Interdisciplinary International Journal of Conservation and Culture
Volume 3, Issue 1, April 2025, (Page 32-41)
DOI: https://doi.org/10.25157/iijcc.v3i1.4891

IIJCC
ISSN 2988-2923

Sustainable entrepreneurship in academia: Challenges, strategies, and the roles in university context

Yasmin Pascual Dormido[1], Ratnawati[2]
STI West Negros University, Philippines[1]
Universitas Galuh, Indonesia[2]

Abstract
Sustainable entrepreneurship has emerged as a transformative force within higher education, reflecting a growing emphasis on ethical, responsible, and future-oriented business practices. Its integration into academic contexts underscores the critical role universities play in fostering entrepreneurial mindsets that align with sustainable development goals. However, despite its rising prominence, there remains a lack of comprehensive conceptual exploration regarding the role and significance of sustainable entrepreneurship toward challenges in shaping educational approaches and institutional strategies within higher education. Furthermore, this article aims to investigate the interconnected relationship between academia, entrepreneurship, and sustainability by articulating the unique role of universities as pivotal hubs for nurturing sustainable business ideas. It further explores the key challenges and innovative strategies involved in scaling sustainable ventures from academic environments to broader market ecosystems. Additionally, it analyzes the employed mechanisms and approaches universities to fostering ecosystems conducive to and supportive of sustainable academic entrepreneurship, underscoring the importance of promoting innovation, interdisciplinary collaboration, and stakeholder engagement. Finally, the article explores the increasingly pivotal role of technology and innovation in driving the success of sustainable academic ventures, with a particular focus on transformative technologies poised to shape the future of sustainable business. Through a rigorous conceptual synthesis, this article endeavors to provide valuable insights and an analytical framework for scholars, educators, policymakers, and practitioners vested in advancing sustainable business education and research.
Keywords: academic entrepreneurship, scaling sustainable ventures, sustainable entrepreneurship, university ecosystem

Corresponding author:
Ratnawati
Pendidikan Bahasa Inggris
Universitas Galuh
Jl. R.E. Martadinata, No. 150 Ciamis, Indonesia
Email ratnawati.englishedu@unigal.ac.id

Article history
Received April 29, 2025
Revised June 2, 2025
Accepted June 20, 2025
Published Online July 1, 2025

Cite this article:
Dormido, Y. P., & Ratnawati, R. (2025). Sustainable entrepreneurship in academia: Challenges, strategies, and the roles in university context. *Interdisciplinary International Journal of Conservation and Culture*, *3*(1), 32–41. https://doi.org/10.25157/iijcc.v3i1.4891

INTRODUCTION

Sustainable entrepreneurship has emerged as an increasingly vital field within the contemporary business and academic landscape, endeavoring to inherently balance economic imperatives with social and environmental responsibility. Within academic settings, the principle of sustainability has garnered significant momentum, fundamentally shaping the direction of research, curriculum design, and the formulation of institutional policies (Van Poeck et al., 2012; Kolb et al., 2017; Fichter & Tiemann, 2018). Universities play a central role in fostering sustainable entrepreneurship by equipping future generations of leaders with the knowledge, practical skills, and ethical frameworks necessary to develop ventures that actively contribute to long-term environmental and social well-being (Naderi et al., 2022; Blankesteijn, 2024; Pless et al., 2021). Furthermore, the interdisciplinary nature inherent to sustainability drives rich collaborations between business schools, environmental science departments, and social science disciplines, yielding holistic approaches to entrepreneurship that comprehensively consider the multifaceted dimensions of impact (Epstein, 2018; Del Vecchio et al., 2021).

Despite the increasing integration of sustainability principles within higher education, there remains a notable gap in the literature concerning the comprehensive conceptualization of sustainable entrepreneurship as situated specifically within academic institutions. While prior studies have addressed sustainability in curriculum development, institutional policies, and interdisciplinary collaboration, limited attention has been given to the systemic and strategic mechanisms through which universities cultivate, scale, and sustain entrepreneurial ventures that address environmental and social challenges. Furthermore, existing research often overlooks the dynamic interrelationship between academia, entrepreneurship, and sustainability, particularly in terms of how academic ecosystems can effectively support the transition of sustainable innovations from campus-based initiatives to broader market applications. This conceptual article seeks to address this lacuna by offering a nuanced exploration of the roles, challenges, and strategic pathways that define sustainable entrepreneurship in academia.

This conceptual article aims to provide a nuanced and integrative exploration of sustainable entrepreneurship in academic settings. Specifically, it examines the transformative role and intrinsic value of sustainable entrepreneurship in higher education, emphasizing the growing institutional focus on ethical, responsible, and forward-thinking business practices (Parginos, 2021; Stephenson et al., 2018). Moreover, the article investigates the complex interrelationship among academia, entrepreneurship, and sustainability, to articulate the unique role of universities as incubators for the development of sustainable business ideas (Kricsfalusy et al., 2018; Roslan et al., 2021).

In addition, the discussion addresses the salient challenges and strategic innovations associated with scaling sustainable ventures from academic institutions into broader market environments. It analyzes the mechanisms through which universities can foster entrepreneurial ecosystems that are conducive to sustainable innovation, highlighting the significance of interdisciplinary collaboration, stakeholder engagement, and policy support. The article also considers the pivotal role of technology and innovation in advancing sustainable academic entrepreneurship, with particular attention to emerging technologies that are poised to transform the future of sustainable business.

Through a rigorous conceptual synthesis, this article seeks to contribute to the academic discourse on sustainable entrepreneurship by offering valuable insights and an analytical framework for scholars, educators, policymakers, and practitioners committed to advancing sustainability-oriented business education and research.

Despite the increasing integration of sustainability principles within higher education, there remains a notable gap in the literature concerning the comprehensive conceptualization of sustainable entrepreneurship as situated specifically within academic institutions. While prior studies have addressed sustainability in curriculum development, institutional policies, and interdisciplinary collaboration, limited attention has been given to the systemic and strategic mechanisms through which universities cultivate, scale, and sustain entrepreneurial ventures that address environmental and social challenges. Furthermore, existing research often overlooks the dynamic interrelationship between academia, entrepreneurship, and sustainability, particularly in terms of how academic ecosystems can effectively support the transition of sustainable innovations from campus-based initiatives to broader market applications. This conceptual article seeks to address this lacuna by offering a nuanced exploration of the roles, challenges, and strategic pathways that define sustainable entrepreneurship in academia.

This conceptual article aims to provide a nuanced and integrative exploration of sustainable entrepreneurship in academic settings. Specifically, it examines the transformative role and intrinsic value of sustainable entrepreneurship in higher education, emphasizing the growing institutional focus on ethical, responsible, and forward-thinking business practices (Parginos, 2021; Stephenson et al., 2018). Moreover, the article investigates the complex interrelationship among academia, entrepreneurship, and sustainability, to articulate the unique role of universities as incubators for the development of sustainable business ideas (Kricsfalusy et al., 2018; Roslan et al., 2021).

In addition, the discussion addresses the salient challenges and strategic innovations associated with scaling sustainable ventures from academic institutions into broader market environments. It

analyzes the mechanisms through which universities can foster entrepreneurial ecosystems that are conducive to sustainable innovation, highlighting the significance of interdisciplinary collaboration, stakeholder engagement, and policy support. The article also considers the pivotal role of technology and innovation in advancing sustainable academic entrepreneurship, with particular attention to emerging technologies that are poised to transform the future of sustainable business.

Through a rigorous conceptual synthesis, this article seeks to contribute to the academic discourse on sustainable entrepreneurship by offering valuable insights and an analytical framework for scholars, educators, policymakers, and practitioners committed to advancing sustainability-oriented business education and research.

SCALING SUSTAINABLE VENTURES: CHALLENGES AND STRATEGIES

One of the critical junctures for sustainable entrepreneurial ventures emerging from academia is the often-difficult transition from promising pilot projects and initial prototypes to impactful, scalable solutions. This scaling process presents unique challenges that often differ significantly from the growth trajectories of conventional businesses. Sustainable ventures frequently grapple with the "valley of death," a period where initial funding and enthusiastic support wane before the venture can establish self-sustaining revenue streams and demonstrate long-term viability (Oghazi et al., 2024). This challenge is often amplified by the inherently longer time horizons associated with achieving both substantial financial returns and meaningful social or environmental impact in sustainability-focused sectors (York & Venkataraman, 2010). Adding to this, the very nature of academic institutions, with their rigid frameworks and emphasis on theoretical knowledge (Guerrero et al., 2021; Burden & Sprei, 2021), can hinder the practical application and scaling of these ventures.

Furthermore, a significant ethical dilemma arises in the scaling process: maintaining the core sustainability mission while simultaneously expanding operations. As ventures experience growth, they may encounter considerable pressures to adopt less sustainable practices, driven by the need to achieve greater cost efficiencies or to meet escalating market demand (Tracey, 2011). Effectively navigating the increasing complexities of global supply chains, ensuring the consistent ethical sourcing of raw materials, and diligently upholding fair labor practices become considerably more intricate as the scale of operations expands (Soundararajan & Brown, 2016). This tension between sustainability goals and financial incentives, as highlighted in the "Concerning Points" section, can lead to compromises where sustainable businesses might adopt less eco-friendly practices to ensure their financial survival, ultimately undermining their foundational mission (Zhao et al., 2024; Rosário & Raimundo, 2022). This is often exacerbated by a lack of institutional incentives for interdisciplinary collaboration, which is crucial for addressing the complex challenges of scaling sustainable solutions (Cai & Lönnqvist, 2022).

To effectively overcome these multifaceted scaling challenges, the adoption of several key strategies is crucial for sustainable academic spin-offs. Securing access to patient capital, impact investment, and innovative blended finance models that explicitly prioritize both robust financial returns and significant positive social and environmental outcomes is paramount (Höchstädter & Scheck, 2015). Universities can play a vital facilitative role by establishing dedicated impact investment funds specifically targeting sustainable ventures or by actively brokering connections with mission-aligned investors who understand the longer-term value proposition of such enterprises. However, as the "Concerning Points" section notes, sustainable ventures often face inadequate funding due to being perceived as high-risk investments with uncertain profitability (Kato, 2024). Moreover, universities themselves may struggle to allocate sufficient internal resources, further hindering the growth of these ventures (Irwin et al., 2023). Therefore, demonstrating the long-term economic viability of sustainable business models is crucial for attracting the necessary investment for scaling.

Strategic partnerships with well-established businesses and relevant organizations can provide invaluable access to essential resources, established distribution networks, and critical market expertise that are often necessary for successful scaling (Bruton et al., 2018). These collaborative relationships can also significantly aid sustainable ventures in effectively navigating complex

regulatory landscapes and in building crucial credibility within the broader market. However, universities must also be mindful of the potential ethical dilemmas that can arise when engaging with corporate partners whose business practices may conflict with sustainability principles (Gonzalez-Urango et al., 2025). Clear guidelines and ethical frameworks, as emphasized in the "Concerning Points" section, are needed to navigate these collaborations effectively, ensuring that academic integrity is not compromised (Mattar et al., 2022; Etim et al., 2022).

Furthermore, faculty members and researchers involved in scaling sustainable ventures often face the challenge of balancing entrepreneurial activities with traditional academic responsibilities (Duval-Couetil et al., 2023). The pressure to publish research and meet tenure requirements can leave limited time and incentives for the demanding work of scaling a business (Gottlieb et al., 2022; Johnson et al., 2025). Universities need to evolve their institutional structures to better recognize and reward the contributions of faculty and students to the scaling of sustainable ventures.

Embracing circular economy principles from the outset and proactively designing products and services for enhanced longevity and resource efficiency can also contribute to the development of more inherently sustainable and ultimately more scalable business models (Geissdoerfer et al., 2018). Finally, a consistent and transparent focus on rigorously measuring and effectively communicating the tangible social and environmental impact achieved alongside traditional financial performance is absolutely essential for attracting impact-conscious customers, mission-driven investors, and purpose-driven talent, thereby fostering genuine long-term sustainable growth (Elkington, 2006). This also addresses the challenge of knowledge gaps and the need for academic research to have practical applicability, as highlighted in the "Concerning Points" section (Singh et al., 2024; Van Tulder & van Mil, 2022).

FOSTERING AN ECOSYSTEM FOR SUSTAINABLE ACADEMIC ENTREPRENEURSHIP

Creating a thriving ecosystem within and around academic institutions is crucial for nurturing and supporting sustainable entrepreneurship. This involves a multi-faceted approach that addresses institutional culture, infrastructure, and external collaborations. However, as the "Concerning Points" section highlights, a significant challenge lies in the *resistance to change and innovation* that is often inherent in traditional academic settings. Many universities operate within rigid institutional frameworks that prioritize established research methodologies and pedagogical approaches, making it difficult for novel entrepreneurial initiatives, particularly those focused on sustainability, to gain traction (Guerrero et al., 2021).

Culturally, universities need to actively promote a mindset that values and rewards entrepreneurial activities focused on sustainability. This includes recognizing entrepreneurial engagement in faculty promotion and tenure processes, celebrating the successes of sustainable ventures, and fostering a sense of shared responsibility for addressing global challenges (Etzkowitz, 2013). A key aspect of this cultural shift is overcoming the *hesitancy of faculty members* to adopt sustainability-driven entrepreneurial programs, often due to uncertainty regarding their academic legitimacy or the impact on tenure and promotion criteria (Noronha et al., 2023). Universities must address these concerns by clearly defining the value of sustainable entrepreneurship within the academic context and by providing appropriate recognition and rewards.

In terms of infrastructure, universities can establish dedicated centers or incubators specifically designed to support sustainable ventures. These centers can provide access to mentorship from experienced sustainable entrepreneurs, legal and business development resources tailored to impact-driven businesses, prototyping facilities, and networking opportunities (Siegell & Wessner, 2012). Furthermore, integrating sustainability principles across various academic disciplines, beyond just business and environmental science, can foster interdisciplinary innovation and lead to more holistic and impactful solutions (Gibb, 2012). This is particularly important because, as the "Concerning Points" section notes, the lack of institutional incentives for interdisciplinary collaboration can hinder the development of effective solutions to complex sustainability issues (Cai & Lönnqvist, 2022).

Building strong bridges with the external ecosystem is equally vital. This includes forging partnerships with local communities, government agencies, non-profit organizations, and impact investors (Rothaermel et al., 2007). These collaborations can provide students and faculty with real-world problem-solving opportunities, access to funding and markets, and valuable feedback for refining their sustainable ventures. Universities can also play a convening role, bringing together diverse stakeholders to address regional sustainability challenges and foster collaborative entrepreneurial solutions.

Moreover, universities need to address the challenge of funding and resource constraints that often limit sustainable entrepreneurship initiatives. As highlighted in the "Concerning Points" section, universities often rely on external grants and industry partnerships, which may prioritize short-term financial returns over long-term sustainability goals (Stevenson et al., 2024). This can result in inadequate funding for sustainability-related ventures, which are often perceived as high-risk investments with uncertain profitability (Kato, 2024). Universities must therefore explore innovative funding models and strive to allocate sufficient internal resources to support these crucial initiatives (Irwin et al., 2023).

Finally, universities must also address the imbalance between research and entrepreneurial activities. Faculty members are often required to meet rigorous research publication requirements, leaving little time for entrepreneurial engagement (Duval-Couetil et al., 2023). As the "Concerning Points" section points out, this tension can discourage faculty from participating in sustainability-focused entrepreneurship, especially when tenure and promotion criteria do not adequately recognize such activities (Gottlieb et al., 2022).

THE ROLE OF TECHNOLOGY AND INNOVATION IN SUSTAINABLE ACADEMIC VENTURES

Technology and innovation are indispensable catalysts for advancing sustainable entrepreneurship within academia. Emerging technologies offer unprecedented opportunities to address environmental and social challenges in novel and impactful ways. However, the successful integration of these technologies into sustainable ventures is not without its challenges.

For instance, advancements in renewable energy technologies, smart grids, and energy storage solutions are being pioneered in university labs and translated into sustainable energy ventures (Sovacool et al., 2022). Similarly, innovations in materials science are leading to the development of biodegradable plastics, sustainable textiles, and green building materials (Ashby, 2015). The application of artificial intelligence (AI) and the Internet of Things (IoT) enables more efficient resource management, optimized supply chains, and the development of smart and sustainable cities (Batty, 2013). These technologies not only mitigate environmental harm but also foster economic growth by creating new markets for green products. Universities and research institutions are at the forefront of driving these technological innovations through basic and applied research. By fostering a culture of interdisciplinary research and providing access to cutting-edge research facilities, universities can be hotbeds for the development of breakthrough sustainable technologies (Stokes, 2000).

However, the "Concerning Points" section of this paper highlights a key challenge: the resistance to change and innovation within academia. Universities, with their rigid institutional frameworks and traditional approaches, may struggle to adapt to the rapid pace of technological development and the need for new, entrepreneurial approaches to commercialization (Guerrero et al., 2021). This resistance can hinder the effective translation of these promising technologies into real-world sustainable ventures.

Furthermore, the funding and resource constraints faced by universities, as detailed in the "Concerning Points" section, can also impede technological innovation in sustainable entrepreneurship (Stevenson et al., 2024). The development and commercialization of new technologies often require significant investment, and universities may lack the necessary financial backing to support these long-term, capital-intensive projects, especially when funding sources prioritize short-term returns (Kato, 2024).

Universities also play a crucial role in transferring these technologies from the lab to the market through technology transfer offices and by supporting the formation of university spin-off companies focused on sustainable solutions (Shane, 2004). Entrepreneurship education programs can equip students and researchers with the skills necessary to commercialize these technologies effectively and to build sustainable businesses around them. However, the imbalance between research and entrepreneurial activities within academia, as discussed in the "Concerning Points" section, can create a bottleneck. Faculty members, often burdened by demanding research publication requirements, may have limited time and incentive to engage in the entrepreneurial activities necessary to bring these technologies to market (Duval-Couetil et al., 2023; Gottlieb et al., 2022).

In addition, the ethical dimensions of technological innovation in the context of sustainable entrepreneurship must be carefully considered. As the "Concerning Points" section notes, the pressure to secure funding can lead to ethical dilemmas and trade-offs, where the pursuit of financial viability may compromise sustainability goals (Zhao et al., 2024; Rosário & Raimundo, 2022). This is particularly relevant in technology-driven ventures, where the allure of potentially lucrative applications might overshadow concerns about long-term environmental and social impacts.

MEASURING AND EVALUATING THE IMPACT OF SUSTAINABLE ACADEMIC ENTREPRENEURSHIP

Measuring the impact of sustainable academic entrepreneurship is crucial for demonstrating its value, securing further support, and guiding future development. However, this process presents unique challenges compared to measuring the impact of traditional business ventures. Sustainable ventures often pursue a "triple bottom line," aiming to achieve not only economic profitability but also positive social and environmental outcomes (Elkington, 2006). This necessitates the use of a broader range of metrics and evaluation methodologies.

One key challenge is the lack of standardized metrics for measuring social and environmental impact. While financial performance can be readily assessed using metrics like revenue, profit, and return on investment, social and environmental impacts are often more complex and context-specific (Clark, 2009). For example, the environmental impact of a venture might be measured in terms of carbon emissions reduced, waste diverted from landfills, or biodiversity preserved. Social impact could be assessed by examining factors such as job creation for marginalized communities, improvements in health and well-being, or contributions to social equity (Nicholls, 2010). Developing robust, reliable, and comparable metrics for these diverse impacts is an ongoing challenge.

Another difficulty lies in attributing impact directly to the activities of a specific academic venture. Many sustainable ventures operate within complex systems, and their outcomes may be influenced by a multitude of factors. Isolating the specific contribution of a single venture can be challenging and may require the use of sophisticated evaluation

techniques, such as counterfactual analysis or social return on investment (SROI) (Emerson & Mckinney, 2010).

Furthermore, the timeframes for realizing social and environmental impacts often differ from those for financial returns. While financial profitability may be achieved in the short to medium term, the positive social and environmental effects of a sustainable venture may take years or even decades to fully materialize. This discrepancy poses challenges for evaluation, as it requires a long-term perspective and a willingness to invest in measurement and reporting over extended periods.

The *resistance to* change and innovation within academia, as highlighted in the "Concerning Points" section, can also hinder the adoption of new and more comprehensive evaluation methodologies. Traditional academic research often prioritizes quantitative metrics and rigorous statistical analysis, which may not be well-suited to capturing the nuances and complexities of social and environmental impact (Guerrero et al., 2021). There may be a reluctance to embrace more qualitative or mixed-methods approaches, which are often necessary for a holistic understanding of impact.

Moreover, the funding and resource constraints faced by universities, as detailed in the "Concerning Points" section, can also limit their capacity to effectively measure and evaluate the impact of sustainable academic ventures (Stevenson et al., 2024). The collection and analysis of social and environmental data can be time-consuming and expensive, and universities may lack the necessary financial backing or expertise to conduct rigorous impact assessments, particularly when funding sources prioritize short-term financial returns(Kato, 2024).

CONCLUSION

In conclusion, sustainable entrepreneurship in academia presents a unique opportunity to address pressing global challenges while driving innovation and societal progress. By integrating sustainability principles into academic research, education, and entrepreneurial ventures, universities can serve as catalysts for environmental stewardship, social equity, and economic resilience. However, this endeavor is not without its challenges; issues such as insufficient funding, fragmented collaboration, and outdated educational structures require urgent attention. Despite these hurdles, the impact of academic institutions on sustainable entrepreneurship is profound, fostering technological advancements, policy development, and cross-disciplinary approaches that align with global sustainability goals. Moreover, the benefits to the world are far-reaching, from mitigating climate change and reducing resource consumption to promoting social innovation and enhancing community well-being. By embracing this transformative role, academia not only contributes to the sustainability agenda but also prepares future leaders to navigate and shape a more equitable and sustainable world.

Limitations and future direction

This conceptual article, while providing a comprehensive overview of sustainable entrepreneurship within academia, inherently carries certain limitations stemming from its theoretical nature. The absence of empirical data and specific case studies restricts the generalizability of the proposed frameworks and strategies, highlighting a crucial avenue for future research. Subsequent studies should focus on empirically validating the identified challenges and the effectiveness of the suggested strategies through quantitative and qualitative analyses of diverse academic institutions and sustainable ventures. Furthermore, future research could delve deeper into specific aspects such as the nuanced impact of different institutional policies, the long-term outcomes of university-supported sustainable spin-offs, and the development of standardized metrics for assessing the holistic impact of these ventures. Exploring the role of emerging technologies beyond their innovative

potential, considering their lifecycle sustainability and ethical implications, also warrants further investigation. Finally, comparative studies across different national and regional academic ecosystems could provide valuable insights into context-specific challenges and best practices for fostering sustainable academic entrepreneurship on a global scale.

Acknowledgments

The authors would like to express their sincere gratitude to the **Eurasia Foundation** for generously providing the financial support that made the International Public Lecture possible. We also extend our appreciation to **Universitas Galuh** for facilitating the collaboration among the authors, which has been essential to the success of this academic endeavor.

Declarations

RM (Data analysis, writing original draft, preparation, writing revision and editing); RR (Conceptualization, research preparation partly, supervision, writing-responses to reviewers' comments); PY (revision, data collection, data validation)

REFERENCES

Ashby, N. J. (2015). 16. Destructive and productive entrepreneurship: an analysis of international panel data. *Economic Behavior, Economic Freedom, and Entrepreneurship*, 193.

Batty, R. (2013). Well there's your problem–the case for using PBL to teach law to business students. *The Law Teacher*, *47*(2), 243-260.

Blankesteijn, M. L. M. (2024). Towards transformative experiential learning in science-and technology-based entrepreneurship education for sustainable technological innovation. *Journal of Innovation & Knowledge*, *9*(3), 100544.

Bruton, G. D., Zahra, S. A., & Cai, L. (2018). Examining entrepreneurship through indigenous lenses. *Entrepreneurship Theory and Practice*, *42*(3), 351-361.

Burden, H., & Sprei, F. (2021). Teaching sustainable development through entrepreneurial experiences. *International Journal of Sustainability in Higher Education*, *22*(1), 142-156.

Cai, Y., & Lönnqvist, A. (2022). Overcoming the barriers to establishing interdisciplinary degree programmes: The perspective of managing organisational innovation. *Higher Education Policy*, *35*(4), 946-968.

Clark, J. (2009). Entrepreneurship and diversification on English farms: Identifying business enterprise characteristics and change processes. *Entrepreneurship and Regional Development*, *21*(2), 213-236.

Del Vecchio, P., Secundo, G., Mele, G., & Passiante, G. (2021). Sustainable entrepreneurship education for circular economy: Emerging perspectives in Europe. *International Journal of Entrepreneurial Behavior & Research*, *27*(8), 2096-2124.

Duval-Couetil, N., Epstein, A. D., & Huang-Saad, A. (2023, June). Factors Influencing Academic Researchers' Motivation for Technology Commercialization and Entrepreneurship: An Overview of the Literature. In *2023 ASEE Annual Conference & Exposition*.

Elkington, J. (2006). Governance for sustainability. *Corporate governance: an international review*, *14*(6), 522-529

Emerson, T. L., & Mckinney, J. A. (2010). Importance of religious beliefs to ethical attitudes in business. *Journal of religion and business ethics*, *1*(2), 1-15.

Epstein, J. L., Sanders, M. G., Sheldon, S. B., Simon, B. S., Salinas, K. C., Jansorn, N. R., ... & Williams, K. J. (2018). *School, family, and community partnerships: Your handbook for action*. Corwin Press.

Etim, E. O., Ayandele, I. A., Etuk, S. G., & Inyang, A. B. (2022). Entrepreneurship: The Thrust For Sustainable Development For Nigeria: An Empirical Analysis. *Scientific Research Journal of Economics and Business Management*, *2*(5), 22-29.

Etzkowitz, H. (2013). Anatomy of the entrepreneurial university. *Social science information*, *52*(3), 486-511.

Fichter, K., & Tiemann, I. (2018). Factors influencing university support for sustainable entrepreneurship: Insights from explorative case studies. *Journal of Cleaner Production*, *175*, 512-524.

Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of cleaner production*, *198*, 401-416.

Gibb, A. (2012). Exploring the synergistic potential in entrepreneurial university development: towards the building of a strategic framework. *Annals of Innovation & Entrepreneurship*, *3*(1), 16742.

Gonzalez-Urango, H., Mu, E., & Corona-Sobrino, C. (2025). An integration-monitoring approach to the development of sustainable technology and innovation: The case of University Technology Transfer Offices. *Sustainable Energy Technologies and Assessments*, *73*, 104118.

Gottlieb, J. D., Townsend, R. R., & Xu, T. (2022). Does career risk deter potential entrepreneurs?. *The Review of Financial Studies*, *35*(9), 3973-4015.

Guerrero, M., Liñán, F., & Cáceres-Carrasco, F. R. (2021). The influence of ecosystems on the entrepreneurship process: a comparison across developed and developing economies. *Small Business Economics*, *57*(4), 1733-1759.

Höchstädter, A. K., & Scheck, B. (2015). What's in a name: An analysis of impact investing understandings by academics and practitioners. *Journal of Business Ethics*, *132*, 449-475.

Irwin, L., Rimanoczy, I., Fritz, M., & Weichert, J. (Eds.). (2023). *Transforming business education for a sustainable future: Stories from pioneers*. Taylor & Francis

Johnson, D., Geiger, M., Gianiodis, P. T., & Bock, A. J. (2025). "Please, Hurry Up!" Leveraging Narratives to Speed Up the Mobilization of Resources for Entrepreneurial Ventures. *Academy of Management Perspectives*, (ja), amp-2023.

Kato, A. I. (2024). Building resilience and sustainability in small businesses enterprises through sustainable venture capital investment in sub-Saharan Africa. *Cogent Economics & Finance*, *12*(1), 2399760.

Kolb, A. Y., & Kolb, D. A. (2017). Experiential learning theory as a guide for experiential educators in higher education. *Experiential Learning & Teaching in Higher Education*, *1*(1), 7-44.

Kricsfalusy, V., George, C., & Reed, M. G. (2018). Integrating problem-and project-based learning opportunities: Assessing outcomes of a field course in environment and sustainability. *Environmental education research*, *24*(4), 593-610.

Mattar, J., Ramos, D. K., & Lucas, M. R. (2022). DigComp-based digital competence assessment tools: literature review and instrument analysis. *Education and Information Technologies*, *27*(8), 10843-10867.

Naderi, N., & Akrami, A. (2018). EFL Learners' Reading Comprehension Development through MALL: Telegram Groups in Focus. *International Journal of Instruction*, *11*(2), 339-350.

Nicholls, A. (2010). The legitimacy of social entrepreneurship: Reflexive isomorphism in a pre–paradigmatic field. *Entrepreneurship theory and practice*, *34*(4), 611-633.

Noronha, M. E. S. D., Ferraro, D. M. J., & Silva, R. D. S. V. (2023). The Decision-Making Process for Developing Sustainable Innovation via Dynamic Capabilities in Cleantechs. *Organizações & Sociedade*, *30*(105), 203-240

Oghazi, P., Mostaghel, R., & Hultman, M. (2024). International industrial manufacturers: Mastering the era of digital innovation and circular economy. *Technological Forecasting and Social Change*, *201*, 123160.

Parginos, A. (2021). *Corporate social responsibility and socio-environmental reporting practices: Evidence from an exploratory study in the Greek context* (Doctoral dissertation, University of Essex).

Pless, N. M., Sengupta, A., Wheeler, M. A., & Maak, T. (2021). Responsible leadership and the reflective CEO: Resolving stakeholder conflict by imagining what could be done. *Journal of Business Ethics*, 1-25.

Rosário, A. T., Raimundo, R. J., & Cruz, S. P. (2022). Sustainable entrepreneurship: A literature review. *Sustainability*, *14*(9), 5556.

Roslan, Z. B., Ramli, Z., Razman, M. R., Asyraf, M. R. M., Ishak, M. R., Ilyas, R. A., & Nurazzi, N. M. (2021). Reflections on local community identity by evaluating heritage sustainability protection in Jugra, Selangor, Malaysia. *Sustainability*, *13*(16), 8705.

Rothaermel, F. T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: a taxonomy of the literature. *Industrial and corporate change*, *16*(4), 691-791.

Shane, S. (2004). Academic entrepreneurship: University spinoffs and wealth creation. In *Academic entrepreneurship*. Edward Elgar Publishing.

Siegel, D. S., & Wessner, C. (2012). Universities and the success of entrepreneurial ventures: Evidence from the small business innovation research program. *The Journal of Technology Transfer*, *37*, 404-415.

Singh, R., Kumar, V., Singh, S., Dwivedi, A., & Kumar, S. (2024). Measuring the impact of digital entrepreneurship training on entrepreneurial intention: the mediating role of entrepreneurial competencies. *Journal of Work-Applied Management*, *16*(1), 142-163.

Soundararajan, V., & Brown, J. A. (2016). Voluntary governance mechanisms in global supply chains: Beyond CSR to a stakeholder utility perspective. *Journal of Business Ethics*, *134*, 83-102.

Sovacool, B. K., Newell, P., Carley, S., & Fanzo, J. (2022). Equity, technological innovation and sustainable behaviour in a low-carbon future. *Nature human behaviour*, *6*(3), 326-337.

Stephenson, J., Heslehurst, N., Hall, J., Schoenaker, D. A., Hutchinson, J., Cade, J. E., ... & Mishra, G. D. (2018). Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health. *The Lancet*, *391*(10132), 1830-1841.

Stevenson, R., Guarana, C. L., Lee, J., Conder, S. L., Arvate, P., & Bonani, C. (2024). Entrepreneurial identity and entrepreneurial action: A within-person field study. *Personnel Psychology*, *77*(1), 197-224.

Stokes, D. (2000). Putting entrepreneurship into marketing: the processes of entrepreneurial marketing. *Journal of research in marketing and entrepreneurship*, *2*(1), 1-16.

Tracey, P. (2011). Entrepreneurship and neo-institutional theory. *Perspectives in Entrepreneurship: A Critical Approach*, 93-106.

Van Poeck, K., & Vandenabeele, J. (2012). Learning from sustainable development: Education in the light of public issues. *Environmental Education Research*, *18*(4), 541-552

Van Tulder, R., & Van Mil, E. (2022). *Principles of sustainable business: Frameworks for corporate action on the SDGs*. Routledge.

York, J. G., & Venkataraman, S. (2010). The entrepreneur–environment nexus: Uncertainty, innovation, and allocation. *Journal of business Venturing*, *25*(5), 449-463.

Zhao, J., Chong, K., & Jiang, M. (2024). Empirical Analysis of Internet Finance's Promotion of Innovation and Entrepreneurship Development: Mediating Effect Based on Innovation and Entrepreneurship Willingness. *Journal of the Knowledge Economy*, 1-21.