

ARE WE SHORT-CHANGING ACCOUNTING MAJORS?

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ABSTRACT

This paper describes a study on the curricular design of introductory accounting courses and the preparedness and performance of accounting students in Intermediate Accounting courses in U.S. institutions of higher learning. The study shows that most universities offer either a two-course Financial Accounting and Managerial Accounting sequence, or a two-course, Principles I and II sequence. Instructors deliver the course material from a user, preparer, or a combination of the two perspectives. This study addresses the question of whether the design and delivery of an introductory accounting course sequence has an effect on accounting students' performance when they get to the intermediate accounting course level. In particular, in an effort to serve non-majors with various backgrounds and objectives for taking introductory accounting courses, are we short-changing the students who choose accounting as a major and will need a strong foundation in financial accounting in the future? The results of this study show no significant differences in perceived preparedness or performance of accounting students by instructors of Intermediate Accounting based on the curricular design or course delivery approach of introductory courses employed.

Keywords: Accounting Education, Accounting Majors, Introductory Accounting, Intermediate Accounting, User Approach, Preparer Approach.

1. INTRODUCTION

Over the past two decades, accounting education has been the subject of serious scrutiny by practitioners and academics. For several reasons, there has been an ongoing call for change in accounting education, with several different responses, and presumably, outcomes.

This paper describes the results of a study conducted in 2005 and 2006 of curricular design offered at the introductory accounting course level to majors and non-majors, and the perceptions of instructors of intermediate level courses of the preparedness and performance of their students. The study is not designed to show causality, rather the results are meant to be prescriptive, to show the current practices among U.S. institutions, and the perceptions of the instructors involved of the areas where students need more preparation at the introductory level. Instructors at the introductory and intermediate levels of accounting as well as program directors can benefit from the results of this study by aligning themselves with similar institutions that are achieving favorable results.

2. BACKGROUND – A CALL FOR CHANGE IN ACCOUNTING EDUCATION

In the early 1980s the American Accounting Association created a committee of members from academia, public accounting, private industry, and government to examine the structure, content, and scope of accounting education with the goal of reorienting education with the needs of professional practice. The general consensus was that accountants needed to expand and extend their knowledge and skills in order to keep up in a rapidly changing economic, technical and social environment. The committee's general conclusions (known as the Bedford Report) were threefold:

1. The accounting profession is expanding, and the expectations of and from those entering the profession are changing.
2. Most accounting education programs are inadequate to meet the needs of the expanding accounting profession.
3. The future scope, content, and structure of accounting education need to be reassessed and redirected appropriately to meet the needs of the profession (Bedford, et al., 1986).

Several trends in the economic and professional environment played important roles in this call for change in accounting education. First, the type of services and products accountants provide was expanding. Competition within and outside the profession was changing as a result, and the players were competing in a global arena. New accounting standards were being developed at exponential rates, making it difficult, if not impossible, for educational programs to keep pace. Widespread computerization at all levels of the profession meant that accountants must be knowledgeable and skilled in computer use before entering the profession.

The Bedford Report described the current state of accounting education as deficient in providing the scope, content and structure necessary to prepare accounting graduates for the profession. Several recommendations were put forth by the committee, with the goal of redirecting accounting education by revising and expanding curriculum, providing a more effective education delivery process, and strengthening the institutions from which accountants graduated.

Recommendations with respect to the scope and content of accounting education included the following competencies and skills necessary for faculty and students:

- competency in information technology and information system development;
- the development of broad personal capacities and skills rather than premature specialization in accounting;
- a strong liberal arts and sciences base to develop analysis, synthesis, problem-solving, and communication skills; and
- the ability to learn, to think, and to be creative.

It was recommended that the structure of accounting education remain broad and include education in the humanities, arts and sciences, as well as conceptual and technical knowledge in accounting. It was also suggested that specialized professional education in accounting be postponed until the graduate level.

At the time of its publication, the Bedford Report was viewed as a feasible set of goals for an educational system that needed to keep up with a changing profession. One of the most striking points made in the Bedford report, however, was that it is entirely possible to restructure and reorient accounting education at the university level without abandoning the commitment that accounting students will learn to prepare and use accounting reports (Bedford, et al., 1986). This is a point that seemed to get less attention as the call for change in accounting education continued.

As part of the implementation strategy of the call for change, the Accounting Education Change Committee (AECC) was formed in 1989 by the AAA to address in detail the content or what was being taught in accounting curricula, as well as how these curricula should be delivered or taught. Not surprisingly, the goal of the AECC was improvement of accounting education in order to align graduates with the types of skills and knowledge necessary to succeed in a rapidly changing profession. The AECC granted funds to several undergraduate and graduate institutions of accounting in order to facilitate curricular development and change, resulting in the publication of "Objectives of Education for Accountants" AECC Position Statement Number One, which served as a guideline for institutions in the process of changing accounting education programs.

Position Statement Number One states that more curricula in accounting are not necessarily the best solution to educating better accountants, and that graduates should be expected to do more than acquire knowledge – by memorizing accounting standards and rules – an impossible task in an arena where new rules and standards are being set continuously. This approach would lead to more narrowly focused students accessing a smaller and smaller percentage of the expanding knowledge base in accounting (Sundem & Williams, 1992). The AECC recommended pedagogy focusing on students' learning to learn, being able to gather information, analyze data, make reasoned decisions, and effectively communicate results.

The user approach or conceptual orientation to teaching accounting courses was introduced early in discussions of change, an approach that emphasizes the use of financial and nonfinancial information for

economic decision-making, and places less emphasis on the record-keeping or preparation functions (preparer orientation) of accountants. AECC Position Statement Number One emphasized that accounting is an information system designed to facilitate and communicate decision-making, and that therefore decision-making must be an integral part of accounting course content (AECC, 1990). AECC Position Statement Number Two, "The First Course in Accounting" reaffirmed this assertion but also suggested that accounting education should focus on the relevance of accounting information to decision-making (user approach) as well as to its source (preparer approach) (AECC, 1992).

According to Sundem & Williams (1991), no single accounting curriculum design would provide the optimal set of skills and knowledge necessary in professional accounting. They suggest, rather, that the development of a set of basic capabilities necessary to succeed in accounting should be the focus of a program of study. These capabilities are defined as skills, knowledge, and professional orientation. First, in terms of skills, students should be recruited for the accounting major based upon communication skills, intellectual skills and interpersonal skills, and the curriculum should be designed to develop and reward improvement in these areas. Interactive learning in the form of case studies, simulations and role-playing is suggested as a strategy for achieving development in these areas, and would make accounting students active learners rather than passive subjects. In terms of knowledge, Sundem & Williams call for accounting graduates to acquire adequate levels of general knowledge, organizational and business knowledge, and, of course, accounting knowledge. Each of these components provide for a more-well rounded business professional with an ability to function in diverse cultural, economic and political settings. The focus in accounting knowledge, again should not be on memorization of rules, rather on the development of the capability to identify problems or opportunities, to identify, gather, measure, summarize, analyze and interpret financial and non-financial data, and to evaluate risk and make informed decisions necessary to solve problems or seize opportunities. This objective can be advanced by including a broad base of liberal arts and sciences in the general curriculum, and by providing a comprehensive business curriculum that includes specialized accounting courses. It was suggested that advanced topics in audit, taxation and information technology be postponed and included in a graduate curriculum. The final capability called for by Sundem and Williams was for professional orientation, that is, that accounting graduates appreciate their obligations as professionals. This calls for training in professional ethics, integrity, objectivity and professional judgment, all difficult to teach and easier learned through practical experience.

Hulme, et al., (1997) corroborate the opinions of The AECC and Sundem & Williams, but stress that it is just as critical to focus on the accounting content that is taught as it is to focus on how it is delivered to accounting students. They believe that the user approach to teaching accounting has its merits and that student-centered pedagogy is valuable. But they add that the content of accounting education must include knowledge and skills that will add value to accountant's services from a Total Quality Management perspective. Because introductory accounting texts written in both the traditional (preparer) approach to accounting and in the user approach to accounting tend to cover the same basic content areas in comparable configurations of chapters, professors aren't always able to determine which topics will truly add value to the services performed by accountants – now and in the future. The role of the instructor, in their opinion has changed to that of facilitator in teaching the student how to learn, and then providing in-depth coverage of only certain topical areas, rather than skimming over several topics. The focus of an accounting course should not be on how much the instructor should cover, but rather on how much the student should know (Hulme, et al., 1997).

In a related line of research, Mintz and Cherry (1993) set out to study the education experience of accounting as well as non-accounting majors in introductory accounting courses. They asked instructors of Intermediate Accounting to rank the importance of topics covered in introductory courses to accounting majors and non-majors. They found that instructors viewed most textbook topics as significantly more important for majors than non-majors, and viewed problem solving and technical (worksheet and computer applications) skills significantly more important to majors. Only one topic (financial statement analysis) was considered more important to non-majors, and communication skills were found to be similarly important to both majors and non-majors. Their study revealed that in general, instructors were not satisfied with the preparation majors received in introductory courses.

In a similar study by Mintz and Cherry (1996), the views of non-accounting faculty on the content and focus of introductory courses in accounting were gathered. Non-accounting (business area) faculty generally supported a user approach to teaching introductory accounting courses, favoring a focus on the use of accounting information over financial statement preparation and bookkeeping. The authors contend that if business schools seek to meet AACSB accreditation requirements, non-accounting faculty should have input into the objectives and design of shared introductory accounting courses.

At the same time as the public profession was calling for changes in the curriculum to better prepare students or graduates for the changing business environment, the IMA was gathering data in support of a change in the managerial accounting curriculum (Siegel and Sorenson, 1999). It appears that the two tracks of accounting (public and private) are growing farther apart. The managerial content of the CPA exam is at an all-time low, which indicates that coursework in managerial accounting is not as critical to those students pursuing licensure.

In 2000, the AAA published the results of a joint project of the AAA, the AICPA, the IMA, and the Big 5 Accounting Firms entitled, "Accounting Education: Charting the Course through a Perilous Future". The authors, Albrecht and Sack (2000) provide evidence that previously suggested changes in accounting education had not been comprehensively adopted by institutions of higher education, the volume and quality of accounting students in the pipeline was decreasing, and that the accounting profession was suffering, so it seems, as a result. They challenged educators to examine the content and design of accounting courses offered to majors and non-majors.

One of the notable comments in Albrecht and Sack's report is "Today anyone, armed with the right software, can be an "accountant" and produce financial information" (pg. 6). Another statement is "the makeup of students enrolling in accounting classes is different than it was previously. We are teaching proportionately fewer accounting majors and proportionately more nonmajors. This shift in the makeup of our students requires a shift in the way we teach accounting..." (pg. 21). With introductory accounting courses being required by an increasing number of business and non-business curricula, and budget constraints in universities, departments must serve as many students as possible with one product.

3. IMPLEMENTING CHANGE AT THE UNIVERSITY LEVEL

During 1990s and early 2000s, many colleges redesigned curriculum to reflect proposed changes in the content and focus of introductory courses. One example of such a change was a switch from a Principles of Accounting I and II, two-semester course sequence to a Financial Accounting and Managerial Accounting two-semester course sequence. This new sequence reflected the change in focus away from financial accounting topics and toward managerial topics that would better serve non-majors and majors not pursuing a public accounting career. Meanwhile, text authors were releasing texts in both Principles I and II and Financial and Managerial Accounting formats. Authors also began presenting their texts as approaching content areas from a user perspective rather than from a preparer or practitioner perspective. Typically, a text written in the user perspective included more material on analysis of information and decision making, while still including the basic rules of debit and credit and journalizing transactions. It seemed that the user perspective was a marketing tool as well as an attempt to align the curriculum with the perceived expectations of the profession.

While some larger degree-granting institutions may be able to offer separate sections of introductory accounting courses for accounting majors, many smaller institutions lack the resources to segregate accounting majors from other business majors at the introductory level. Therefore, the switch from the Principles I and II to the Financial and Managerial design, and from the preparer to the user perspective, if adopted in shared major courses, would seem to serve the non-majors at a slight expense to accounting majors. This direction of thinking caused us to ask this question: If introductory courses are designed and delivered with non-majors in mind, are we short-changing accounting majors? That is, will accounting majors receive adequate preparation in their chosen field of study? While the implementation of change in accounting education is ongoing, we are interested in the effects of changes in introductory accounting courses, if any, from the perspective of those who must deal with the ramifications of change at the onset – the instructors in Intermediate Accounting courses.

4. RESEARCH QUESTIONS

1. What types of introductory accounting courses are included in the curriculum of schools serving accounting majors?
 - a. Is a user or a preparer perspective being taken?
 - b. How are the courses weighted between financial and managerial topic coverage?
2. How is the design and delivery of introductory courses associated with perceived preparedness and performance of accounting majors at the Intermediate Accounting course level?
3. What content areas do Intermediate Accounting instructors believe need to be covered more fully in introductory accounting courses?
4. What other factors may contribute to the perceived performance or preparedness of accounting majors at the Intermediate Accounting course level?

5. STUDY INFORMATION

This study was designed to gather information from accounting educators teaching Intermediate Accounting courses on the curricular design of introductory accounting courses, including their perceptions of the preparedness and performance of accounting students in Intermediate Accounting courses. Our sample was drawn by choosing the highest-ranking instructor with an interest in financial accounting at institutions listed in the latest Hasselback Accounting Faculty Directory, which would indicate a potential instructor of Intermediate Accounting courses. Potential subjects were sent an email that directed them to a web-based survey instrument. If the recipient was not an instructor of Intermediate Accounting, they were requested to forward the email message to the appropriate individual(s) at their institution. The initial message was sent to 824 individual email addresses in May 2005, in line with the end of the spring 2005 semester. A good number of the messages were returned as unread or undeliverable, which is common in this type of methodology. Undeliverable addresses and addresses of those reporting no involvement in Intermediate Accounting were removed from the database. A total of 60 useable responses were received as of June 28, 2005. A second mailing was initiated in December 2005, in line with the end of the fall 2005 semester. Again, undeliverable addresses were removed from the database. The final database was pared down to 668 email addresses. If previous respondents answered the survey again, older responses were replaced by the more recent. Seventy-six new responses were received in this second round of questionnaires. The overall response rate was 20.4 percent.

6. RESULTS

The survey administered yielded 136 useable responses representing the views of Intermediate Accounting instructors and programs in 41 states. Some of the characteristics of the respondents and of the respondents' institutions are presented in Table 1. The institutions represented by the sample offer varying combinations of bachelors, masters, and doctoral degrees. The majority of institutions offer bachelors degrees, (B.S., B.A., or Other). Thirty schools offer multiple undergraduate degrees in accounting. Several respondents indicated that graduate degrees are offered, with sixteen institutions offering multiple masters degrees. Only nine of the responding institutions have Ph.D. programs. The size of programs represented by the sample vary in size from 11 to 880 undergraduate majors (average 146.5), and from 2 to 130 graduate level majors (average 30.1).

A majority of the individual respondents to the survey are current instructors of Intermediate Accounting. Six respondents completed the survey without any assistance, 87 completed the survey with the assistance of an instructor of introductory level courses at their institution, and 10 are instructors of both intermediate and introductory courses. Twenty-seven of the respondents are instructors of introductory courses that had either taught Intermediate Accounting or are familiar with the curriculum, or are department chairs. Respondents' credentials are also shown in Table 1. Eighty-four hold doctoral degrees, 49 hold masters degrees, and one holds a bachelors degree. Certification is weighted toward public accounting – 109 are CPAs. Twenty-nine are CMAs and 18 hold other certification.

TABLE 1. INSTITUTION AND RESPONDENT INFORMATION

Degrees Offered	Number of Programs	
B.A. in Accounting	29	
B.S. in Accounting	79	
B.S. in Business Admin. (Accounting Concentration)	40	
Combined B.S./M.S. in Accounting	10	
M.S. in Accounting	38	
M.B.A. with Accounting	36	
Ph.D. in Accounting	9	
Number of Accounting Majors	Range	Average
Undergraduate	11 - 880	146.5
Graduate	2 - 130	30.1
Prepared by	Number of Respondents	
Intermediate Accounting Instructor	6	
Intermediate Accounting Instructor with the Assistance of an Introductory Instructor	87	
Both Introductory and Intermediate Accounting Instructor	10	
Introductory Accounting Instructor with the Assistance of an Intermediate Instructor	27	
Highest Degree Earned by Respondent		
Doctorate	84	
Masters	49	
Bachelors	1	
Professional Certification of Respondents		
CPA	109	
CMA	20	
Other	18	
Teaching Experience	Range	Average
Years teaching Accounting	2 – 40 years	21 years
Years teaching at current institution	0 – 38 years	13 years
Number of Sections taught over past 5 years		
Intermediate Accounting I	0 – 25	5.9
Intermediate Accounting II	0 – 30	5.7
Principles I or Financial Accounting	0 – 40	7.1
Principles II or Financial Accounting	0 – 40	4.5

The teaching experience reported ranges from 2 to 40 years of teaching accounting with an average of 21 years. This level of experience indicates that a large number of these faculty members were teaching during the time period of the call for change in accounting education. On average respondents have been teaching at their current institution for 13 years (range 0 to 28 years), indicating that many of them would have some experience with curriculum development at the institution.

The average number (and range) of course sections taught by respondents over the past five years are also shown in Table 1. While some instructors teach both the first and second introductory and/or intermediate courses, some only teach one. Based on the characteristics and credentials of the survey respondents, and the size and types of programs that they serve, we believe that our survey has reached

the intended target audience. We feel comfortable that the views they express with respect to accounting curriculum and the preparedness and performance of students are valid even though the sample size is small.

TABLE 2. INTRODUCTORY ACCOUNTING COURSE INFORMATION

Curricular Structure	Number of Programs	Percent of Total
Financial Accounting and Managerial Accounting	83	61.0%
Principles I and Principles of II	48	35.3%
Other	5	3.7%
Planning to Change Structure		
From Fin/Mgr to Principles I/II	3	3.6%
From Principles I/II to Fin/Mgr	11	22.9%
Pedagogical Approach		
User Approach	44	32.4%
Preparer Approach	33	24.3%
Combination of Approaches	46	33.8%
None of the Above	13	9.5%
Planning to Change Approach		
From User to Preparer	9	20.5%
From Preparer to User	4	12.1%
Average Course Coverage		
	Financial Topics	Managerial Topics
Financial Accounting	98.3%	1.7%
Managerial Accounting	12.7%	87.3%
Overall Coverage	55.5%	44.5%
Principles of Accounting I	93.6%	6.4%
Principles of Accounting II	43.4%	56.6%
Overall Coverage	68.5%	31.5%
Number of Sections per Academic Year		
	Range	Average
Financial Accounting or Principles I	2 – 40	9.1
Sections Restricted to Accounting Majors Only	2	
Managerial Accounting or Principles II	1 – 40	8.4
Sections Restricted to Accounting Majors Only	6	
Number of Credits per Course		
	Range	Average
Financial Accounting or Principles I	3 – 6	3.2
Managerial Accounting or Principles II	2 – 6	3.3
Enrollment per Course		
	Range	Average
Financial Accounting or Principles I	15 – 180	75.0
Managerial Accounting or Principles II	12 – 120	62.8
Average Percent of Accounting Majors in Courses		17.5%

Table 2 presents information gathered on the structure, pedagogical approach and size of introductory accounting courses of the sample institutions. We now address our first research question on the structure and content of introductory accounting. Of the 136 respondents, 83 programs (61.0%) offer Financial and Managerial Accounting and 48 offer Principles of Accounting I and II (35.3%). Five respondents reported “Other” configurations. Three institutions reported planning to change from

Financial/Managerial to Principles I and II, while eleven plan to change from Principles I and II to Financial/Managerial. Forty-four instructors reported that the user approach is employed in introductory courses at their institutions (35.8%), 33 reported that the preparer approach is utilized (26.8%), and 46 reported that a combination of the approaches is used (37.4%). Nine institutions reported planning to change from the user to the preparer approach, while four plan to change from the preparer to the user approach. Topic coverage under the two structures is slightly different for the first introductory course, and noticeably different for the second course in the two course sequences. Financial/Managerial sequences on average devote 98.3% of the course covering financial topics in the first course, and 87.3% of the second course to managerial topics. For Principles I and II sequences, the first course is on average 93.6% financial in content and the second course is 56.6% managerial in coverage. The Principles I and II course sequence provide an average of about 23% more financial coverage than the Financial/Managerial sequence.

The number of sections offered, the number of credits, and the enrollment in introductory courses is also shown in Table 2. Sections of the first introductory course range from 2 to 40 per year, with an average of 9.1. Sections of the second introductory course range from 1 to 40, with an average of 8.4 per year. The courses carry 2-6 credit hours, with a mode of 3 for both the first and second courses and a mean of 3.2 and 3.3 credits, respectively. Enrollment in the first course ranges from 15 to 180 students, with an average of 75 students. The second course's enrollment is slightly lower, ranging from 12 to 120 students, with an average class size of 62.8. Of the courses reported, only 2 of the first courses (Financial or Principles I) are restricted to only accounting majors, and 4 of the second courses (Managerial or Principles II) are restricted to accounting majors. On average, only 17.5 percent of all introductory accounting students are accounting majors. This information shows that introductory accounting courses, especially the first course, serve large populations of non-accounting majors.

Table 3 shows the characteristics of the Intermediate Accounting courses taught at respondents' institutions. The number of sections offered per academic year range from 1 to 13 for Intermediate I (average 2.8) and from 1 to 9 for Intermediate II (average 2.4). The marked decrease in the number of sections offered on average corresponds with the increase in the average percent of accounting majors in the courses – 87.8%. Course credits range from 3 to 6 with an average of 3.3 and 3.2 for Intermediate I and II, respectively. Average enrollment (31.8 for Intermediate I and 28.0 for Intermediate II) is lower for both courses, although the upper range is the same as for introductory courses. With different curricular structures (Financial/Managerial and Principles I and II), different pedagogical approaches (user approach and preparer approach), different levels of topic coverage, and larger class sizes, how well are accounting majors being prepared for smaller, financial-based, preparer-oriented Intermediate Accounting courses?

TABLE 3. INTERMEDIATE ACCOUNTING COURSE INFORMATION

Number of Sections per Academic Year	Range	Average
Intermediate Accounting I	1 – 13	2.8
Intermediate Accounting II	1 – 9	2.4
Number of Credits per Course	Range	Average
Intermediate Accounting I	3 – 6	3.3
Intermediate Accounting II	3 – 6	3.2
Enrollment per Course	Range	Average
Intermediate Accounting I	8 – 180	31.8
Intermediate Accounting II	7 – 120	28.0
Average Percent of Accounting Majors in Courses		87.8%

When asked about the overall performance of their students in Intermediate Accounting courses, 36.6 percent of respondents indicate that performance over the past 5 years is about the same. Slight

declines in performance are reported by 35.9 percent of respondents, and significant declines are reported by 10.7 percent. Slight improvements and significant improvements in performance are reported by 11.5 and 5.3 percent, respectively. Table 4 shows that when these performance measures are compared for the two curricular structures, 10 percent of instructors whose students came through the Financial/Managerial curriculum report a significant decline in performance, 36.3 percent report a slight decline, and 38.7 percent report about the same performance, while 10 percent and 5 percent report slight and significant improvements in performance, respectively. The performance of students coming through the Principles I and II introductory sequence is similar, and not significantly different than that of Financial/Managerial students. Performance differences are more marked among user, preparer, and combination approaches. In total, 25.5 percent of respondents whose students took introductory courses under the user approach report some improvement among Intermediate students, while only 12.1 percent of respondents whose students took introductory courses under the preparer approach report some improvement among Intermediate students. Of those whose students received a combination of the approaches, 11.1 percent report improvement. Declines in performance were reported by 41.9 percent of Intermediate instructors whose students had received the user approach, by 42.4 percent of instructors whose students had received a preparer approach, and by 57.8 percent of those whose students had received a combination of approaches. Differences in mean performance among the approaches were analyzed using t-tests. There are no significant differences in reported performance among approaches.

TABLE 4. OVERALL PERFORMANCE OF STUDENTS IN INTERMEDIATE ACCOUNTING COURSES

Performance	Sample	Fin/Mgr	Princ I/II	User	Preparer	Combination
N size	131	80	47	43	33	45
Significant Decline	10.7%	10.0%	12.8%	16.3%	3.0%	13.3%
Slight Decline	35.9%	36.3%	34.0%	25.6%	39.4%	44.5%
About the same	36.6%	38.7%	34.0%	32.6%	45.5%	31.1%
Slight Improvement	11.5%	10.0%	14.9%	13.9%	9.1%	8.9%
Significant Improvement	5.3%	5.0%	4.3%	11.6%	3.0%	2.2%

Table 5 shows the reported importance of introductory accounting courses to performance in Intermediate Accounting. Respondents from institutions that offer the Principles I and II sequence attach a higher level of importance on the role of the introductory courses to performance in Intermediate courses (28.3% critically important) than respondents from institutions offering the Financial/Managerial sequence (12.7% critically important). Those respondents in the user approach group attach slightly less importance on introductory courses than the combination approach group, and significantly less than the preparer approach group (t-value = 2.130; p = .036). So, even though there are only slight differences in performance (per Table 4), with the user approach group showing more improvement among students, respondents from the preparer group place more importance on the role of introductory courses in the performance of students in Intermediate Accounting. These perceptions of lower performance in Intermediate courses, and higher importance of introductory courses by the preparer group may be self-supporting.

TABLE 5. IMPORTANCE OF INTRODUCTORY ACCOUNTING COURSES TO PERFORMANCE IN INTERMEDIATE ACCOUNTING

Importance	Sample	Fin/Mgr	Princ I/II	User	Preparer	Combination
N size	129	79	46	42	32	45
Not important	4.7%	6.3%	2.2%	7.1%	3.1%	2.2%
Minor Importance	5.4%	7.6%	2.2%	7.1%	3.1%	4.5%
Moderate Importance	28.7%	29.1%	21.7%	35.7%	21.9%	33.3%
Very Important	43.4%	44.3%	45.6%	33.4%	56.3%	37.8%
Critically important	17.8%	12.7%	28.3%	16.7%	15.6%	22.2%

Tables 6 and 7 reveal the perceptions of instructors as to their students' need for less, more, or the same amount of preparation in financial and managerial accounting, respectively, at the introductory level. Per

Table 6, nearly half (48.1 percent) of the sample reported that students would be fine with the current level of preparation in financial accounting at the introductory level. Just over half (51.1 percent) of all respondents reported that students needed more preparation in financial accounting topics. These results show little variation among the design of courses or delivery method subcategories. A summary of the content areas needing more coverage are listed later in Table 9. Table 7 shows that, overall, only 11.4 percent of Intermediate Accounting instructors believe that students need more managerial accounting preparation at the introductory level, and 15.3 percent believe that students need less managerial accounting. This is logical because Intermediate I and II are both primarily financial in content, and because most institutions offer separate Cost or Managerial Accounting courses at the upper level for accounting majors. Accordingly, the largest number of “same” responses came from instructors whose students took Financial and Managerial Accounting as introductory courses. Those respondents in the Principles I and II and preparer approach groups feel only slightly stronger that there should be less managerial accounting at the introductory level (most likely, for the same reasons as above).

TABLE 6. INTERMEDIATE ACCOUNTING STUDENTS’ NEED FOR PREPARATION IN FINANCIAL ACCOUNTING AT THE INTRODUCTORY LEVEL

	Sample	Fin/Mgr	Princ I/II	User	Preparer	Combination
N size	133	82	47	43	33	46
Less	.8%	-	2.1%	-	-	-
Same	48.1%	51.2%	42.6%	46.5%	57.6%	47.8%
More	51.1%	48.8%	55.3%	53.5%	42.4%	52.2%

TABLE 7. INTERMEDIATE ACCOUNTING STUDENTS’ NEED FOR PREPARATION IN MANAGERIAL ACCOUNTING AT THE INTRODUCTORY LEVEL

	Sample	Fin/Mgr	Princ I/II	User	Preparer	Combination
N size	131	80	47	43	33	44
Less	15.3%	12.5%	21.3%	9.3%	24.2%	15.9%
Same	73.3%	82.5%	57.4%	76.7%	66.7%	72.7%
More	11.4%	5.0%	21.3%	14.0%	9.1%	11.4%

Table 8 summarizes the overall breakdown of curricular design and pedagogical approaches employed by respondent institutions in the sample. The two most-reported configurations are Financial/Managerial with user approach (n=30, 22.1%) and Financial/Managerial with a combination of user and preparer approaches (n=27, 19.9%). After that, three configurations were similarly weighted: Principles I and II with a combination of approaches (n=18, 13.2%), Financial/Managerial with a preparer approach (n=17, 12.5%), and Principles I and II with a preparer approach (n=16, 11.8%).

TABLE 8. SUMMARY OF DESIGN AND APPROACH

	Sample		User		Preparer		Combination		Other	
	n	% tot.	n	% tot.	n	% tot.	n	% tot.	n	% tot.
Fin/Mgr	83	61.0%	30	22.1%	17	12.5%	27	19.9%	9	6.6%
Princ I/II	48	35.3%	10	7.4%	16	11.8%	18	13.2%	4	2.9%
Other	5	3.7%	4	2.9%	0	-	1	0.7%	0	-
Total	136	100.0%	44	32.4%	33	24.3%	46	33.8%	13	9.5%

Table 9 lists the financial accounting content areas where 25 percent or more respondents indicated that students need more preparation at the introductory level. The areas can easily be grouped into larger headings. The first three: Realization and Recognition of Revenue, Matching Expenses to Revenue, and Preparation of Adjusting Entries can all be considered end-of-period adjustments for accrual accounting. The next two: Discussion of Present Value Concepts and Solving Present and Future Value Problems can be considered the Time Value of Money. The next two: Discussion of the Format of the Statement of

Cash Flows and Classification of Investing, Financing, and Operating Activities pertain to cash flows, and the last item, Full Disclosure in Financial Reporting stands alone. Table 9 also shows that Intermediate Accounting instructors cover two of the weak areas in a remedial fashion.

TABLE 9. CONTENT AREAS THAT NEED MORE COVERAGE

<p>Students in Intermediate Accounting Need More Preparation at the Introductory Level in the Following Content Areas:</p> <ul style="list-style-type: none">• Realization and Recognition of Revenue• Matching Expenses to Revenue• Preparation of Adjusting Entries• Discussion of Present Value Concepts• Solving Present and Future Value Problems• Discussion of the Format of the Statement of Cash Flows• Classification of Investing, Financing, and Operating Activities• Discussion of Full Disclosure in Financial Reporting <p>Content Areas where Respondents Tend to Spend the Most Time Covering Material in a Remedial Fashion:</p> <ul style="list-style-type: none">• Journalizing Transactions• Preparation of Adjusting Entries• Solving Present and Future Value Problems• Amortization of Bond Premium and Discount

7. COMMENTS FROM RESPONDENTS

A few respondents offered comments or opinions on the study and its premise. One respondent shared his opinion that introductory accounting has very limited relevance to Intermediate student performance, and that students' level of cognitive skills is the primary determinant of their success. He also offered that SAT score is probably the best predictor of success in Intermediate Accounting, and that the basic function of Intermediate Accounting is to wash out weak students. Many in accounting education may share these views, and while studies examining the relationship between SAT score and success in introductory accounting (Marcheggiani, et al., 1999), and overall accounting grade point average (Nourayi and Cherry, 1993) have been conducted, an investigation of a more direct connection between SAT score and success in Intermediate Accounting may be an area for future research. Other respondents expressed an interest in our findings because they had considered similar questions when designing introductory accounting curricula.

8. CONCLUSION

Are we short-changing accounting majors? Does the curricular design or the pedagogical approach employed in introductory accounting courses have a perceived impact on the preparedness or performance of students in Intermediate Accounting? It appears not. The results of this study do not show significant differences in perceived performance or preparedness of students coming from different introductory course delivery modes.

What other factors may contribute to the perceived performance or preparedness of accounting majors at the Intermediate Accounting course level? One factor that may sway an Intermediate Accounting instructor's perception of preparedness is the level of importance that an instructor places on particular content areas. As was shown above, instructors employing the preparer approach place significantly higher levels of importance on introductory courses than those employing the user approach. The preparer approach group also reported less improvement in performance than the user approach group. Another observation made as a result of this study is that Intermediate Accounting instructors report an

average of 21 years of teaching experience. Most of the study respondents are CPAs who have been teaching (and quite probably have not been in practice) for several years. Instructors' perceptions of a decline in student performance may be flawed, that is, these instructors may just be feeling the frustration of an increasing body of financial accounting material that must be covered in a limited number of Intermediate Accounting course hours. Intermediate instructors should seek the advice of professional accountants currently in practice as to the content areas that should receive priority in their courses to better align students with the needs of the profession.

Should schools design introductory accounting courses to serve only majors or only non-majors? It appears not. Given budget constraints, it seems that institutions can continue to serve a diverse group of students with blended introductory level courses without severely impacting the accounting majors. Content areas that are believed to deserve more attention (adjustments, time value of money, cash flows, and disclosure) should be addressed at individual institutions' department level.

Another observation on the design and delivery of courses is that although there is a tendency toward the Financial/Managerial curricular configuration, Principles I and II is not going away. The same is true for the approaches taken: the sample is divided among the user, preparer, and combination approaches. Although at some point over the past 20 years many institutions have changed the design and approach of introductory accounting courses, it appears that instructors have chosen the combination with which they are either most comfortable delivering or that they feel is most effective, or both. Per this study, only a handful of institutions were considering changing structures or approaches. In other words, the sample is divided into camps with common structures. These camps will probably converge only slightly in years to come. Hopefully, accounting majors will obtain adequate knowledge and skills in financial and managerial accounting at the introductory level to be successful in Intermediate Accounting courses regardless of the curricular design or the pedagogical approach employed.

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AUTHORS' COMMENTARY

We do not argue with the call for change in accounting education, and we concur with most of the strategies that have been suggested for achieving change – including the user (instead of preparer) approach to teaching introductory accounting courses. However, we believe that too little emphasis on debits, credits and financial accounting principles may lead to a generation of accountants who rely on the judgment of those less qualified to record and disclose transactions.

While the number of accounting majors is relatively small compared to all other majors in an institution's business school or department of business, those choosing to go on in accounting should not be short-changed. Tailoring the introductory courses to serve accounting majors, business majors, and a variety of non-business majors that have a "management" component in their curriculum (and therefore require introductory accounting courses) may save resources. But this approach may fundamentally harm accounting majors, and in doing so, provide a disservice to the profession. We believe our duty is to our accounting majors first when designing the curriculum of accounting courses.

A possible (but not practical) solution to the potential short-changing of accounting majors is the offering of separate sections of introductory courses for majors only, offered in the Principles I and II sequence. Another solution may be to require accounting majors to take a one-credit, co-requisite in addition to each of the three-credit courses in the Financial and Managerial Accounting introductory sequence, focusing on the recording and reporting of transactions. A third option may be to design a three-course Intermediate Accounting sequence to completely cover the financial accounting topics necessary for those expecting to sit for the Uniform CPA Exam. With 150-hour programs in place in most accounting degree-granting institutions, there is, per the advice of advocates for change, room to cover advanced financial topics at the graduate level. However, a shortfall in basic principles at the very beginning of the students' program carries what we feel is a risk of future shortcomings. Though our study does not prove this statistically, the effects may not be noticed until later in students' academic or professional careers.

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