

# How to Embed Sustainability in Your Financial and Management Accounting Courses

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Susan K. Wolcott, PhD, CPA, CMA, [WolcottLynch.com](http://WolcottLynch.com)

Matthew J. Sargent, DBA, CFE, CISSP, CISA, The University of Southern Mississippi

In Absentia: Naomi Siegel Soderstrom, PhD, FASSA, The University of Melbourne





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1 👤

### How/where is sustainability taught in your accounting program?

- Embedded throughout the accounting curriculum
- Embedded in 2-3 accounting courses
- A separate accounting course
- None of the above



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- Why Sustainability in Accounting?
  - Why Throughout the Curriculum?
  - Learning Objectives
  - Guidance for Learning Activities
  - Learning Activity Examples

# Why Sustainability in Accounting?

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- Increased Business World Focus
- More International Reporting/Assurance Requirements
- Collaboration of Accounting With Others on Sustainability
- Increased Focus by Accounting Firms



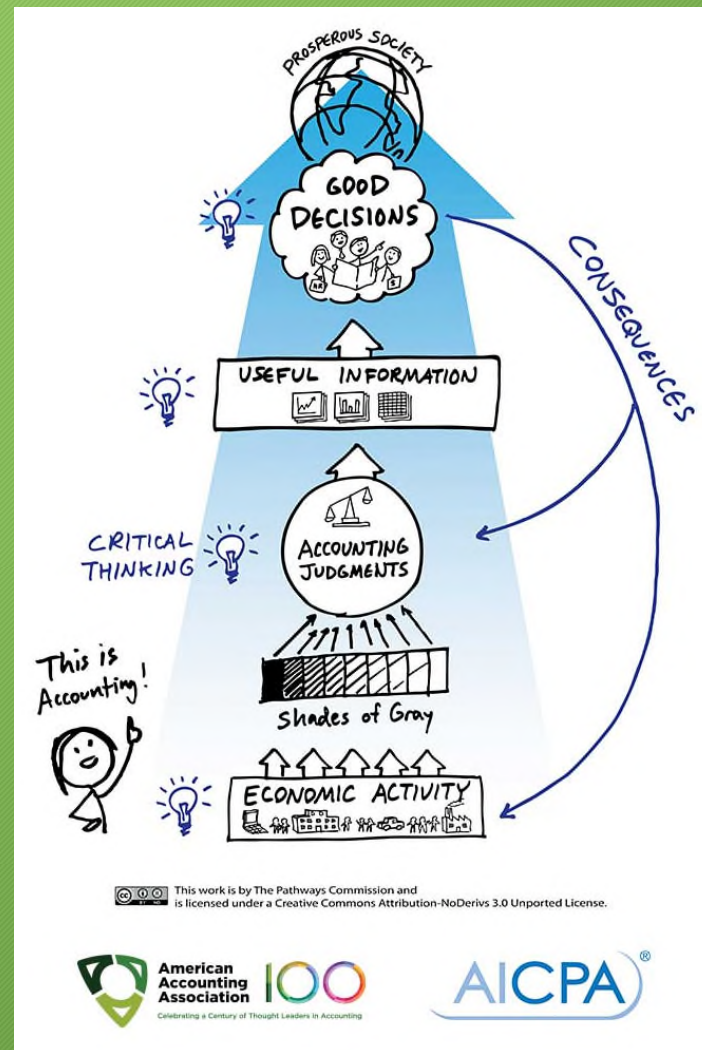
# Why Sustainability Throughout the Accounting Curriculum?



# Pathways Vision Model

In Absentia

AAA and AICPA (2014)





<b>Economic Activity</b>	<ul style="list-style-type: none"> <li>• Beyond economic activities: environmental, social, governance</li> <li>• Focus on both financial and nonfinancial events and circumstances</li> <li>• Activities beyond the organization (e.g., suppliers and customers)</li> </ul>
<b>Shades of Gray</b>	<ul style="list-style-type: none"> <li>• More sources and types of uncertainty</li> <li>• New and less precise measurement methods</li> <li>• More forward-looking information</li> </ul>
<b>Accounting Judgments</b>	<ul style="list-style-type: none"> <li>• More qualitative data</li> <li>• New/different analytical methods</li> <li>• More reliance on external experts</li> </ul>
<b>Useful Information</b>	<ul style="list-style-type: none"> <li>• Wider range of stakeholders with different information needs</li> <li>• Reduced comparability across organizations and over time</li> <li>• Evolving reporting guidelines</li> </ul>
<b>Good Decisions</b>	<ul style="list-style-type: none"> <li>• Uncertain consequences of information on decision makers and/or society.</li> <li>• Conflicting and competing social, environmental, economic, and ethical criteria</li> </ul>

## Examples of Sustainability Complexity

Based on categories in the Pathways Vision Model (AAA and AICPA, 2014)

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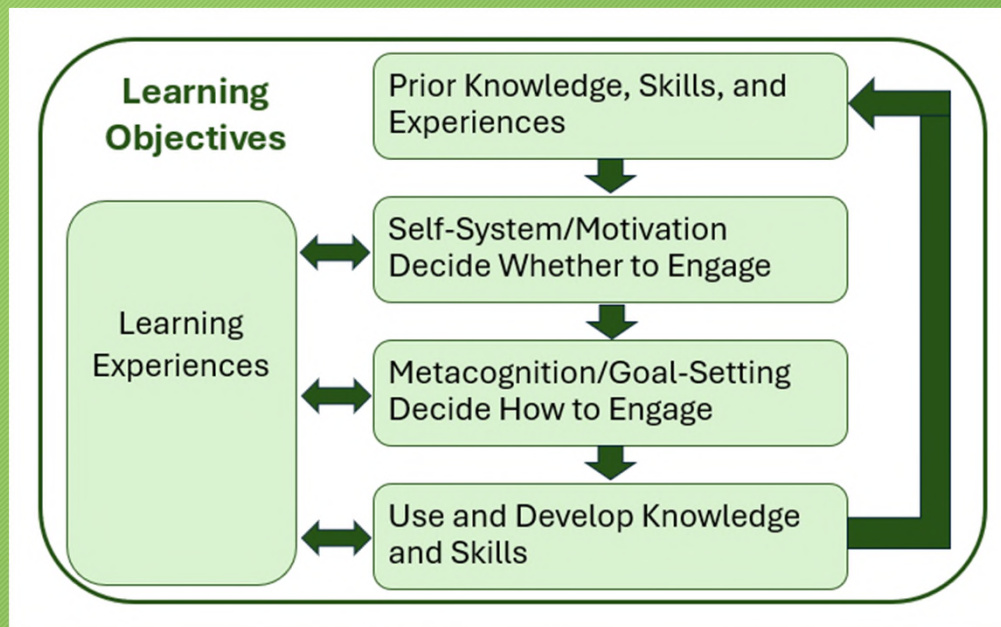
# Sustainability Learning Objectives for Accounting



# Design Learning Experiences for a Course

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Adapted from Wolcott & Sargent (2021, Fig 1) and based on Marzano and Kendall (2007)



Student Learning in  
One Class  
Leads to the “Prior”  
Knowledge, Skills, and  
Experiences  
for the Next Class




Introductory Skills	Intermediate Skills	Advanced Skills
<ul style="list-style-type: none"> <li>• Recognize open-ended problems that have no single “correct” answer</li> <li>• Apply technical knowledge to simple open-ended problems</li> <li>• Distinguish between relevant and irrelevant information</li> <li>• At least partially interpret relevant information to support an opinion/conclusion</li> </ul>	<p>In Addition to Introductory Skills:</p> <ul style="list-style-type: none"> <li>• Identify main problem and complexities</li> <li>• Thoroughly and objectively analyze alternatives, including relevant information, assumptions and others’ perspectives</li> <li>• Delay conclusions until thorough analysis is completed</li> </ul>	<p>In Addition to Introductory and Intermediate Skills:</p> <ul style="list-style-type: none"> <li>• Identify most important problem(s) and complexities, including embedded subsidiary problem(s)</li> <li>• Objectively analyze the most important alternatives, information, implications, and perspectives</li> <li>• Evaluate the quality of information and assumptions</li> <li>• Select and apply appropriate decision criteria to reach well-founded conclusion(s)</li> </ul>

# Generic Learning Experiences to Achieve Learning Objectives

Adapted from AICPA faculty guide (Wolcott, 2020), based on the reflective judgment model (King and Kitchener, 1994) and on evidence regarding accounting students’ skills (Wolcott and Sargent, 2021)





# Guidance for Sustainability Learning Activities



# Sustainability Learning Objectives to Build Technical Expertise Across the Curriculum

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Sustainability Learning Objectives (IFAC 2024, Technical Expertise)	Introductory Skills	Intermediate Skills	Advanced Skills
1. Understand and apply sustainability-related reporting and assurance standards and requirements.	<p>1.1a Recognize the effects of sustainability-related issues on financial statement accounts</p> <p>1.1b Identify the differences between assurance standards for financial and sustainability reporting</p>	<p>1.2a Relate sustainability disclosure requirements to existing financial reporting frameworks</p> <p>1.2b Discuss the unique assurance issues and procedures for sustainability information</p>	<p>1.3a Apply reporting concepts that are unique to sustainability</p> <p>1.3b Apply relevant assurance standards to sustainability information</p>
2. Establish ways to measure performance, including science-based metrics and targets.	<p>2.1a Recognize the usefulness of sustainability report measures for internal management</p> <p>2.1b Compare sustainability measures used by different organizations</p>	<p>2.2a Discuss the use of sustainability-related measures for executive remuneration</p> <p>2.2b Discuss the usefulness of sustainability-related measures for performance management systems (e.g., Balanced Scorecard)</p>	<p>2.3a Evaluate the challenges of developing high-quality sustainability measures</p> <p>2.3b Apply sustainability-related measures to evaluate performance</p>

# Sustainability Learning Objectives (continued)

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Sustainability Learning Objectives (IFAC 2024, Technical Expertise)	Introductory Skills	Intermediate Skills	Advanced Skills
<b>3. Analyze sustainability-related data sets and scenarios to support informed decision making.</b>	3.1a Identify and apply simple data estimates required for sustainability-related information	3.2a Apply and discuss the usefulness of sustainability-related information for internal risk management and/or scenario analyses	3.3a Apply analytical skills to performance and interpret sustainability-related data sets and scenarios
<b>4. Design, implement and evaluate systems, processes and controls for sustainability-related reporting.</b>	4.1a Identify possible reasons why sustainability-related information might be inaccurate	4.2a Discuss the role of organizational governance (e.g., the board of directors) related to sustainability	4.3a Identify and discuss issues related to the gathering and reporting of sustainability information provided by external parties 4.3b Discuss the usefulness of cross-disciplinary collaboration in the development and use of sustainability information



# Sustainability Learning Objectives (continued)

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Sustainability Learning Objectives (IFAC 2024, Technical Expertise)	Introductory Skills	Intermediate Skills	Advanced Skills
5. <b>Use judgment and assess materiality for a sustainability context.</b>	5.1a Recognize the effects of materiality on sustainability reporting requirements	5.2a Discuss issues related to materiality judgments for sustainability information	5.3a Compare and contrast materiality for sustainability reports and traditional financial statements
6. <b>Produce high-quality, decision-useful sustainability disclosures and information.</b>	6.1a Compare organizational sustainability reporting information to industry-based information	6.2a Identify and discuss the relevance of sustainability disclosures to external users	6.3a Evaluate the impact of manager discretion on the quality of sustainability information 6.3b Evaluate the quality of sustainability-related disclosure information for: (a) external decision makers and (b) internal decision making 6.3c Evaluate the usefulness of voluntary versus mandatory sustainability disclosures for internal management



# Sustainability Learning Activity Examples



# Sustainability Learning Activity Example #1

(With alignment to learning objectives from slides 11, 12, and 13)

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General Issue	Introductory Skills	Intermediate Skills	Advanced Skills
<b>Understand and apply sustainability-related reporting requirements.</b>	<b>Specific Issue:</b> Effects of climate change on the numbers reported in the financial statements.	<b>Specific Issue:</b> Fit of new sustainability disclosure requirements within the financial reporting Conceptual Framework	<b>Specific Issue:</b> IFRS S2 requires disclosure about climate-related risks and opportunities over the short, medium, and long term
<b>Introductory Resources:</b> IFRS (2023c)  <b>Intermediate Resources:</b> IFRS (2018) FASB (2010) IFRS (2023a) SASB standards  <b>Advanced Resources:</b> Channel Infrastructures NZ Limited (2024-pg. 42 includes analysis of time horizons) IFRS (2023 b)	<b>Example Discussion Questions (Alignment to LO 1.1a):</b> <ul style="list-style-type: none"> <li>Is it possible for the value of fixed assets to be affected by climate change?</li> <li>Is it possible for sales or accounts receivable to be affected by climate change?</li> <li>Is it possible for supplier-related accounts (e.g. inventory and accounts payable) to be affected by climate change?</li> </ul>	<b>Example Discussion Questions (Alignment to LO 1.2 a):</b> <ul style="list-style-type: none"> <li>IFRS S1 (IFRS 2023j) suggests that companies consider using SASB industry disclosures for their reports, which include both climate-related and more general sustainability disclosures. Select a SASB industry standard for a company that has been discussed in class and, in the context of the Conceptual Framework, discuss whether the suggested disclosures are in alignment with the qualitative characteristics of useful financial information.</li> </ul>	<b>Example Discussion Questions (Alignment to LO 1.3 a):</b> <ul style="list-style-type: none"> <li>What is meant by short, medium, and long-term information, and how do these types of information deviate from typical timelines used in financial reporting?</li> <li>How should accountants and managers determine what comprises relevant short, medium, and long-term climate-related effects?</li> <li>What issues, such as potential liability, might managers be concerned about for these types of disclosures?</li> </ul>

# Sustainability Learning Activity Example #2

(With alignment to learning objectives from slides 11, 12, and 13)

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General Issue	Introductory Skills	Intermediate Skills	Advanced Skills
<b>Produce high-quality sustainability-related measures that are useful for internal decision-making</b>	<b>Specific Issue:</b> IFRS S2 requires companies to report their Greenhouse Gas (GHG) emissions. While this reporting is for annual reports, the data are clearly available for managers as well.	<b>Specific Issue:</b> IFRS S2 requires companies to discuss how climate-related targets (e.g., Greenhouse Gas emissions) are linked to executive remunerations.	<b>Specific Issue:</b> One way that companies help decision-makers consider climate-related issues is by using internal carbon prices. IFRS S2 required companies to disclose when and how they apply internal carbon prices in decision-making.
<b>Introductory Resource:</b> IFRS (2023b)  <b>Intermediate Resources:</b> Cohen, Kadach, Ormazabal, and Reichelstein (2023) Lenihan and Brennan (2023)  <b>Advanced Resources:</b> IFRS (2023b) KPMG (2023) Ecofys, The Generation Foundation, and CDP (2017)	<b>Example Discussion Questions (Alignment to LO 2.1a):</b> <ul style="list-style-type: none"> <li>What are the different types of GHG emissions that are reported, and which types of GHG emissions can managers directly control?</li> <li>For what types of internal decisions might GHG emissions information be useful?</li> </ul>	<b>Example Discussion Questions (Alignment to LO 2.2a):</b> <ul style="list-style-type: none"> <li>How might sustainability and climate-related items be included in executive remunerations (e.g., based upon achieving a firm-level or industry-based target, percentage change in the measure, as a hurdle for receiving any bonus, etc.)?</li> <li>What are the arguments for and against including climate-related items in executive remuneration?</li> </ul>	<b>Example Discussion Questions (Alignment to LO 2.3a):</b> <ul style="list-style-type: none"> <li>How would internal carbon prices affect decision models such as for: 1) investment decisions; 2) transfer pricing; 3) scenario analysis?</li> <li>What carbon pricing method should managers use (e.g., carbon fees, shadow prices, or implicit prices), and how should these internal prices be set?</li> </ul>



# Sustainability Learning Activity Example #3

(With alignment to learning objectives from slides 11, 12, and 13)

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General Issue	Introductory Skills	Intermediate Skills	Advanced Skills
<b>Design, implement and evaluate sustainability-related systems, processes and controls.</b>	<b>Specific Issue:</b> Reporting of sustainability-related information will require new systems. Some of the systems require collection of non-traditional data	<b>Specific Issue:</b> Directors play a key role in organizational governance, which is an important part of Management Control	<b>Specific Issue:</b> Sustainability issues transcend organizational boundaries. This can lead to issues associated with gathering data for mandatory disclosure and can impose liabilities on the organization.
<b>Introductory Resources:</b> WBCSD and WRI (2024) EPA (2024)  <b>Intermediate Resource:</b> COSO and WBCSD (2018)  <b>Advanced Resources:</b> Greenhouse Gas Protocol (2022) Philips and Caldwell (2005) Lemke and Petersen (2012)	<b>Example Discussion Questions (Alignment to LOs 3.1a and 4.1a):</b> <ul style="list-style-type: none"> <li>Reporting of Scope 3 emissions requires companies to include emissions related to employee commuting. Design a spreadsheet that can be used to create a database for calculating Scope 3 emissions related to employee commuting.</li> <li>Do you think the data in the system will be complete and reliable?</li> </ul>	<b>Example Discussion Questions (Alignment to LOs 3.2a and 4.2a):</b> <ul style="list-style-type: none"> <li>What is the role of the Board of Directors related to sustainability? Why should oversight of organizational sustainability be at the board level?</li> <li>What types of processes need to be in place for directors to understand that the organization can identify and manage sustainability-related risks?</li> </ul>	<b>Example Discussion Questions (Alignment to LOs 4.3a and 4.3b):</b> <ul style="list-style-type: none"> <li>What types of systems are needed to develop to track Scope 3 emissions from upstream and downstream entities? How can an organization control the quality of the Scope 3 information obtained from upstream and downstream organizations?</li> <li>What sustainability-related risks to an organization stem from upstream and downstream organizations? What controls can companies put in place to manage these risks?</li> </ul>



# Sustainability Learning Activity Example #4

(With alignment to learning objectives from slides 11, 12, and 13)

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General Issue	Introductory Skills	Intermediate Skills	Advanced Skills
<b>Use judgment and assess materiality for a sustainability context</b>	<b>Specific Issue:</b> Disclosures under IFRS S2 are subject to materiality considerations, with companies only reporting material items.	<b>Specific Issue:</b> An item's materiality depends on the audience for the reported information. The Global Reporting Initiative has produced voluntary reporting standards that are multi-stakeholder. The IFRS and US GAAP conceptual frameworks focus on materiality from the perspective of external providers of capital.	<b>Specific Issue:</b> Reporting standards differ in their definition of "material" information that should be reported (financial materiality, impact materiality, double materiality).
<b>Introductory Resource:</b> IFRS (2023d) – Introductory World Resources Institute (2021)  <b>Intermediate Resources:</b> FASB (2010) GRI (2024)  <b>Advanced Resources:</b> IFRS (2023a) European Commission (2023) Turner and Weirich (2023)	<b>Example Discussion Questions (Alignment to LO 5.1a):</b> <ul style="list-style-type: none"> <li>• If a company does not report an item such as emissions, does that mean that management is in violation of the reporting standards?</li> <li>• What kinds of companies are likely to have material carbon emissions? Is this always the same for Scope 1, Scope 2, and Scope 3 data?</li> </ul>	<b>Example Discussion Questions (Alignment to LO 5.2a):</b> <ul style="list-style-type: none"> <li>• What are examples of information that might be material from the perspective of GRI's definition of materiality, but would not be material from a financial reporting perspective?</li> <li>• How does the non-financial nature of sustainability-related information make it more difficult to make materiality judgments?</li> </ul>	<b>Example Discussion Questions (Alignment to LO 5.3a):</b> <ul style="list-style-type: none"> <li>• Why are standard setters discussing using new types of materiality for sustainability information compared to traditional financial statement information?</li> <li>• What are arguments for and against moving to "double materiality" as a means of determining what type of information should be reported in corporate annual financial reports?</li> </ul>



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# Q&A



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## **Our Contact Information:**

Susan Wolcott, [swolcott@WolcottLynch.com](mailto:swolcott@WolcottLynch.com)

Matt Sargent, [Matthew.Sargent@usm.edu](mailto:Matthew.Sargent@usm.edu)

Naomi Soderstrom, [naomiss@unimelb.edu.au](mailto:naomiss@unimelb.edu.au)