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Data Analytics and Compliance with AACSB Accounting Technology Standards: A Critically Appraised Topic

Gregory J. Tanzola

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CASE WESTERN RESERVE UNIVERSITY
EST. 1826

EDITORIAL NOTE

This critically appraised topic article explores how university accounting programs can satisfy their shifting technology curricula. Accreditation standards and the CPA exam coverage make inclusion necessary of substantial student preparation in the topic of data analytics. In the presence of minimal curricular advice and standards, what successful techniques exist to help accounting program administrators ensure that their programs both meet the requirements and prepare the students? The findings turn up several potential interventions: a task force to guide curricula redesign and development of faculty skills and knowledge in data analytics; fortified resources for faculty development; and finally, faculty reorientation to continuous change in their topics.

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Gregory J. Tanzola
Saint Joseph's University

ABSTRACT

As technology accelerates and gains importance in the accounting industry, the inclusion of technology in accounting curricula also becomes more important. Indeed, this inclusion is a requirement of the academic accounting accrediting body, The American Association to Advance Collegiate Schools of Business (AACSB). However, neither minimal guidance nor standards for meeting the technology requirements currently exist. This topic paper examines how academic accounting departments may address data analytics as a component of the AACSB's technology requirement. The analysis synthesizes peer-reviewed articles exploring how data analytics are being integrated into accounting curricula and identifies three main concerns: (1) the need for standardization in curricula, (2) qualifications of faculty members, and (3) identification of required skills for students.

REVIEW QUESTION

The review question is this: *How can accounting programs enable data analytics to comply with the AACSB technology standards?* The question's scope using the PICOC framework is shown in Table 1.

Table 1: PICOC Framework

PICOC Term	Review Question Components
Population	Accounting Programs
Intervention	Curricula, Faculty, Required Skills
Comparison	Other Academic Institutions
Outcome	AACSB Compliance
Context	Accounting Faculty

BACKGROUND

Technological advances in information technology (IT) have resulted in more investments in accounting systems and increased demand for accountants who have the skills for such systems (Pan & Seow, 2016). As a result, the accounting profession has become integrated with technology, data, and analytics (Andiola et al., 2020). Data analytics comprises the data, technology, and processes that extract meaning from data to identify trends and solve problems. Because of technical changes in the profession, employers seek accountants who have technical skills and accounting knowledge to facilitate complex transactions and business models (Qasim & Kharbat, 2020); meanwhile, incorporating data analytics into accounting curricula may improve the employability of accounting graduates (Sarkar et al., 2021).

Recognizing the importance of technology and data analytics to the profession, the American Institute of Certified Public Accountants (AICPA) and the National Association of State Boards of Accountancy (NASBA) issued a new model for licensing certified public accountants (CPAs). This new model, CPA Evolution, includes technology, accounting, auditing, and taxes as elements of the model's core (AICPA & NASBA, 2022). As a result of CPA Evolution, analytics is included as part of a new section in the CPA exam called Business Analysis and Reporting (BAR). The BAR section includes assessments of methods to transform data for decision making (AICPA & NASBA, 2022). To guide educators with curriculum development, the AICPA and NASBA have provided a CPA Evolution curriculum model; however, the curriculum model has been met with concerns from the Institute of Management Accountants for its lack of management accounting coverage (Lawson & Venkatesh, 2021).

Accounting curricula traditionally have focused on providing the skills necessary for graduates to be successful as entry-level public accountants. The curricula using this approach focus on financial accounting rules, auditing procedures, and tax codes, encompassing a significant amount of topical coverage (Lawson et al., 2014). Focusing on immediate skills has been criticized because, as a result, graduates are more prepared to pass a certification test but less prepared for a continuously evolving profession (Bedford et al., 1986). In addition, graduate and hiring trends indicate fewer accounting majors and fewer applicants for these entry-level positions. This trend is evidenced by a 7.4% decrease in the number of accounting undergraduates from 2016 to 2020, a corresponding 10% reduction in the hiring of new accounting graduates, and yet an increase in the number of non-accounting majors hired into accounting roles (AICPA, 2021). These figures may suggest that accounting firms seek applicants who have a broader perspective than a narrow accounting focus. Unfortunately, the modification of accounting curricula to support a long-term perspective has been slow (Lawson et al., 2014).

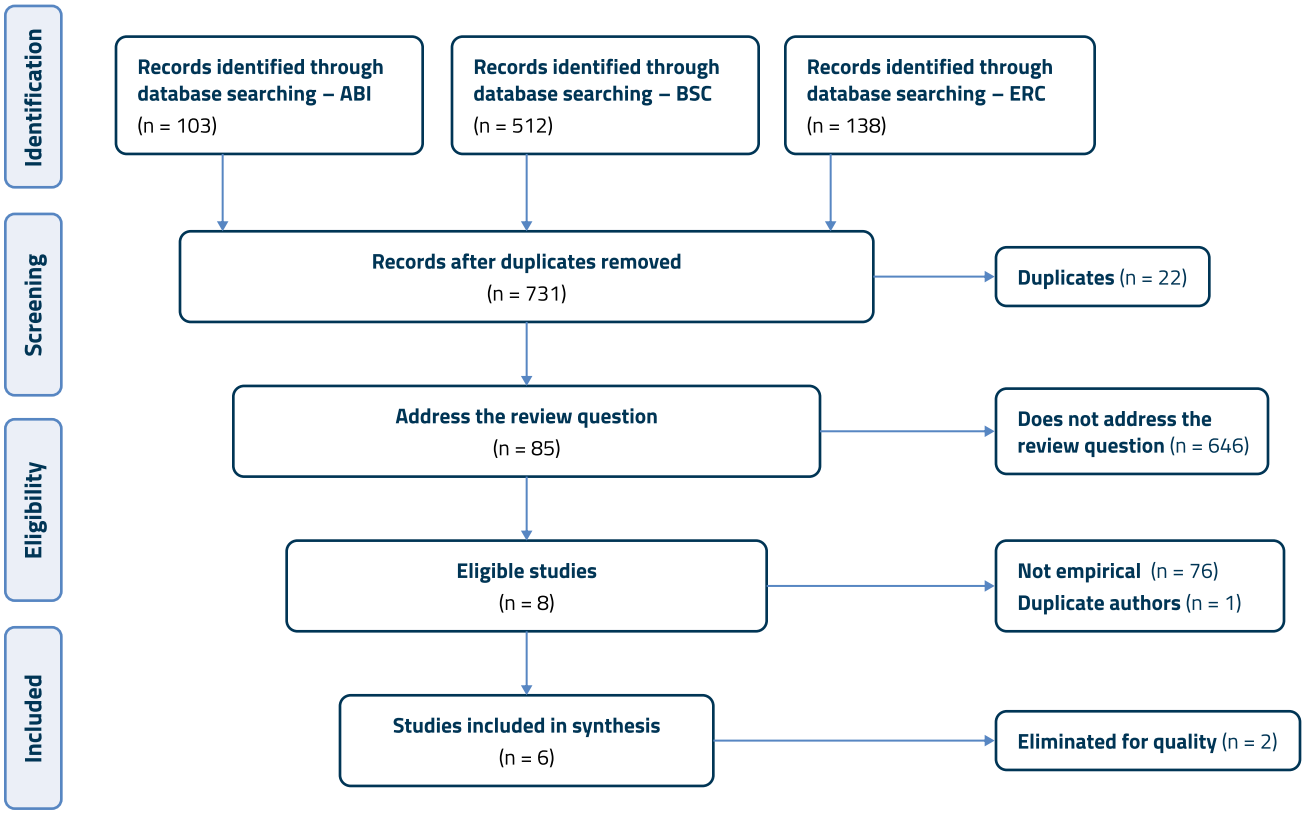
Of the 792 accredited business schools, 195 have supplemental accounting accreditation with the AACSB (AACSB, n.d.). Supplemental accounting accreditation requires schools to follow six standards, including an obligation to address the technology needs of students. Enhancing accounting programs' technology requirements is the fifth standard set forth by the AACSB's accounting accreditation. Standard A5 is titled Information Technology Skills, Agility, and Knowledge for Accounting Graduates and Faculty, and it states that accounting curricula should include various technologies, including data analytics (AACSB, 2022). However, in a 2021 survey of 317 accounting departments in institutes of higher education (IHEs), only 64% of accounting programs cover data analytics (AICPA & NASBA, 2022). This study explores the ability of accounting departments in IHEs to address AACSB standards through the use of data analytics.

SEARCH STRATEGY, METHOD, AND EVIDENCE SELECTION

Data were gathered from databases using Boolean strings and the building blocks approach. I used three databases for the search, choosing them for their business, management, and education coverage: ABI/Inform (ABI), Business Source Complete (BSC), and Education Resource Complete (ERC). The search string was: accounting AND ("business analytics" OR "data analytics" OR analytics) AND (curricul* OR syllab* OR class* OR course* OR lesson* OR program*). The search resulted in 753 peer-reviewed articles (103 from ABI, 512 from BSC, and 138 from ERC).

My review of abstracts and conclusions led to the removal of 22 duplicates and 646 articles that were deemed irrelevant to the review question. Of the remaining 85 eligible articles, 76 were not empirical (i.e., they were commentaries and pedagogical work). One study I eliminated was empirical, but I deemed it too similar to another remaining article by the same authors. After my analyses, five of the six articles that remained were from BSC, with the lone exception being from ABI. The full study selection is presented as a flowchart in Figure 1.

Figure 1: Flow of Data Discovery



After reviewing the remaining eight articles for their methodology, sample population, literature review, results, discussion, and conclusions, I eliminated two more articles for inadequate quality. Thus, the final selection for the review consisted of six articles (see Table 2).

The six articles chosen are studies that appear relevant in answering the research question and do not appear to be lacking in their methodologies, sampling techniques, conclusions, and validity. Table 3 critically evaluates the selected six articles and lists the research approach, empirical basis, method of analysis, and validity evaluation. Two of the studies use a mixed-method approach, two are quantitative surveys, and two are qualitative analyses. Most of the studies exhibit high validity because the study data support the conclusions. The study by Woodside et al. (2020) exhibits moderate validity because the sample

Table 2: Search Results

Study No.	Study
1	Andiola, M.A., Masters, E., & Norman, C. (2020). Integrating technology and data analytic skills into the accounting curriculum: Accounting department leaders' experiences and insights. *Journal of Accounting Education*, 50: 1–18.
2	Ballou, B., Heitger, D.L., & Stoel, D. (2018). Data-driven decision-making and its impact on accounting undergraduate curriculum. *Journal of Accounting Education*, 44: 14–24.
3	Dzuranin, A.C., Jones, J.R., & Olvera, R.M. (2018). Infusing data analytics into the accounting curriculum: A framework and insights from faculty. *Journal of Accounting Education*, 43: 24–39.
4	McBride, K. & Philippou, C. (2020). "Big results require big ambitions": Big data, data analytics, and accounting in masters courses. *Accounting Research Journal*, 35(1): 71–100.
5	Sarkar, S., Boss, S.R., & Gray, J. (2021). Pedagogical practices of accounting departments addressing AACSB technology requirements. *Issues in Accounting Education*, 36(4): 59–85.
6	Woodside, J.M., Chambers, V., & Mendoza, M. (2020). Integrative learning and interdisciplinary information systems curriculum development in accounting analytics. *Journal of Information Systems Education*, 31(2): 147–156.

Table 3: Critical Evaluation

		Research Approach	Empirical Basis	Analysis Method	Overall Validity
1	Andiola et al., 2020	Mixed-method approach using a simple random survey, with quantitative data collection and open-ended questions	Survey of accounting department leaders from accredited business schools, resulting in a 36.7% response rate	Descriptive and inferential statistical analysis and thematic analysis	High validity: Conclusions resulted from statistical analysis, with support from thematic analysis and no indication of bias.
2	Ballou et al., 2018	Two separate quantitative surveys	Survey of 413 accounting professors and 52 accounting professionals, representing approximately an 8.3% and 68% response rate, respectively	Descriptive and inferential statistical analysis	High validity: Conclusions resulted from statistical analysis, with no indication of bias.
3	Dzuranin et al., 2018	Descriptive quantitative survey	267 accounting faculty, with a 5.7% response rate	Descriptive and inferential statistical analysis	High validity: Conclusions resulted from statistical analysis, with no indication of bias.
4	McBride & Philippou, 2020	Exploratory qualitative approach using prior topical research, university websites, and websites of accounting governing bodies	18 research articles in the area of accounting and data analytics, websites of 15 masters of accounting programs, websites of 5 governing accounting bodies	Thematic analysis	High validity: Thematic analysis methodology and data appear to support study findings.
5	Sarkar et al., 2021	Mixed-method approach using a simple random survey, with quantitative data collection and open-ended questions	85 faculty teaching in technology in accounting programs, representing a 3% response rate	Descriptive and inferential statistical analysis and thematic analysis	High validity: Conclusions resulted from statistical analysis, with no indication of bias.
6	Woodside et al., 2020	Qualitative analysis	Curriculum review of the top-ranked U.S. accounting programs	Thematic analysis	Moderate validity: Source data support conclusions; however, sample may be limiting.

is represented by the 25 highest-rated accounting programs according to *U.S. News & World Report*. The rankingsby *U.S. News & World Report* have been called into question, and schools have begun to withdraw from the ranking process because of their perceived inaccuracy (Saul, 2022).

Andiola et al. (2020) and Sarkar et al. (2021), through mixed-method studies, investigated the approaches taken in accounting curricula to integrate data analytics. The research of Ballou et al. (2018) identified the critical knowledge, skills, and abilities associated with data analytics that should be addressed in accounting curricula, as reported by professionals and academics. Dzuranin et al. (2018) investigated the data analytics tools and methods that should be taught and how they may be introduced into the curricula. McBride and Philippou (2020) compare accounting graduates' achieved data analytic skills to those required by accounting governing bodies. Finally, Woodside et al. (2020) thematically review highly rated accounting programs to create an accounting curriculum model incorporating data analytics.

FINDINGS

I summarize the findings derived from each research paper and offer a collective translation of the findings in Table 4. The findings identified three critical areas affecting accounting departments in IHEs related to AACSB accreditation standard A5: Curricula lack standardized analytic content, faculty data analytic skillsets may not be adequate, and the required analytic skills of accounting graduates are not defined.

Curricula

Analytics-driven curricula lack consistency. Accounting curricula have followed traditional methods, but historical models may need to change, and some concepts may need to be deemphasized to introduce data analytics topics (Ballou et al., 2018). Deemphasizing some content may be necessary

Table 4: Key Findings and Translation of the Collective Findings

#	Author, Year	Finding #1: Curricula	Finding #2: Faculty	Finding #3: Skills
1	Andiola et al., 2020	Departments are trying to determine the courses into which data analytics are to be incorporated and are less than satisfied with the AACSB guidance.	Department chairs' biggest hurdle to data analytics integration is having the appropriate faculty to execute.	N/A
2	Ballou et al., 2018	Traditional accounting concepts may need to be deemphasized so that data analytics topics may be introduced.	N/A	Those in academia and those in the profession do not agree on which data analytic skills should be prioritized.
3	Dzuranin et al., 2018	Elements of data analytics should be present in most accounting courses.	Faculty lack an understanding of the software used by those in the profession.	Results indicate a disparity among faculty members regarding the focus of data analytics skills, and the profession does not provide specific guidance.
4	McBride & Philippou, 2020	Accounting and auditing courses should be reworked to ensure that skills are acquired for data analytics.	N/A	N/A
5	Sarkar et al., 2021	Accounting departments must adapt curricula to integrate technology, even if doing so requires changes to historic academic models.	Faculty training in the area of data analytics is lacking.	Employers are uncertain about the detailed skills needed by an accounting data analytics professional.
6	Woodside et al., 2020	Curriculum gaps exist in the core accounting curriculum for the development of analytical and computing skillsets.	Faculty are not provided detailed area content coverage and ways to integrate data analytics into the accounting curriculum.	Different stakeholder perspectives often create challenges in degree course design, and insufficient evidence exists on the specific data analytic skills.
	Translations	Curricula lack standardized analytic content.	Data analytic skillsets of faculty members may not be adequate.	The analytic skills required of accounting graduates are not defined.

as data analytics become included in most courses in the curricula (Dzuranin et al., 2018). As Sarkar et al. (2021) noted, redesigning curricula to integrate technologies such as data analytics may require the addition of new objectives and new competencies and the removal of some traditional topics. In a separate study, Al-Htaybat et al. (2018) found that curricula should change because of their lack of data analytics. In addition, gaps in curricula are said to exist in the analytical, quantitative, and computing skillsets (Woodside et al., 2020). Meanwhile, McBride and Philippou (2020) call for redesigning accounting and auditing courses to ensure that data analytic skills are addressed.

Faculty

Faculty do not possess the necessary analytic skills, and a lack of defined necessary skills compounds the problem. Andiola et al. (2020) found that accounting department chairs struggle with executing their plans because they do not have the proper faculty to address data analytics content. Faculty members are not adequately trained in data analytics (Sarkar et al., 2021), and they do not understand the data analytics software used by those in the profession (Dzuranin et al., 2018). In addition, faculty members do not have the content coverage or methods to integrate data analytics into the curriculum (Woodside et al., 2020); accounting PhD graduates report that they must teach themselves pedagogical knowledge and skills (Dunn et al., 2016), including data analytic skills.

Skills

The data analytic skills required of students are not defined. Dzuranin et al. (2018) note that the accounting profession does not provide guidance to faculty members regarding required data analytic skills. This lack

of professional guidance may lead to the disparity between faculty members and professionals about which data analytics skills should be prioritized in accounting curricula (Dzuranin et al., 2018). In addition, the disagreement creates obstacles in course design (Woodside et al., 2020). Finally, the uncertainty regarding the direction of the profession may result from a belief among some of its members that accounting has evolved into a discipline that is no longer academic, resulting in misdirected activities (Demski, 2007).

CONCLUSION

Translations of the collective findings suggest that accounting curricula lack standardized analytic content, faculty members' data analytic skillsets may not be adequate, and the analytic skills required of accounting graduates are not defined. In addition, the findings indicate that accounting departments may need the support of school administration for management, planning, communication, and resource allocation. Bedford et al. (1986) previously provided recommendations for an expanded accounting curriculum and called for the involvement of school administrators. They suggested that IHE administration must provide resources and ensure appropriate faculty selection. The administration's involvement has been found to facilitate curricular changes. Christensen et al. (2009) noted that faculty members tend to resist curriculum changes because of a lack of direction from school leadership, while Jenkins (2018) noted that teacher effectiveness in curricular change depends on management, organizational relationships, operational practices, and school culture.

RECOMMENDATIONS

First, schools need to establish a task force to address guidance, definitions, and standards that facilitate faculty preparedness, curriculum development, and desired skill development. As Lawson et al. (2014) reported, defining competencies and developing curricula have been discussed in the past by task forces appointed by governing bodies in the accounting industry; acceptance of the recommendations is possible, and risks are minimal.

Second, administrators at IHEs should ensure that resources are available for faculty development and that the faculty composition is appropriate for teaching data analytics. Recommendations about resources are risky in that many universities face financial uncertainty and declining enrollment (DeMonbrun & Warshaw, 2020). Although some research has shown where school administrators have failed to follow such recommendations, the recommendation to increase faculty performance should not inspire great resistance.

Third, faculty members should be ready to make continuous changes in their curricula to account for technological changes. IT departments face similar needs, and IT faculty members' approaches to curricula change should be considered. As Harris and Patten (2015) note, IT departments must frequently update their curricula for emerging technologies by including a wide-ranging breadth of skills; greater depth then is expected to be addressed by employers or through advanced degrees. However, Watty et al. (2016) found that accounting faculty members' resistance to change is a barrier to technology adoption. This resistance presents a higher risk that this final recommendation may not be accepted or implemented.

LIMITATIONS AND FUTURE RESEARCH

As with every study, this topic paper has its limitations. A synthesis of only six articles means that assumptions about the generalizability of its findings requires caution. Although this synthesis represents the some of the best currently available evidence, empirical accounting research is somewhat limited (Rebele & St. Pierre, 2015). In addition, research in two of the articles used data from university websites, which assumes the websites were current and updated. Finally, one article used a sample based on rankings provided by *U.S. News & World Report*. The reliability of these rankings has increasingly been questioned.

This synthesis suggests several areas for future research. First, it is needed to identify the types of data analytic skills required for accounting graduates. Second, as accounting curricula become more susceptible to the effects of technological changes, research to identify methods for reducing faculty members' resistance to change also may be helpful to IHE administrators. Third, research regarding the results of the CPA Evolution curriculum model may provide guidance for accounting departments. Fourth, the AICPA calls for recognizing accounting as a STEM field to benefit graduates (Taylor, 2023), and research should consider this perspective as accounting departments plan for technology integration.

REFERENCES

American Association to Advance Collegiate Schools of Business. (2022). *Standards for Accounting Accreditation*. https://www.aacsb.edu/educators/accreditation/accounting-accreditation/aacsb-accounting-accreditation-standards (accessed on August 4, 2023).

American Association to Advance Collegiate Schools of Business. n.d. *AACSB Accredited Schools*. https://www.aacsb.edu/accredited (accessed on August 4, 2023).

American Institute of Certified Public Accountants. (2022). *2021 Trends: A Report on Accounting Education, the CPA Examine, and Public Accounting Firms' Hiring of Recent Graduates*. Durham, NC: AICPA. https://micpa.org/docs/site/educator-assets/2021-trends-report.pdf?sfvrsn=bfb9c261_2 (accessed on August 4, 2023).

National Association of State Boards of Accountancy. (2022). *Uniform CPA Examination Blueprints*. Durham, NC: AICPA & Nashville, TN: NASBA. https://www.evolutionofcpa.org/Documents/CPA%20Evolution%20Brochure%20-%20May%202021.pdf (accessed on August 4, 2023).

American Institute of Certified Public Accountants & National Association of State Boards of Accountancy. (2021). *Accounting Program Curriculum Gap Analysis*. Durham, NC: AICPA & Nashville, TN: NASBA. https://www.evolutionofcpa.org/Documents/Accounting%20Program%20Curriculum%20Gap%20Analysis%20Report%203.15.2021.pdf (accessed on August 4, 2023).

Al-Htaybat, K., von Alberti-Alhtaybat, L., & Alhatabat, Z. (2018). Educating digital natives for the future: Accounting educators' evaluation of the accounting curriculum. *Accounting Education*, 27(4): 333–357. https://doi-org.ezproxy.umgc.edu/10.1080/09639284.2018.1437758

Andiola, M.A., Masters, E., & Norman, C. (2020). Integrating technology and data analytic skills into the accounting curriculum: Accounting department leaders' experiences and insights. *Journal of Accounting Education*, 50: 1–18. https://doi.org/10.1016/j.jaccedu.2020.100697

Ballou, B., Heitger, D.L., & Stoel, D. (2018). Data-driven decision-making and its impact on accounting undergraduate curriculum. *Journal of Accounting Education*, 44: 14–24. https://doi.org/10.1016/j.jaccedu.2018.05.003

Bedford, N., Bartholomew, E. E., Bowsher, C. A., Brown, A. L., Davidson, S., Horngren, C. T., Knortz, H. C., Piser, M. M., Shenkir, W. G., Simmons, J. K., Summers, E. L., & Wheeler, J. T. (1986). Future accounting education: Preparing for the expanding profession. *Issues in Accounting Education*, 1(1): 168–195.

Booth, A. (2006). Clear and present questions: Formulating questions for evidence-based practice. **Library Hi Tech**, 24(3): 355–368. https://doi.or10.1108/07378830610692127

Christensen, P., Thrane, M., Jørgensen Herreborg, T. & Lehmann, M. (2009). Sustainable development: Assessing the gap between preaching and practice at Aalborg University. *International Journal of Sustainability in Higher Education*, 10(1): 4–20.

DeMonbrun, M., & Warshaw, J. B. (2020). Enrollment management and admissions policies at regional public universities. *New Directions for Higher Education*, 19: 71–88. https://doi.org/10.1002/he.20368

Demski, J. (2007). Is accounting an academic discipline? *Accounting Horizons*, 21(2): 153–157.

Dunn, K.A., Hooks, K.L., & Kohlbeck, M.J. (2016). Preparing future accounting faculty members to teach. *Issues in Accounting Education*, 31(2): 155–170. https://doi.org/10.2308/iace-50989

Dzuranin, A.C., Jones, J.R., & Olvera, R.M. (2018). Infusing data analytics into the accounting curriculum: A framework and insights from faculty. *Journal of Accounting Education*, 43, 24–39. https://doi.org/10.1016/j.jaccedu.2018.03.004

Harris, M. A., & Patten, K. P. (2015). Using Bloom's and Webb's Taxonomies to Integrate Emerging Cybersecurity Topics into a Computing Curriculum. *Journal of Information Systems Education*, 26(3): 219–234.

Jenkins, G. (2020). Teacher agency: The effects of active and passive responses to curriculum change. *Australian Educational Researcher*, 47(1): 167–181. https://doi-org.ezproxy.umgc.edu/10.1007/s13384-019-0033-2

Lawson, R. A., Blocher, E. J., Brewer, P. C., Cokins, G., Sorensen, J. E., Stout, D. E., Sundem, G. L., Wolcott, S. K., & Wouters, M. J. (2014). Focusing accounting curricula on students' long-run careers: Recommendations for an integrated competency-based framework for accounting education. *Issues in Accounting Education*, 39(2): 295–317.

Lawson, R. A. & Venkatesh, R. (2021). IMA briefing concerns for the CPA evolution model. *Institute of Management Accountants*. https://www.imanet.org/ima-briefing/2021/june/ima-briefing-concerns-for-the-cpa-evolution-model?psso=true

McBride, K. & Philippou, C. (2020). "Big results require big ambitions": Big data, data analytics, and accounting in masters courses. *Accounting Research Journal*, 35(1): 71–100. https://www.emerald.com/insight/content/doi/10.1108/ARJ-04-2020-0077/full/html

Pan, G., & Seow, P. (2016). Preparing accounting graduates for digital revolution: A critical review of information technology competencies and skills development. *Journal of Education for Business*, 91(3): 166–175. http://dx.doi.org/10.1080/08832323.2016.1145622

Qasim, A., & Kharbet, F.F. (2020). Blockchain technology, business data analytics, and artificial intelligence: Use in the accounting profession and ideas for inclusion into the accounting curriculum. *Journal of Emerging Technologies in Accounting*, 17(1): 107–117.

Rebele, J.E., & St. Pierre, E. K., (2015). Stagnation in accounting education research. *Journal of Accounting Education*, 33: 128–137. http://dx.doi.org/10.1016/j.jaccedu.2015.04.003

Sarkar, S., Boss, S.R., & Gray, J. (2021). Pedagogical practices of accounting departments addressing AACSB technology requirements. *Issues in Accounting Education*, 36(4): 59–85. https://doi.org/10.2308/ISSUES-19-082

Saul, S. (2022). Despite years of criticism, the *U.S. News* college rankings live on. *The New York Times*, September 15. https://www.nytimes.com/2022/09/15/us/us-news-college-ranking.html

Taylor, J. (2023). Update on the AICPA pipeline acceleration plan. *Journal of Accountancy*, July 12. https://www.journalofaccountancy.com/newsletters/academic-update/update-on-the-aicpa-pipeline-acceleration-plan.html

Watty, K., McKay, J., & Ngo, L. (2016). Innovators or inhibitors? Accounting faculty resistance to new educational technologies in higher education, *Journal of Accounting Education*, 36: 1–15. https://doi.org/10.1016/j.jaccedu.2016.03.003

Woodside, J.M., Chambers, V., & Mendoza, M. (2020). Integrative learning and interdisciplinary information systems curriculum development in accounting analytics. *Journal of Information Systems Education*, 31(2): 147–156.

ABOUT THE AUTHOR

Gregory J. Tanzola is an Assistant Professor of Practice in Accounting at the Haub School of Business at Saint Joseph's University and a doctoral candidate at the University of Maryland Global Campus. He is also a certified public accountant and holds a MBA from Villanova University as a member of Beta Gama Sigma. With over 30 years of professional experience in Accounting and Information Technology, he possess expertise in the areas of corporate budgeting, forecasting, and planning analytics. After reciving his undergraduate degree in accounting from Saint Joseph's University, Mr. Tanzola began his career at Coopers and Lybrand. After leaving Coopers and Lybrand he held accounting and IT roles in the in the cable and pharmaceutical industries. His research interest include the impact of artificial intelligence on the accounting profession and environmental, social, and governance financial reporting and disclosures.