

Entrepreneurship Education

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Definition

The term *entrepreneur* originates in the 13th century to describe traders who wanted to make arbitrage profits at their own risk. It is derived from the French verb *entreprendre* and means “to undertake something” or “to do something” (Hekman 2005). For many centuries the concept of the entrepreneur has been interpreted differently, but in a narrow economic perspective (Mittelstädt and Wiepcke 2013, 87). As a representative of classical economic theory, Jan Baptiste Say (1803) placed the function of coordinating resources at the center of entrepreneurial activity. Knight (2014), as a neoclassicist, described the entrepreneur as a taker of unavoidable risk. Schumpeter (1934), as a representative of the modernist phase, sees the entrepreneur as a catalyst, an innovator. In economics, theorizing is important, but it was Sarasvathy, a cognitive scientist who devised a transdisciplinary approach. Sarasvathy sought a deeper understanding of real-life entrepreneurship and engaged practitioners. Her approach emphasizes the application of entrepreneurial thinking and action and understands it as a set of principles, decision-making logic, and techniques that anyone can learn to a certain extent (Sarasvathy and Venkataraman 2011, 115). A closer scholarly examination reveals that entrepreneurship is understood as creating value for others, whether by founding an innovative organization (Gartner 1989, 51) or within an existing organization (Shane and Venkataraman 2000).

Entrepreneurship education, i.e. the promotion of entrepreneurial thinking and action, is defined very differently. A narrow definition refers to encouraging students to become self-employed (becoming an entrepreneur). A broad version (Lackeus 2015) focuses on empowering students to be more creative, opportunity-oriented, proactive, and innovative for all walks of life (becoming entrepreneurial). The narrow version is regularly justified regarding the economic benefits of entrepreneurship and is therefore often controversial. From a humanistic point of view, such a utilitarian view is incompatible with the public education mandate. The broad version is compatible with it, but an overextension of entrepreneurship as a

soft skill bears the danger of arbitrariness of entrepreneurial education and leads to demarcation problems. Is all learning by doing entrepreneurial education? And are problem-based and project-oriented learning – which recur in learning by doing – entrepreneurial education, too? A minimum delimitation can be seen in the recourse to subject-specific definitions of entrepreneurship as “learning by creating value for others” (Lackeus 2015). According to the European Commission (2012, 5)

“Entrepreneurship education” is about learners developing the skills and mindset to turn creative ideas into entrepreneurial action. This competence is crucial for all learners, supporting personal development, active citizenship, social inclusion, and employability. It is relevant across the lifelong learning process, in all disciplines of learning, and to all forms of education and training (formal, non-formal, and informal) that contribute to an entrepreneurial spirit or behaviour, with or without a commercial objective.

The European Commission's definition emphasizes entrepreneurial education as the acquisition of key life skills in a broad version with an entrepreneurial core (“entrepreneurial action”) and is directly applied in the education system in about half of the EU members and associated countries. The European definition emerged from Anglo-Saxon approaches as they can be found in the Global Entrepreneurship Monitor Consortium (Amorós et al. 2013). In Asia, especially Japan and South Korea, so-called Humane Entrepreneurship offers a new perspective, combining entrepreneurship with leadership and human resource management (Kim et al. 2018). In Africa, e.g. Nigeria, entrepreneurship education is strongly connected to improving small business management as the lack of basic business knowledge is often the main reason for entrepreneurial failure (FATE Institute 2021).

Background

Entrepreneurship emerges from the interaction of person and context, from the active pursuit of an opportunity and its success or failure. Nevertheless, what does it all come down to? A variety of factors can be identified that seem to have an influence, such as personality traits (achievement orientation, control beliefs, or willingness to take risks), experience, culture, or other demographics (age, socioeconomic status, etc.). On the other hand, the pertinent question is: what can be influenced in educational institutions, and how effectively?

The theory of planned behavior (Ajzen 1991) contributes significantly to answering this question. In entrepreneurship education, the theory of planned behavior argues that an entrepreneurial attitude (*I can or will ...*) is first established before entrepreneurial intentions (*I plan ...*) and entrepreneurial actions (*I am*

entrepreneurial ...) occur. The entrepreneurial attitude is formed through self-efficacy and sufficient knowledge, skills, and experience. Therefore, educational institutions' task is to provide learning arrangements that set entrepreneurial tasks or challenges. Tasks stimulate emotions, situations, and activities, e.g. interaction with the outside world, enduring uncertainty, teamwork, and presentations to others. Mastering these tasks and overcoming their inherent obstacles fosters entrepreneurial competencies and increases self-efficacy. Therefore, at the heart of effective entrepreneurial education is the promotion of self-efficacy (Bandura 1977; Boyd and Vozikis 1994) in adolescents and young adults. Only if they believe they can change the world, will they try it.

The three most internationally established scales for measuring entrepreneurial self-efficacy (Moberg 2014) are based on Chen et al. (1998), DeNoble et al. (1999), and McGee et al. (2009). They have four dimensions in common: (1) *Action*, e.g. the capability to manage time or budgets in projects; (2) *Context* and Outward Orientation, e.g. the capacity to establish contact with others and exchange information; (3) *Creativity*, e.g. the ability to think around corners; and (4) *Mindset*, e.g. the asset to deal with unexpected change.

Effective entrepreneurship education promotes competencies in these four dimensions by using transdisciplinary approaches (Mittelstädt et al. 2019, 56). Particularly the entrepreneurial action and outward orientation (context) enable students to deal with the plurality of knowledge. At the same time, entrepreneurial working itself contributes to the plurality of knowledge resources and enlarges the community of knowledge producers. Students have to actively create their own, individual knowledge path and educational biography (creativity), and to manage time and budgets (action). They interact with others (context) and have to deal with unexpected change (mindset). Transdisciplinary learning thereby fosters self-efficacy and ambiguity tolerance, wherefore transdisciplinary entrepreneurship education offers a promising approach (Martínez and Muñoz 2021).

Debate and criticism

Entrepreneurship can be criticized in many ways. Firstly, entrepreneurship in theory and practice has been shaped by *Euro-American perspectives*. These concepts originate in trader guilt and stem from the emergence of the bourgeoisie in cities like Amsterdam, London, or New York. Trader guilt – amongst others – pursued economic, but also political freedom and supported the creation of liberal societies at home (Gelderblom 2010, 156). However, it was also European traders who facilitated the transatlantic slave trade (Williams 1990, 199). As these historical dimensions show, entrepreneurship education needs an ethical foundation, as entrepreneurs are confronted with complex moral problems (Hannafey 2003).

Secondly, entrepreneurship involves a *market- and technology-optimistic view* and a growth paradigm that has helped entrepreneurial societies achieve great prosperity (Naudé 2007, 7). While entrepreneurship has optimized the use of scarce resources, free resources such as clean air, clean water, biodiversity, and a stable climate have been squandered. The relevant question is whether entrepreneurship and entrepreneurship education also play a relevant part in the solution of these global challenges. In fact, entrepreneurship presupposes sustainable thinking and acting (United Nations 2022, 44).

Thirdly, *religion* plays an important role in entrepreneurial behavior, too. The Euro-American Christian perspective misses Confucian (not competing for profit but for excellence) and Islamic (Shariah-compliance) aspects of entrepreneurship (Dodd and Gotsis 2007, 93). As a consequence, entrepreneurship education has to embrace diversity.

Fourthly, Euro-American entrepreneurship created the central, socially shared *stereotype of entrepreneurs* being mostly male heroes who manage to build up a company based on innate character traits, alone and against all odds (see Ogbor 2000, 607). This stereotype is just not suitable for entrepreneurship education. It has an exclusionary effect in particular on women (Leffler 2012, 39), suppresses responsibility for one's personal development, negates the potential of teamwork (Drnovsek et al. 2009, 201), and reproduces oversimplified and distorted images of entrepreneurship (Jones 2012, 252). Again, entrepreneurship has to embrace diversity.

Fifthly, entrepreneurship education focuses too much on content and not enough on how to teach it (Ebberts 2019, 43). How can this be changed? Current understandings of entrepreneurship education put the individual to be qualified primarily in the center (subject orientation) and focus on the acquisition of competencies with the emphasis on (1) the core of entrepreneurial action, (2) enabling the individual to cope with future challenges concerning expected careers, and (3) entrepreneurial action in society to initiate social change (see Halbfas and Liszt-Rohlf 2019, 17–18).

As not all university teachers are optimistic about the introduction of entrepreneurship education, it is argued that entrepreneurship education is primarily about economic interests and not about goals of personal maturity and emancipation (Eichhorn and Erlacher 2022, 101).

Regarding the motivation of entrepreneurs, it is necessary to consider that not only financial rewards or purely economic interests are a main driver of entrepreneurship (Shepherd and Patzelt 2018). Passion, a strong inclination toward an entrepreneurial activity in order to gain self-determination, contributes, and the goal of preserving natural and communal environments, generating economic and non-economic gains for disadvantaged others, or strong beliefs in values are also relevant. People with health-related limitations or who are underprivileged often freely choose entrepreneurial careers (Pagán 2009, 219). Ebberts (2019, 209)

states that educational institutions are more likely to open up to entrepreneurship education if they include the holistic approach of different motivators. Social entrepreneurship education, or sustainable entrepreneurship education, increasingly finds its way into academic teaching. In addition to enabling students to think and act entrepreneurially, it also focuses on the assumption of social or ecological responsibility. Entrepreneurship can address the sustainability challenge (Villar and Miralles 2019, 104) and social issues (Austin et al. 2006, 6). In turn, social or sustainable entrepreneurship education encompasses all educational measures that address, for example, social, cultural, or environmental problems based on innovative problem-solving processes, and focuses on developing the learners' competencies. The development of competencies is not limited to entrepreneurial thinking and action but also to the ability to solve social, cultural, and environmental problems, among others.

In addition to professional competence (basic entrepreneurial knowledge) and methodological competence, humanistic competence (curiosity, creativity, critical thinking, value-based motivation), and social competence (social sensitivity, empathy, ability to act in solidarity or with environmental awareness) come to the fore (see Wiepcke 2019).

According to Schwarz (2014, 230), design competence is considered central in social entrepreneurship education, which aims to actively shape society and participate in the development processes of civil society. Creating ideas with future potential is also oriented toward sustainable business. Since design competence is also central to other educational approaches such as Education for Sustainable Development (Strachan 2018), Service Learning (Delano-Oriaran et al. 2015) or Transformative Learning (Ramsgaard 2018, 8), Social as well as Sustainable Entrepreneurship Education can be inter- and transdisciplinarily linked together with other subject areas. Thus, complex problems of other subjects such as geography, biology, or politics can be experienced under social, environmental, and entrepreneurial aspects, and students with different disciplinary backgrounds can jointly develop solutions.

Current forms of implementation in higher education

While the concepts and models of entrepreneurship and entrepreneurship education are rather Western oriented, the implementation occurs globally. As universities are considered to be a key institution for opportunity-oriented entrepreneurship, they are urged to provide all students with facilities that promote these competencies.

University activities can be divided into three categories: Learning about, for, and through entrepreneurship (Hannon 2005, 105); *Learning about entrepreneurship*

encompasses the content-based theoretical approach to entrepreneurship to enable a general understanding of the phenomenon. It focuses on object orientation and is currently the predominant form in higher education institutions, as it corresponds to traditional knowledge-based approaches. Typically, this is done within existing modules like General Management or Small Business Management. *Learning for entrepreneurship* means to prepare students to consider becoming an entrepreneur as a career option and focuses on promoting required competencies (subject orientation). Entrepreneurial courses are mainly offered in extracurricular schedules at universities, in seminars like Business Planning, Marketing for Entrepreneurs, Finance for Entrepreneurs, etc. They have a little systematic effect (Lackeus and Williams-Middleton 2018, 39).

Learning through entrepreneurship as a gold standard puts the process character of entrepreneurship projects in the foreground and includes process-oriented learning and simulative approaches to real entrepreneurial situations in teaching. Process-oriented learning creates incidents to provide feedback and embark on methodological teaching. In order to achieve it, universities use plural, activating, and action-oriented methods in addition to subject content – and thereby creatively practice one form of transdisciplinary learning. Methods such as entrepreneurial project work, practice firm or mini-companies, entrepreneurial case studies, business model development, design thinking, idea competitions, and role models are used for practice-oriented entrepreneurship education at universities (Kirchner and Loerwald 2014; Neck et al. 2014).

Due to such worldwide organizations as the United Nations (e.g. UNESCO-UNEVOC) and their initiatives on promoting entrepreneurship, best practices from the International Council for Small Business, and the Global Entrepreneurship Monitor consortium are shared globally. The Global Entrepreneurship Week, a yearly event in over 170 countries, attempts to sensitize different stakeholders in society, like universities or schools, for entrepreneurship education – e.g. entrepreneurs come to class, and entrepreneurial challenges or pitch events are conducted across different institutions.

Entrepreneurship competencies can only be developed to a limited extent through individual measures. According to Ashmore (2006) and Bacigalupo et al. (2016), continuous entrepreneurship education achieves two goals: on the one hand, it supports the development of autonomy and responsibility in the process of implementing ideas; on the other hand, it strengthens the ability to create value in simple and predictable contexts to complex, constantly changing environments.

For entrepreneurship education to be sustained in higher education institutions, universities require a stable ecosystem (see Progression Model for Entrepreneurship Education Ecosystems in Europe; McCoshan 2010) to be anchored at three levels: (1) *Macro level*: National or state-specific strategy for entrepreneurial education at universities by the Ministry of Science; (2) *Meso level*: University anchoring of an

entrepreneurship strategy, financial support, regional embedding, and local partnerships; (3) *Micro level*: Quantity (number of learners participating in entrepreneurship projects) and quality of measures.

It should not be underestimated that entrepreneurship education is still a young field at universities. With its application and action orientation, it has a highly innovative impact on academic teaching and learning. It is promising, yet still marginalized, as it is at odds with traditional knowledge-based and academic disciplinary approaches. Universities still have a long way to go in order to teach entrepreneurship in a way that is both effective and efficient.

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