The Holistic Stewardship Framework: Revolutionizing Management Education

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ABSTRACT:
Universities and business schools are expected to play a crucial role in addressing modern challenges, given their key role in society and their vital function in generating and sharing knowledge. Traditional management education, often siloed and focused on economic feasibility, falls short in preparing leaders for today's complex landscape. This paper proposes the Holistic Stewardship Framework, a transformative approach to management education. Grounded in corporate sustainability, this paradigm adopts the United Nations Principles of Responsible Management Education (PRME) as its framework, with the United Nations Sustainable Development Goals (UNSDGs) serving as metrics for program and course outcomes. Our study examines teaching and learning practices, curriculum development, and policies worldwide, using secondary sources and publicly available data. The Holistic Stewardship Framework aligns with research emphasizing the role of responsible leadership in enhancing knowledge sharing and organizational performance. It addresses the need for interactive learning approaches fostering critical thinking and creativity. Practical examples demonstrate how integrating UNSDGs into courses equips future managers to navigate complexity, ethical dilemmas, and global challenges. This paradigm bridges theory and practice, cultivating leaders who balance economic viability with social responsibility and environmental stewardship. It represents a comprehensive shift in management education, preparing business leaders to thrive in a dynamic, interconnected world and address 21st-century challenges.

1. Introduction

In an era of unprecedented global challenges, the landscape of management education stands at a critical juncture. The business world faces complex issues of diversity, sustainability, and rapid technological change, demanding a fundamental reevaluation of traditional management practices (Armstrong & Sadler-Smith, 2008). The conventional approach to management education, often siloed and primarily focused on economic feasibility, is increasingly inadequate in preparing leaders for today's multifaceted business environment. The disconnect between traditional curricula and the realities of the modern workplace has sparked a growing call for reform in business education (Mintzberg, 2004).

This paper introduces the Holistic Stewardship Framework (HSF), a transformative approach to management education that addresses these pressing challenges. Grounded in principles of corporate sustainability and responsible leadership, this paradigm seeks to bridge the gap between theory and practice, equipping future

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business leaders with the skills and mindset necessary to navigate complexity, drive innovation, and champion ethical practices.

By adopting the United Nations Principles of Responsible Management Education (PRME) as a framework and integrating the United Nations Sustainable Development Goals (UNSDGs) as key metrics, HSF offers a comprehensive strategy for reimagining management education. This approach also addresses the urgent need for business leaders who can balance economic viability with social responsibility and environmental stewardship (PRME, 2021).

As we delve into the components and implementation of this paradigm, we will explore how it can transform management education to meet the needs of a rapidly changing world, preparing the next generation of business leaders to thrive in a dynamic, interconnected global economy and address the multifaceted challenges of the 21st century. While the HSF presents a promising model for management education reform, its adaptability across diverse socio-economic regions requires further exploration. Localized adaptations will likely be necessary, particularly in non-Western education systems, and future cross-regional pilot systems will be essential to validate and refine its global applicability.

2. Research Question
2.1 Major research question
How can the Holistic Stewardship Framework transform management education to effectively prepare business leaders for the complex challenges of the 21st century?

2.2 Secondary research questions
- What key elements of the Holistic Stewardship Framework help overcome the limitations of traditional management education in promoting responsible leadership and sustainability awareness among diverse learners?
- How does the integration of the UNSDGs and PRME into business school curricula impact students' ability to navigate ethical dilemmas and global challenges?
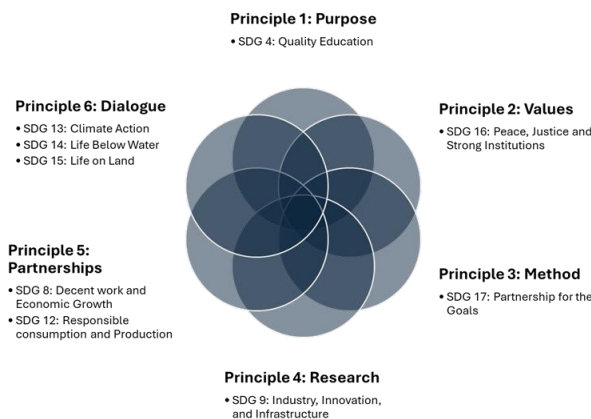
3. Conceptual Framework

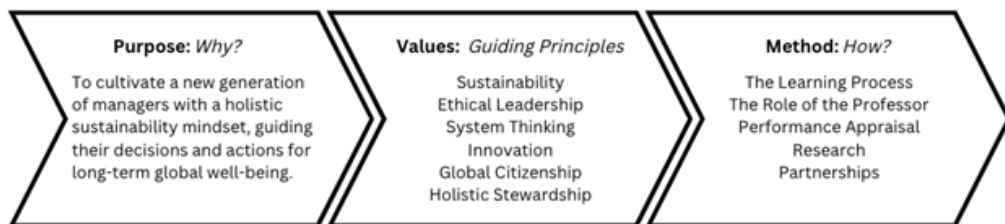*Figure 1:* Integration of PRME and UNSDGs and the foundation of HSF

Figure 2: *Holistic Stewardship Framework's purpose, values and method*

3.1 Purpose

The Holistic Stewardship Framework aims to foster a new generation of managers who can balance economic viability with social responsibility and environmental stewardship, preparing them to thrive in a dynamic, interconnected world and address the multifaceted challenges of modern business.

3.2 Values

The proposed framework is based on foundations that encompass a set of values that are oriented towards attitudes, behaviors, and decision-making processes. These values serve as guiding principles, shaping how future leaders approach business challenges in an interconnected world.

- **Sustainability**. Embracing practices that meet present needs without compromising future generations' ability to meet their needs.

- **Ethical Leadership**. Fostering integrity, transparency, and accountability in decision-making and organizational governance.

- **Systems Thinking**. Developing the ability to understand complex interconnections and long-term impacts of business decisions on society and the environment.

- **Innovation**. Encouraging creative problem-solving and adaptability to address evolving global challenges.

- **Global Citizenship**. Cultivating a sense of responsibility towards the global community and diverse stakeholders.

- **Holistic Stewardship**. Balancing economic viability with social responsibility and environmental protection in all business practices.

3.3 The approach (the learning process)

The HSF emphasizes experiential and participatory learning, where professors act as facilitators and students engage through discussions, projects, and real-world applications. This approach fosters critical thinking, creativity, and collaborative problem-solving, equipping future leaders with the skills and knowledge to address complex sustainability challenges.

The learning process. The learning process should still employ lectures in some fashion. However, the objective is not to transfer knowledge but to collectively build key concepts and spark reflection and inquiring. Class discussions must be an integral part of the teaching/learning process. In addition to a more dynamic approach to lectures,

activities like projects that include class presentations, within which a group of students must take the lead and deliver the results of their learning process to peers, are highly recommended. A course should also provide students an opportunity to practice key concepts in real world settings. Conversely, projects that involve interaction with the community and aim at solving real problems are also highly recommended. For instance, Kenworthy-U'ren and Peterson (2005) proposed employing service learning in management education, which means introducing nonprofit organizations as a theme for class projects.

The professor. The professor, who may as well be an accomplished scholar, ideally must have some level of involvement with the genuine business world. They must comfortably play the role of a facilitator of the learning process. The best metaphor for the role the professor must play is that of a sports coach, the professor must be a catalyst of discussions that can accommodate multiple approaches to have ideas generated and therefore problems solved. Fueled by solid research, the proposed professor should be student-centric and practice oriented. This is a reference to how Mintzberg (2009) defines management as a practice. Shifting faculty roles from lecturers to facilitators presents challenges, as institutional inertia, entrenched teaching methods and limited training may slow adoption. Successful HSF implementation will require strong institutional support and ongoing investment in faculty development.

Performance appraisal. There are plenty of difficulties in implementing new ways of appraising students' performance; three significant changes must be introduced to support the implementation of the HSF. Firstly, a practical and collaborative dimension must be added to the evaluation system. Secondly, this evaluation system must be as open-ended as possible to accommodate more creative solutions. Thirdly, this evaluation system must incorporate interactive and timely feedback system.

Research (the role of research). Research must first enhance learning and consequently inspire positive impact practice. The traditional emphasis on metrics like research impact (ranking or journals and number of citations) must be balanced by practical applications of the augmentation of the body of knowledge promoted by new research.

Partnerships (community engagement). Whenever applicable, programs, courses, projects, and class activities must include community engagement and an applied contribution. Service learning is a notable example of that, which can translate in the use of cases studies where a team of students collaborate to address a problem the community is facing.

Dialogue (meaningful conversations about impact). Program reviews, reports to the board of directors, and research impact reports must all include a meaningful dialogue about the impacts of the programs on the community. This is to ensure the program is delivered on its mandate to be relevant from a practical perspective.

4. Literature Review

The evolving landscape of management education necessitates a shift towards integrating sustainability and ethical principles into curricula. This literature review

explores recent advancements in responsible management education, focusing on the integration of the UNSDGs and the PRME within business schools.

4.1 Generational differences

Understanding generational characteristics is crucial for tailoring educational approaches to meet the needs of current students. Generation Z, born between 1997 and 2012, is entering higher education with distinct traits shaped by global connectivity and economic uncertainty. They are pragmatic, entrepreneurial, and socially conscious, valuing sustainability and ethical practices (Howe & Strauss, 2007; Dorsey & Villa, 2020). This generation's unique perspective is driving a shift in educational priorities toward sustainability-oriented curricula (Tan et al., 2023).

4.2 Critique of management education

Traditional management education has been critiqued for its reliance on outdated pedagogical methods that fail to address contemporary challenges. Ackoff (2002) emphasized the importance of apprenticeship and practical learning over theoretical knowledge. Similarly, Mintzberg (2009) argued that effective management requires tacit knowledge, which is often overlooked in conventional education. The need for interactive learning approaches that foster critical thinking, and creativity is increasingly recognized as essential for preparing students to navigate complex business environments (Tapscott, 2009; Feldman, 2005).

Recent research underscores the importance of responsible leadership in enhancing knowledge sharing and organizational performance. Responsible leadership fosters a conducive environment for collaboration and innovation, essential for addressing sustainability challenges (Doh & Quigley, 2014; Alzghoul et al., 2018). This aligns with calls for a more integrated approach to management education that emphasizes ethical leadership and social responsibility (Maak & Pless, 2006).

4.3 Corporate sustainability

The concept of businesses' social responsibilities has been discussed and paved the way for the concept of corporate social responsibility (CSR) (Bowen, 2013). The latter has been further developed and adopted in academia (Carroll, 1979; Davis, 1973; Orlitzky et al., 2003; Porter & Kramer, 2007; Tan et al., 2015) and adopted by organizations (Business for Social Responsibility [BSR], 2023; International Organization for Standardization [ISO], 2010 It reflects the need to encompass social, environmental, and ethical values within business strategy (Porter & Kramer, 2007) and to extend corporate performance beyond profit margins (Nicolau, 2008).

Businesses operate within ecosystems and rely on the sustenance of natural capital –the forests, rivers, oceans, air, and delicate balances that require sustainable management of resources. Additionally, the focus must be on the human dimension of businesses, which includes social capital such as societal relationships, trust, and the intangible networks that underpin collective wellbeing (Falck & Heblich, 2007). More specifically, Unruh (2020) urges businesses to focus on stakeholders and social bonds as a strategic imperative. Giddings, Hopwood, and O'Brien (2002) offered an even more holistic view by proposing natural, social, and financial capital, not as three separate perspectives but as

intrinsically connected ones. Natural capital encompasses society, and society encompasses business.

As such, the interconnectedness of financial, natural, and social capital highlights the need for holistic approaches to business education that prepare students to address environmental and social challenges (Giddings et al., 2002).

4.4 PRME and UNSDGs

There is no denying the interconnectedness between the PRME and the UNSDGs. The PRME, which consists of seven principles, serves as a guide for educational institutions to cultivate students' abilities to create sustainable value for both business and society at large. These principles stress the importance of integrating universal values such as ethics, responsibility, and sustainability into the curriculum and research (PRME, 2021).

Simultaneously, the UNSDGs, which encompass 17 goals, aim to address diverse global challenges, including poverty, inequality, climate change, and environmental degradation (UN, 2015). The literature suggests that management education plays a crucial role in achieving these SDGs.

The integration of PRME principles with UNSDGs is pivotal for transforming management education. PRME provides a framework for embedding ethics and responsibility into curricula, aligning educational outcomes with global sustainability goals (PRME, 2021). By aligning their curriculum and research with the PRME principles and the UNSDGs, institutions can prepare future leaders with the necessary knowledge and skills to tackle these challenges and contribute to the achieving the UNSDGs. For example, the incorporation of sustainable business practices and corporate social responsibility into the curriculum can directly contribute to SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production) (Jones, 2017). Therefore, integrating PRME principles into management education is not merely about producing graduates who are adept in business but also about nurturing responsible leaders who can drive the achievement of the UNSDGs.

While PRME and UNSDGs are complementary, integrating both into one curriculum can be challenging due to overlapping objectives (e.g. promoting ethical leadership and responsible economic practices) and tensions (e.g. balancing immediate business outcomes with long-term environmental goals). For example, PRME Principle 3 (Method) encourages educational frameworks to develop responsible leadership but conflicts with SDG 13 (Climate Action) when short-term business interests favor profitability over environmental action. Institutions must then carefully align priorities to avoid redundancy and conflicting objectives when designing curricula.

Recent studies highlight the potential of Ecopedagogy to influence higher education institutions' policies towards sustainability. Ecopedagogy emphasizes critical evaluation of learning outcomes related to sustainability, preparing students to become change agents in their communities (Žalėnienė & Pereira, 2021). This approach aligns with the transformative potential of education in shaping a sustainable future by fostering responsible leadership and ethical decision-making among graduates (Smith, 2019).

In conclusion, the literature suggests the importance of the PRME principles in management education and their role in achieving the UNSDGs. In turn, deploying UNSDGs into the curriculum can function as evidence of the implementation of PRME

principles. Concurrently, these approaches reinforce the importance of management education in enabling a more sustainable future.

5. Research Methodology

This study employs a qualitative approach, collecting data from three distinct sources to ensure a robust chain of evidence supporting the study's hypothesis. By triangulating (Jick 1979; Patton, 1999) data from different sources, the study seeks to provide robust support for its conclusions, demonstrating how this approach can effectively prepare business leaders to tackle complex global challenges.

First, a literature review has been conducted to provide a thorough examination of current literature on state-of-the-art management education and sustainability practices, establishing a theoretical foundation for the study.

The empirical phase involved a review of 24 universities, comprising 12 PRME Champions for the 2024-2025 cycle and 12 universities featured in the Times Higher Education Impact Rankings. This analysis drew on publicly available data, including 24 university websites, 19 PRME Sharing Information on Progress reports, 26 sustainability-related reports, such as strategic frameworks, annual reports, and environmental policies, and 49 sustainability-focused academic programs. Supplementary insights were also gathered from university news pages, blogs, and case studies. Student initiative pages and campus engagement sections from all 24 university websites were also reviewed to identify examples of student-led sustainability initiatives and broader community engagement.

Initially, the data collected was categorized according to the six PRME principles and their associated UNSDGs. This first step provided a foundational alignment with PRME's core principles and ensured consistency with the global sustainability discourse. Subsequently, through a thematic content analysis of the information collected, three recurring categories were identified to facilitate the synthesis process and comparison across institutions, namely: 1) Programs and Courses; 2) Key Initiatives; and 3) Student Engagement. These categories were derived inductively based on common patterns observed while still reflecting broader PRME and UNSDG frameworks. Programs and Courses capture how universities integrate sustainability and responsible management principles into academic offerings through specialized programs and courses. Key initiatives refer to specific institutional efforts such as research centers, sustainability hubs, or leadership programs that advance responsible management and sustainable practices. Student engagement highlights how students are actively involved in co-curricular activities, student-led projects, and participatory governance, fostering leadership and community impact.

6. Results

The research provides three dimensions aligned with sustainability and ethics across multiple universities: programs and courses, key initiatives, and student engagement. Key indicators such as course descriptions, sustainability strategies, and examples of impactful initiatives were analyzed and are summarized below and in further detail in the tables in Table 1 below.

Table 1: Summary of PRME champions' best practices

Summary of PRME Champions for 2024-2025 cyclce	
University	Programs/Courses, Key Initiatives & Student Engagement
Aalto University, School of Business, Finland	It offers a Master of Science (MSc) in Sustainable Entrepreneurship, with courses like sustainable development and accounting for sustainability, The New Sustainability in Business Course and the Strategic Sustainability for Business Program. The school established the Sustainability in Business research group over three decades ago and promotes circular economy projects and initiatives like the Sustainability Action Booster and Sustainability Business Club.
Audencia Business School, France	It offers an MSc in Management for Sustainable Business with modules like systems thinking and sustainability, and the 'Acteur Pour la Transition Écologique' program focusing on themes like climate change. The school integrates CSR into its curriculum and activities, collaborating with global organizations such as Worldwide Fund for Nature France. It launched the Gaïa School for ecological transition and worked with The Shift Project to incorporate environmental issues into management education.
Deakin Business School, Australia	It offers a Sustainability and Development program with courses like environmental sustainability and climate change. The school developed a Sustainable Construction Case Study, organized innovation and sustainability challenges. The university encourages students to apply for leadership opportunities in PRME Global Students.
Gordon S. Lang School of Business and Economics at University of Guelph, Canada	It offers an MBA with courses like sustainable value creation and governance for sustainability, and a Bachelor of Commerce with a minor in Sustainable Business, including courses on ethics and circular economy. The school established the Institute for Sustainable Commerce to advance UNSDGs and sustainability research, and students engage in mentorship programs and workshops to promote sustainability practices.
ISCTE - Business School, Portugal	It offers an MBA in Sustainable Management with modules on circular economy and governing for sustainability, and a Postgraduate degree in ESG: Reporting and Sustainable Management. The school established a Business Research Unit and is actively involved in initiatives like the GRACE Academy. It is recognized globally by UI Green Metric as one of the most sustainable universities.
Nottingham Business School at Nottingham Trent University, United Kingdom	It offers an MSc in Management (Sustainable Leadership) with modules on sustainability transitions and climate solutions for a net zero future. The school established the Responsible & Sustainable Business Lab and collaborates globally through initiatives like the UN PRME Working Group. Students engage in Carbon Literacy Training, sustainability consultancy for small and medium-sized enterprises.
Peter T. Paul College of Business and Economics at University of New Hampshire, United States	It offers an Economics Major: Public Policy and Sustainability Option with courses like economics of climate change and natural resource economics, and the EcoGastronomy Dual Major, focusing on sustainable food systems and nutrition. The college fosters innovation through partnerships with the Sustainability Institute and Changemaker Collaborative and houses initiatives like the Center for Business Analytics. Students engage in the Changemaker Speaker Series and Business in Practice workshops.

Stockholm School of Economics, Sweden	It offers a Sustainability Track in its master's programs, integrating courses like corporate sustainability and a sustainability-focused thesis. The school established research centers like the Mistra Center for Sustainable Markets and the Sustainable Finance Lab. It also founded the Stockholm Sustainable Finance Centre with the Swedish government. Students participate in projects like the Global Challenges Track and the Sustainability Track, focusing on sustainable value creation.
UC Business School at University of Canterbury, New Zealand	It incorporates ESG-related modules into courses such as business and sustainability. It holds the prestigious "triple-crown" accreditation and is ranked second in New Zealand for sustainability in the QS World University Rankings. The school hosts the Sustainability Hub, led by the Pro-Vice Chancellor Sustainability, and fosters student involvement through the Sustainability Office.
University of Cape Town Graduate School of Business, South Africa	It offers a Postgraduate Diploma in Development Finance, featuring courses on environmental finance and sustainable investments, and a Master of Commerce in Development Finance with a focus on responsible investment and innovative finance. The school hosts the Bertha Centre for Social Innovation and Entrepreneurship and engages students to tackle social and environmental challenges.
University of Plymouth, United Kingdom	It offers two bachelor's degrees: BSc (Hons) Environmental Management and Sustainability and BA (Hons) Education for Sustainability, with modules like carbon literacy, and an MSc in Sustainability in Practice, focusing on workplace and community challenges. The Sustainability Hub fosters collaboration on sustainability goals, while student societies like the Environmental Society and Wildlife and Ecological Society support student engagement.
University of Winchester, United Kingdom	It offers an MSc in Marketing with modules like market-led organizational change. Since 2019, the university has committed to embedding the UNSDGs in all programs. It hosts the Young Person's Climate Assembly, collaborates on initiatives like the Responsible Futures Programme, and implemented an Environmental Strategy and Biodiversity Action Plan to achieve carbon neutrality by 2030.

The analysis is structured around the six PRME principles and the 17 UNSDGs, which serve as the foundation for assessing institutional efforts in sustainability education, ethical leadership, partnerships, research, and student engagement. Each PRME principle and UNSDG is further explored through value-based sub-themes derived from the HSF emphasizing Sustainability, Ethical Leadership, Systems Thinking, Innovation, Global Citizenship, and Holistic Stewardship. These sub-themes provide insight into how universities operationalize their PRME and UNSDG commitments, ranging from embedding sustainability into core curricula, fostering interdisciplinary learning, leveraging partnerships for climate solutions, and engaging students in sustainability advocacy. Table 2 summarizes practices of select universities investigated within this study.

Table 2: Practices contributing to the actualization of the Holistic Stewardship Framework

PRME principle	Value-based theme	Trends in best practices	Examples of university implementation
Principle 1: Purpose	Sustainability	Embedding sustainability into business education	• ESG-integrated MBA and executive programs

SDG 4: Quality Education			• Sustainability literacy requirements for all students • Leadership programs focused on ethical decision-making
Principle 2: Values *SDG 16: Peace, Justice & Strong Institutions*	Ethical Leadership	Strengthening governance, ethics and DEI in business education	• Indigenous knowledge and DEI-focused programs • Ethics and circular economy courses • Mandatory responsible leadership training in business schools
Principle 3: Method *SDG 17: Partnerships for the Goals*	Systems Thinking	Encouraging interdisciplinary problem-solving approaches	• Cross-sector research collaborations on sustainability • "Living Labs" using campuses as experimental sustainability hubs • Partnering with local/global organizations to implement sustainable practices
Principle 4: Research *SDG 9: Industry, Innovations & Infrastructure*	Innovation	Expanding research into sustainability-driven technology and solutions	• Dedicated climate innovation hubs and net-zero research centers • AI and sustainability-focused entrepreneurship initiatives
Principle 5: Partnership *SDG 8 & 12: Decent Work and Economic Growth & Responsible Consumption and Production*	Holistic Stewardship	Fostering industry-engagement and sustainability-driven entrepreneurship	• Industry partnerships to promote sustainability-aligned business models • Sustainable entrepreneurship incubators for student-led ventures • Green supply chain initiatives and responsible production practices
Principle 6: Dialogue *SDG 13, 14 & 15: Climate Action, Life Below Water & Life on Land*	Global Citizenship	Promoting student-led sustainability action and advocacy	• PRME student chapters engaging in climate and social impact initiatives • Campus-wide sustainability governance with student participation • Sustainability-focused global collaborations and advocacy forums

7. Discussion

The HSF provides a new way to teach management, overcoming traditional curriculum limits and preparing future leaders for modern challenges. This discussion summarizes study findings and answers the research questions.

The HSF updates management education by incorporating sustainability, ethical leadership, and systems thinking. Instead of focusing solely on economic outcomes, it balances economic viability with social responsibility and environmental concerns. By

including the UNSDGs and PRME in its curriculum, HSF helps students tackle global challenges from a holistic perspective.

Key elements of the HSF—experiential learning, community engagement, and interdisciplinary collaboration—fill gaps in traditional education. Participatory learning methods in programs like Aalto University's MSc in Sustainable Entrepreneurship develop practical skills and critical thinking for sustainability issues. Institutions like Nottingham Business School use innovative assessments and sustainability-focused research centers to bridge theory and practice.

The HSF's emphasis on interactive learning and values-based education overcomes the fragmented nature of traditional management programs. Its focus on sustainability, ethical leadership, and global citizenship ensures that students develop the competencies needed to lead responsibly in diverse contexts. For example, initiatives like Stockholm School of Economics' Global Challenges Track demonstrate how integrating UNSDGs fosters systems thinking and ethical decision-making.

The framework's alignment with PRME principles promotes sustainability in academics and governance, increasing institutional accountability. Programs like Deakin Business School's Sustainability Challenges show how HSF-aligned curricula help students tackle ethical dilemmas creatively and collaboratively.

Incorporating the United Nations Sustainable Development Goals (UNSDGs) and Principles for Responsible Management Education (PRME) into business school curricula enhances students' capacity to navigate ethical dilemmas and global challenges by offering a structured framework for comprehending interconnected issues. This alignment promotes systemic thinking, as exemplified by Audencia Business School's MSc in Management for Sustainable Business program, which provides students with the necessary tools to address climate change and Circular Economy challenges.

Student engagement initiatives, like the University of Plymouth's Environmental Society, show how integrating UNSDG inspires practical learning. These programs link theory with practice, equipping graduates to lead sustainably in complex environments.

8. Conclusion

The HSF represents a comprehensive shift in management education. By integrating sustainability principles, ethical leadership, and global citizenship into its foundation, it equips future business leaders with the skills necessary to address 21st-century challenges effectively. While further research is needed to assess long-term impacts on graduates' careers and organizational practices, this study underscores the transformative potential of HSF-aligned education in fostering responsible leadership for a sustainable future.

The use of secondary data restricts insights into internal challenges and student experiences. Future research could focus on longitudinal studies tracking the impact of HSF-aligned programs on graduates' career trajectories and their contributions to sustainable business practices and in-depth case studies of institutions fully implementing the HSF, examining challenges and best practices in its adoption. Other important avenues include strategies for overcoming faculty resistance and institutional barriers to experiential learning and evaluating the adaptability of the HSF across diverse socio-economic regions,

particularly within non-Western educational institutions. Developing measurable indicators, such as changes in student behavior, shifts in institutional culture towards sustainability and ethics, and graduates' career outcomes across different socio-political contexts, will be crucial for systematically tracking the long-term effectiveness of HSF implementation. Additionally, it would be of interest to focus on comparative studies between traditional management education and HSF-aligned programs, assessing differences in student outcomes and preparedness for 21st-century challenges related to innovative assessment methods that align with the HSF's principles and effectively measure students' ability to apply holistic stewardship in real-world scenarios.

In conclusion, the Holistic Stewardship Framework offers a promising framework for transforming management education to meet the needs of a rapidly changing world. While challenges remain in its full implementation, the evidence suggests that many business schools are moving in directions aligned with the HSF. As we continue to refine and implement this approach, we have the potential to cultivate a new generation of business leaders equipped to drive sustainable change and address the complex challenges of our time. Ultimately, leadership in a sustainability-driven world must be redefined as the ability to balance stakeholder well-being, long-term environmental stewardship and innovation. The future of business success lies not only in economic growth, but in creating shared value that sustains communities, ecosystems and future generations.

References

Ackoff, R. L. (2002). Interview by Glen Redrick. *Journal of Academy of Management Learning and Education, 1*(1), 56-63.

Alzghoul, A., Elrehail, H., Emeagwali, O. L., & AlShboul, M. K. (2018). Knowledge management, workplace climate, creativity and performance. Journal of Workplace Learning, 30(8), 592–612. https://doi.org/10.1108/jwl-12-2017-0111

Armstrong, S. J., & Sadler-Smith, F. (2008). Learning On Demand, at Your Own Pace, in Rapid Bit-Sized Chunks: The Future Shape of Management Development. *Academy of Management Learning and Education, 7*(4), 571-586.

Bowen, H. R. (2013). *Social responsibilities of the businessman.* University of Iowa Press. https://doi.org/10.2307/j.ctt20q1w8f

Business for Social Responsibility. (2023). Our story. https://www.bsr.org/en/about/story

Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review, 4*(4), 497–405. https://doi.org/10.5465/amr.1979.4498296

Davis, K. (1973). The case for and against business assumption of social responsibilities. *Academy of Management Journal, 16*(2), 312–322.

Doh, J. P., & Quigley, N. (2014, August). *Responsible Leadership and Stakeholder Management: Influence Pathways and Organizational Outcomes.* ResearchGate. https://www.researchgate.net/publication/287238040_Responsible_Leadership_and_Stakeholder _Management_Influence_Pathways_and_Organizational_Outcomes

Dorsey, J., & Villa, J. (2020). Zconomy: How Gen Z will change the future of business—and what to do about it. HarperCollins Leadership.

Falck, O., & Heblich, S. (2007). Corporate social responsibility: Doing well by doing good. *Business horizons, 50*(3), 247-254.

Feldman, D. C. (2005). The Food is not Good and They Don't Give Us Enough: Reflections on Mintzberg Critique of MBA Education. *Academy of Management, 4*(2), 217-220.

Giddings, B., Hopwood, B., & O'Brien, G. (2002). Environment, economy and society: fitting them together into sustainable development. Sustainable Development, 10(4), 187–196. https://doi.org/10.1002/sd.199

Howe, N., & Strauss, W. (2007). The Next 20 Years: How Customer and Workforce Attitudes Will Evolve. *Harvard Busines Review, 85*(8), 41-52.

International Organization for Standardization. (2010). *Guidance on social responsibility.* https://www.iso.org/obp/ui/#iso:std:iso:26000:ed-1:v1:en

Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. Administrative science quarterly, 24(4), 602-611.

Jones, P. (2017). Sustainable business practices and corporate social responsibility in management education. Journal of Business Ethics, 152(3), 643-654.

Kenworthy-U'Ren, A., & Peterson, T. O. (2005). Service-Learning and Management Education: Introducing the "WE CARE" Approach. *Academy of Management Learning & Education*, 272-277.

Maak, T., & Pless, N. M. (2006). Responsible leadership in a stakeholder society – A relational perspective. Journal of Business Ethics, 66(1), 99-115.

Mintzberg, H. (2004). *Managers not MBA: A Hard Look at the Soft Practice of Managing and Management Development.* San Francisco: Berret-Koehler Publishers.

Mintzberg, H. (2009). *Managing.* San Francisco: Berret-Koehler.

Nicolau, J. L. (2008). Corporate social responsibility: Worth-creating ctivities. *Annals of tourism research*, *35*(4), 990-1006.

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies, 24*(3), 403–441. https://doi.org/10.1177/0170840603024003910

Porter, M. E., & Kramer, M. R. (2007, April 24). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*. https://doi.org/10.1108/sd.2007.05623ead.006

PRME (2021). The Principles for Responsible Management Education. Retrieved from https://www.unprme.org/.

Smith, A. (2019). The role of education in shaping a sustainable future. *International Journal of Sustainability in Higher Education*, 20(1), 23-38.

Tan, E., Wanganoo, L., & Mathur, M. (2023). Generation Z, sustainability orientation and higher education implications: An ecopedagogical conceptual framework. *journal of applied learning & teaching*, *6*(1), 314-323.

Tan, Y., Ochoa, J. J., Langston, C., & Shen, L. (2015). An empirical study on the relationship between sustainability performance and business competitiveness of international construction contractors. *Journal of Cleaner Production, 93,* 273–278. https://doi.org/10.1016/j.jclepro.2015.01.034

Tapscott, D. (2009). *Grown Up Digital: How the Net Generation is Changing Your World.* New York: McGra-Hill.

UN (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. Retrieved from https://sdgs.un.org/2030agenda.

Unruh, G.C. (2020). Stakeholder capitalism: A global economy that works for progress, people and planet. Harvard Business Review.

Žalėnienė, I., & Pereira, P. (2021). Higher education for sustainability: A global perspective. *Geography and Sustainability, 2*(2), 99–106. https://doi.org/10.1016/j.geosus.2021.05.001