The Bedford Report
Future Accounting Education:
Preparing For The Expanding Profession

Appendix A

An Illustrative Conceptual Framework for Future Accounting Education: An Information Development and Dissemination Structure

The reorientation of accounting education from the preparation of financial statements to an expanded economic/financial information development and distribution function will involve restructuring and reorienting university accounting educational materials. University accounting faculties will likely formulate various approaches to the task of determining what to teach, when to teach it, and how to present it to students.

Without implying that this illustration is the only framework for improving university accounting education, the following example of a conceptual structure indicates the nature of the potential changes that may be made. The outline is designed to span multiple types of information systems for decision making, including the well-established system for preparing financial statements.

Broadly viewed, accounting involves (1) the selection, observation, and identification of significant phenomena about the activities of an organization; (2) the measurement of the selected phenomena by assigning symbols (words and numerals) to represent them (journal) and storing the symbols in a database (ledger); (3) the analysis and processing of the symbols to reveal relationships among the observed phenomena and to develop models (accounting reports) of an organization's parts, setting, and activities over a period time; and (4) the disclosure of the developed information to various decision makers.

Traditionally, accounting education has taught students to observe events, select those that deserve recording as transactions, measure them according to a conventional object classification system at exchange price, analyze the recorded transactions to reveal relationships in income and balance sheet related types of operating reports, and distribute the reports as aids in management control and capital formation.

To improve and reorient accounting education materials, universities need to expand instruction in the accounting functions of observation, selection, measurement, analysis and disclosure. The concepts of a transaction serves the accounting profession well in providing useful information to managers, investors, and others for decision making purposes. In today's economic society, however, the transaction is only one of many concepts implicit in the information accountants must learn to develop and distribute.

Surrounding events and internal and external environmental circumstances need also to be observed by accountants to identify additional relevant information for both long-term and operating decision making. For example, accounting students need to learn to identify key internal and external variables (i.e., market share, employee turnover, etc.) that influence the activities of a particular organization, program, or object. Accounting students also need to learn to distinguish between relevant and irrelevant phenomena for their various reports, requiring background knowledge of organization goals and management objectives. At the same time accounting faculties need to direct research towards finding means of increasing the reliability of all relevant information. Accountants may or may not use methods similar to those used in the past, which introduced bills of sale, invoices, purchase orders, written contracts, and other documentary evidence to provide reliability.

Teaching students to perform the measurement function will require educational material on two essential activities: (1) the identification of the attribute(s) of the observed phenomena to be measured (e.g., value, historical cost, current cost, revenue opportunities); and (2) the selection of an appropriate measurement scale (nominal-classification, original-ranking, interval-range and probability spread, and ratio-single numeral). Accountants now use the nominal scale routinely and conventionally in assigning well-know symbols (names) to phenomena (e.g., "current assets," "inventories"). They also use extensively the ratio scale in assigning numerals to represent some type of value to a nominal (classification) measure. Both probability and range (interval) measures and ranking (greater than, equal to, or less than) scales have been proposed as means for accountants to improve the scope and accuracy of their information disclosures. Future accounting students should learn these additional measurement methods. Accounting faculties may wish to include material on all four measurement scales and illustrate their use in developing information for decision making as part of the accounting curriculum.

When accounting faculties educate students for the analysis function of accounting, they may find it necessary to include in accounting courses various qualitative and quantitative techniques (statistics, mathematical model building, expert systems methods, etc.) to develop multiple types of relationships among recorded phenomena in the expanded accounting database. Associated with the development of this additional information will be the need for accounting students to learn to market the new information products. In addition, accounting faculties may decide that effective performance of the accounting analysis function will require that future accounting students take university courses dealing with systems analysis and information processing in order to be prepared for future accounting practice and to place the study of accounting in a meaningful perspective.

Finally, the restructured and reoriented accounting educational curriculum will place greater emphasis on the information distribution function. To prepare students for effective information dissemination, accounting faculties may add accounting courses that assure meaningful communication (written, oral, and behavioral, using various formats), that develop advisory skills in suggesting uses of information, and that provide an understanding of the economics of information.

Economics is the root discipline of accounting. Research in the economics of information emphasizes the importance of cost-benefit tradeoffs in deciding on the complexity of formal information systems. For example, the widely-used accounting model is only one source of information. Accounting students should be well grounded in cost-benefit thinking and should recognize that an accounting system is not necessarily always the optimum way to gather information.

Within the foregoing framework for future accounting education as an information development and dissemination structure, current accounting practice in preparing financial statements may constitute the main accounting information system. Other accounting information systems, however, will need to be added to the university accounting curriculum; for example, for management and government control of strategies, administration, and operations; for specific projects such as mergers and acquisitions; for long-term planning and implementation; and for many other purposes.

This outline illustrates the conceptual feasibility of broadening and increasing the relevance of university accounting education to the full scope of accounting practice at all levels. Some universities may adopt this framework immediately; others may use it as a general guide for improving current programs. Still others may develop an entirely different framework for future accounting education. But all should perceive that it is possible to restructure and reorient university accounting education without abandoning a commitment to assure that accounting students learn to prepare and use traditional accounting reports.