

The foundation for a broad education should have been obtained from an accountant's collegiate education. At later stages in their careers, however, many professional accountants have the maturity to benefit from a fresh exposure to general education. Universities with their vast academic resources are ideally suited to provide education of this type. Universities are also best qualified to disseminate the results of faculty research efforts.

On the other hand, a professional accountant may develop an increasingly specialized expertise in some accounting area, such as a particular industry. The ability to offer continuing education in such specialties may be unique to a particular individual or small group of professionals.

A successful menu of programs for continuing professional education can best be achieved by close cooperation among universities, accounting and industrial firms, government organizations, and professional societies. Each can make a substantial contribution, and together they can meet the expanding need for continuing professional education.

Recommendations. To meet these needs and goals of the future accounting profession, this Committee makes the following recommendations regarding the scope, content and structure of accounting education:

Scope and Content

1. Accounting should be viewed as a broad economic information development and distribution process, based on the design, implementation, and operation of multiple types of information systems. (See Appendix A for an illustration.) Accordingly, accounting faculties should maintain a competence in the information technologies and in efforts to develop comprehensive information systems for organizations.
2. Accounting faculties should recognize and advise students that a rigorous general accounting

education and the development of broad personal capacities and skills is preferred to premature specialization in accounting.

3. Accounting faculties should be receptive to an expansion of educational requirements in the liberal arts and sciences that aim to develop the student's capacities for analysis, synthesis, problem-solving, and communication.
4. University accounting education should emphasize the skills and capacities needed for life-long learning.
5. Learning objectives of courses and programs should be so designed that they help students learn to learn, to think, and to be creative.
6. Accounting faculties should establish high expectations for students and should adjust the curriculum content and learning methods to match the professional skills, personal capacities, and general knowledge they expect students to develop.
7. Universities should maintain flexibility in accounting educational programs to permit rapid adjustment to changes in the information needs of society.

Structure

8. A broad educational structure must be made available that spans education in the humanities, arts, and sciences (general education); the general conceptual information development and reporting knowledge required of all accountants (general professional accounting education); and the specialized technical knowledge required in one or more areas of accounting information development (specialized professional accounting education).
9. Specialized professional accounting education should be offered only at the graduate level. Thus, a complete curriculum covering all three levels of education will normally take a minimum of five years.
10. Practicing and academic accountants should be guided by the principle of comparative advantage in deciding upon the specialized professional education content to be provided by universities and that to be provided by employers and others through various programs of continuing education.

²Study Group on the Conditions of Excellence in American Higher Education, Involvement in Learning: Realizing the Potential of American Higher Education, The Chronicle of Higher Education, October 24, 1981, p. 43.

³Association of American Colleges, Project on Redefining the Meaning and Purpose of Baccalaureate Degrees, The Chronicle of Higher Education, February 13, 1985, p. 18.

⁴Ibid, pp. 18-24.