# SHAPING THE NEW BUSINESS CHANGEMAKERS: TOWARD A NOVEL TAXONOMY OF SOCIAL ENTREPRENEURSHIP EDUCATION

# Bojan Kitanovikj

Faculty of Economics-Skopje, Cyril and Methodius University in Skopje, North Macedonia bojan.kitanovikj@eccf.ukim.edu.mk

# **Stojan Debarliev**

Faculty of Economics-Skopje, Cyril and Methodius University in Skopje, North Macedonia stojan.debarliev@eccf.ukim.edu.mk

## Aleksandra Janeska-Iliev

Faculty of Economics-Skopje, Cyril and Methodius University in Skopje, North Macedonia aleksandra.janeska-iliev@eccf.ukim.edu.mk

## **ABSTRACT**

Social entrepreneurship appears as a newer business model that, in addition to profit, aims to solve a social problem with the help of social innovation. As the number of social enterprises increases, so does the interest in acquiring knowledge, skills, and abilities to create a new social entrepreneur who is ready to respond to modern challenges. That is why the eyes are immediately focused on education and educational institutions that are tasked with laying the foundations of learning for social entrepreneurship. To date, the literature on social entrepreneurship education (SEE) is fragmented and without a clear systematic framework. To fill this research gap, the purpose of this paper is to synthesize and map the landscape of SEE and create a new taxonomy of the ecosystem. Namely, this is one of the first research endeavors to map the educational opportunities for learning social entrepreneurship. The research is aimed at examining key trends in SEE, key themes and concepts, their interrelationships, and impact on the social entrepreneurship ecosystem based on abstract mining of scholarly articles published in journals, which are indexed in the Scopus database. The results have implications for a multitude of stakeholders such as academia, managers and entrepreneurs, practitioners, and decision-makers.

**Keywords:** Social entrepreneurship, Education, Social entrepreneur, Training, Taxonomy

JEL classification: L31, I21

## 1. INTRODUCTION

The importance of education and training for the development of entrepreneurship is widely recognized (Ndofirepi, 2020). Consequently, entrepreneurship education has attracted increasing interest from private sector stakeholders, higher education institutions, practitioners and policymakers around the world who see this type of educational opportunity as a key driver and enabler of innovative business ideas and economic growth (Nabi *et al.*, 2017; Janeska Iliev *et al.*, 2023). The scholarly discussion on the topic is also developing to examine cross-country and inter-institutional differences in entrepreneurship education models in terms of objectives and pedagogical approaches (Jones and Matlay, 2011). Although there is a lack of an integrated

pedagogical approach to entrepreneurship education for students at all levels (Blankesteijn *et al.*, 2021), there is an increasing body of empirical evidence to support the relevance of entrepreneurship education across disciplines, levels, and types of education (Pollard and Wilson, 2014; Debarliev *et al.*, 2022).

Hence, entrepreneurship education has gradually emerged and developed into a mature field (Jones and Matlay, 2011). On the other hand, in response to the increasing importance of sustainable development, there has recently been an expansion of entrepreneurship education into the domains of sustainable and social entrepreneurship as separate and unique types of entrepreneurial education.

Educational opportunities for social entrepreneurship are generally aimed at building capacity and acquiring knowledge, skills, and experiences related to creating business models that, in addition to profit goals, try to solve a social problem (Shahid and Alarifi, 2021). Additionally, social entrepreneurship education (SEE) is focused on building awareness, shaping attitudes, and expectations about social problems versus sustainable development (Satar and John, 2016), developing relevant mindsets and competencies for starting and managing social enterprises and other sustainable business ventures (Kummitha and Kummitha, 2021).

Consequently, higher education is beginning to contribute to the field of training new social entrepreneurs by offering special programs on social entrepreneurship aimed at business professionals as well as professionals from other educational backgrounds. These programs are often offered by various other institutions around the world, such as the Skoll Center for Social Entrepreneurship, the Ashoka Foundation, the Schwab Foundation, GIZ, and the like (Kremel and Wetter Edman, 2019; Sen, 2007). The increasing number of programs from non-formal education providers and universities shows the strong interest among students and educational institutions in this type of educational opportunity (Kirby and Ibrahim, 2011).

Recently, there has been an intense emergence of academic programs, training and courses on social entrepreneurship in most developed and many developing countries (Brock and Kim, 2011; Nakao and Nishide, 2020). However, there is still room for improvement. Existing curricula and teaching pedagogies for SEE vary widely, resulting in a lack of consensus on what constitutes best practice for this type of education (Pittaway and Cope, 2007).

Researchers note that the design and maintenance process of the programs are primarily driven by teacher preferences (García-González and Ramírez-Montoya, 2021). Previous research efforts have incompletely presented and analyzed the evolutionary development of SEE, offering few relevant findings regarding optimal forms of pedagogy, curriculum design and development, the inclusion of teaching approaches, systemic components, and training needs for social entrepreneurship (Capella-Peris *et al.*, 2020). Consequently, there are limited systematic frameworks for teaching and learning social entrepreneurship around the world (Hoppe *et al.*, 2017).

To address this gap in research for a comprehensive overview of the current situation, opportunities, strategies, and outcomes of SEE from a more systematic and rigorous approach, this research is positioned to provide an answer to these topics. Additionally, after searching the Scopus database, where the highest quality and most cited papers are indexed worldwide, it was noted that no study has used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol for a systematic review and framework building. Hence,

the aim of the research is to synthesize and map the landscape of SEE and create a new taxonomy of the ecosystem.

After defining the purpose, subject and scope of the research, the paper asks the following research questions: 1) What are the dominant themes, clusters, and intellectual structures in the global literature on social entrepreneurship education?; 2) Which recurring dimensions of social entrepreneurship education emerge from the literature and how do they relate with the wider SEE ecosystem?; 3) In what ways do current initiatives interact with formal curricula to expand access, deepen engagement, and support venture creation in SEE?

To answer these questions, the paper presents a systematic literature review of data obtained from the Scopus database, which aims to examine educational opportunities and programs for social entrepreneurship, grounded in the PRISMA protocol for systematic literature reviews and meta-analyses.

Namely, the paper is conceptualized in a way that in the next section lays out the foundations of the theory of social entrepreneurship and educational challenges, followed by a presentation of the methodological approach. Finally, the results and conclusions of the research are presented.

## 2. THEORETICAL BACKGROUND AND RELEVANT RESEARCH

# 2.1. Achievements in social entrepreneurship education programs

In practice to date, significant efforts are evident from universities of business, management, and economics, as well as from other academic institutions and organizations for offering training and short-term courses, while undergraduate and postgraduate programs in the field of social entrepreneurship and other related disciplines are less common (Roslan *et al.*, 2022). Even outside the traditional academic world, education for future social entrepreneurs is further strengthened through the establishment of special social entrepreneurship centers around the world. These centers primarily support a wide range of teaching, learning, mentoring, and research initiatives for community development (Rahman and Tekula, 2014). In other words, the focus of social entrepreneurship centers lies in stimulating, incubating, mentoring, and providing financial support to enthusiastic and active social entrepreneurs (Rahman and Tekula, 2014).

One of the most comprehensive analyses of social entrepreneurship curricula was conducted by Brock and Steiner (2009), who examined nearly 110 social entrepreneurship curricula taught at over 70 universities across the United States, Asia, and Europe. In the context of the curriculum, the authors identified seven salient themes in curriculum design, such as addressing social needs or problems, innovating, advancing social enterprises, securing resources, identifying opportunities, developing a sustainable business model, and measuring results (Brock and Steiner, 2009). Furthermore, the study highlighted that universities tend to implement numerous teaching methods, including traditional lectures, class discussions, case study elaborations, guest lectures and interviews, business plan development, and the like (Brock and Steiner, 2009).

However, despite attempts to conceptualize social entrepreneurship education (Mitra *et al.*, 2019), the literature on the topic is fragmented and without clear systematic frameworks of how it functions and, more importantly, how it relates to the broader social entrepreneurship ecosystem. Nevertheless, it is clear that the number of academic and other institutions planning

to initiate various social entrepreneurship education programs is continuously growing (Thomsen *et al.*, 2018).

# 2.2. Social entrepreneurial intention and mindset in the educational context

Social entrepreneurship represents a paradigm shift by encouraging a bottom-up development approach or a socially innovative business model to address socioeconomic problems (Gupta et al., 2020). As a type of business model, it is the focus of various stakeholders, and therefore understanding and influencing the intention of the social entrepreneur, especially through educational intervention, can greatly help in the process of developing new social entrepreneurs (García-Morales et al., 2020). Researchers believe that the inclusion of social entrepreneurship as part of the curriculum is very likely to encourage the development and replication of social innovations (Thomsen et al., 2018).

There is significant empirical evidence that entrepreneurial intentions and mindsets are fundamental factors influencing entrepreneurial behavior (Farrukh *et al.*, 2018). Social entrepreneurship intention is understood as the desire to create a social enterprise to bring about social change through innovation (Tran and Von Korflesch, 2016). In other words, intention can be understood as the individual's goal to start an entrepreneurial venture to create social change in society. The positive correlation between entrepreneurial education and entrepreneurial intention has been confirmed in different contexts, including research that targets undergraduate or postgraduate students, given that these respondents tend to think more about their career after education (Chipeta *et al.*, 2020).

Furthermore, research highlights that students should be equipped with a general entrepreneurial mindset as a prerequisite for sustainable development (Pollard and Wilson, 2014). This mindset is growth-oriented and has obvious benefits in terms of improving tolerance of risk, proactivity, innovation, passion for solving social problems, and other elements of entrepreneurial orientation (Satar and Natasha, 2019). Consequently, developing an entrepreneurial mindset can help strengthen the entrepreneurial competencies of young entrepreneurs and students at all levels of education (Schaltegger and Wagner, 2011). Thus, it is necessary for students to be exposed to conditions that stimulate their entrepreneurial behavior for the development of social enterprises (Satar, 2024).

As a result, researchers have often relied on theoretical foundations such as the social capital theory, human capital theory, theory of planned behavior, social cognitive theory, social cognitive career theory, and social learning theory as some of the crucial postulates that describe SEE efforts (Chen and Shabbir, 2025).

## 2.3 Key dimensions of social entrepreneurship education programs

Diving into the theoretical background of the topic, one can identify several key aspects of social entrepreneurship education programs. Entrepreneurship education generally aims to foster and enhance entrepreneurial awareness, motivation, knowledge, skills, and other competencies necessary to successfully launch and manage a venture (Naveed *et al.*, 2021). By extension, social entrepreneurship education is expected to pursue similar objectives. Ensuring the sustainability of social enterprises demands key entrepreneurial abilities, including the generation and exploitation of ideas, opportunity recognition, securing financial resources, achieving commercial returns for reinvestment, effective management, resource conservation, and an understanding of business models and market dynamics (Shahid and Alarifi, 2021).

Social entrepreneurship education should be designed around broad objectives such as raising awareness, fostering entrepreneurial intentions, building capacity, supporting ongoing ventures, embedding a societal mission within the enterprise vision, and facilitating transitions to employment within social enterprises (Shahid and Alarifi, 2021). Because social enterprises differ in their missions, strategies, structures, and processes (Satar and Natasha, 2019), the purposes and learning goals of these programs must distinguish between narrow and broad conceptualizations of social entrepreneurship. As a result, the learning objectives may vary considerably depending on the form and scope of the educational approach (Kwong *et al.*, 2022).

There is broad agreement that students should be exposed to experiences that stimulate their inclination and intention to act in ways aligned with the values of social entrepreneurship (Mitra *et al.*, 2019). As a multidisciplinary domain, social entrepreneurship encompasses diverse missions, strategies, structures, and processes (Satar and Natasha, 2019). Consequently, it can be integrated into the curricula of various disciplines, including the humanities, arts, sciences, and engineering. This diversity widens the potential audience for such programs to include not only students but also managers, entrepreneurs, activists, and academic professionals (Kwong *et al.*, 2022).

Within the context of SEE, learning centers can play a pivotal role by offering curricula and specialized modules on entrepreneurship and social entrepreneurship. Scholars argue that such centers should be embedded within a broader higher education strategy aimed at systematically developing social entrepreneurship programs, much like traditional entrepreneurship centers (Maas and Jones, 2017). Their organizational positioning, however, is not uniform: some operate within universities or faculties, while others function independently (Shahid and Alarifi, 2021). Ideally, these centers adopt an interdisciplinary orientation and remain accessible across faculties, engaging stakeholders from the wider ecosystem, such as regulators, policymakers, researchers, entrepreneurs, donors, and civil society organizations, to foster a holistic approach to social entrepreneurship education (Maas and Jones, 2017).

## 3. METHODOLOGY

To fulfill the research objective, we develop the SEE taxonomy based on a systematic literature review and bibliometric analysis techniques, which are instruments for evaluating and analyzing scientific literature and are considered a form of scientific mapping (Zupic and Čater, 2015). Thus, the main goal of bibliometric methods is to discover the relationships and connections between published scientific papers and relevant publications. In addition, there is a descriptive component of this type of research that is used to collect new data about the authors and papers that receive the most citations in the field, their interconnectedness, and the occurrence of keywords and comparable topics (Donthu *et al.*, 2021).

Having said that, bibliometric analysis is not necessarily a new method (Kessler, 1963), but it has recently seen a significant increase in interest from the scientific community due to the easily accessible online databases, which contain almost all documents ever published. This development is supported by new and improved bibliometric software solutions such as VOSviewer and BibExcel, which significantly facilitate data structuring and the analysis process (Bunjak *et al.*, 2022).

For the purposes of this research, a search was conducted in the Scopus database, one of the most influential databases of quality research from around the world. On the other hand, the

fact that the review and the underlying studies it draws upon, rely heavily on literature indexed in Scopus may lead to introducing some bias and omissions due to restricting the source of data to a single database and language. Hence, high-quality research published in other languages or regional journals may not appear in prestige databases and thus may be overlooked, skewing our understanding of SEE. As a result, this is framed as a potential methodological limitation and a call for future research. Still, the data necessary for the bibliometric analysis was obtained by searching for several keywords divided into four pillars:

- social AND entrepren\* AND education\* 1.597 identified publications,
- "social entrepren\*" AND education\* 322 identified publications,
- social AND entrepren\* AND training 548 identified publications,
- "social entrepren\*" AND training 93 identified publications.

In the search, the year 2025 was excluded because at the time of writing this year has not yet ended. In addition, the intention was to analyze only papers in peer-reviewed scientific journals, which are indexed in the Scopus database. In addition, a pre-selection criterion was set in terms of language, so that the papers had to be written exclusively in English. Furthermore, the search was further refined and limited to the category of business, management and accounting. A more detailed overview of the pre-selection criteria is presented in Table 1.

Table 1: Criteria for inclusion and exclusion of papers from the analysis

Criteria for excluding papers	Criteria for including papers
1. Comments on other papers, government	1. Original scientific papers published in peer-
reports, abstracts and papers presented at	reviewed, international, scientific journals
conferences, editorials, poster papers, research	
protocols, gray literature, graduation theses	
2. Papers whose primary purpose is not related	2. Papers explaining the relationship between
to the relationship between social	social entrepreneurship and formal or informal
entrepreneurship and education	education
3. Papers not written in English	3. Papers written in English
4. Papers published in 2025	4. Papers written up to and including 2024, with
	no restrictions on initial publication.

(Source: Authors' own analysis)

While excluding certain types of publications enhances quality control, it means potentially valuable practical knowledge, like detailed program evaluations or innovations reported in industry reports or doctoral theses, is not incorporated. Publication bias is also a factor, considering that studies showing positive effects of SEE are more likely to be published than null or negative findings, potentially overstating the benefits in the literature. We mitigated bias by following systematic review protocols, employing the PRISMA framework to rigorously identify, screen, and include articles as proposed by Moher *et al.* (2015). Taking this into account, 2,560 articles or papers were identified in the database. A detailed overview of the phases of the PRISMA protocol is shown in Figure 1.

**IDENTIFICATION** Four-pillar keyword search (N = 2560)Step 1 Exclusion of duplicates, articles **CLEANING** written in a language other than English, articles missing author Step 2 names (N = 1893) **RELEVANCE ASSESSMENT** Deleting articles due to lack of relevance (N = 1324) Step 3 **INCLUSION** Step 4

Figure 1: Database cleaning stages according to the PRISMA protocol

(Source: Adapted from Moher et al. (2015))

For the purposes of bibliometric analysis, the VOSviewer software (version 1.6.19) was used to measure and display the frequency of occurrence of keywords (Van Eck and Waltman, 2014).

## 4. RESEARCH FINDINGS AND DISCUSSION

To develop a taxonomy of SEE, a keyword co-occurrence analysis was performed to gauge the main topics, areas and themes in the research field (Figure 2).

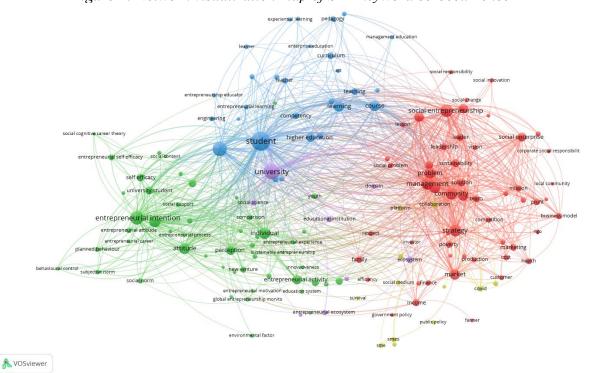


Figure 2: Network visualization map of SEE keyword co-occurrence

(Source: Authors' own analysis)

Namely, the map shows a dense network of keywords related to social entrepreneurship and education, where the size of each keyword or bubble reflects how often the keyword appears in the literature and the colors indicate groups of terms that frequently co-occur (Van Eck and Waltman, 2014). The thick links between the keywords represent strong relationships in the published work.

One prominent cluster appears in *blue* and centers on terms such as "student," "entrepreneurship education," "higher education," "learning," "curriculum," "teaching," and "experiential learning". This area captures the pedagogical and institutional side of entrepreneurship education, pointing out research on how universities design curricula, how teachers deliver courses, and how students experience entrepreneurship and social innovation in higher-education settings. Moreover, it is focused more on the individual aspects of gaining competencies and delivering knowledge. The cluster's main theoretical move is adapting experiential or constructivist learning and "authentic" entrepreneurship education to the social-impact context, arguing that real-problem engagement and reflection are necessary to build changemaker competence (Aadland and Aaboen, 2020). Practically, studies converge on two levers of effectiveness – institutional commitment through mission alignment and dedicated centers or incubators, on one hand, and educator capacity through faculty development and practitioner co-teaching on the other (Vázquez-Parra *et al.*, 2022). Yet evidence comparing instructional designs remains thin, and assessment standards are uneven (Chen and Shabbir, 2025).

A second major cluster is shown in *red* and focuses on the essence, context, and content of SEE. Some of the most notable keywords here include "social entrepreneurship," "management," "community," "leadership," "sustainability," "strategy", and "problem solving", representing the management and practice dimension of the field. The keywords here emphasize how social enterprises create value, the strategies they use to address social problems, and the importance of collaboration, leadership, and community engagement in achieving social change. The contribution is a competence view that integrates business intelligence with mission-driven and systems-thinking skills. Curricula increasingly include design thinking, stakeholder engagement, and impact logic, but comparative studies of syllabi and learning outcomes are still scarce (Azqueta *et al.*, 2023).

The *green* cluster brings together terms such as "entrepreneurial intention," "attitude," "self-efficacy," "perception," and "social norm". This points to a psychological and behavioral research stream, where scholars examine how education and social context shape students' entrepreneurial attitudes and their intention to start ventures as outcomes of the process. It links theories of planned behavior and social cognitive career development to entrepreneurship education. Empirical work generally shows positive effects, especially for experiential formats, yet effects vary across contexts and program quality, joining the call for linking intentions to action and track post-program behaviors (Nabi *et al.*, 2017). This means that in the SEE context, intentions are still seen as outcomes of educational activities and antecedents for becoming a social entrepreneur (Michel and Förster, 2025).

A smaller *yellow* cluster appears around keywords such as "policy," "SMEs," "market," "finance," "income," and "COVID". As such, the cluster reflects work on the external environment in the form of public policy, market forces, funding mechanisms and crises, which influence social entrepreneurship and entrepreneurship education. In comparison with the other clusters, it shows an emerging but still less developed body of research together with the *purple* cluster, which contains terms like "ecosystem," "domain," "university," "social science," and

similar. In other words, these emergent themes situate SEE within enabling or constraining environments in terms of policy, finance, partnerships, and shocks such as COVID, arguing that program outcomes depend on ecosystem scaffolding or the abundance of incubators, funding, or multi-stakeholder projects (Pache and Chowdhury, 2012). While universities with social-innovation hubs and wide and well-established social networks report stronger venture outputs (Hassan *et al.*, 2022), sustainable financing and long-term models remain underresearched, especially in fragile contexts (Shahid and Alarifi, 2021; Albatran and Atikbay, 2025).

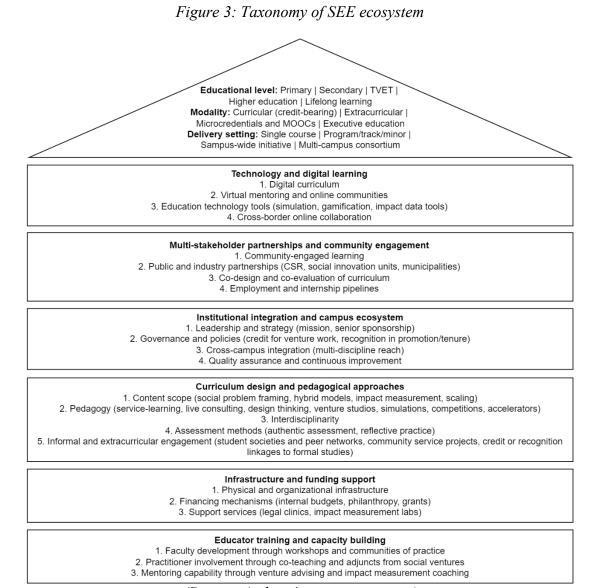
In this vein, despite rapid growth, SEE literature remains fragmented and marked by several gaps and tensions. First, scholars note an impact-intention gap where research predominantly measures shifts in student intentions or attitudes rather than long-term social venture creation or demonstrable societal impact (Azqueta *et al.*, 2023; Chen and Shabbir, 2025). While SEE is shown to boost social entrepreneurial intentions and self-efficacy, empirical evidence on the translation of these intentions into sustained entrepreneurial action and social value creation remains limited (Alzate *et al.*, 2024). This calls for longitudinal designs and outcome tracking beyond course completion.

Second, SEE exhibits pedagogical inconsistency. Programs vary widely in methods – from lectures to service learning and incubator-based models (Roslan *et al.*, 2022). Yet systematic comparisons and pedagogical evidence remain scarce (Chen and Shabbir, 2025). Although experiential and authentic learning approaches show promise, the field lacks consensus on core competences, instructional design, and assessment standards (Hockerts, 2018; Capella-Peris *et al.*, 2020). This variability risks impeding cumulative knowledge development and complicates efforts to benchmark program effectiveness.

Third, SEE faces conceptual and interdisciplinary tensions. Social entrepreneurship combines business, social innovation, and public-sector logics, yet educational models often privilege either managerial or social-mission perspectives (Hoppe *et al.*, 2017). Scholars highlight the need for clearer conceptual boundaries and integrated competence frameworks that reconcile economic sustainability with social impact and stakeholder value creation (Satar, 2024; Gupta *et al.*, 2020).

Finally, the literature increasingly recognizes the underexplored role of informal learning ecosystems, including accelerators, community-based programs, and online platforms (Debarliev *et al.*, 2022; Hockerts, 2018). Such initiatives often foster deeper engagement and real-world practice, however, they remain peripheral in research and loosely integrated into formal programs (Vázquez-Parra *et al.*, 2022). Thus, we believe that bridging formal and informal learning pathways and examining their combined effects represents a promising avenue for advancing SEE theory and practice.

With that being said, much of the literature measures student intentions or competencies, while giving less attention to the structural and programmatic mechanisms that make SEE effective (Shahid and Alarifi, 2021; Chen and Shabbir, 2025). Across levels of education, especially higher education, the field now calls for integrative frameworks that explain how curricula, institutions, and ecosystems interact to nurture social entrepreneurs (Alzate *et al.*, 2024). We propose one such taxonomy in Figure 3.



(Source: Authors' own construction)

Multiple reviews identify a shortage of trained educators capable of delivering interdisciplinary, impact-oriented instruction (Roslan *et al.*, 2022). Faculty development programs, practitioner co-teaching, and communities of practice are emerging solutions, but empirical evidence on how these capacity-building efforts influence program quality remains limited (Alzate *et al.*, 2024).

Multi-stakeholder partnerships and infrastructure support emerge as powerful enablers in SEE initiatives, too. Collaborations with nonprofits, social enterprises, government agencies, and industry provide real problem contexts, mentorship, and funding (Pache and Chowdhury, 2012; Roslan *et al.*, 2022). Universities with incubators, social innovation hubs, and dedicated funding lines demonstrate stronger outcomes, yet financing models and long-term sustainability of such infrastructure are under-researched (Shahid and Alarifi, 2021).

At the program level, curriculum design and pedagogy remain diverse and inconsistent. Effective practices combine social venture content with experiential methods in the form of service learning, live consulting projects, and design thinking (Hockerts, 2018). Scholars agree on the importance of learner-centered, action-oriented approaches, but systematic comparisons

of pedagogical strategies are still scarce (Chen and Shabbir, 2025). Also, informal initiatives like student clubs, competitions, hackathons, and online platforms, offer new modes of engagement that extend learning beyond the classroom (Hockerts, 2018). Despite their growing relevance, these extracurricular and digital dimensions remain peripheral in much of the scholarly discourse (Chen and Shabbir, 2025).

When it comes to institutional integration, leading universities increasingly embed social entrepreneurship in their mission statements, establish dedicated centers, and promote cross-disciplinary collaboration (Chen and Shabbir, 2025). Ecosystem approaches, exemplified by Ashoka U's "Changemaker Campus" model, are crucial for moving beyond isolated courses (Vázquez-Parra *et al.*, 2022). Yet many institutions still face environmental barriers and lack strategic support, limiting their capacity to sustain SEE at scale (Roslan *et al.*, 2022).

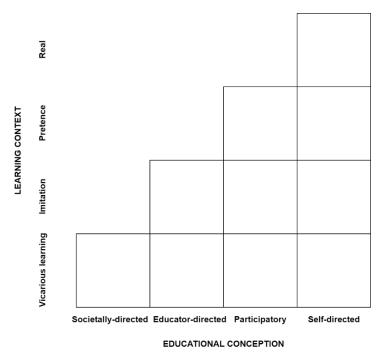


Figure 4: Hierarchical design of SEE

(Source: Adapted from Aadland and Aaboen (2020))

Thus, building upon the taxonomy proposed by Aadland and Aaboen (2020) for authentic entrepreneurship education, we call for a new, recontextualized taxonomy aimed at SEE (Figure 4). Their work highlighted how authentic learning requires students to engage with real problems and external stakeholders, and how these categories can be combined hierarchically to capture increasing levels of authenticity (Aadland and Aaboen, 2020).

Building on this logic, the SEE framework follows a similar two-axis design but adapts the criteria to the specific challenges of teaching for social impact. Along the educational conception axis, programs range from societally motivated offerings that raise awareness of social issues, through educator-directed and participatory formats that introduce tools and guided practice, to self-directed experiences where students take ownership of venture creation. The learning context axis moves from vicarious learning (case studies and classroom simulations from observing educators, social entrepreneurs, and role models in general), to imitation (student projects that mimic real ventures), to pretense (engagement with external

actors in controlled settings), and finally to real contexts where students operate genuine social enterprises with external stakeholders and tangible risk.

As in the original model, these categories are hierarchical, as higher levels of self-direction presuppose elements of the preceding stages. For example, a self-directed, real-context program still contains educator support and participatory elements to ensure students acquire the necessary theoretical grounding before assuming full responsibility.

## 5. CONCLUSION

This study provides one of the first systematic attempts to map and classify the rapidly expanding field of SEE. By applying the PRISMA protocol and bibliometric techniques to a large Scopus dataset, we identify four dominant research clusters – pedagogical and institutional design, social entrepreneurship practice, entrepreneurial intention and psychology, and policy/market context. We synthesized them into a new taxonomy of the SEE ecosystem. Our findings show that while SEE is gaining momentum across higher education and nonformal settings, the literature remains fragmented and heavily outcome-oriented, focusing primarily on student intentions and competences rather than on the programmatic and structural mechanisms that make SEE effective (Shahid and Alarifi, 2021; Chen and Shabbir, 2025). The proposed taxonomy highlights seven interrelated domains that together capture the complexity of how education and social entrepreneurship intersect.

Some key takeaways can be found useful for both theory and practice. First, universities that embed social entrepreneurship within their strategic missions and create dedicated centers or hubs are better positioned to sustain SEE at scale (Vázquez-Parra *et al.*, 2022). Second, effective curricula blend social venture content with experiential pedagogies such as service learning and live consulting projects, yet systematic comparisons of pedagogical approaches remain rare (Hockerts, 2018). Third, a shortage of trained educators continues to constrain program quality, underlining the importance of faculty development, practitioner co-teaching, and communities of practice (Roslan *et al.*, 2022). Finally, partnerships with external stakeholders and the emergence of digital platforms offer powerful but under-studied avenues for extending SEE beyond traditional classroom boundaries.

Despite these contributions, the study does not come free of some limitations. Bibliometric methods rely on publication data indexed in Scopus and therefore may omit relevant work in other languages, databases or practitioner outlets (Donthu *et al.*, 2021). The taxonomy is conceptual and derived from secondary data, so future empirical testing across different national and institutional contexts is needed to validate and refine its categories. These limitations open several avenues for future research. Comparative case studies and longitudinal designs could examine how combinations of curriculum, partnerships, and infrastructure shape student outcomes and venture creation. Cross-country analyses would help uncover contextual differences in policy support, funding models, and cultural factors influencing SEE. Additionally, the aforementioned digital learning environments and hybrid delivery models merit particular attention, given their growing role in scaling SEE and fostering global networks.

Theoretically, this taxonomy extends work on authentic entrepreneurship education and foundational theories like social learning theory, human capital theory, social cognitive theory, and similar by reconceptualizing the hierarchical dimensions for a social impact context, thus linking levels of educational conception with degrees of real-world engagement. Practically, it

offers educators and policymakers a structured framework for designing and evaluating SEE programs, guiding decisions about institutional investment, partnership development, and the integration of experiential and digital elements. By moving the conversation beyond outcomes to the mechanisms of partnership and implementation, this research contributes to the maturation of SEE as a distinct field that climbs high on global agendas when it comes to research and education, in general.

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