

Revising the Content of Intermediate Accounting: An Analysis of Perceptions of Accounting Educators

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Abstract

The volume and complexity of the content presented in traditional intermediate accounting courses have increased substantially over the last 50 years. A minority of business schools have responded to this change by adding a third intermediate financial accounting course to the curriculum. The primary purpose of this research is to examine the level of support among accounting educators for the creation of an additional intermediate accounting course. We survey accounting professors and ask whether specific, complex topics should be moved from a traditional intermediate course to a more advanced financial accounting course. We also ask educators for perceptions of the costs and benefits associated with an additional intermediate accounting course. This study is designed to be primarily descriptive.

Survey results show (1) that the majority of accounting educators do not support the creation of a third intermediate accounting course and (2) that accounting professors who teach at universities that offer a third intermediate accounting course generally have more favorable attitudes regarding the costs and benefits of a third intermediate course. These findings may aid accounting educators in making accounting curriculum decisions.

Introduction

Accounting academics have argued that traditional intermediate accounting courses do not adequately cover financial accounting topics due to the volume and complexity of current financial accounting standards and rules. In addition to the content coverage, accounting educators are expected to integrate the development of soft skills such as critical thinking, communication and ethical awareness in all accounting courses. One potential solution to the problems created by content overload and the need to develop soft skills is the creation of a third intermediate accounting class. Moving certain topics from traditional intermediate accounting courses to a third intermediate accounting course should provide more time for instruction related to both technical accounting rules and soft skills.

Many accounting students will not take the CPA exam and arguably have no need to learn many of the complex and voluminous rules covered in intermediate accounting. Such students may receive a greater benefit by substituting courses that focus on managerial accounting rather than courses which focus on financial accounting. Moving certain complex content to an elective third intermediate course, thus, allowing more time to cover the content of traditional intermediate accounting courses, may provide a means of retaining students who are not preparing for careers in public accounting.

This survey identifies participants who generally agree or disagree that a majority of the complex topics should be moved to a third intermediate course. We ask for opinions of accounting educators regarding the costs and benefits of a proposal to shift certain complex topics from traditional intermediate accounting courses to a third intermediate financial accounting course. This study is designed to be primarily descriptive in nature and seeks perceptions of accounting educators who will assume a key role in development of the accounting curriculum. The literature review which follows cites research related to the above-mentioned motivations for revision of intermediate accounting courses.

Literature Review

Content Overload

Griffin and Dawkins (1986) surveyed accounting department heads to examine current practices related to content coverage and credit hours in intermediate accounting courses. They noted that the volume of accounting standards had increased significantly over the previous decade. They argued that traditional intermediate accounting topics could not be adequately covered in two three-semester hour courses. The authors found that the vast majority of schools required completion of two intermediate courses and that less than ten percent of schools offered three intermediate courses. Given the increased volume and complexity of financial accounting standards since 1986, the issue of intermediate accounting topic coverage continues.

Anderson and Boynton (1992) note a general perception that content overload exists in intermediate accounting. Based upon an experiment performed by the authors, they conclude that the omission of redundant material (such as a review of the accounting cycle) in Intermediate I allows more in-depth coverage of important topics as well as the addition of new topics. Catanach, Croll and Grinaker (2000) note the problem of content overload and state that the volume of material covered significantly reduced time available to discuss other important issues. Burnett, Friedman and Yang (2008, 83) report the concern expressed by other researchers that the “magnitude of material covered in intermediate accounting has reached the point of ‘information overload.’” The above-mentioned authors noted the problem of content overload and presented educational techniques designed to alleviate this problem.

Davidson and Francisco (2009) surveyed accounting programs at U.S. universities. They found that sixty percent required a two-course sequence in intermediate accounting (3 semester hours per course) and twenty percent required a three-course (3 semester hours per course) sequence. Twenty percent had made, or were considering making, changes such as increasing credit hours for the two-course sequence or moving certain topics to more advanced accounting courses. Generally schools which made the change to a three-course sequence reported goals of improving student learning and allowing more time for coverage of complex topics. The authors provide evidence that an increasing number of schools are requiring three intermediate accounting courses. Even so, these schools represent a minority of accounting programs.

Development of Soft Skills

W. Steve Albrecht and Robert J. Sack (2000) discussed numerous changes recommended for accounting education. They contend that accounting educators emphasize topical content coverage to the detriment of soft skills such as critical thinking, communications and interpersonal skills. These arguments are also presented in the CPA Horizons 2025 Report (2011), sponsored by the AICPA, which identifies core competencies that CPAs must develop in order to provide a competitive advantage to clients. The report writers conclude that traditional accounting education must incorporate core competencies such as communication skills, critical thinking skills and ethical conduct. Rebele and St. Pierre (2019) present a discussion of issues related to teaching soft skills and note that time allocated to this important task has decreased the time available for coverage of technical material. Accounting educators must create innovative teaching methods to ensure that both hard skills and soft skills are adequately covered in the accounting curriculum.

Retention/Student Success Rates

Intermediate accounting is considered by most accounting students and faculty to be a very challenging course subject to high failure/withdrawal rates. Sanders and Willis (2009) describe the creation of an entrance exam (which

included remedial instruction) intended to reduce the high failure/withdrawal rate in Intermediate I. They note that pressure from university administrators to improve retention rates and student success rates provided a significant motivation for the entrance exam.

Sargent (2013) reports the positive results of the adoption of a proficiency exam, coupled with tutoring, which was created to reduce the failure rate and improve student outcomes in Intermediate I and II. Given the demands on educators to improve retention rates and student outcomes, the creation of a third intermediate accounting course might provide an avenue for improvement.

Careers Other Than Public Accounting

Bergolofsky (1968), an early critic of traditional accounting programs, called for a revision of accounting curricula that focus primarily on financial accounting and preparation for the CPA exam. He proposed the offering of an accounting degree with a managerial accounting emphasis as an important addition to accounting programs. He argued that many potential accounting students are frustrated and discouraged by the content and complexity of intermediate accounting. He recommended the addition of alternative courses to the accounting curriculum in an effort to retain accounting students and fill the need in industry for managerial accountants. Given the push in higher education for student retention, accounting educators might consider changes to intermediate accounting for the benefit of accounting students who will not pursue careers in public accounting.

Siegal, Sorensen, Klammer, & Richtermeyer (2010) reviewed changes in accounting courses over the prior 20 years at U.S. universities. They sought to examine the issue of whether current accounting curricula meet the needs of accounting students who will not seek employment in public accounting. They report evidence (obtained from AICPA publications covering years 1999-2008) that more than fifty percent of graduates from accounting programs will seek initial employment in areas other than public accounting. They argued that changes are needed to design accounting programs which meet the needs of all accounting majors rather than focusing primarily on the needs of CPA exam candidates. The authors recommended that financial accounting coursework focused on the CPA exam should be delivered at the graduate level. They report that approximately fourteen percent of the sampled schools offered a third intermediate accounting course. Both Seigal et al. (2010) and Davidson and Francisco (2009) reported that only a minority of accounting programs (14 percent and 20 percent, respectively) offer a third intermediate accounting course.

Lawson, et al. (2014) present the report of a Task Force of the Institute of Management Accountants (IMA) and the Management Accounting Section (MAS) of the American Accounting Association (AAA). The Task Force recommends that accounting education should expand the current focus on careers in public accounting/auditing to include other accounting-related careers. The authors note that over eighty percent of accounting graduates will eventually accept positions in firms other than public accounting firms.

In summary, four motivations for the creation of a third intermediate accounting course are discussed above. First, a third intermediate financial accounting course might provide relief from the overload of current financial accounting rules. Second, other educational objectives such as the development of soft skills places greater pressure on accounting professors. Additional time and effort needed for the development of soft skills in accounting courses exacerbate the content overload issue. Moving topical content from a traditional intermediate course to a third intermediate accounting course may reduce the pressure to de-emphasize or omit important financial accounting topics. Third, university pressure to increase retention and student success rates places additional pressure on educators to adjust the curriculum in an effort to meet expectations of administrators. Fourth, several influential committees of the IMA and AAA have recommended that the accounting curriculum should be revised to meet the needs of students who will not pursue careers in public accounting. A new Intermediate III course which focuses on some of the more complex topics tested on the CPA exam might be required for students who plan to take the CPA exam and offered as an elective for students who choose to prepare for a career other than public accounting/auditing.

Several motivations for moving content from traditional intermediate accounting courses to a third intermediate

accounting class have been presented. We seek to determine overall participant support and perceptions of cost/benefits that may be incurred/result from moving content to a third intermediate accounting course.

Research Design

We conduct a survey designed to address the following issues:

- (1) What are the opinions of accounting educators regarding movement of some of the more complex financial accounting topics from traditional intermediate accounting courses to a third intermediate course or to a graduate-level financial accounting course?
- (2) What are the perceptions of accounting educators regarding potential costs/benefits of moving content of a third intermediate course or to a graduate-level financial accounting course?

We examine differences in the perceptions of accounting professors based upon demographic data and responses to survey statements/questions regarding the costs/benefits of the proposed changes. We hope to gain a better understanding of some of the reasons why professors might agree/disagree with the curriculum changes.

We survey accounting professors at both accredited (AACSB or ACBSP) and non-accredited colleges and universities. Survey participants are randomly selected from Hasselback Directory of Accounting Academics. We send the survey to accounting professors who are noted in Hasselback as primarily teaching financial accounting topics. We select a random sample of 1000 accounting professors. The survey email provides a link to Qualtrics, the host of the survey. We ask participants to provide their informed consent prior to beginning the survey. We received 130 responses of which 93 are substantially complete and useable. Non-usable responses generally omitted a majority of the answers. The overall useable response rate was 9.3%.

The survey requests demographic information including: (1) whether a third intermediate accounting course is offered at the participant's university, (2) the participant's primary teaching areas and frequency of teaching intermediate accounting, (3) school of business accreditation, (4) accounting department accreditation, (5) total university enrollment, and (6) percentage of accounting majors who take the CPA exam. Most participants teach financial accounting courses frequently. Most participants teach at accredited business schools that do not have separate accreditation for the accounting department. Participants are employed at universities with enrollments that cover the range from small to large institutions. The percentage of accounting majors who take the CPA exam covered ranges from < 20%, 20 - 40%, and > 40%. Table 1 presents demographic data.

We ask participants for their opinion regarding transfer of a majority of the content of the following eight topics from a traditional intermediate course to a third intermediate financial accounting course:

- Earnings per share
- Share-based compensation
- Leases
- Income taxes
- Pensions
- Other post-retirement benefits
- Change in accounting principle and error corrections
- Derivatives and hedging activities

Topics listed above are those that intermediate accounting professors would likely classify as the 'most complex' topics in intermediate. Based upon a convenience sample (Google search) approximately thirty universities that offered Intermediate III were identified. We reviewed catalog descriptions of each course and found that the topics listed above were among the top ten topics covered in Intermediate III. Survey participants suggested that revenue recognition and interim financial reporting should have been considered in the list of topics.

Survey participants are asked to indicate agreement or disagreement with the following statements for each of the eight topics listed above. Statements in the survey read as follow:

A majority of the content of each topic should be moved from a traditional intermediate course and added to a third undergraduate intermediate financial accounting course.

A majority of the content of each topic should be moved from a traditional intermediate course and added to a graduate financial accounting course.

Participants reported agreement or disagreement for each of the two statements and for each of the eight topics. We ask participants whether ‘a majority of the content of each topic’ should be moved. We assume that participants who agree that a topic should be moved to another course might also agree that an introduction to each topic should be retained in a traditional intermediate course. Hereinafter, for brevity, we substitute ‘the topic’ for ‘a majority of the content of each topic’ should be moved.

Participants choose from the following Likert scale responses: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree. Thus, a participant might agree/disagree to move some (but not all) of the topics from a traditional intermediate accounting course to a third undergraduate intermediate financial accounting course or to a graduate financial accounting course.

Frequency distributions of agree/disagree responses for the eight topics are summarized in Table 2. Note that almost all participants disagree (respond with 1, 2, or 3) with moving the earnings per share topic and almost all participants agree (respond with 5, 6, or 7) with moving the derivatives topic to a third intermediate accounting course.

Participants who responded with ‘4’ for any topic indicated ‘neither agree nor disagree.’ For the remaining six topics, a majority (minority) of participants disagree (agree) with moving the topics to a third intermediate accounting course. Table 2 also reports results related to moving topics to a graduate financial accounting course. Generally, these results reflect greater disagreement and less agreement. Due to the low agreement rate regarding movement of topics to a graduate-level course, these survey responses will not be analyzed and discussed.¹

Frequency distributions for the individual topics and perceptions regarding placement of each topic are not the focus of this research. Instead, we examine differences between groups of accounting professors who generally agree or disagree that topics should be moved to another accounting course. See the discussion of ‘Agree’ participants and ‘Disagree’ participants (defined below).

Results and Discussion

Agree/Disagree Groups

This research is designed to present evidence of perceptions of the need (or lack thereof) to move complex topics from traditional intermediate accounting courses (Intermediate I and II) to a third intermediate accounting course (such as Intermediate III). Rather than analyzing and discussing course placement of each topic, we examine opinions of professors regarding overall agreement (or lack thereof) to move complex topics from a traditional intermediate accounting course to a third intermediate accounting course.

We assign participants to one of three groups (Agree, Disagree or Neither Agree nor Disagree (Neither)) based on overall participant agreement or disagreement that topics should be moved from a traditional intermediate course to a third intermediate financial accounting course.² Agree group participants are defined as those who reported agreement (i.e., responded 5, 6, or 7) to move content from a traditional intermediate accounting course to a third intermediate course for 5 or more of the 8 topics. Disagree group participants are defined as those who reported disagreement (i.e., responded 1, 2, or 3) for 5 or more of the 8 topics. All other participants are referred to as the Neither agree or disagree (Neither) participants. Neither participants are excluded from reporting and analyses in this study.³

Based upon the procedures described above, participants are assigned to each group. Numbers (percentages) of participants responding to the first survey statement presented above (i.e., move content to a third intermediate accounting course) follow: agree participants = 30 (32%), neither participants = 20 (22%), disagree participants = 43 (46%).⁴ We calculate a composite score for each agree participant and each disagree participant. The composite score is the sum of the ratings of each participant for each of the eight accounting topics. Since there were eight topics which each participant rated on a scale of 1 - 7 (where 1 = strongly disagree and 7 = strongly agree), the composite score for any participant could range from a low of 8 (disagree strongly on all eight topics) to a high of 56 (agree strongly on all 8 topics).

Participants responded to the survey statement presented above (a majority of the topic content should be moved from a traditional intermediate course and added to a third undergraduate intermediate financial accounting course) using the seven-point Likert scale. All participants agreed that some topics should be moved to another course and that some topics should not be moved to another course. We test for a significant difference between the average composite scores of the agree group participants and the disagree group participants. Average composite scores for the agree group (44.6) and the disagree group (18.2) are significantly different (p-value < .01). See Table 3.

CPA Exam

Participants respond to the following survey question:

What percentage of accounting majors (both undergraduate and graduate) at your university/college will take the CPA exam? Please select your best estimate.

CPA exam estimate categories include the following: Less than 20%, 20 - 40%, Greater than 40%, and Do not know.

We identify all participants (agree and disagree) who reported CPA exam percentages of less than 40% and refer to them as members of the '<40% group.' Next, we identify all participants who reported CPA exam percentages of more than 40% and refer to them as the '>40% group.' We exclude participants who respond 'do not know' from the following analyses.⁵

We expect that participants who teach at universities which place a greater emphasis on passing the CPA exam (which we assume to be the > 40% group) will be less likely to favor the creation of a third intermediate class. We expect that the > 40% group will have a lower average score (i.e., more strongly disagree). We expect that participants who teach at universities which place less emphasis on passing the CPA exam (which we assume to be the < 40% group) will be more likely to favor creation of a third intermediate class. Thus, we expect the < 40% group will have a higher average score. We test for differences between group average composite scores using a t-test. Group average composite scores follow: <40% group average = 28.6 and >40% group average = 28.9. These averages are not significantly different. Review of the data reveals that, within each CPA exam group, there are substantial numbers of agree participants and disagree participants. Thus, failure to find a difference in the group averages is not surprising. We conclude that differences in participant responses cannot be explained by an examination of CPA exam percentages. See Table 3.

Third Intermediate Course Offered

Participants respond to the following survey question:

Does your university/college offer a third undergraduate intermediate financial accounting course? Is this course required for all undergraduate accounting majors?

Approximately one-fourth of participants report that a third undergraduate intermediate financial accounting course is offered and that the course is generally (90% of responses) required for all undergraduate accounting majors.

Based upon comparisons with prior research, the number of schools that offer a third intermediate accounting course may be increasing.

We calculate average composite scores for participants in the 'Offer' group (participants teach at a school which offers a third intermediate class) and for participants in the 'Not Offer' group (participants teach at a school which does not offer a third intermediate class).⁶ We expect that participants in the offer (not offer) group will be more (less) likely to agree that a third intermediate class should be offered. Thus, we expect that offer group participants will have a higher average composite score (i.e., report higher agreement) than the not offer group. We test for significant differences between the offer group and not offer group average composite scores using a t-test. Group averages follow: offer group average = 35.67 and not offer group average = 26.50. Note that the offer group average falls on the agree side of the Likert scale midpoint. The not offer group average falls on the disagree side of the Likert scale midpoint. These group averages are significantly different ($p < .01$). We conclude that participants who teach at schools which offer Intermediate III are more likely to agree that a third intermediate accounting course should be offered. See Table 3. Further analyses, discussed below, may shed additional light on reasons for participant agreement.

Costs/Benefits Analyses

We test for significant differences between agree group participants and disagree group participants related to perceptions of the costs and benefits of providing a third intermediate accounting course. Participants respond to survey statements (using the seven-point Likert scale) which read as follows:

Moving the eight topics, listed above, from a traditional intermediate accounting course to a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant **positive impact on student learning** of the topics moved to the new course(s). (Hereinafter referred to as the 'positive impact on student learning' statement.)

Moving the eight topics, listed above, from a traditional intermediate accounting course to a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant **burden to students** due to the cost and time required to complete an additional accounting course. (Hereinafter referred to as the 'burden to students' statement.)

Moving the eight topics, listed above, from a traditional intermediate accounting course to a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant **financial burden to university/college/department budgets** due to the costs incurred to provide an additional financial accounting course. (Hereinafter referred to as the 'burden to school budgets' statement.)

We calculate, for each of the three statements presented above, an average score (with a range of 1 to 7) for the responses of agree group participants and disagree group participants.⁷ We test for differences between the group averages using a t-test. Analysis of these differences may aid in understanding participants' reasons for agreeing or disagreeing with the proposed changes to traditional intermediate accounting courses.

Positive Impact on Student Learning

Accounting educators have argued that the addition of a third intermediate accounting course would enhance student learning. We expect that agree (disagree) participants are more likely (less likely) to believe that creation of a third intermediate course will result in a significant positive impact on student learning. Thus, we expect that the agree (disagree) group will report a higher (lower) average response. Table 4 reports average group responses to the 'positive impact on student learning' statement. Group averages (disagree group = 3.79, agree group = 6.20) are significantly different ($p < .01$). We conclude that participants who agree that a third intermediate course is needed do so, in part, because of the perceived positive impact on student learning. The average response of participants who disagree reflects slight disagreement with the 'positive impact on student learning' statement.

Burden to Students

The addition of a third intermediate accounting course may meet resistance from students due to additional burdens of time and costs required to take another course. However, overall credit hour limitations for graduation may require corresponding reductions in other coursework. We expect that disagree (agree) participants are more likely to believe that the addition of a third intermediate accounting course will result (will not result) in a significant burden to students. Thus, we expect that the disagree (agree) group will report a higher (lower) average response. Table 4 reports average group responses to the 'burden to students' statement. Group averages (disagree group = 4.93, agree group = 3.38) are significantly different ($p < .01$) and, as expected, disagree (agree) participants expect that the addition of a third intermediate accounting course will result (will not result) in a significant burden to students. We conclude that participants who agree that a third intermediate course is needed do so, in part, because they believe that no significant additional burden will be imposed upon students.

Burden to School Budgets

Many universities are financially stressed and may be reluctant to add courses for which there is little faculty support. Thus, the addition of a third intermediate accounting course, which may burden already tight budgets, may require a high level of faculty and administrator support. We expect that disagree participants are more likely to believe that the addition of a third intermediate accounting course will result in a significant burden to school budgets. We expect that agree participants are less likely to believe that the addition of a third intermediate accounting course will result in a significant burden to school budgets. Thus, we expect that the disagree (agree) group will have a higher (lower) average score. Table 4 reports average group responses to the 'burden to school budgets' statement. Group averages (disagree group = 4.37, agree group = 3.50) are significantly different ($p < .02$). We conclude that participants who agree that a third intermediate course is needed do so, in part, because they believe that no significant additional financial burden will be imposed on school budgets.

Conclusions and Suggestions for Further Research

We report perceptions of accounting educators regarding costs/benefits of the creation of a third intermediate financial accounting course. Based upon survey results, we conclude that a majority of accounting professors do not support the development of a third intermediate accounting course and do not expect significant benefits from this curriculum change. However, we do note evidence that attitudes may be slowly changing. Research does provide limited evidence of an upward trend in the number of universities that offer three intermediate courses. See Griffin, et al, (1986) who report that less than ten percent of schools offered three intermediate courses; Davidson, et al, (2009) report twenty percent; and this survey which reports an estimated twenty-five percent of schools offer a third intermediate accounting course.

We find that a minority of participants (the 'agree participants') expect that the creation of a third intermediate accounting course (1) will result in a significant positive impact on student learning, (2) will not create a significant burden to students due to the cost and time required to complete an additional accounting course and (3) will not result in a significant financial burden to college budgets. We find that participants who teach at schools that currently require a third intermediate accounting course are more likely to agree with the proposal to create a third intermediate course.

The relatively low response rate (9.3%) is a limitation of this study that negatively impacts external validity. This study might be replicated and expanded to explicitly incorporate motivations (such as those described in the literature review) for the creation of a third intermediate course. We recommend additional research that may provide evidence of a linkage between the creation a third intermediate accounting course and an impact on student learning and accounting major retention. We encourage research that seeks the perceptions of other stakeholders such as students, administrators, and employers of accounting graduates. Hopefully, the suggested research will assist educators in the identification of solutions to current accounting curriculum issues.

Endnotes

1. The agreement rate for moving content to a graduate financial accounting course was substantially lower than the agreement rate for moving content to a third intermediate accounting course. Due to the very low agreement rate, we do not analyze participant responses regarding movement of topics to a graduate level course. See Table 2 which reports frequency distributions for responses related to moving content to a third intermediate accounting course and to a graduate financial accounting course.

2. *ibid.*

3. We were surprised at the number of participants who fell into the neither group. We expected participants to either be strongly in favor of or strongly opposed to the proposals for change. We conclude that participants who agreed on 4 topics and disagreed on 4 topics could not be logically placed in the agree group nor in the disagree group. A few neither participants selected 4 (neither agree nor disagree) on all eight topics. We exclude “neither” participants from further analyses and discussions.

However, due to the substantial percentage of responses from neither group participants and the potential impact on group comparisons, we report the impact of these participants in this endnote. First, we treat neither participants as agree participants and conduct all statistical tests reported in this research study. Next, we treat neither participants as disagree participants and conduct the same statistical tests. Treatment of neither participants as agree participants or as disagree participants changes average response scores for each group but does not alter any conclusions regarding significance of the group differences. All group differences remain statistically significant with one-tailed p-values of less than 5%. Group averages and t-tests based upon inclusion of neither participants are not presented.

4. Numbers of (percentages) participants responding to the statement described in footnote 1 (i.e., move content to a graduate financial accounting course) follow: agree group - 13 (14%), neither group - 22 (24%), disagree group - 58 (62%). Due to the low number of (percentage of) agree group participants, we conclude that further analyses of these agree/disagree participant responses will not be practically significant.

5. Participants in the neither group are excluded from the analysis of the impact of CPA exam rates. See additional discussion at endnote 3.

6. Participants in the neither group are excluded from the analysis of the impact of offering a third intermediate accounting course. See additional discussion at endnote 3.

7. Participants in the neither group are excluded from the analyses of costs and benefits of offering a third intermediate accounting course. See additional discussion at endnote 3.

References

- Albrecht, W., & Sack, R. (2000). Accounting Education: Charting the Course through a Perilous Future. Accounting Education Series, Vol 16, Sarasota, FL: American Accounting Association. Retrieved from: www.aaahq.org/pubs/AESv16/toc.htm.
- American Institute of Certified Public Accountants (AICPA). (2011). CPA Horizons 2025 Report. Retrieved from: www.aicpa.org/research/cpahorizons2025/cpahorizonsreport.html.
- Anderson, J., & Boynton, W. (1992). Managing the Intermediate Accounting Overload: An Experiment. *Journal of Accounting Education*, 10(2), 297-307.
- Bergolofsky, H., (1968). A Proposed Revision of the Accounting Curriculum. *Accounting Review*, 43(4), 787-788.
- Burnett, R., Friedman, M., & Yang, Y. (2008). The Change in Students' Perception of Accounting Skills in Intermediate Accounting: A Guide for Accounting Education Reform. *The Accounting Educators' Journal*, 18, 81-101.
- Catanach, A., Croll, B. & Grinaker, R. (2000). Teaching Intermediate Financial Accounting Using a Business Activity Model. *Issues in Accounting Education*, 15(4), 583-603.
- Davidson, L., & Francisco, W. (2009). Changes in the Intermediate Accounting Course Sequence. *American Journal of Business Education*, 2(7), 55-59.
- Griffin, R. B., & Dawkins, S. C. (1986). Current Trends in Intermediate Accounting Course Content. *Issues in Accounting Education*, 1(2), 238-248.
- Lawson, R., Blocker, E., Brewer, P., Cokins, G., Sorensen, J., Stout, D., Sundem, G., Wolcott, S., & Wouters, M. (2014). Focusing Accounting Curricula on Students' Long-Run Careers: Recommendations for an Integrated Competency-Based Framework for Accounting Education. *Issues in Accounting Education*, 29(2), 295-317.
- Rebele, J., & St. Pierre, C. (2019). A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48, 71-79.
- Sanders, D., & Willis, V. Setting the P.A.C.E. for Student Success in Intermediate Accounting. *Issues in Accounting Education*, 24(3), 319-337.
- Sargent, C. (2013). Find It, Fix It, and Thrive: The Impact of Insisting on Proficiency in Prerequisite Knowledge in Intermediate Accounting. *Issues in Accounting Education*, 28(3), 581-597.
- Siegel, G., Sorensen, J. E., Klammer, T., & Richtermeyer, S. B. (2010). The Ongoing Preparation Gap in Accounting Education: A Call to Action. *Management Accounting Quarterly*, 11(3), 41-52.

Appendix A

Intermediate Accounting Survey Instrument

This Intermediate Accounting Survey is designed to examine the opinions of accounting professors regarding the optimal course placement of some of the most complex topics covered in intermediate accounting courses. Traditionally, the topics listed below have been covered in either an Intermediate I or Intermediate II course. Hereinafter, we define the term “traditional intermediate courses” to mean either Intermediate I or Intermediate II courses which cover most, if not all, of the topics listed below.

We seek your opinion regarding the optimal course placement of the following topics: (1) Earnings per share, (2) Share-based compensation, (3) Leases, (4) Income taxes, (5) Pensions, (6) Other post-retirement benefits, (7) Change in accounting principle and error corrections and (8) Derivatives and hedging activities. The content of these topics might be covered in (1) a traditional intermediate accounting course, (2) a third intermediate financial accounting course and/or (3) a graduate financial accounting course.

Q1 Does your university/college offer a third undergraduate intermediate financial accounting course? Is this course required for all undergraduate accounting majors?

Yes. This course is required for all undergraduate accounting majors.

Yes. This course is NOT required for all undergraduate accounting majors.

No. A third undergraduate intermediate financial accounting course is not offered.

Q2 Does your university/college offer a graduate financial accounting theory course? Is this course required for all graduate accounting majors?

Yes. This course is required for all graduate accounting majors.

Yes. This course is NOT required for all graduate accounting majors.

No. A graduate financial accounting theory course is not offered.

Q3 Please indicate agreement/disagreement with the following statement for each of the topics listed below:
A majority of the content of each topic listed below should be moved from a traditional intermediate course and added to a third undergraduate intermediate financial accounting course.

- (1) Earnings per share
- (2) Share-based compensation
- (3) Leases
- (4) Income taxes
- (5) Pensions
- (6) Other post-retirement benefits
- (7) Change in accounting principles, error corrections
- (8) Derivatives and hedging activities

Choose from the following responses for each of the above-listed topics:

Strongly Disagree (1)

Moderately Disagree (2)

Slightly Disagree (3)

Neither Agree nor Disagree (4)

Slightly Agree (5)

Moderately Agree (6)

Strongly Agree (7)

Q4 Please indicate agreement/disagreement with the following statement for each of the topics listed below:

A majority of the content of each topic listed below should be moved from a traditional intermediate course and added to a graduate financial accounting theory course.

(See list of topics and responses from Q3.)

Q5 Please indicate your agreement or disagreement with the following statement:

If the eight topics, listed above, are moved from traditional intermediate courses and added to a third undergraduate intermediate financial accounting course, this financial accounting course should be a required course for all undergraduate accounting majors.

Choose from the following responses:

Strongly Disagree (1)

Moderately Disagree (2)

Slightly Disagree (3)

Neither Agree nor Disagree (4)

Slightly Agree (5)

Moderately Agree (6)

Strongly Agree (7)

Q6

Please indicate your agreement or disagreement with the following statement:

If the eight topics, listed above, are moved from traditional intermediate courses and added to a graduate financial accounting course, this graduate financial accounting course should be a required course for all graduate accounting majors.

(See list of responses from Q5.)

Q7

Please indicate your agreement or disagreement with the following statement:

Moving the eight topics, listed above, from a traditional intermediate accounting course and to a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant positive impact on student learning of the topics moved to the new course(s).

(See list of responses from Q5.)

Q8 Please indicate your agreement or disagreement with the following statement:

Moving the eight topics, listed above, **from** a traditional intermediate accounting course **to** a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant burden to students due to the cost and time required to complete an additional accounting course.

(See list of responses from Q5.)

Q9 Please indicate your agreement or disagreement with the following statement:

Moving the eight topics, listed above, **from** a traditional intermediate accounting course **to** a third undergraduate intermediate accounting course or a graduate financial accounting course would result in a significant financial burden to university/college/department budgets due to the costs incurred to provide an additional financial accounting course.

(See list of responses from Q5.)

Q10 Your primary teaching area(s) include the following:

Financial / Managerial / Auditing / Tax / Information Systems

Q11 Do you frequently teach intermediate financial accounting courses? Yes / No

Q12 Your school of business is accredited by the following organization: AACSB / ACBSP / Neither of the above

Q13 Your accounting department is accredited by the following organization: AACSB / ACBSP / Neither of the above

Q14 The estimated total enrollment at your university/college during academic year 2017-18 is within the range of:

- 0 to 10,000
- 10,000 to 20,000
- 20,000 to 30,000
- greater than 30,000

Q15 What percentage of accounting majors (both undergraduate and graduate) at your university/college will take the CPA exam? Please select your best estimate.

- less than 20%
- 20 - 40%
- greater than 40%
- Do not know

Q16 Does your university/college currently offer a specialized undergraduate accounting tract (concentration) such as managerial accounting, auditing, information technology or taxation? Yes / No

Q17 If your answer to question 16 is yes, please list the tracts/concentrations offered by your university/college.

Q18 Are there any financial accounting topics that you would have added to the topics listed in the Introduction?

Table 1
Demographics

| | Number | Percent |
|--|--------|---------|
| Third intermediate class offered? | | |
| Yes | 26 | 28 |
| No | 65 | 70 |
| No response | 2 | 2 |
| Total | 93 | 100 |
| Primary teaching area? | | |
| Financial | 46 | 50 |
| Financial and other areas | 28 | 30 |
| Other areas of accounting | 19 | 20 |
| Total | 93 | 100 |
| Frequently teach intermediate? | | |
| Yes | 58 | 62 |
| No | 35 | 38 |
| Total | 93 | 100 |
| College of business accreditation? | | |
| AACSB | 72 | 77 |
| ACBSP | 12 | 13 |
| None | 9 | 10 |
| Total | 93 | 100 |
| Department of accounting accreditation? | | |
| AACSB | 35 | 38 |
| ACBSP | 9 | 10 |
| None | 49 | 52 |
| Total | 93 | 100 |
| University enrollment? | | |
| Less than 10,000 | 50 | 54 |
| 10,000 to 20,000 | 23 | 25 |
| 20,000 to 30,000 | 13 | 14 |
| Greater than 30,000 | 7 | 7 |
| Total | 93 | 100 |
| Percentage of accounting majors who take CPA exam? | | |
| Less than 20% | 7 | 8 |
| 20 - 40% | 25 | 27 |
| Greater than 40% | 56 | 60 |
| Do not know | 5 | 5 |
| Total | 93 | 100 |

Table 2**Frequency distribution for disagree, agree, and neither responses to survey statements.**

| Content topic | Move topic from a traditional intermediate course and add to a: | | | | | |
|------------------------------------|---|----|---|---|----|----|
| | Third intermediate course ¹ | | | Graduate accounting course ² | | |
| | D | A | N | D | A | N |
| Earnings per share | 71 | 16 | 6 | 76 | 6 | 9 |
| Share-based compensation | 46 | 41 | 6 | 55 | 24 | 12 |
| Leases | 64 | 25 | 4 | 68 | 14 | 9 |
| Income taxes | 54 | 34 | 5 | 68 | 14 | 8 |
| Pensions | 46 | 43 | 4 | 59 | 22 | 9 |
| Other post-retirement benefits | 37 | 52 | 4 | 53 | 26 | 12 |
| Change in accounting principle | 63 | 26 | 4 | 70 | 10 | 10 |
| Derivatives and hedging activities | 17 | 69 | 7 | 31 | 47 | 13 |

Survey statements read as follows:

¹A majority of the content of each topic should be moved from a traditional intermediate course and added to a third undergraduate intermediate financial accounting course.

²A majority of the content of each topic should be moved from a traditional intermediate course and added to a graduate financial accounting course.

Note: Disagree (D) = response of 1, 2, or 3, Neither agree nor disagree (N) = response of 4, Agree (A) = response of 5, 6, or 7.

Table 3
Analysis of group differences - average composite scores

| Group | Group Average Composite Score ² | | T-stat | P-value ¹ |
|---------------------------------|--|-----------|--------|----------------------|
| Agree/Disagree | Disagree | Agree | | |
| | 18.2 | 44.6 | -16.6 | < .01 |
| Percentage taking CPA Exam | < 40% | > 40% | | |
| | 28.6 | 28.9 | -0.07 | .47 |
| School offers Intermediate III? | Offer | Not Offer | | |
| | 35.67 | 26.50 | 2.67 | < .01 |

¹ All p-values are one-tailed.

² Average participant sum of responses (composite score) for each group where possible range includes: 8 = strongly disagree (score of 1) on all 8 topics through 56 = strongly agree (score of 7) on all 8 topics.

Table 4

Analysis of costs/benefits perceptions - agree/disagree group differences

| | Group Mean ² | | T-stat | P-value ¹ |
|-------------------------------------|-------------------------|-------|--------|----------------------|
| | Disagree | Agree | | |
| Positive impact on student learning | 3.79 | 6.20 | -7.36 | < .01 |
| Burden to students | 4.93 | 3.38 | 3.66 | < .01 |
| Burden to school budgets | 4.37 | 3.50 | 2.37 | < .02 |

¹ All p-values are one-tailed.

² Note: Rating of 1 = strongly disagree, 4 = neither agree/disagree, 7 = strongly agree. Group means are the average response of the agree/disagree group participants for each statement.