

FROM MEMORIZATION TO DISCOVERY IN AMERICAN ACCOUNTING EDUCATION

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Introduction to American Accounting Education

Commonalities and Diversity

- All business school students:
 - Undergraduate: principles courses in financial and management accounting.
 - MBA: typically one financial accounting course.
- Accounting major or concentration:
 - Undergraduate degree.
 - Masters degree.
 - Ph.D. degree.

Typical Courses for B.S. in Accounting

- Financial Accounting: beginning, intermediate and advanced
- Management and Cost Accounting
- Accounting Information Systems
- Government and Nonprofit Accounting
- International Accounting
- Auditing (Attestation, Assurance)
- Federal Taxation
- Business Law

Degree Requirements for B.S. in Accounting at UI-Chicago

- Minimum of 120 semester credit hours:
 - 60 hours of General Education
 - 60 hours of Business and Accounting:
 - Approximately 30 hours in Finance, Marketing, Economics, Business Management,

Information and Decision Sciences.

- Approximately 30 hours in Accounting courses (beyond principles).

Undergraduate Course Requirements for B.S. in Accounting

- 8 Required Courses:
 - Introduction to Financial Accounting
 - Introduction to Managerial Accounting
 - Intermediate Financial Accounting I
 - Intermediate Financial Accounting II
 - Cost Accounting
 - Accounting Information Systems
 - Auditing
 - Federal Income Taxation: Individuals

Undergraduate Courses Requirements for B.S. in Accounting (continued)

- 3 out 8 Elective Courses:
 - Advanced Financial Accounting
 - Federal Taxation: Corporations
 - Government & Non-profit Accounting
 - Database Accounting Systems
 - International Accounting
 - Special Topics in Accounting
 - Business Law I (legal environment)
 - Business Law II (uniform commercial code)

Two Visions and Versions of Masters Program

- Two visions for advanced education of undergraduate accounting majors:
 - Preparation for Ph.D. studies.
 - Preparation for professional practice.
- Two versions in common practice:
 - One-year program: specialization for undergraduate accounting majors.
 - Two-year program: condensed program for students without B.S. in Accounting.

Degree Requirements for M.S. in Accounting at UI-Chicago

- Three tracks for different backgrounds:
 - B.S. in Accounting (1 year full-time study).
 - M.B.A. or B.S. or B.A. in non-accounting business discipline (1 to 2 years).
 - B.S. or B.A. in non-business discipline (2 years).
- Total 34 to 60 semester credit hours depending on the track.

Course Offerings for MSA at UI-Chicago

- Financial Accounting
- Management or Cost Accounting
- Government and Nonprofit Accounting
- Federal Taxation
- Auditing and Attestation

- Business Law
- Accounting Information Systems
- International Accounting
- Accounting Theory
- Accounting Research

MSA Courses at UI-Chicago

Required Background Courses

- Introductory Financial Accounting
- Intermediate Financial Accounting I
- Intermediate Financial Accounting II
- Management Accounting
- Auditing
- Federal Taxation-Individual
- Accounting Information Systems

Required Graduate Courses

- Accounting Thoughts and Paradigms
- Accounting Research - Methodology and Communication

MSA Courses at UIC (cont.)

Elective Courses (3 out of 11)

- Advanced Financial Accounting
- Federal Taxation, mainly Corporations
- Business Law
- Government and Nonprofit Accounting
- Database Accounting Systems
- International Accounting
- Financial Statement Analysis
- Managerial Accounting Theory
- Competitive Cost Management
- Valuation and Analysis
- Special Topics

Brief Comments on Ph.D. Education

- Accounting concentration in Ph.D. in Business Administration (e.g. U. of Chicago, Northwestern/Kellogg School, or U. Penn/Wharton School)
- Ph.D. in Accountancy (UIUC)
- Common structure: formal course work, followed by dissertation research

Ph.D. Education: Institutional and Product Differentiation

- No uniform national/government requirements; only accreditation requirements.
- Common formal requirements: formal course work and dissertation research; 3-5 years.
- Differentiation in terms of student placement, and faculty specialization and strength:
 - Small specialized programs at graduate business schools of private universities.
 - Large comprehensive programs at state universities with undergraduate programs.

Issues in American Accounting Education

Issues Identified by Major CPA Firms

(1989)

Changing Accounting Profession

- Business world more complex and dynamic due to
 - Advanced technology
 - Increase in accounting standards
 - Economic globalization
 - Complexity of transactions

Concerns of Accounting Firms as Employers

- Declining enrollment in accounting programs.
- Decline in the quality of students.
- Supply and demand imbalance in terms of availability of quality graduates.
- Firms unable to be as selective as in the past.

Gap between Education and Profession

- Capabilities of a successful practitioner:
 - Communication skills.
 - Intellectual skills.
 - Interpersonal skills.
 - Teamwork.
 - General knowledge.
 - Organizational and business knowledge.
 - Accounting and auditing knowledge.
- Educational institutions do not deliver all the above capabilities.
- Very few accounting faculty actively involved in practice.

Endorsement of 150 Hours of College Education for CPAs

- CPAs are certified and licensed by each State.
- Education requirements for AICPA membership and eligibility to take the Uniform CPA Exam:
 - Before 150-Hour Rule:
 - Undergraduate degree in accounting.
 - Minimum of 120 semester credit hours.
 - Specific details vary according to jurisdiction (States).
 - After 150-Hour Rule
 - Undergraduate or graduate degree in accounting.
 - Minimum of 150 credit hours for undergraduate degree or undergraduate and graduate degrees combined.
 - Specific details vary according to jurisdiction (States).

Issues with 150-Hour Rule

- No consensus among educators as to how to best use the additional 30 hours.

- Investment and opportunity costs for students.
- Uncertain prospects of higher salary.

Issues Identified by the Accounting Education Change Commission (AECC)
(1996)

Reasons for the Emergence of Issues

- Changes in the whole profession due to economic conditions, technological advancements, management techniques.
- Emergence of a gap between accounting education and professional practitioners

Why Issues? (continued)

- Expansion and specialization of accounting services:
 - Consulting, compilation and review; special investigations; claims auditing; litigation support; operational auditing.
- Increased demand from management
 - Preference for information systems experts to help solve strategic and tactical problems.

Challenges for Accounting Education

- Expansion of services and products.
- Increased specialization.
- Changes in the nature and extent of competition.
- Proliferation of standards.
- Litigation and legal liability.
- Widespread computerization.

Current Issues in Accounting Education

- Stagnation in university accounting educational programs relative to the advances in accounting practice:
 - Most programs likely to cover the broad themes of financial statement preparation, information development, and management decision making in varying degrees.

Current Issues (continued)

- Expansion in the body of knowledge required for accounting practice:
 - Coverage of the breadth and depth of generally acceptable accounting principles is becoming complex and overwhelming.

Current Issues (continued)

- Traditional teaching and learning methods less effective for current and future professional needs for creative thinking:
 - Lecture together with routine-problem solving
 - Problems with specific solutions rather than cases with alternative solutions
 - Learning of more factual rules to be applied in rigid fashion
 - Focus on passing professional examinations

Current Issues (continued)

- Continuing professional education:
 - Training continues throughout an accountant's career.

- Little attention paid to continuing professional education in university accounting education process.

Issues Identified by Albrecht and Sack (2000)

Changes in Business Environment

- Major developments:
 - Technology has made information inexpensive.
 - Globalization has increased competition.
 - Concentration of economic power in large mutual funds and pension funds.

Changes in Business Environment... (continued)

- Only the best organizations succeed.
- Traditional higher education is bureaucratic and slow to react to market needs:
 - Graduate with outdated skills have harder time finding jobs.
 - Consequently, student numbers are declining.

Declining Student Enrollment

- Both quantity and quality of students.
- Why?
 - Salaries offered by accounting firms and private sector employers have decreased compared to other employers.
 - New alternative areas of study increase competition for accounting programs and lead to more difficulty attracting bright students.

Declining Enrollment (cont.)

Why?

- Students willing to take more career risks.
- Misconception about accounting field: students do not perceive accounting as leading to creative, rewarding, people-oriented careers
- Higher opportunity costs due to 150-hour rule.

Accounting Graduates Would Not Choose Accounting Major Again

- Why?
 - Business world has changed dramatically while accounting education has not.
 - Business people are looking elsewhere for careers due to technological and competitive changes.
 - In the “value chain” of information, accounting education prepares students to perform lower level functions.

Obsolescence of Old Accounting Education Models

- Problems with course content or curriculum:
 - Narrow curricula with emphasis on technical rules and professional examinations
- Problems with teaching modes and methods:
 - Too much emphasis on lecture and memorization.
 - Too much reliance on textbooks instead of creative types of learning.

Obsolescence of Old Accounting Education Models (cont.)

- Impact of technology is not properly incorporated into education:
 - Emphasis on its use to solve problems, understanding systems controls, understanding technology terminology
- University departmental and programmatic issues:
 - Very little variety in the types of programs offered by different universities

What to Do?

Proposals to Improve

American Accounting Education

Recommendations by Major CPA Firms

(1989)

Curriculum

- Discard textbook-based, rule-intensive, lecture/problem style of presentation.
- Reevaluation of topical coverage in all subjects
 - Presentation of relevant material.
- More use of seminars, simulations, written assignments, case analysis.
- Development of new teaching methods
 - A message in itself.
- Opportunities to experience work patterns encountered in professional settings.
- Use of team approach.

Faculty and Students

- Faculty
 - Development and maintenance of knowledgeable, practice-oriented faculty.
 - Meaningful and increased association between faculty and practitioners through innovative methods.
- Students
 - Convince students that additional investment in educational requirement is worthwhile.
 - Create stimulating curriculum.
 - Create increased opportunities upon graduation.

Universities and Accreditation

- Universities
 - Reward faculty members for innovative curriculum development efforts.
 - Provide leadership and support in the curriculum development process.
- Accreditation
 - Must be responsive to the desired capabilities for the profession.
 - Must be supportive of innovation and experimentation in curricular change.

Recommendations of the Accounting Education Change Commission (1996)

Conceptual Framework Provided by the Bedford Committee Report (1986)

Scope and Content of Accounting Education

- Accounting viewed as a broad economic information development and distribution process.
- Rigorous general accounting education and development of broad personal capacities.

- Expansion of liberal arts and sciences education to promote analysis, synthesis, problem-solving, and communication.
- Life-long learning emphasized.
- Emphasis on learning to learn, to think, and to be creative.

Structure of Accounting Education

- General education: humanities, arts, and sciences through broad educational structure
- General professional accounting education: general conceptual information development and reporting.
- Specialized professional accounting education: specialized technical knowledge required in one or more areas of accounting—should be offered only at the graduate level.

Faculty, Administrative, and Professional Concerns

- The Teaching Process
 - Require students to be active problem solvers rather than passive information recipient
 - Increased contacts between students and faculty.
 - Develop teaching materials to serve the future structure, content, and scope of accounting education.

Faculty, Administrative, and Professional Concerns (continued)

- Faculty Responsibilities:
 - Place appropriate emphasis on student learning, research, and professional service according to the requirements of the changing profession
 - Promote both basic and applied research by accounting academics
- Professional Examinations
 - Curriculum content developed to prepare students for future accounting practice rather than for mastering expected examination content

Faculty, Administrative, and Professional Concerns (cont)

- Administration
 - Establish high standards for admission.
 - More resources to introductory and intermediate accounting education.
 - Greater interaction among accounting faculty and non-accounting faculty.
- Accreditation
 - Encourage development of graduate accounting programs.
 - Give accounting faculty more autonomy to allow adaptation to rapidly changing profession.
 - Minimization of procedural accounting courses required for accreditation.

Recommendations by Albrecht and Sack

(2000)

Each School to Tailor Its Accounting Programs

- Determine the primary employers of own students and their expectations.
- Determine where the students came from in the past and will come from in future.
- Determine the strengths and weaknesses of the faculty.
- Determine the strengths and weaknesses of the business school.

- Determine what resources are available.

Analyzing Degree Programs

- Consider if the value of undergraduate program in accounting:
 - Perhaps it should be combined with other related programs like strategy or finance
- Consider if the value of fifth-year or masters program in accounting:
 - Perhaps it should be offered only as a concentration in M.B.A.
- Consider the addition of a new and different kind of program that incorporates the needs of the new business environment.

Curriculum and Course Content

- Zero-based approach: discard content no longer needed to deliver a more value-added program.
- Focus on fundamental/foundation material and skill building.
- Coverage of more breadth in topics at high-level rather than in depth.
- Educate students how to find answers and how to learn.

Teaching Modes and Methods

- Less reliance on lectures and textbooks.
- Case-based approach to teach dealing with uncertainty and analytical skills.
- Oral and written communication assignments.
- Incorporation of group work to teach leadership and team work.
- Involvement of business professionals.
- Out-of-class activities such as internships, field studies, and service-learning assignments.

Investment in Faculty Development

- Faculty must have resources to stay up-to-date
 - Technologically, globally, and current and broad business and accounting knowledge.
- Faculty should engage with changing business world
 - Must possess consulting, internship, residency, or other real-world experiences.
- Programs must have a proactive faculty development agenda
 - Allows identification of competitive advantages and maintenance of those advantages

Project Discovery

University of Illinois

At Urbana-Champaign

(UIUC)

UIUC Department of Accountancy

- In the business school of a comprehensive university with teaching, research and public service missions.
- The first Ph.D. in Accountancy program in the U.S. and still one of the largest.
- Multiple masters programs.
- Consistently top ranking B.S. program.
- Early and long-time international program.

Rationale for Project Discovery

- Education based on traditional accounting functions outmoded: insufficient emphasis on problem identification, information search and evidence evaluation.
- General and specialized education not integrated.
- Accounting's functional application areas not integrated.
- Introductory accounting course narrow and procedural.

Problems to be Addressed

- Passive learning the norm.
- Development of oral and written communication skills not emphasized.
- Little emphasis on conceptual understanding of accounting issues.
- Too little synergy between the teaching and research missions.
- Limited and insufficient involvement of accounting practitioners.

Redefining Educational Objective

"[Undergraduate] [s]tudy in accountancy is defined to prepare individuals for entry into the accountancy profession independent of subsequent specialization. This preparation includes knowledge of the activities of organizations, businesses, and accounting practices; intellectual, interpersonal, and communication skills; and personal capabilities and professional attitudes...."

Re-orientation from Theory of the Firm to Organization Theory

"Organizations are a nexus of contracts, implicit and explicit, among resource owners who contract with each other to the benefit of all. In most complex organizations, contracts specify who has the knowledge, thus the rights, to make decisions about the use and control of the contracted resources."

From Stockholders to Stakeholders

"The effectiveness and efficiency of decisions regarding initiation, execution and monitoring of organizations' contracts depend on the quantity and quality of information available. The accountant assists in the development, accumulation, evaluation and dissemination of the information necessary for contracting parties to make effective and efficient contracting decisions."

The Role of Accounting

in the Contracting Process

" Organizations, in turn, contract with various segments of society such as labor unions, capital markets, regulatory agencies and governments. The accountant assists in the development, accumulation, evaluation and dissemination of information necessary for ensuring that organizations comply with the terms of their social contracts."

Basic Approach

- Greater emphasis on methods and skills of inquiry, analysis, judgment and decision making: enhance development of critical thinking abilities through active learning methods.
- Better integration and reinforcement of general education requirements in accountancy.

Emphasis: The Role of Information

- More interesting and better introductory courses in business: provide better understanding of the role of information in business.
- Courses organized with an integrated conceptual structure:
 - Incorporate various functional areas.
 - Emphasize the utility of information along with information production and distribution.

New Features

- Extensive use and embedding of team projects and oral reports to improve interpersonal and communication skills.
- Greater integration of current research findings into the curriculum.
- A working partnership between faculty and practitioners to bring practical experience and current developments to the classroom.

Curriculum: Required Courses

- Introductory component:
 - Accounting and Accountancy I
 - Accounting and Accountancy II
- Concepts component:
 - Accounting Measurement & Disclosure
 - Decision Making for Accountancy
 - Accounting Institutions & Regulation
 - Accounting Control Systems
 - Assurance and Attestation
- Professional Development Workshop

Professional Development Workshop (ACCY 300)

- Oral and written presentation/ communication skills.
- Teamwork and leadership skills including organization, negotiation and conflict resolution.
- Time management, stress management, and interviewing.
- Coverage of topics such as discrimination and other social issues of the workplace, cultural diversity and how to conduct business in a global marketplace.

Accounting Measurement & Disclosure (ACCY 301)

- Introducing measurement concepts including properties of measures, scales, allocation, aggregation and estimation.
- Identifying objectives of accounting information, including qualitative characteristics.
- Understanding valuation principles and alternative valuation techniques as they apply to both stock and flow measures.
- Understanding the relation between accounting measures and decision objectives arising from explicit and implicit contracts.

Decision Making for Accountancy (ACCY 302)

- Introduction to the various uses of accounting information in decision making.
- Understanding the information needs of decision makers both inside and outside organizations.
- Development of judgment and problem-solving skills, particularly related to decision making in the face of uncertainty and ambiguity.
- Providing an integrated framework for structuring and using analytic models to assist judgment and decision making, including concepts useful in the construction of automated decision aids in accounting settings.
- Understanding both quantitative and intuitive approaches to decision making, emphasizing their complementary strengths and weaknesses.

Accounting Institutions & Regulation (ACCY 303)

- Understanding the economic aspects of regulation.
- Examining regulation of accounting procedures with respect to external reporting, including the activities of the FASB, the SEC, the AICPA, and, to a lesser extent, the Governmental Accounting Standards Board and the International Accounting Standards Committee.
- Considering the regulation of accounting procedures for rate-setting and other purposes by governmental agencies and state public utility commissions.
- Examining regulation of accounting procedures for taxation including consideration of the US Congress, the IRS, and foreign governments.

Accounting Control Systems (ACCY 304)

- Developing an understanding of conflicting interests implicit in contracting settings.
- Examining controls (e.g., planning, transaction) which can be employed and considering factors that affect selection.
- Analyzing information technology and cost/benefit considerations in control system selection.
- Developing an understanding of information controls including those that assure completeness, reconciliation of independent sources, monitoring and verification via audit trails.

Assurance and Attestation

(ACCY 305)

- Developing an understanding of the role of assurance and attestation in a market-based economy, including the potential subject matters of assurance and attest services.
- Examining concepts and issues of assurance and attestation, including assertions, risks, and verification.
- Developing an understanding of verification procedures, including the scientific method and the role of evidence.
- Developing an understanding of ethical dilemmas in assurance and attestation settings and an awareness of alternative standards and criteria for coping with these dilemmas.

Summary

- Discovery vs. memorization.
- Multi-media activities vs. lecture and discussion.
- Becoming an accountant vs. being an accountant.
- General education vs. professional training.
- Organization vs. business firms, or specific economic sectors and industries.

The Aims of Education

“Whatever be the details with which you cram your students, the chance of their meeting ... exactly that detail is almost infinitesimal; and if they do meet it, they will probably have forgotten whatever you taught them about it. The really useful training yields a comprehension of a few general principles with a thorough grounding in the way they apply to a variety of concrete details.

The Aim of Education (continued)

In subsequent practice the students will have forgotten your particular details; but they will remember by an unconscious common sense how to apply principles to immediate circumstances.”

- Alfred North Whitehead

A Personal

Project Discovery

Life-long Adventure in

Government Accounting

What I Learned at UIUC

- What I *earned* at UIUC: B.S. (1971), M.A.S. (1973), and Ph.D. (1975), and what I *learned*...
- The spirit of inquiry, and social science research methodology.
- Accounting as social and institutional practice.
- Role models: Bedford, Mautz.
- Rigorous academic standards: McKeown.
- Professionalism: Martin, Zimmerman, Weir.
- Caring: Caquelin, Shove and Thomas.

What I Didn't Learn at UIUC

- There was more to life than accounting.
- How to deal with "academic politics."
- Formally...
 - Government accounting.
 - Political science: comparative politics.
 - Law: constitutional law.
 - Public economics: fiscal policy, public choice.
 - More mathematics

How I Remedied My Deficiencies

- "To teach is to learn twice over" - Jobert
- Research as personal discovery:
 - Identify the masters: Becker, Buchanan, Coleman, Posner, Simon, Schick, Wildavsky.
 - Breadth vs. depth: a delicate balance.
- Consulting:
 - American governments: local, state, federal.
 - IMF, OECD, UNDP, World Bank.
 - China: MOF, NAI.

A Modest Measure of Success

- Conventional measures: tenure and promotions, professorships, department headship, peer recognition.
- Contribution to the discipline:
 - UIC govt. accounting symposium series.
 - *Research in Governmental & Nonprofit Acctg.*
 - Comparative International Government Accounting Research (CIGAR) Network.
- Colleagues and friends all over the world.

To the Finishing Line...

- China:
 - Government accounting standards.
 - Faculty development in govt. accounting.
 - Integrating govt. accounting, budgeting and public policy.
- Course Development:

- New way of teaching govt. accounting: comparative, conceptual, analytical.
- Courses: undergraduate, masters and Ph.D. level; professional development of govt. officials.

Belated Discovery of An Education Theory Made in Southern China

- Gongfu tea: strong and lingering taste.
- “Gongfu tea cup”: small and fragile.
- “Tea cup theory” of teaching:
 - Students have finite capacity to retain knowledge.
 - Teachers should not “pour” more knowledge than students can absorb.
 - Dense knowledge lasts longer; less is more.

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- Program Description for Students:
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