



Teaching ESG Reporting Frameworks in Accounting Education: Pedagogical Strategies, Challenges, and Curriculum Integration

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Abstract

Environmental, Social, and Governance (ESG) reporting has rapidly evolved into a central pillar of corporate accountability and sustainable finance. Regulatory mandates, investor activism, and stakeholder pressure have transformed ESG disclosure from a voluntary practice into a strategic necessity for organizations worldwide. This transformation has significant implications for accounting education, which must prepare graduates to understand, apply, and critically evaluate ESG reporting frameworks. This paper examines the importance of teaching ESG reporting frameworks in accounting programs and reviews existing pedagogical approaches used across global institutions. Drawing on an extensive review of academic literature, professional standards, and regulatory guidelines, the study identifies key challenges in ESG education, including conceptual ambiguity, lack of standardized frameworks, faculty preparedness, and curriculum overload. The paper proposes an integrated pedagogical model that embeds ESG reporting across accounting subjects through experiential learning, case-based instruction, and technology-enabled tools. The study concludes that systematic ESG education enhances ethical awareness, sustainability literacy, and professional competence among future accountants.

Key word: ESG Reporting, Accounting Education, Sustainability Accounting, Integrated Reporting, Curriculum Design.

Introduction

Over the past decade, ESG considerations have reshaped corporate reporting, investment decision-making, and regulatory oversight. Investors, regulators, and civil society increasingly demand transparency not only in financial performance but also in environmental impact, social responsibility, and governance practices. Frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), Integrated Reporting (), and the recently established International Sustainability Standards Board (ISSB) have formalized ESG reporting expectations.

Accounting professionals play a central role in measuring, verifying, and communicating ESG information. Consequently, accounting education must evolve beyond traditional financial reporting to include sustainability and ESG competencies. This paper argues that ESG reporting frameworks should be systematically embedded within accounting curricula to ensure graduates are prepared for emerging professional roles in sustainability reporting, assurance, and advisory services.

2. Conceptual Foundations of ESG Reporting

ESG reporting refers to the disclosure of non-financial information related to an organization's environmental performance, social impact, and governance structures. Unlike traditional financial reporting, ESG reporting incorporates both quantitative and qualitative metrics, forward-looking indicators, and stakeholder-oriented disclosures.

The theoretical foundations of ESG reporting include stakeholder theory, legitimacy theory, institutional theory, and triple bottom line accounting. These perspectives help accounting students understand why organizations disclose ESG information and how such disclosures influence corporate reputation, risk management, and long-term value creation.

3. Evolution of ESG Reporting Frameworks

The ESG reporting landscape has evolved from fragmented voluntary disclosures to increasingly standardized global frameworks. The GRI emphasizes stakeholder inclusivity and impact reporting, while SASB focuses on financially material sustainability issues. TCFD addresses climate-related risks and opportunities, and Integrated Reporting seeks to connect financial and non-financial value creation. The ISSB aims to harmonize sustainability reporting standards globally.

Understanding these frameworks is critical for accounting students, as organizations often adopt multiple frameworks simultaneously. Teaching ESG reporting therefore requires a comparative and analytical approach rather than rote learning of standards.

4. Importance of ESG Education in Accounting Programs

The integration of ESG reporting into accounting education supports multiple learning outcomes. First, it enhances sustainability literacy and ethical reasoning among students. Second, it aligns accounting education with professional body requirements, as organizations such as IFAC, ACCA, and CPA increasingly emphasize sustainability competencies. Third, ESG education prepares students for emerging career paths in sustainability reporting, assurance, and consulting.

Moreover, ESG reporting strengthens students' ability to apply professional judgment, manage non-financial risks, and communicate complex information to diverse stakeholders.

5. Pedagogical Approaches to Teaching ESG Reporting

5.1 Case-Based Learning

Case studies involving corporate sustainability successes and failures enable students to critically analyze ESG disclosures, greenwashing risks, and stakeholder responses. Real-world cases enhance engagement and contextual understanding.



5.2 Experiential and Project-Based Learning

Hands-on projects such as preparing mock sustainability reports, ESG materiality assessments, and carbon footprint calculations allow students to apply theoretical concepts in practice. These activities foster analytical and technical skills.

5.3 Interdisciplinary Teaching

ESG reporting intersects with environmental science, ethics, law, economics, and data analytics. Interdisciplinary instruction helps students appreciate the complexity and interconnectedness of sustainability issues.

5.4 Technology-Enabled Learning

The use of ESG databases, sustainability software, and data visualization tools exposes students to professional reporting environments and enhances digital competence.

6. Conceptual Framework for Teaching ESG Reporting

Comparison of Main Sustainability Disclosure Frameworks and Standards							
	GRI	ESRS		ISSB	Consolidated into ISSB		
		Pre-Omnibus	Post-Omnibus		Integrated Reporting Framework	SASB Standards	TCFD
Type of Guidance	Standards	Standards	Standards	Standards	Framework	Standards	Guidelines
Application	Voluntary	Mandatory for large companies, 250+ employees, EUR 50 M turnover, or EUR 25 M balance sheet total, and listed SMEs	Mandatory for largest companies, > 1000 employees, EUR 90 M turnover or EUR 25 M balance sheet total, listed SMEs exempted Companies no longer subject to CSRD can opt for voluntary reporting based on simplified standards (similar to VSME standards)	Subject to national jurisdiction adoption	Voluntary	Voluntary	Voluntary
Coverage	Global	European Union EU Large Public Interest: FY24 EU Other Large Undertakings: FY25 EU-listed SMEs: FY26 Non-EU countries as of FY28 net turnover EUR 150 M, EU branch with > 40 M, or listed on an EU market	European Union EU Large Public Interest: FY24 EU Other Large Undertakings: FY27 EU-listed SMEs: FY28 Non-EU countries as of FY28 net turnover EUR 450 M, EU branch with > 50 M, or listed on an EU market	Global	Global	US-focused originally, applicable globally as part of ISSB standards	Global
Topics	Economic, environmental, and social activities and impacts	Environmental, social and governance	Environmental, social and governance (with fewer mostly quantitative metrics)	General Sustainability, Climate, Other topics to be added (biodiversity and human capital in next two years)	Six capitals: financial, manufactured, intellectual, human, social, natural	Environment, social capital, human capital, business model & innovation, leadership & governance	Climate-related risks, opportunities, financial impacts, and scenario analysis
Sector Specific	Yes	Yes (forthcoming)	No (eliminated)	Yes	No	Yes (77 sectors)	Yes
Target Audience	All stakeholders	All stakeholders	All stakeholders	Investors	Providers of financial capital	Investors	Investors
Building Blocks		TCFD, GRI, CDP	TCFD, GRI, CDP	TCFD, SASB, CDSB			
Materiality type	Impact materiality	Double- materiality (financial + impact materiality)	Retained	Single materiality (financial materiality)	Single materiality (financial materiality)	Single materiality (financial materiality)	Single materiality (financial materiality)
Materiality definition	Aspects that reflect the organization's significant economic, environmental, and social impacts; or that substantively influence the assessments and decisions of stakeholders	Impact on people or the environment and financial effects on undertaking over the short-, medium- and long-term time horizons.	Retained	Information is material if omitting, misstating or obscuring that information could reasonably be expected to influence decisions that the primary users of general-purpose financial reporting.	Matter that could substantively affect the organization's ability to create value in the short, medium, or long term.	A fact is material if there is a substantial likelihood that a reasonable investor would view its omission or misstatement as having significantly altered the total mix of information.	Public companies' legal obligation to disclose information in their financial filings— including material climate-related information.
Assurance	No assurance requirement	Limited assurance remains, with plans to transition to reasonable assurance	Limited assurance remains, reasonable assurance requirement removed	No assurance requirement but designed to make companies assurance ready	No assurance requirement	No assurance requirement	No assurance requirement

Source: IFC, 2025.

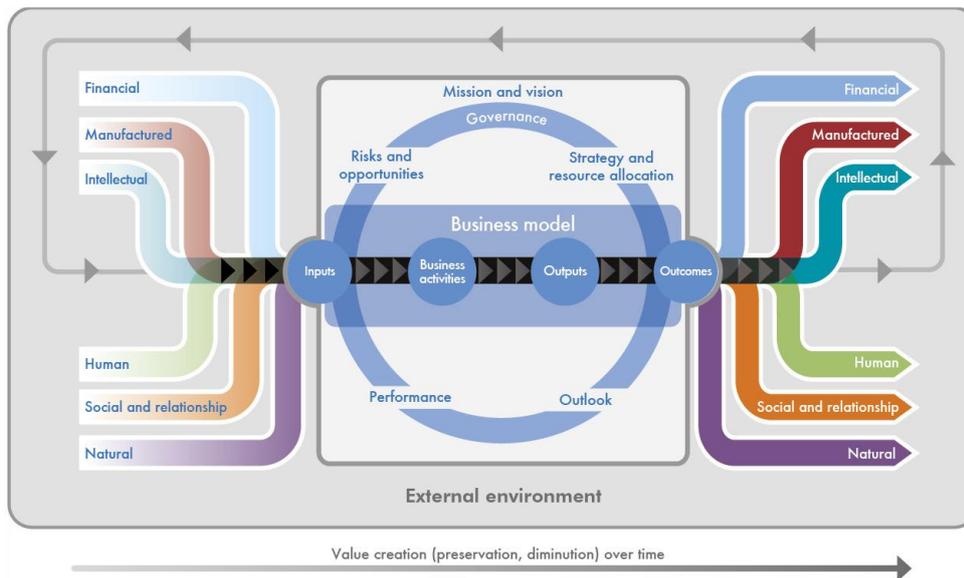


Figure 1. Integrated ESG Reporting Teaching Framework in Accounting Education

The framework demonstrates how ESG concepts can be embedded across financial accounting, auditing, management accounting, and assurance courses, supported by ethics and sustainability governance principles.

7. Curriculum Design and Integration Strategies

Effective ESG education requires curriculum integration rather than standalone sustainability courses. ESG concepts should be embedded across accounting subjects, including financial reporting, auditing, management accounting, and corporate governance. Assessment strategies should emphasize critical thinking through case analysis, reflective writing, group projects, and scenario-based evaluations.

Faculty development and industry collaboration are essential to ensure curriculum relevance and practical orientation.

8. Challenges in Teaching ESG Reporting

Despite growing importance, ESG education faces several challenges. The lack of universally accepted standards creates conceptual ambiguity, while rapid regulatory changes require continuous curriculum updates. Faculty may lack sustainability expertise, and curriculum overcrowding limits instructional depth.

Additionally, ESG data complexity and measurement uncertainty pose pedagogical difficulties, particularly for students accustomed to precise financial metrics.

9. Role of Educators, Institutions, and Professional Bodies

Accounting educators must adopt innovative teaching methods, continuously update course content, and collaborate with sustainability professionals. Institutions should support faculty training, provide access to ESG databases, and encourage experiential learning partnerships.



Professional bodies and regulators can facilitate curriculum alignment by issuing clear competency guidelines.

10. Future Directions and Policy Implications

Future accounting education should emphasize climate accounting, biodiversity reporting, ESG assurance, and digital sustainability reporting. Policymakers and accreditation agencies should formally recognize ESG competencies as core learning outcomes. Continuous dialogue between academia, industry, and regulators is essential to maintain curriculum relevance.

11. Conclusion

Teaching ESG reporting frameworks in accounting education is critical for preparing professionals capable of addressing contemporary sustainability challenges. An integrated, experiential, and interdisciplinary pedagogical approach enhances students' ethical awareness, analytical skills, and professional readiness. By embedding ESG reporting systematically within accounting curricula, educational institutions can contribute to more transparent, accountable, and sustainable business practices.

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