

ADVANCES IN ACCOUNTING
EDUCATION

ADVANCES IN ACCOUNTING EDUCATION: TEACHING AND CURRICULUM INNOVATIONS

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ADVANCES IN ACCOUNTING EDUCATION: TEACHING
AND CURRICULUM INNOVATIONS VOLUME 25

**ADVANCES IN ACCOUNTING
EDUCATION: TEACHING
AND CURRICULUM
INNOVATIONS**

EDITED BY

THOMAS G. CALDERON

The University of Akron, USA



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Submissions are invited for forthcoming volumes of *Advances in Accounting Education (AIAE)*. AIAE publishes a wide variety of articles dealing with accounting education at the college and university level. AIAE encourages readable, relevant, and reliable articles in all areas of accounting education including auditing, financial and managerial accounting, forensic accounting, governmental accounting, taxation, accounting systems, etc. Articles from authors outside the United States are encouraged. Papers can focus on:

- Innovation in teaching and learning, with evidence to demonstrate effectiveness.
- Research studies with implications for improving accounting education.
- Efficacy of technology in teaching and learning.
- Disruptive technologies, emerging business models and implications for accounting education.
- Assessment of learning and continuous improvement.
- Pedagogical implications of regulation.
- Administrative and leadership issues related to innovation and effective teaching and learning.
- Global challenges, constraints, and opportunities for accounting education.
- Critical reviews of the domain of accounting with implications for curriculum innovation.
- Conceptual models, methodology discussions, and position papers on particular issues.
- Historical discussions and literature reviews with implications for pedagogical efforts.

AIAE provides a forum for sharing ideas and innovations in teaching and learning ranging from curricula development to content delivery techniques. Pedagogical research that contributes to more effective teaching and learning in colleges and universities is highlighted. All articles must include a discussion of implications for teaching, learning, and curriculum improvements. Non-empirical papers should be academically rigorous, and specifically discuss the institutional context of a course or program, as well as any relevant tradeoffs or policy issues. Empirical reports should exhibit sound research design and execution, and must develop a thorough motivation and literature review, possibly including references from outside the accounting field.

SUBMISSION PROCESS

Send two MS Word files by e-mail:

- (1) a manuscript with an abstract and any research instruments used, with no information to identify authors; and
- (2) a cover page with a list of all authors' names, institutional affiliations, mailing addresses, telephone numbers, and e-mail addresses.

Two reviewers assess each manuscript submitted and reviews are completed in a timely manner, usually 60–90 days.

Send manuscripts to Thomas Calderon, editor, aiae@uakron.edu

WRITING GUIDELINES

1. Write your manuscript using active voice. Therefore, you can use the pronouns “we” and “I.” Also, please avoid using a series of prepositional phrases. We strongly encourage you to use a grammar and spell checker on manuscripts before you submit to AIAE. Parsimony is a highly desirable trait for manuscripts we publish. Be concise in making your points and arguments.
2. Each paper should include a cover sheet with the names, addresses, telephone number, and e-mail address for all authors. The title page also should include an abbreviated title that you should use as a running head (see item 7 below). The running head should be no more than 70 characters, which include all letters, numbers, punctuation, and spaces between words.
3. The second page should consist of an abstract of approximately 150 words and up to five key words.
4. You should begin the first page of the manuscript with the manuscript’s title. DO NOT use the term “Introduction” or any other term at the beginning of the manuscript. Simply begin your discussion.
5. Use uniform margins of 1.5 inches at the top, bottom, right and left of every page. Do not justify lines; leave the right margins uneven. Do not hyphenate words at the end of a line; let a line run short or long rather than break a word. Type no more than 25 lines of text per page.
6. Double-space all lines of text, including titles, headings, and quotations.
7. Place each figure, table and chart on a separate page at the end of the manuscript. Include a marker in the body of the paper to show approximately, where in the final manuscript each figure, table, or chart will appear.
8. After you have arranged the manuscript pages in correct order, number them consecutively, beginning with the title page. Number all pages. Place the number in the upper right-hand corner using Arabic numerals. Identify each manuscript page by typing an abbreviated title (header) above the page number.
9. Format all citations within your text with the author(s) name and the year of publication. An appropriate citation is Catanach (2004) or Catanach and Feldmann (2005), or Catanach etl a1. (2006) when there are three or more authors. You do not need to cite six or seven references at once, particularly when most recent references cite earlier works. Please try to limit yourself to two or three citations at a time, preferably the most recent ones. Use APA 6.
10. You should place page numbers for quotations along with the date of the material being cited. For example: According to Beaver (1987, 4), “Our knowledge of education research ...and its potential limitations for accounting ...”

11. List at the end of the paper the full bibliographic information (e.g., author, year, title, journal, volume, issue and page numbers) for all references cited in the body of the paper. List references in alphabetical order by the first author's last name.
12. Center, capitalize each word and bold main headings; capitalize the first letter in each word, italicize and bold and center sub-headings; capitalize the first word, italicize and center the next level headings; capitalize the first word, italicize and left justify next level headings.

STATEMENT OF PURPOSE

Advances in Accounting Education: Teaching and Curriculum Innovations is a refereed academic journal whose purpose is to help meet the needs of faculty members and administrators who are interested in ways to improve teaching, learning and curriculum development in the accounting area at the college and university level. We publish thoughtful, well-developed articles that are readable, relevant, and reliable.

Articles may be either empirical or non-empirical and should emphasize innovative approaches that inform faculty and administrators as they seek to advance their classrooms, curricula, and programs. All articles should have well-articulated and strong theoretical foundations. Establishing a link to the non-accounting literature is desirable. Further, we expect all manuscripts to address implications for the scholarship of teaching and learning.

Normally, articles that emphasize pedagogy and classroom innovation (e.g., cases, exercises, specific approaches to teaching a topic, etc.) must demonstrate efficacy in at least one college setting. That is, the authors offer evidence to show that the innovation has been tried and it is effective.

Non-empirical manuscripts should be academically rigorous. They can be theoretical syntheses, conceptual models, position papers, discussions of methodology, comprehensive literature reviews grounded in theory, or historical discussions with implications for efforts to enhance teaching, learning, and curriculum development. Reasonable assumptions and logical development are essential.

Sound research design and execution are critical for empirical reports. Reviewers focus on the quality of method, data, results, and analysis as well as the implications for teaching, learning, and curriculum development.

REVIEW PROCEDURES

Advances in Accounting Education: Teaching and Curriculum Innovations provides authors with timely reviewer reports that clearly indicate the status of the manuscript. Each manuscript is reviewed by at least two reviewers. Authors receive initial reviews normally within eight to 12 weeks of manuscript submission.

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THEME 1

**CURRICULUM AND
PEDAGOGICAL INNOVATIONS**

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ACCOUNTING AND AUDIT QUALITY PERSPECTIVE: FAIR VALUE MEASUREMENTS AND DISCLOSURES CURRICULUM GAPS

Thomas R. Weirich and Natalie Tatiana Churyk

ABSTRACT

The accelerated pace of change in the global economy and capital markets along with the complexity of transactions and financial reporting that involve applying fair value measurements (FVM) is a major third-party user concern. The 2008 financial crisis highlighted risks that investors are exposed to when making FVM-related capital allocations. Accounting estimates often involve subjective assumptions and measurement uncertainty, increasing potential management bias (Choudhary, 2011; Ramanna & Watts, 2012). FVMs are of critical importance to the reliability of the financial statements. Therefore, the purpose of this chapter is to inform educators of the possible need to evaluate their curriculum as to coverage of FVM topics. The support for this evaluation is based on our attempt to: (1) evaluate the extent of reported FVM-related deficiencies with reference to regulatory bodies' findings of significant deficiencies in FVM; (2) examine the use of FVM specialists; (3) determine if colleges and universities are keeping pace with FVM demands; (4) list the Uniform CPA Examination Blueprint FVM testing areas; and (5) provide curricular FVM topic recommendations.

Keywords: Fair value measurements; Fair value measurements deficiencies; Fair value measurements specialists; Fair value measurements curriculum; Securities & Exchange Commission; Public Company Accounting Oversight Board

In today's capital markets, company managers and investors take sizeable risks based on entities' fair market values measuring assets and liabilities for financial reporting purposes. Such risks include the absence of reliable market prices, subjective information, and potential bias in the information. Besides fair value's use to measure financial instruments, it also helps to calculate financial instrument impairments, to record assets acquired and liabilities assumed in business combinations, litigation, asset restructuring decisions, transfer pricing decisions, and other tax issues. With several valuation methods currently available, each with its various estimates, assumptions, and potential biases, knowing how to correctly value an asset is critical for merger and acquisitions decisions and for selecting investments to include in a portfolio.

Regarding management's determining fair value measurements (FVMs), many research studies find that auditors may lack the *necessary knowledge* to correctly assess the reasonableness of management's FVM assessments (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013; Griffith, Hammersley, & Kadous, 2015). Furthermore, Cannon and Bedard (2017) reported that FVMs are one of the most encountered challenges facing auditors in evaluating management's assumptions and methods utilized.

Organizations such as the Public Company Accounting Oversight Board (PCAOB), the US Securities & Exchange Commission (SEC), and the International Forum of Independent Audit Regulators (IFIAR) scrutinize FVM and its impact on financial statements. The regulators have often questioned the integrity and reliability of the FVM valuation or models used to measure assets and liabilities, especially in terms of how management determines and assigns fair value and how auditors audit FVM. The PCAOB (2007) reports that *a lack of valuation knowledge and professional skepticism were observed audit deficiencies in many inspections resulting in auditors not sufficiently prepared for the challenges in auditing FVM*. Financial statement users demand high quality auditing of increasingly complex investment vehicles and the related financial reporting requirements. This increase in fair value as a meaningful measure for reporting assets and liabilities stems largely in response to investors and regulators identifying it as the most relevant financial reporting metric.¹

As financial reporting requirements move to FVM,² accounting and finance professionals should adequately understand valuation methods and models. It starts with college education. Curricula must be dynamic and market-driven to meet the evolving nature of capital markets. This will help to better inform those involved in financial reporting and help prepare new entrants to the profession. Thus, we focus on analyzing the existing broad spectrum of valuation education available to students and consider how and whether it meets current market needs and the needs of investors. After examining PCAOB, SEC, and IFIAR findings to identify gaps between regulators, auditors, and professional education/exam, we highlight and suggest how to reduce this potential "knowledge gap" that currently exists in the accounting profession related to valuation services. This study focuses on these main points: (1) the increasing use of FVM over the last 20 years and the importance of the competency of company management and auditors who are charged with assigning values; (2) the importance of auditors'

valuation knowledge, especially when their knowledge is juxtaposed against a valuation expert's knowledge in arriving at FVMs; (3) short of becoming a valuation expert, the auditor needs to possess an adequate level of knowledge in valuation topics to conduct an audit in accordance with current and proposed auditing standards; and (4) the limited training of valuation topics in US colleges and universities accounting curriculums.

The remainder of this chapter is organized as follows. Part II contains a review of the PCAOB, SEC, and IFIAR Inspection Findings as they relate to valuation audit deficiencies. It also provides examples of critical audit matters (CAMs) that highlight valuation issues as reported in current audit reports. Part III contains a discussion of considerations and challenges for auditors regarding the role and use of the work of specialists. Part IV evaluates the current academic accounting curriculum based on a sample of major universities as to the *required* coverage of valuation course offerings for accounting graduates. It also lists FVM topics currently tested on the CPA exam. Part V provides recommendations to reduce the "knowledge gap" by suggesting fundamental valuation topics that could/should be incorporated into *required* valuation courses or included in other *required* courses. These suggested topics are also important for auditors to understand to aid in discussion and evaluation of services provided in house or by third-party valuation experts. Lastly, Part VI discusses conclusions.

REVIEW OF PCAOB, SEC, AND IFIAR INSPECTION FINDINGS

Over the past 10 years, regulators, including the PCAOB and the SEC, have increasingly criticized the Big 4 (PwC, KPMG, EY, and Deloitte) public accounting firms for the quality of their audit work and audit documentation including deficiencies related to financial instruments, business combinations, impairment of goodwill, and valuation. Findings have also been critical of the firms' valuation quality controls. A review of PCAOB, SEC, and the IFIAR reports indicate that among other matters, there were a significant number of deficiencies relating to auditing the valuation of investments and securities and impairments. Additionally, a report, *Survey of Fair Value Audit Deficiencies* (2012), by Atlanta based valuation and litigation consultancy firm, Acuitas, Inc. – reviewed PCAOB inspection reports for the periods 2008–2011 and reported that *approximately one-fourth of all audit deficiencies reported by the PCAOB related to fair value measurement audit deficiencies*. The study notes the primary causes of such deficiencies as being related to: pricing, failure to test, disclosures, risk assessment, prospective financial information, and other-than-temporary investments.

The following Acuitas observations relate to *pricing* and *failure to test*:

- *Pricing* – Includes failure to understand the methods, models and assumptions used by pricing services or valuation specialists; using the same pricing service to corroborate prices that the issuer used when measuring fair value; failure to investigate differences between prices from different sources; failure

to investigate pricing differences identified by internal audit; failure to investigate adjustments made to third-party prices by issuers; and inappropriately applying the yield or discount rate from one population to test securities prices or values in the test population without assessing the comparability of the two groups.

- *Failure to Test* – Includes relying on interim testing and failing to test the assertion when there was no material change in value; relying on interim testing and failing to perform procedures at year end; failing to perform sufficient substantive procedures when significant risks are identified; failing to perform year end tests when broker quotes were older than 30 days; failing to perform substantive tests when too much reliance is placed on internal controls or internal audit; failure to assess whether all assets and liabilities had been identified in a business combination; failure to test data provided to an outside valuation specialist; failure to test the accuracy and completeness of data that valuation specialists relied on; failure to test fair value when requested pricing information was not received; failure to test all items in a selected sample; and outright failure to test certain assets and liabilities.

The survey concluded that the increase in FVM deficiencies is the result of an increase in complexity of audits from the recent financial crisis. Also, the survey found that auditors need to focus on assessing and testing FVM internal controls in business combinations and assets for impairment (i.e., a valuation concept).

A PCAOB staff consultation paper (2014a), *Auditing Accounting Estimates and Fair Value Measurements*, notes that the PCAOB has observed many audit deficiencies in auditing accounting estimates and FVM. Also noted below is that other global standard-setters have reported a significant number of deficiencies in this area (IFIAR, 2013). The PCAOB suggests several improvements are needed to existing standards related to accounting estimates and FVM – including merging guidance on auditing estimates and fair value – as one possible means of reducing such audit deficiencies. However, the root cause of the deficiencies is not articulated in the staff consultation.

The CFA Institute spoke on these topics (accounting estimates and FVM) at a PCAOB Standing Advisory Committee (2015) meeting suggesting *that the root cause of such deficiencies has not been identified but may stem from the lack of valuation education by accounting and auditing professionals*. Later in this chapter, we explore how students, soon to be accounting professionals, are educated on basic valuation concepts.

Review of PCAOB Inspection Reports

The PCAOB inspects firms' performance of audits and issuance of audit reports involving US companies, other issuers, brokers, and dealers. A review of PCAOB inspection reports identifies the common areas of deficient findings and demonstrates that a solid foundation in valuation expertise is necessary to ensure the reliability of FVMs by investors. To ascertain where valuation audit deficiencies exist, we conducted an examination of the PCAOB's annual inspections

of registered public accounting firms' findings to assess compliance with the Sarbanes–Oxley Act of 2002, the rules of the PCAOB, the rules of the SEC, as well as professional standards.

We sought to understand the details of inspections and ascertain instances in which the terms *valuation*, *fair value*, or *impairments* were cited as deficiencies in audit practice. During our review of 2010–2019 reports issued (total of 1,541 reports), we found 831 (54%) PCAOB inspection reports that used the term “valuation” 618 times (40%), the term “fair value” 292 times (20%), and the term “impairments” 202 times (13%). The frequency of these terms indicates the prevalence of findings and importance in their inspection. It is important to note that the terms cited are not mutually exclusive, as a particular audit deficiency may align with more than one term associated with the same failure. Secondly, the PCAOB noted that in *most* reports that contained one of these key terms, that the auditing firm *failed to gather sufficient appropriate data* and *sufficiently evaluate the reasonableness of certain significant assumptions* related to fair value, valuations, or impairments.

We also reviewed PCAOB comments in these inspection reports to understand better their stated criticisms, particularly regarding alleged failures by the accounting firm to obtain sufficient appropriate audit evidence to support their opinion on the financial statements. The observations of this study appear below.

Observations

In virtually every inspection report, the PCAOB raised the issue that the auditor tested certain high-level controls related to the issues noted in the specific cases cited in the examples but *failed to sufficiently test these controls* or *did not test the detail controls* as to whether the controls operated at a level of precision that would prevent or detect material misstatements. Generally speaking, auditing standards recognize that the amount of audit evidence required to provide an opinion depends on the severity of the risk of financial misstatement (i.e., the greater the risk and the more evidence that is required). With this in mind, it is particularly troublesome that the majority of the inspection findings relate to a failure in testing detailed controls.

Fig. 1 shows three examples from the PCAOB findings to illustrate examples of deficiencies identified by the PCAOB. These representative cases highlight the nature of the area and deficiency.

The PCAOB reports also stated that the audits *failed to test certain data* utilized by the issuer/client, or data provided by third-party specialists. While auditors often rely on the work of specialists, it is essential that the auditor understand the work of the specialist and assess their conclusions related to the audit. See Part III *Using the Work of a Specialist* for further discussion.

It is important to remember the deficiencies cited by the PCAOB in the inspection reports represent a microcosm of an almost innumerable quantity of accounting transactions, pieces of audit evidence, and judgments considered by the largest registered public accounting firms. However, while the deficiencies are a small percentage of the greater whole, they provide a compelling, but concerning reminder

Case 1: Financial Instruments	Case 2: Business Combinations	Case 3: Impairment of Goodwill
<ul style="list-style-type: none"> ▪ <u>Failure to perform sufficient procedures</u> to test the Fair Value Measurement (FVM) of and related disclosures for an issuer's financial instruments without readily determinable fair values. ▪ <u>Failure to obtain an understanding</u> of the specific methods and assumptions underlying the FVMs obtained from the pricing service. ▪ <u>Failure to evaluate</u> the appropriateness of the valuation methods and the reasonableness of the significant assumptions the issuer utilized to develop the FVMs. 	<ul style="list-style-type: none"> ▪ <u>Failure to sufficiently evaluate</u> the reasonableness of certain significant assumptions and test related data that the issuer used in determining the fair value of acquired assets and allocating the resulting goodwill to its business units. ▪ <u>Failure to perform substantive procedures</u> further than an inquiry of management and comparing the assumptions and data to untested data provided by the issuer. 	<ul style="list-style-type: none"> ▪ Auditors tested internal controls over the analysis of impairment of goodwill and other indefinite-lived intangible assets, but <u>failed to sufficiently test</u> these controls. ▪ <u>Failure to evaluate</u> the reasonableness of significant assumptions in valuing goodwill and the indefinite-lived intangible assets.

Fig. 1. PCAOB Identified Audit Deficiencies.

of the risks associated with the auditing environment related to valuation and the necessity of continuing technical education and professional vigilance.

While it has been suggested that improvements in qualifications and greater quality control are necessary in the valuation profession, it also seems useful to assess whether accountants and auditors have sufficient valuation knowledge to perform basic audit functions related to valuation to effectively assess the qualifications to retain a specialist, or to evaluate the work of such specialists once engaged. With valuation being one of the key audit assertions (completeness, existence, accuracy, *valuation*, ownership, and presentation) we contend that accountants and auditors must be subject to education and continuous training in these areas.

Review of SEC Enforcement Releases

In conjunction with the PCAOB inspection reports cited earlier, we also examined 1,017 SEC *Accounting and Auditing Enforcement Releases* (AAERs)³ issued during the same time period (2010–2019). AAERs are issued during, or at the conclusion of an investigation against a particular firm or an individual auditor for alleged accounting and/or audit misconduct. The AAERs provide varying degrees of detail on the nature of the misconduct and its effect on the financial statements of the alleged company.

We identified 64 AAERs related to *valuation, fair value, or impairment* misconduct. None of the AAERs evaluated were related to the same company. Furthermore, a majority of those related to the preparer/filer and issuer officers