

Educating Accountants for a Sustainable Future

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Agenda

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2. Methodology
3. Key takeaways:
 1. Competencies
 2. Educational strategies
 1. Initial professional development (IPD)
 2. Continuing professional development (CPD)
 3. Challenges
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Research Questions

- (1) What existing knowledge, skills, and behaviors of aspiring and professional accountants are most relevant to sustainability-related reporting and assurance?
- (2) What new knowledge, skills, and behaviors need to be developed, or have more emphasis placed on, in order to enable aspiring and professional accountants to deliver quality sustainability-related reporting and assurance services?
- (3) How do the competencies required to perform quality sustainability-related reporting and assurance services differ between aspiring and professional accountants?
- (4) What educational strategies are most effective in the development of sustainability-related reporting and assurance competencies? How do these strategies differ for IPD (pre-qualification) and CPD (post-qualification)?
- (5) What are the biggest challenges for aspiring and professional accountants to obtain the competencies needed to perform quality sustainability-related reporting and assurance services?

Methodology

Sources:

- Review of three sets of literature (academic, public accounting/audit firms, and professional accounting organizations (PAOs))
- Search databases included Google Scholar, Academic Source Complete, Business Source Complete and EBSCO
- Priority to recent literature, defined as that published during the last three years (2021-2023)

Search terms:

- Search string included: “sustainability,” “education,” “competencies,” “accounting,” “students,” “preparedness,” “higher education institutes (HEIs),” “training,” “strategies,” “challenges,” and “ESG”

Key Takeaway - Competencies

Competency and Support from the Literature	Competency Description
<p>Systems-Thinking (Deloitte 2022; JICPA 2022; Lozano et al. 2017; Redman and Wiek 2021)</p>	<p>Ability to apply knowledge of topic interconnectivity to (a) understand the various financial statement impacts of sustainability metrics and (b) propose innovative solutions to associated risks.</p>
<p>Interpersonal Skills (Carvalho and Almeida 2022; JICPA 2022; Lozano et al. 2017; Redman and Wiek 2021)</p>	<p>Ability to communicate across groups and disciplines to gain an understanding of inputs to sustainability metrics</p>
<p>Critical Thinking and Problem Solving (Lozano et al. 2017; Rieckmann 2018; Sharma and Stewart 2022; Tran and Herzig 2023)</p>	<p>Ability to quantify and translate non-financial data and associated risks into financial statement data.</p>
<p>Adaptability and Flexibility (Gil-Doménech 2021; ISCA 2022; Redman and Wiek 2021)</p>	<p>Ability to apply foundational accounting knowledge to new types of data reporting and new reporting requirements, and ability to tolerate and respond to ambiguity and uncertainty.</p>
<p>Technological Capability (AICPA 2022; Carvalho and Almeida 2022; Deloitte 2022)</p>	<p>Ability to analyze non-financial data and large datasets.</p>

Deeper Look at Competencies

- Systems-Thinking
- Interpersonal Skills
- Critical Thinking and Problem Solving
- Adaptability and Flexibility
- Technological Capability

Skills Embedded in a Systems-Thinking Competency (*Marcos-Sánchez et al. 2022*)

- In exploring cause–effect relationships, he/she recognizes the importance of considering delays.
- Locates unintended consequences.
- Shifts perspectives to broaden knowledge.
- Distinguishes the circular nature of complex cause–effect relationships.
- Identifies that the behavior of a system is determined by structure.
- Uses knowledge of systemic structures to test actions for greater effectiveness.
- Surfaces and tests assumptions.
- Verifies results and modifies actions if necessary: successive approach.
- Seeks to perceive the whole picture.

Deeper Look at Competencies

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Skills Embedded in an Interpersonal Skills Competency

(Lans et al. 2014; De Haan 2006; Wiek et al. 2011)

- Communicating
- Collaborating, including interdisciplinary work
- Negotiating
- Empathy
- Compassion
- Transdisciplinary thinking
- Stakeholder engagement

Deeper Look at Competencies

- Systems-Thinking
- Interpersonal Skills
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Skills Embedded in a

Critical Thinking and Problem Solving Competency

(Gil-Domenech et al. 2021; AICPA 2022)

- Assess and quantify sustainability-related risks.
- Critical thinking and critical self-assessment (at the individual and organizational level)
- Critical contextualization of knowledge establishing interrelationships with social, economic, environmental, local and/or global problems
- Critically assess the impact (positive and negative) of their organization on society, the economy, and the environment
- Critically assess the implications of ethical and deontological principles related to the values of sustainability
- Critically assess the responsible actions of companies as well as implications of those actions

Deeper Look at Competencies

- Systems-Thinking
- Interpersonal Skills
- Critical Thinking and Problem Solving
- **Adaptability and Flexibility**
- Technological Capability

Skills Embedded in an Adaptability and Flexibility Competency (*Gil-Domenech et al. 2021; ISCA 2022*)

- Adaptability to an evolving regulatory climate
- Adaptability of business practices and reporting requirements to external directives
- Willingness to supplement current skills and competencies within the ESG context.
- Interpret and apply new standards in accordance with regulatory requirements.

Deeper Look at Competencies

- Systems-Thinking
- Interpersonal Skills
- Critical Thinking and Problem Solving
- Adaptability and Flexibility
- Technological Capability

Skills Embedded in a Technological Capability Competency (AICPA 2022)

- Identify information system requirements to evaluate strategies to enhance environmental, societal, and governance practices.
- Leverage relevant technologies to facilitate data analyses that support diversity, equity, and inclusion.
- Innovation and exploration of ways to use technology to achieve sustainability objectives across a variety of disciplines.
- Develop an understanding of technologies used to develop sustainability measures.

Key Takeaways – Educational Strategies

- Initial Professional Development (IPD)
 - Integrative sustainability education indicates its integral nature rather than as an ‘add-on.’
 - Weaving it into courses versus isolating it (Sharma and Stewart 2022)
 - Project-based, case-based, and experiential learning
 - Technical memorization versus critical thinking through solutions (Evans 2019; Lee and Perdana 2023; Tran and Herzig 2023)
 - A combination of formal, non-formal, and informal learning produces holistic learning (Caldana et al. 2023)
 - Formal= Curricular
 - Non-formal= Extracurricular
 - Informal= External via work/practical experience or internship
- Continuing Professional Development (CPD)
 - Importance of a skills-focused education and rapid training programs to upskill their workforce through continuing professional development programs which offer digital badges, micro-credentials, and stackable credentials (Deloitte 2022; PwC 2021)

Key Takeaways – Challenges

- Resource constraints
 - Lack of qualified instructors, lack of textbooks, curriculum capacity (Al-Hazaima et al. 2021)
- Curriculum constraints, subject to accreditation and/or credentialing standards
 - Wong et al. (2021) cites a ‘vocational orientation of students’ who dismiss non-technical education as irrelevant.
- Lack of consensus on what should be taught and how.
 - Uncertainty as to what role should accounting play in sustainability (Gray 2019)
 - Dissonance between training technical accountants and independent thinkers (Gray 2019)

“This conundrum is reflected at its most basic in the contrasting questions: do we take accounting, management and corporations and ask, “how can they contribute to sustainability”? Or do we take society and ecology as our starting point and ask, “what must be done to approach sustainability?” The first takes corporations and accounting as essential to our discussion; the second allows for the possibility that accounting and corporations may be the problem and any answer may decide that we need no accounting or corporations— at least as we currently know them (Milne et al. 2009; Russell et al. 2017).” (Gray 2019, 44).

Q&A





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