

Рад примљен: 11. 3. 2021.

Рад прихваћен: 31. 5. 2021.

Оригинални
научни рад

Thea J. Tselepis¹

South African Research Chair Initiative: Entrepreneurship
Education², University of Johannesburg, South Africa

Cecile Nieuwenhuizen

South African Research Chair Initiative: Entrepreneurship Education,
University of Johannesburg, South Africa

Chris Schachtebeck

Department of Business Management,
University of Johannesburg, South Africa

To Live and to Learn: Practice-Led Learning Through Entrepreneurship Education

Summary: *The aim of this paper is to propose a matrix that could guide the approaches to entrepreneurship education at tertiary level bearing in mind binary constructs such as theory-led learning versus practice-led learning, as well as different contexts such as entrepreneurship in a formal programme versus entrepreneurship in a module only. A qualitative research approach was followed to compile the matrix, using data collected from 25 students who reflected on what an ideal programme or module could have entailed and what the most meaningful activities could be for such a programme or module. The matrix proposes some insightful approaches and activities that educators may consider when refining their module outcomes and assessments.*

Keywords: *Entrepreneurship education, design thinking, teaching approaches, entrepreneurial competencies, AIR.*

1 theat@uj.ac.za

2 Research project: “Entrepreneurship in undergraduate tertiary programmes in South Africa” (CBEREC 19JBS04). The authors would like to acknowledge the Department of Higher Education and Training, National Research Foundation, South African Research Chair Initiative (DHET-NRF SARChI) in Entrepreneurship Education for their contribution towards some of the costs towards the project (Grant Number: 118845).

Copyright © 2021 by the authors, licensee Teacher Education Faculty University of Belgrade, SERBIA.

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original paper is accurately cited.

Introduction

Approaches to entrepreneurship education (EE), particularly at tertiary level, have changed over the last decade. The focus has shifted from facilitating structured and more predictive teaching methods and processes about entrepreneurship, to iterative and more flexible methods and processes through entrepreneurship (Daniel, 2016; Linton & Klinton, 2019; Nielsen & Christensen, 2014; Nielsen & Stovang, 2015). In this regard, modern approaches relating to entrepreneurship education can support learning *for* entrepreneurship or learning *through* entrepreneurship (Neck & Greene, 2011). Flexible methods and approaches are more closely related to learning through practice (Linton & Klinton, 2019). Moreover, the need to approach EE with interdisciplinary thinking, particularly from the design disciplines, has been noted in current studies on EE (Daniel, 2016). The shift in thinking about how to approach teaching and learning practices in the discipline supports the development of skills that students should master for the 21st century (Ghfar, 2020).

Looking at the tendencies on developing skills and competencies for the future, particularly for entrepreneurship, two questions that are addressed in this paper are: (a) Which *teaching* approaches to entrepreneurship education are relevant in particular tertiary contexts? and (b) Which *learning* approaches from other disciplines can be validated in EE?

The purpose of this paper is therefore to suggest a matrix that could guide educators to select appropriate approaches to teaching entrepreneurship in higher educational institutions that aim to promote learning for or through practice. This paper reports on a study conducted at a comprehensive higher education institution in South Africa that offers entrepreneurship as a service module (thus interdisciplinary), as well as a formal programme in entrepreneurship. A “retrospective student voice” on what should be covered in modules or programmes in entrepreneurship is reported. Furthermore, stu-

dent experiences of meaningful learning activities are placed on a proposed matrix.

The paper commences with a literature review on EE and the approaches to teaching entrepreneurship; the construct of practice-led learning and its role are introduced in the review. This is followed by the methodology of the study. The findings and discussions are then presented, and the proposed matrix is unpacked with recommendations for tertiary educators in entrepreneurship modules or programmes.

Literature review

Although there is no single definition of entrepreneurship, Kourlinsky’s (1995) guide aids significantly in crystallising the concept: Competencies and conditions needed for entrepreneurship include opportunity recognition, the gathering of resources in the face of risk, and the creation of a new business venture. It is therefore of paramount importance to find appropriate and impactful methods of both teaching and assessing in education to support the development of competencies for new venture creation, especially in the South African context, where the creation of new ventures is a key strategy to develop the economy (Iwu, Opute, Nchu, Eresia-Eke, Tengeh, Jaiyeoba, & Aliyu, 2019). Appropriate teaching and assessment methods thus also call for dynamic engagement in the realm of EE, where the outcome is most commonly associated with the development of skills relating to creation and management of small businesses. Educational impact assessment concerns itself with the discovery of cause-and-effect relationships (Cook, 2002). In the case of EE, educational approach is considered primarily as the cause, and students’ skills and knowledge and the ability to apply this knowledge as the effect (Ball, 2013; Slavin, 2002).

Lackeus (2020) outlines seven distinct methods to teach EE in terms of cause, namely, (a) starting a real business, (b) starting a simulated business,

(c) starting a social venture, (d) writing a business plan, (e) brainstorming business ideas, (f) exploring role models, and (g) shadowing an entrepreneur. The effect of these pedagogical methods can include improved knowledge on the concept of entrepreneurship, but also the development of “a broad variety of skills and attitudes, such as leadership, creativity, self-insight, self-efficacy, school engagement, learning orientation, proactiveness, perseverance, uncertainty tolerance and increased intention to start a venture” (Lackeus, 2020:938). The following sections review prominent literature on EE from three different approaches, namely, learning *about* entrepreneurship, learning *for* entrepreneurship, and learning *through* entrepreneurship.

Entrepreneurship education approaches

Learning about entrepreneurship

Entrepreneurship education first arose in the post-World War II era, with early literature emerging around 1960. This was followed by dedicated entrepreneurship modules in the 1970s, with the first courses taught outside of a business school context in the 1980s. Thereafter, the field rapidly evolved, with the United States alone boasting entrepreneurship courses in close to two thousand institutions by the early 2000s (Katz, 2003; Klein & Bullcock, 2006). The pedagogical approach of teaching about entrepreneurship is best described by Crispin et al. (2013:102) as one whereby “the instructor lectures on the topics, reinforcing the material from the textbook, and tests are used to assess the students’ learning”. These authors go further to say that this approach is most efficient when a larger number of students need to be taught the basic concepts and theories of entrepreneurship. The downside of this approach, however, is that by the nature of its design, it “lacks the essential real-world experience dimensions of entrepreneurship education” (Crispin et al., 2013:102).

Learning for entrepreneurship

Jones and English (2004:416) argue that an action-oriented teaching style “encourages experiential learning, problem solving, project-based learning, creativity, and is supportive of peer evaluation. It is thought that such a process best provides the mix of enterprising skills and behaviours...”. These authors argue that action-oriented learning is suitable for teaching entrepreneurship, but point out that the transition from traditional classroom-style teaching **about** entrepreneurship (theoretical) to an action-oriented approach is difficult, considering the extent to which the principles of entrepreneurship, as an academic discipline, and business and management are intertwined. The purported benefits of teaching **for** entrepreneurship are contended by Noll (1993), who argues that the traits usually associated with entrepreneurship cannot be taught in a business school setting. These traits include risk-taking, creativity, and innovation (Brown, 2000). Bechard and Toulouse (1998) view entrepreneurship **education as** an approach to train and educate students in the **creation of a new** venture or small business development, while education for small business ownership primarily tends to focus on **managing or acquiring** a business venture. A popular approach to learning for entrepreneurship in higher education institutions is the development of business plans.

Many institutions straddle the boundaries of “learning by doing” for learning and assessment as much as the educational setting (as opposed to real-life context) will allow, by requiring students to present and defend business plans in front of a panel (consisting, e.g., of academic experts, venture capitalists, and other potential funders; Tan & Ng, 2006). White (1996) proposes the concept of problem-based learning, whereby students face a number of entrepreneurship-related problems and are required to solve them during the course of the semester in a team-based setting. This has the advantage of being able to incorporate real-life events, such as cur-

rent business and economic events, into the problem, which allows for more realistic problem-based learning, as the skills acquired through this are developed in the context of a current reality.

The key to problem-based learning is the initiation of the learning process through the definition of problems and provision of relevant information (Jonassen, 2000). The bulk of the problem-solving process is manifested in the early stages of problem definition and framing. This may, however, be problematic when a scenario already has a clear end-state in mind. The problems may furthermore be ill-defined and the information vague (Jonassen, 2000). The inclusion of a reapplication stage is therefore beneficial, as learners can appreciate the value of the problem-based learning process in its entirety, rather than the mere pursuit of a solution (O'Brien, Hamburg, & Southern, 2019). This approach is in contrast to the synergistic learning approach proposed by Collins, Smith, and Hannon (2006), which advocates the use of a participatory, collaborative, peer-learning environment in fostering nascent entrepreneurship.

Learning through entrepreneurship

O'Brien and Hamburg (2019:528) state that "entrepreneurship education has emerged as a pedagogy in which students learn through entrepreneurship and it encourages learners to view their disciplines in terms of opportunity and value". As entrepreneurship primarily concerns itself with the creation of new ventures in the midst of risk and uncertainty, traditional classroom-based teachings about entrepreneurship are no longer deemed appropriate (Hoppe, 2016). Prominent studies such as those by Tan and Ng (2006) confirm that most successful entrepreneurship education programmes have elements of "learning by doing", primarily imparted by activities outside of the classroom. Learning in a real-life context by doing and yielding something new is referred to as "entrepreneurship" (Johannisson, 2020). The typical activities through which students learn by practice can include internships, starting

a small business on campus, and being placed in a smaller consulting role (Tan & Ng, 2006).

However, Fox, Pittaway, and Uzuegbunam, (2018) suggest a more balanced approach to teaching entrepreneurship: these authors are of opinion that there are substantial benefits in simulation games in a classroom that teach real-life skills in a simulated environment. This view, which has emerged over the past 20 years, is supported by authors such as O'Brien and Hamburg (2019), who argue that this can be achieved through design thinking, problem-based, inquiry-based, and challenge-based learning, providing opportunity for collaborative problem solving. Jones (2011) proposes a pedagogy for teaching entrepreneurship by referring to the concept of a "reasonable adventurer", which requires students not only to learn and reflect, but also to try entrepreneurship by translating real-life entrepreneurial activities into learning opportunities. One might argue that a reasonable adventurer might be willing to let their practice lead the learning and that this learning might not always be in the real-life context. Therefore, it may also be argued that in this teaching approach, the learning of the student is predominately practice led through the creative process of entrepreneuring.

inking approaches to entrepreneurship education to practice-led learning

Practice-led learning is a construct that is borrowed and adjusted from practice-led research. The rationale for adjusting the term for this study will be provided after an explanation of the well-known construct of practice-led research.

Practice-led research is a method to construct a new understanding of practice and is applied in the creative disciplines, such as art and design (Hawkins & Wilson, 2017). Authors such as Lin (2019) describe practice-led research as a creative process of meaning making but point out that the meaning making is led by the practical component of researchers or practitioners in the creative fields.

In this regard, Boyle (2015) highlights the subjective experience of constructing new knowledge during practice-led research and explains that reflection is a method to construct the new knowledge. Another dimension of practice-led research is the creative output that results from the practice (Hawkins & Wilson, 2017). From the aspects mentioned in this paragraph, parallels can be drawn between the creative design process of researchers and practitioners, and the creative processes required to yield value creation by entrepreneurs. These parallels (between the design discipline and entrepreneurship, as well as the parallel of meaning making when doing research) have been well documented by design thinking authors such as Neck and Green (2011) and Linton and Klinton (2019).

Bearing the above parallels in mind, it is argued that “research” can be replaced with the term “learning” as this is also a process of meaning making. Practice-led learning is thus viewed as a means of constructing new meaning in the creative processes applied to entrepreneurship. Consequently, it would be important not only to look at teaching approaches to EE, but also the learning of EE by students. In this regard, practice-led learning may well be a term to oppose theory-led learning of students in the context of EE. In this paper, it is therefore recognised and acknowledged that experiential learning is similar to practice-led learning; the difference, though (highlighted in the context of this paper), is that experiential learning may still be theory-led, whereas practice-led learning might be viewed as a design process, led by practice, with the theoretical principles learnt as a result of the practice.

Exploring the role of practice-led learning in the various approaches to the teaching of EE could therefore offer the beginnings of a matrix that supports the selection of appropriate teaching and learning approaches in EE contexts. The following section is the methodology that informed the empirical data for the matrix developed in this paper.

Methodology

According to Bryman and Bell (2011), a research design is a framework according to which data are collected and analysed. A case study research design was used in this study. The case was a comprehensive university offering diplomas, degrees, and postgraduate qualifications in South Africa. The university was selected due to its extensive involvement in entrepreneurship education at levels ranging from first year through to postgraduate modules in various qualifications such as commerce, engineering, information technology, and design. Entrepreneurship is offered both as a programme and as service modules to other disciplines across the institution.

Research methods

The research method was qualitative because the reflections of students were important. Interviews were deemed appropriate in this study to guide a conversation, as recommended by Yin (2003). A semi-structured interview schedule was therefore developed by the researchers, based on their experience as entrepreneurship lecturers and researchers. The interviews were used to gather personal opinions, insights, and experiences to determine student experiences and expectations of entrepreneurship modules and programmes, based on their personal reflection after three years of entrepreneurship modules or a formal programme.

To ensure and maintain the interest and involvement of the student participants, the questions were primarily open ended, and if needed, these were extended by probing questions. An important advantage of semi-structured interviews is that they allow for probing, resulting in the gaining of in-depth and relevant information (“thick data”; Struwig & Stead, 2014). Open-ended questions ensure flexibility and the probability of identifying unexpected themes that could be relevant to the study (Bryman & Bell, 2011).

Sampling

The study employed a multistage sampling approach. The first stage was the selection of a university, the case study, active in post-school entrepreneurship education. The second stage was the selection of groups of third-year and postgraduate-level students who received entrepreneurship lectures in the faculty of commerce of the university. The third stage involved purposive sampling and the selection of students who volunteered to participate in the study. For the third stage of sampling, interested and informed students were invited to participate in the interviews with a researcher. Purposive sampling was used, meaning that participants were selected with particular criteria in mind. Table 1 summarises the criteria and the rationale employed in selecting participants for the study.

Table 1: Selection criteria for the purposive sample

Criterion	Rationale for the selection criterion
Postgraduate or third-year student	Reflection was required from participants They had to have
Candidate from the formal programme	completed the module or programme to provide a meaningful opinion
Candidate from interdisciplinary programmes who took entrepreneurship as a service module	Candidates could comment on the value of entrepreneurial approaches to their discipline
Candidate who could indicate the value of the programme	Candidates who completed the formal entrepreneurship programme

Twenty-five students fit the criteria, were selected and agreed to participate in the study. Participation involved one-on-one interviews with one of the researchers, lasting between 30 and 60 minutes. It is important to note that the researchers who interviewed the students were not the lecturers of those particular modules, so as to allow participants

to share their thoughts (even negative experiences) freely. The interviews were audio recorded, and extensive field notes were made during interviews.

Data analysis

Interviews were transcribed, and a thematic analysis was conducted on each transcription. Themes were identified in each transcription and then combined and reduced to central themes when all were compared. All data were sorted accordingly, and applicable central themes to the objective are reported in this paper.

Quality of the data

Strategies that enhance the quality of the qualitative data were implemented, as recommended by Babbie and Mouton (2014) and Struwig and Stead (2014). According to Babbie and Mouton (2014), the four constructs relating to the quality of data are credibility, transferability, dependability, and confirmability. Babbie and Mouton (2014) explain that credibility pertains to the trustworthiness of the data and whether the data “rings true”. Transferability pertains to the extent to which the data can be transferred to similar situations. Dependability can be achieved when similar results would be found with similar participants. Confirmability relates to the strategies the researchers implemented to avoid bias and their ability to present findings that are related to the focus of the study. These constructs were therefore carefully considered in this study, and the strategies implemented to assure the quality of data are set out in Table 2.

Table 2: Constructs and strategies to ensure quality of data

Construct	Strategy to ensure quality
credibility	researchers' own training and experience with entrepreneurship education enabled them to interpret data in a believable way (that "rings true")
transferability	context of the data is reported proper records (e.g., interview notes, transcriptions, contextual information, and detail of participants) kept
dependability	"thick data" obtained by allowing participants to speak; audit trail kept; peer reviews of data conducted

Research ethics

Ethical approval for this research was granted by the relevant research ethics committee of the university where the study was performed. The researchers complied with all the provisos stated in the ethical approval letter. Permission to conduct research with university students was granted by the Executive Director: Research and Innovation.

Students signed consent forms after it was explained to them that (a) the study would assist in improving entrepreneurship modules and programmes; (b) questions were not to probe their academic performance, but rather their personal experiences of entrepreneurship modules/programmes and their recommendations; (c) participation was voluntary and participants retained the right to withdraw from the interview at any time; (d) they had the right to refuse answering questions; and (e) personal information, identity, as well as any answers provided would remain confidential.

Findings and discussions

This paper presents one part of a larger study. The starting point for this study is the reflection of

participants on what an ideal programme or module for entrepreneurship should entail, in retrospect (i.e., after already having completed such a programme or module). In the analysis of what students expected from their modules or programmes, two main themes were identified: (a) programme-/module-essential components and (b) meaningful learning units/activities. In this regard, what follows are the findings relating to the reflection of the students regarding their expectations about their entrepreneurship education.

An important observation is that participants (who took part in the full programme as well as those who only had a module) had very specific ideas around what learning about, for, and through entrepreneurship should be. Statements from participants in the programme, as well as those only had a module on entrepreneurship, illustrate this. In these statements, it is apparent that participants thought that learning through practice or practical application could be very effective, and they promoted this particularly to develop skills and the mindset to start up their businesses, but also to be more prepared to sustain their own businesses. The following statements summarise these sentiments.

A participant from the entrepreneurship programme stated:

"I feel like practicals would actually be a good idea... in terms of what it takes to start a business... We could do workshop attendance, something that involves what running a business really is because running a business especially for the first time, first year or two it's hard to generate an income, probably only start breaking even first or second year, so those are the sort of things that most of our generation don't get to learn how to start their business. Funding, how to secure funding, and understanding what an incubation stage is when starting a business and how you need help in that incubation stage." (P19)

Participants with only a module on entrepreneurship expressed:

“I just think it can be more practice within the assessments. More doing and experiencing the application of the skills you need for entrepreneurship because if you want to follow that route [becoming an entrepreneur], you will have to have the ‘know how.’” (P4)

“It [teaching] shouldn’t be based on book knowledge, but things we can apply practically in the real world.” (P6)

More evidence that supports the above statements is provided in Table 3 to indicate how the sub-themes were identified. The most prominent statements are provided, though others in the data set also supported these main ideas.

Table 3: Essential components to guide teaching approaches, from the participants’ reflections

Participant enrolled for module or programme	Verbatim quotation from selected participants	Teaching approach required by participants’ expectations
Module	<p>“Writing business plans, particularly budgets, is important.” (P1)</p> <p>“It should equip you with the necessary information to start up your own business and teach you the skills to be an entrepreneur.” (P2)</p> <p>“It should teach me the principles of business, how to conduct a business, how to sustain your business, how to get funding, all those things. I want to get skills on how to manage a business.” (P4)</p>	Learning <i>for</i> entrepreneurship
Programme	<p>“Creative skills, skills on how to penetrate the market and see opportunities and take those opportunities” (P7)</p> <p>“Not only theory, also practical. How to deal with failure.” (P16)</p> <p>“So I think entrepreneurship should be about equipping them, if they want to ... open a company ... an entrepreneur is someone who comes up with this brand new idea and this amazing concept and then carries it out into a business and it’s about new markets.” (P10)</p> <p>“... implementation of their own ideas, let students explore by themselves. This is good for creativity, innovation and how to do one’s own thing.” (P18)</p>	Learning <i>through</i> entrepreneurship
Module	<p>“This module changed my entire outlook and I learnt that I can maximise my potential.” (P2)</p> <p>“The inspiration of a life path. I have truly seen how my main course can become more enriching if I just look at the options for a career differently. So lots of skills used to visualise one’s life and dare to visualise big ideas.” (P3)</p> <p>“It [a module in entrepreneurship] should focus on those skills and how to build the character to be entrepreneurial...” (P6)</p>	Learning <i>for</i> entrepreneurship
Programme	<p>“people to share the challenges that you will face and how to go about facing those challenges” (P7)</p> <p>“Theory is a good foundation.” (P16)</p>	Learning <i>about</i>

From Table 3, it may be seen that there is a strong reference to the skills and mindset or attitude that should be developed by EE. The recommended skills that emerged from the participants' verbatim responses were *opportunity finding, business planning, general business management, creativity and innovation*, as well as *vision and character to overcome or deal with challenges*. These aspects are in line with the competencies mentioned in the introduction to this paper, and validate the work of Lackeus (2020).

Participants seemed to believe that development of competencies can be supported with teaching approaches *for* and *through* entrepreneurship. These approaches seem to be expected by participants who had a module on entrepreneurship, as well as those who completed the formal programme. Surprisingly, two participants who completed the programme acknowledged that a teaching approach *about* entrepreneurship has a place. They qualified their statements by referring to theory as a "good

foundation" and acknowledged that teaching about challenges should stem from the experiences (practice) of others with skills on "how to".

Table 4 contains statements suggesting the most prominent activities identified by an analysis of the participants' reflections on what they would suggest as activities that create learning.

From the statements presented in Table 4, it is apparent that participants found practice-led learning meaningful, whether they took only a module on entrepreneurship or completed the formal programme in entrepreneurship. The learning activities that participants found meaningful are in line with what is prescribed in the literature on modern approaches to EE, as they have strong experiential components (Jones & English, 2004), elements of systemic integration through design thinking, and consequently value-added (Tselepis & Lavelle, 2020) and problem-based projects (O'Brien, Hamburg, & Southern, 2019).

Table 4: Most meaningful learning activities from the participants' perspectives

Participant enrolled for module or programme	Verbatim of selected participants on activities that are meaningful with regards to their learning	Does learning seem practice led or theory led?
Module	"What is current and how we can or should look at things. I did not understand before how the economy works, but now I see the links between what I see in the news and how it affects me or my ideas. I liked the slides on the principles." (P2)	Theory-led
	"What stood out for me was learning what you are up against in terms of South Africa's economy, in terms of other people that are trying to open ... businesses. What it is that you are selling and how it has to be different in some sort of way so that you can stand out." (P4)	
	"We learnt some of the skills such as setting up a business plan or marketing research plan." (P2)	Practice-led
	"I would say being practical stood out for me, because the entrepreneurship we were doing was not only theoretical, but there are some practicals that were involved; that was most interesting for me." (P3)	
	"I would also say I enjoyed marketing, because it teaches me how to market my business, how to let people know about your business and your product and all that." (P4)	
"I like creativity a lot, anything to do with creativity, different area of creativity, how to ensure people will be creative." (P5)		

Programme	<p>“Each module complements each other, so when you learn something in business management as a module, you find out that it overlaps [with] what you are learning in marketing, and how they are both have a symbiotic relationship if you want to start a really successful business.” (P8)</p> <p>“... good lecturer, good interaction, can ask questions, lecturer explains very [meaningfully], he provides links to relevant topics and questions.” (P14)</p> <p>“how to innovate and be different from others in the industry, competitive advantage in projects” (P9)</p>	Theory-led
	<p>“Business plan was good but it should be taken further, i.e., incubation hub, funders, towards establishing the business. Creativity test.” (P10)</p> <p>“Starting a business in simulation games is excellent. If lecturers have been exposed to entrepreneurship, they make it more interesting.” (P11)</p> <p>“Projects are actual, on topics that are relevant now or how can say, current.” (P12)</p> <p>“... practical side, not only learning theory. Examples from lecturers, sharing. Involve students to be engaged. Exposure to companies.” (P16)</p> <p>“We engaged in the working world. ... assignments that [required] us to do actual research and interviews.” (P19)</p> <p>“integrated projects that [didn’t] just assess one thing.” (P21)</p>	Practice-led

There were participants who acknowledged the importance of theory-led learning as having *equipped* them to “understand the economy” and interpret current economic factors. In this regard, the theory is applied *for* entrepreneurship. These activities seemed to relate to principles that could be applied to real-life contexts.

With the teaching approaches of Table 3 in mind, as well as the findings on meaningful learning in Table 4, two binary axes are proposed to guide decisions relating to EE:

1. an axis with poles for entrepreneurship as a module in a interdisciplinary programme versus a formal programme in entrepreneurship
2. an axis with poles for practice-led learning versus theory-led learning.

The proposed matrix and the implications for selecting teaching and learning approaches are presented in Figure 1.

Conclusion and final thoughts

It can be seen from Figure 1 that different approaches to teaching and learning can be applied in different contexts with reference to EE. Furthermore, it seems that the postmodern approaches to teaching through entrepreneurship can be applied in interdisciplinary programmes with a module on entrepreneurship, as well as in formal entrepreneurship programmes. From the data in this study, it seems that participants were ready for practice-led learning and they understand how to apply theory-led learning. The teaching *about* entrepreneurship seems to have a place in a formal programme as it

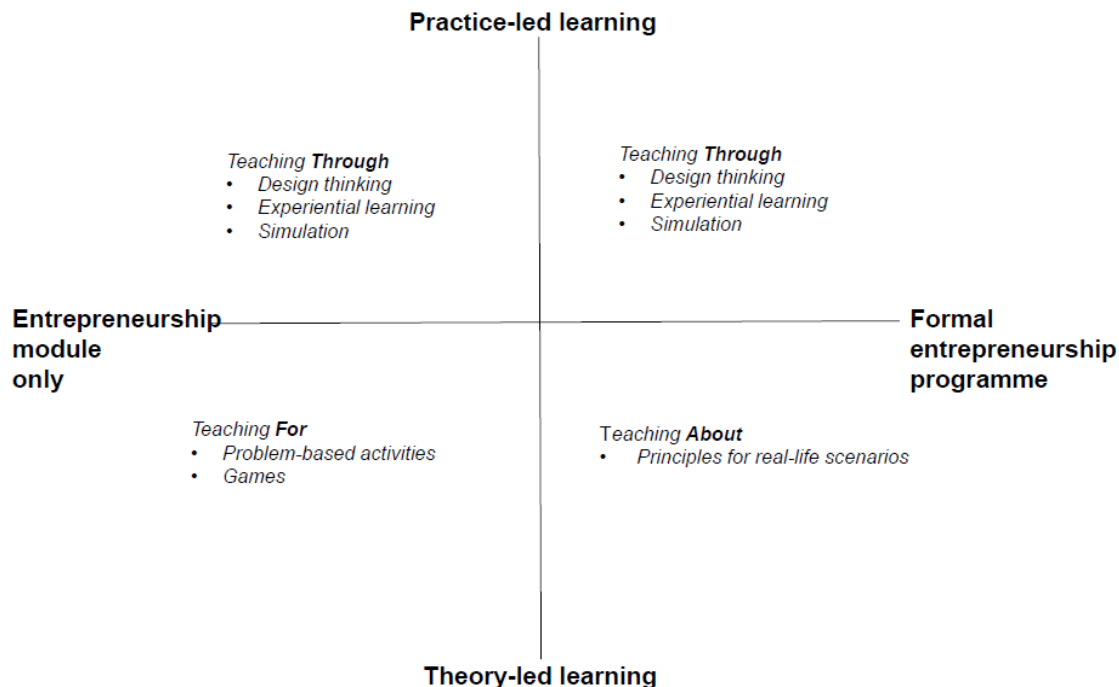


Figure 1: A proposed matrix for the selection of teaching and learning approaches to EE (authors' own compilation)

can guide the working principles of entrepreneurship as a discipline. In contrast, an applied module in interdisciplinary programmes can rather follow a teaching *for* or *through* entrepreneurship approach.

The question that we pose for reflection is whether educators in entrepreneurship are equipped and ready to co-create the meaningful range of activities that promote practice-led learning on top of theory-led learning?

We acknowledge the limitations of this study as it only reports on a single case, cannot be used to generalise, nor does it propose the one ultimate teaching and learning approach for EE. Rather, this study identifies the aspects that are important and meaningful from a student perspective and could therefore be considered, especially for assessment activities in EE.

To end this paper, we reflect on the title that plays on living and learning as an attitude that

should be instilled in students who are brave enough to embrace practice-led learning through entrepreneurship. However, the challenges to educators of entrepreneurship are to equip students to reflect during their own entrepreneurial journeys and to embrace students' failures as a positive tool in the overall learning experience. The challenge is also to allow students to respond to their own unique challenges in their own creative ways, while we as educators simply let them live their entrepreneurial paths and add value on a tertiary level already.

As a final thought, we leave readers with this quote from a participant in this study, as it summarises the importance of practice-led learning and adding value in this way:

"I cannot wait until I finish my degree to start [a business], I need to do it while I can still ask for advice; people depended on me to be a job creator. ... I want to live and let live, you know!" (P6)

References

- Babbie, E. & Mouton, J. (2014). *The Practice of Social Research*. Cape Town: Oxford University Press.
- Ball, S. J. (2013). *The Education Debate*. Bristol: Policy Press.
- Becherd, J. P. & Toulouse, J. M. (1998). Validation of a didactic model for the analysis of training objectives in entrepreneurship. *Journal of Business Venturing*, 13 (4), 317-332.
- Boyle, C. (2015). Take (s) One to Know One: Photography and Practice-led Research. *International Journal of the Image*, 6 (1), 13-21.
- Brown, C. (2000). *Entrepreneurial Education Teaching Guide*. Kansas: Kauffman Centre for Entrepreneurial Leadership Clearing house on Entrepreneurship Education.
- Bryman, A. & Bell, E. (2011). *Business Research Methods*. New York: Oxford University Press.
- Collins, L. A., Smith, A. J. & Hannon, P. D. (2006). Applying a Synergistic Learning Approach in Entrepreneurship Education. *Management Learning*, 37 (3), 335-354.
- Cook, T. D. (2002). Randomized experiments in educational policy research: a critical examination of the reasons the educational evaluation community has offered for not doing them. *Educational Evaluation and Policy Analysis*, 24 (3), 175-199.
- Crispin, S., McAuley, A., Dibben, M., Hoell, R. C. & Miles, M. P. (2013). To Teach or Try: A Continuum of Approaches to Entrepreneurship Education in Australasia. *American Journal of Entrepreneurship*, 6 (2), 94-109.
- Daniel, A. D. (2016). Fostering an entrepreneurial mindset by using a design thinking approach in entrepreneurship education. *Industry and Higher Education*, 30 (3), 215-223.
- Fox, J., Pittaway, L. & Uzuegbunam, I. (2018). Simulations in entrepreneurship education: Serious games and learning through play. *Entrepreneurship Education and Pedagogy*, 1 (1), 61-89.
- Ghafar, A. (2020). Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes. *International Journal of Higher Education*, 9 (1), 218-229.
- Hawkins, B. & Wilson, B. (2017). A Fresh Theoretical Perspective on Practice-Led Research. *International journal of art & design education*, 36 (1), 82-91.
- Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O. & Aliyu, O. A. (2019). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19 (1), 1-13. DOI: 10.1016/j.ijme.2019.03.007.
- Johannisson, B. (2020). Searching for the roots of entrepreneuring as practice: introducing the enactive approach. In: *Research Handbook on Entrepreneurial Behavior, Practice and Process*. Cheltenham: Edward Elgar Publishing. DOI: 10.1108/IJEER-10-2018-0627
- Jones, C. (2011). *Teaching entrepreneurship to undergraduates*. Cheltenham: Edward Elgar.
- Jones, C. & English, J. (2004). A contemporary approach to entrepreneurship education. *Education + Training*, 46 8/9, 416-423.
- Kourilsky, M. L. (1995). *Entrepreneurship Education: Opportunity in search of curriculum*. Kansas: Ewing Marion Kauffman Foundation.

- Lackeus, M. (2020). Comparing the impact of three different experiential approaches to entrepreneurship in education. *International Journal of Entrepreneurial Behaviour & Research*, 26 (5), 937-971.
- Lin, F. L. Y. (2019). Using thematic analysis to facilitate meaning-making in practice-led Art and Design research. *International Journal of Art & Design Education*, 38 (1), 153-167.
- Linton, G. & Klinton, M. (2019), University entrepreneurship education: a design thinking approach to learning. *Journal of Innovation and Entrepreneurship*, 8 (1), 1-11.
- Neck, H. M. & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new Frontiers. *Journal of Small Business Management*, 49 (1), 55-70.
- Nielsen, S. L. & Christensen, P. R. (2014) The wicked problem of design management: Perspectives from the field of entrepreneurship. *The Design Journal*, 17 (4), 560-582.
- Nielsen, S. L. & Stovang, P. (2015). DesUni: university entrepreneurship education through design thinking. *Education+ Training*, 57 (8/9), 977-991.
- Noll, C. L. (1993). Planning curriculum for entrepreneurship education. *Business Education Forum*, 47 (3), 3-6.
- O'Brien, E. & Hamburg, I. (2019). A critical review of learning approaches for entrepreneurship education in a contemporary society. *European Journal for Education*, 54 (3), 525-537.
- O'Brien, E., Hamburg, I. & Southern, M. (2019). *Using technology-oriented, problem-based learning to support global workplace learning*. In: Kenon, V. H. & Palsole, S. V. (Eds.). *The Wiley handbook of global workplace learning* (591-609). Hoboken, NJ: John Wiley & Sons.
- Slavin, R. E. (2002). Evidence-based education policies: transforming educational practice and research. *Educational Researcher*, 31 (7), 15-21.
- Struwig, F. W. & Stead, G. B. (2013). *Research Planning, Designing and Reporting*. Cape Town: Pearson.
- Tan, S. S. & Ng, C. K. F. (2006). A problem-based learning approach to entrepreneurship education. *Education + Training*, 48 (6), 416-428.
- Tselepis, T. J. & Lavelle, C. A. (2020). Design thinking in entrepreneurship education: Understanding framing and placements of problems. *Acta Commercii*, 20 (1), 1-8.
- White, H. B. (1996). Dan tries problem-based learning: a case study. *To improve the academy*, 15 (1), 75-91.
- Yin, R. (2003). *Case Study Research - Design and Methods*. London: SAGE.

Теа Ц. Целепис

Ванредни професор на Катедри за предузетничко образовање DHET-NRF SARChI

Сесил Нојвенхаузен

Редовни професор и Шеф катедре за предузетничко образовање DHET-NRF SARChI

Крис Шактбек

Универзитет у Јоханезбургу

Виши предавач и Шеф Катедре за Пословни менаџмент

ЖИВЕТИ И УЧИТИ: УЧЕЊЕ КРОЗ ПРАКСУ ПУТЕМ ПРЕДУЗЕТНИЧКОГ ОБРАЗОВАЊА

Присвојујући предузетничком образовању на терцијарном нивоу променили су се током прошле деценије, посебно у погледу подршке развоју већина и компетенција за 21. век. Сходно томе, неопходно је размислити о релевантним наставним процесима програма предузетничтва у различитим контекстима, као што је развојни контекст. Штавише, модули предузетничтва често се нуде као део интердисциплинарних програма, а у неким случајевима као дисциплина, и с тим у вези контекст такође захтева различите процесне поучавању и учењу. Услед разлика у контекстима можда треба дажљиво размислити како подучавати предузетничтво, јер један процес може захтевати подучавање о предузетничству, други може захтевати процес самом предузетничству, док ће у оквиру неког трећег процеса предузетничтво служити као средство за подучавање и учење. Избор процеса у великој мери зависи од односа између теорије и праксе. У овом раду не доводимо у питање да су и теорија и пракса важни у предузетничком образовању, али постоји неизвесност која би од две димензије (теорија или пракса) требало да буде процесна у поучавању, у зависности од конкретне контекста. Циљ овог рада је стога да предложимо матрицу која би могла водити процесима предузетничком образовању на терцијарном нивоу, позивајући се на динарне конструкције као што су учење засновано на теорији наставе учења кроз праксу, као и предузетничтво у формалном програму образовања наставе предузетничтва у оквиру једног модула.

Квалитативним истраживањем спроведеним у Јужноафричкој Републици обухватили смо студенте који су похађали наставу из предузетничтва само у оквиру једног модула, као и студенте који су имали предузетничтво као засебан предмет прописан наставним планом и програмом. Полуструктурирани интервјуи обављени су са 25 испитаника који су раније били уписани у неку институцију високог образовања у Јужноафричкој Републици (у време интервјуа били су студенти који су дипломирали). Од ових испитаника је изражено да размисле о предузетничким програмима или модулима које су похађали на факултету и да кажу: а) шта би идеалан програм или модул о предузетничству требало да подразумева, и б) које су активности, у време када су похађали модул или програм, за њих биле најкорисније. Двадесет и пет интервјуа смо транскрибовали и анализирали корисне се анали-

зом садржаја. На основу анализе њодајшака однос теорије и праксе намећу се као тема у смислу ујшницаја једној или другој на ниво информисаности студента или на њихов процес учења. Чинило нам се да су ове теме релевантне за мајрицу. У погледу интерпретације добијених њодајшака, увели смо нови конструкт, њозајмљен из дизајнерских дисциплина – учење кроз праксу – као моћући ирисћуји предузетничком образовању, како у интердисциплинарном контексту, иако и у чистим предузетничким дисциплинама, будући да је њошреба за таквим ирисћујом настала на основу ставова исћинаника и из велике њошребе да се учење више заснива на пракси, а мање на теорији. Сходно томе, најрављена је мајрица да служи као водич наставницима који предају предузетничство у погледу избора ирисћуја и активности у оквиру у два различита контекста: наставе предузетничства само у оквиру једној модула и наставе предузетничства као засебној предмети са својим наставним планом и програмом.

Предложена мајрица има четири квадранта који указују на различите методе њодучавања и учења у различитим контекстима. Мајрица иакође њоказује да се њостимодерни ирисћуји настави кроз предузетничство моћући применити у интердисциплинарним програмима са модулом о предузетничству, као и у формалним програмима предузетничства. Изгледа да су студенти сћремни за учење кроз праксу и да њодучавање о предузетничству има своје место у формалним плановима и програмима, јер оно може водити увођењу радних принципа предузетничства у оквиру академске дисциплине. Насућрошћ томе, њодучавање за предузетничство или кроз предузетничство више одговара настави на модулу у оквиру некој интердисциплинарној програма.

Кључне речи: предузетничко образовање, дизајн, наставни ирисћуји, предузетничке компетенције, 4ИР.