DISCUSSION ON KEY CONCEPTS IN MODERN ENTREPRENEURSHIP EDUCATION

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ABSTRACT

This article discusses trends in entrepreneurship education. It aims to discuss key concepts around modern entrepreneurship education and to analyze their applicability to universities in the former Soviet countries. Entrepreneurship education is provided mainly in traditional university setting and through short-term projects (master classes, online courses, seminars, projects, etc.). The main factors that cause changes in entrepreneurship education are low forecastability of long-term economic situation, globalization and digitization of economy. In this regard, education is now considered an individual process that lasts a lifetime and educational structures are forced to discover new dimensions of organizational mobility and business agility to survive and thrive in a highly competitive market. At this point, short-term courses, master classes, and projects will be strongly sought-for; individual approach to course planning, the Bologna Process, and individually selected tools are expected to find growing importance. Aside from this, the so-called design thinking is about to creep into the system of education, which provides a project-based approach to learning. Universities become business-oriented: they firstly produce entrepreneurs and secondly perform entrepreneurial activity, namely create business incubators and science parks, accelerate start-ups, realize technology transfer, collaborate with endowment funds (academic fundraising), create an innovation ecosystem, etc.

Keywords: Entrepreneurship Education, University, Design Thinking, Practice-Based Learning, Individualization of Education, Business Agility, Technology Transfer, Business Incubators, Innovation Ecosystem.

INTRODUCTION

Entrepreneurial education, like entrepreneurship itself, undergoes significant changes at the current stage of social development. Changes involve the types of entrepreneurship and requirements for entrepreneurship education. Now, successful startups and freelancing require the possession of skills like self-promotion, business planning, and skills associated with marketing research, etc. On the other hand, the growing number of successful entrepreneurs without a corresponding education is a fair argument against full entrepreneurship education (Haase & Lautenschläger, 2011; Konstantinov & Valiev, 2018), as well as against the development of entrepreneurial skills in class (Hindle, 2007; Åstebro et al., 2012). The problem
is aggravated by the fact that those who drive education within a university setting are and entrepreneurs, who have real experience, only conduct master classes.

Modern universities face the challenge of developing a new paradigm of entrepreneurship education: it is difficult to predict whether this will entail the development of new courses, or the modernization of traditional modes, or the development of radically new approaches to education. Hence, there are debates about the role of universities in entrepreneurship education; what exactly courses should include; the opportunities and prospects for self-learning; steps to improve the effectiveness of entrepreneurship education; steps to promote entrepreneurial activity; the role of entrepreneurial experience; making courses elective; and defining entrepreneurship as a technical specialty due to a significant number of start-ups.

According to Forbes, entrepreneurship classes and programs in colleges around the U.S. have quadrupled in the past 25 years. Meanwhile rates of private business ownership for households under 30 have declined over 60% during the same period (Yang, 2016). Thus, the more we teach entrepreneurship, the fewer young people actually start businesses. This fact necessitates fundamental changes in the field of entrepreneurship education.

In addition to academic institutions, there are many organizations providing consulting services, delivering training, seminars and other events. Among them:

- Industry-specific business associations, regional chambers of commerce and industry, business support centers under international institutions (World Bank, EBRD, etc.) (Afanasiev and Shash, 2018).
- Private centers for advisory support and professional advancement.
- Individuals engaged in independent entrepreneurship teaching.

These groups of organizations have different goals. For example, some of the consulting centers focus on solving problems relevant to the client’s business (developing business models, optimizing costs, assessing risks, etc.). Seminars with few hours only open to students the depth of business-related problems and their complex interrelationships, which requires a sound scientific approach. Certified trainers who offer advanced seminars to staff suite only the budget of large and successful companies. Small and medium-sized businesses focus on the price of trainings, rather than on skills development. Fundamentally different is the approach of universities that provide a wide range of knowledge to an uninvolved-in-economic-activity student who purposefully uses his/her free time for self-development. Different organizations offering entrepreneurship education service different segments of consumers. This requires thorough content of education programs and effective teaching methods to reach the desired results.

Entrepreneurship education awoke considerable interest in recent decades, largely due to evidence on the positive impact of small and medium-sized enterprises on economic growth, new jobs creation, innovation, and wealth. Since the first entrepreneurship course at Harvard University in 1947, countless courses and programs were developed and implemented around the world. Nevertheless, there are still many discussions held on the scale, goals, and methods most suitable for shaping entrepreneurial thinking.

According to the National Survey of Entrepreneurship Education (2019), traditional methods and entrepreneurship classes are ineffective because they do not take into account current changes in global digital society. Both in the US and in the world, the majority of universities keep only one eye on the leading trends in entrepreneurship. These trends involve social entrepreneurship, experiential education, interdisciplinary entrepreneurship, lean start-ups, online programs, innovation and creativity, design thinking, crowd-funding, global focus
programs, increasing technology use, encouraging student start-ups, etc. It is important to note that entrepreneurship education is increasingly considered as an integral part of educating students of other majors (e.g. engineering students) who may use this knowledge to implement their own projects (Maresch et al., 2016).

In the European Union, according to approaches developed by the European Commission and presented in the Entrepreneurship Action Plan (2004) and other sources (Making progress, 2004; European Commission, 2004), the process of teaching entrepreneurship should begin at high school and involve the development of relevant character traits. At the same time, the process of studying entrepreneurship should not be limited to university education but continue throughout a lifetime. These documents emphasize the importance of both formal education and self-education, and their special role in developing entrepreneurial thinking and skills (i.e., research and development for commercial purposes, etc.).

Pittaway & Edwards (2012) distinguish four forms of entrepreneurship education, which are “About”, “For”, “Through” and “Embedded” or “In”. The “About” type uses more traditional pedagogic forms of educational practice when students do not take part in real projects. Traditionally, entrepreneurship is taught from the management standpoint: the focus is laid on predicting business outcomes using various mathematical models, often without paying necessary attention to the development of needed skills. At the same time, current studies point out the need to change the approaches to university entrepreneurship education and increase the number of real projects in which students could take part (Linton & Klinton, 2019).

Despite various technologies that are applicable to entrepreneurship education, such as interactive, computer-based, and etc. (OECD, 2009; Kozlinska, 2011; Bae et al., 2014; Blenker et al., 2014; Maresch et al., 2016), teaching methods and technologies to ensure efficiency of entrepreneurship education do not exist (Neck & Greene, 2011). The modern trend in entrepreneurship education is expanding the practice and utilizing experiences (Fayolle et al., 2006; Noyes & Deligiannidis, 2013).

Researchers offer different visions of entrepreneurship education. Linton & Klinton (2019) suggest using the so-called design thinking to ensure the “Through” approach through the engagement in start-ups. Similar models were developed by institutions like the Hasso Plattner Institute of Design at Stanford University (dschool.stanford.edu), or most recently the School of Entrepreneurial Design Thinking–The ED-School (www.ed-school.com) at the University of Koblenz-Landau in Koblenz, Germany. At the same time, Von Kortzfleisch et al. (2013) indicate that there is no clear definition and concept of entrepreneurial design thinking. Thus, the following holistic approach is suggested. Students work in groups on various projects, which gradually become more complex. Initially, such projects are introductory and offered to build a team and become familiar with the methods of entrepreneurial activity. They are followed by more advanced projects and rotation of team members between groups. Then, each team works on the final project–problem solving, real project development, and business model implementation. While implementing the project, students tackle various subjects like business modeling, marketing and distribution, investment and financing, business planning, etc.

- There is no doubt that entrepreneurship education should base on some principles.
- The first principle argues that the use of a systematic approach in high-quality education allows identifying structural characteristics of education and allows subordinating the new-breed entrepreneurs.
- The second principle suggests that the activity approach allows boosting students’ motivation to enrich knowledge in the field of entrepreneurship.
- The third principle stresses that socio-cultural approach to education contributes to cross-cultural management and corporate culture.

- The fourth principle substantiates the need to produce an entrepreneur possessing values necessary for sustainable development and thus, social integration.

The implementability of these principles in the context of project-based approach is debatable, as no statistical data exists to indicate the effectiveness of this approach. In addition, design thinking is not proven to increase business efficiency, although it has a positive effect on students' motivation and satisfaction with the learning process (Daniel, 2016), as well as on the intention to engage in business activities (Sukavejworakit et al., 2018).

Today, there is no holistic vision of entrepreneurship education being based on design thinking and, as a consequence, no action plans, method learning, etc. This gap is especially noticeable in developed Asian countries like China (Li & Li, 2015). This experience may be relevant to developing former Soviet countries, in which, for historical reasons, entrepreneurship education borrows best international practices. At this stage of development, universities on a post-Soviet platform can introduce new approaches to bridge the gap between national and world entrepreneurship education.

This study aims to discuss key concepts in modern entrepreneurship education and to analyze their applicability to universities in former Soviet countries.

**METHODS**

Entrepreneurship education constantly requires adapting to modern needs. To ensure the high quality of graduates, we need to explore the main trends in this field and to determine applicability of these trends for updating the education programs. For this purpose, data from entrepreneurial sphere published by domestic and foreign practitioners and scientists were reviewed. Methods used in the study—analysis, synthesis, and generalization—are applied to identify the pros and cons of entrepreneurship education, to compare the post-Soviet model with western approaches to education, and to identify new directions for the education system development in the post-Soviet countries.

**RESULTS**

Entrepreneurial education in the post-Soviet countries undergoes significant changes. On the one hand, universities rely on traditional methods of education and implement only some of the undertakings that progressive business schools offer. On the other hand, they understand that this approach places them aside from providers of high-quality entrepreneurship education.

Entrepreneurial education in Epy former Soviet countries is provided exclusively on the basis of local universities, without the participation of leading business schools. National business schools were created either by national experts, who have studied abroad, or in collaboration with Western schools of average quality. The first difference between entrepreneurship education in the former Soviet countries and in the world-class universities is that most national universities and business schools tend to “teach” competencies rather than ensure self-learning. For example, education in local universities is dominated by in-class learning with a significant amount of theoretical material and little attention is paid to individual activates. What is normal in world-class universities is not a common practice here. What is meant is that students should independently acquire the knowledge they need. The main role in education should be given to self-preparation and self-learning, where the role of a university professor is to manage this process by giving directions to their students. For their classes,
students should be provided with literature and supporting materials to read before lectures. Thus, they should know the topic of discussion before the class. This gives everyone the opportunity to not only perceive the information passively but also to actively participate in the discussion. Most textbooks used for full-time, evening and distance education do not sufficiently disclose the mechanism for finding and assessing the viability of new entrepreneurial ideas, especially those related to production. Associated recommendations and simulators for those who want to learn this mechanism are also nowhere to find.

An important step in entrepreneurship education is to develop skills like setting priorities, justifying criteria for opportunity assessment, and giving effective feedback. It is necessary to determine if new idea is more effective compared with the current one or to take an already existing idea and implement it better than before. Searching for an entrepreneurial idea should be done individually or by a group of like-minded people. This requires well-known methods of individual (analogy, inversion, idealization) or collective search (brainstorming, Delphi technique, etc.) followed by justification of ideas found. This approach to entrepreneurship education allows identifying a portion of students with abilities to generate competitive entrepreneurial ideas and further deepen their knowledge in this area. Other students can focus on justifying choices regarding the purchase of licenses and existing enterprises or regarding the renting options.

At the same time, national universities do not give enough attention toward the need of developing the so-called soft skills that are not directly related to job description of a particular job-holder, but that are necessary for successful teamwork. Soft skills involve the usage of different models of behavior in similar situations, deep understanding of one’s own interests, empathy, effective priority management, ability to make better choices if alternatives are available, responsiveness to new challenges and circumstances, stress-resistance, and ability to reach goals. Modern educational standards do not provide for these skills and a student usually learns them under specialized paid MBA programs or after employment. Soft skills also include motivation, leadership, management, teamwork, time management, presentations, sales, personal development, etc.

From entrepreneurship textbooks and guides, it becomes evident that education focuses on the establishment of enterprises (organizational and managerial aspect), on the strategies for development, on business regulation mechanisms, and on performance evaluation. These are important areas but they are not able to significantly change the situation with entrepreneurship, especially industrial entrepreneurship, in transition due to intermediaries dominating national business. Under these circumstances, 80-90% of entities have earnings only for living and only a few reach the level of initial capital necessary for further development. Starting your business from scratch is a challenge. Only about 15% of new enterprises continue to operate after the first 10 years of performance and only 40% after 5 years. Although manufacturing enterprises have more chances to survive, intermediaries, especially retail trade, are still popular. In this regard, it is necessary to change the way entrepreneurs are trained. These are important issues, considering a decline in production, growing unemployment, and the loss of national markets.

Hence, national system of entrepreneurship education needs reforms to be made. However, changes should not mimic world trends. Business schools that will appear in former Soviet countries should not be a copy of Western business schools; in other words, catch-up development with successful reproduction of the best world practice is not an option, since even the best needs reforming. Implementing outdated is a dead end. The viability of a business school is tied to innovation. National universities came to an understanding of this problem, as
evidenced by an increase in master classes, short-term programs, certification programs, retraining programs, etc. Even today, a project-based approach steps into the field of particular disciplines and touches upon the independent work of students. Unfortunately, these projects are modifications of term and graduation projects and only partially mirror the actual project. With projects introduced, knowledge is assimilated much better because interactive techniques are designed not for memorization but for a thoughtful, creative process of knowing the world, for stating the problem and searching for its solution. In this case, soft skills are developed with teamwork (Table 1).

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<tr>
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<td><strong>PROS AND CONS OF UNIVERSITY ENTREPRENEURSHIP EDUCATION</strong></td>
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<td><strong>Pros</strong></td>
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<td>Space for Implementing New Approaches towards Teaching</td>
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<td>Openness to Changes</td>
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<td>Experience and Creativity</td>
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<td>Various Education Models</td>
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<tr>
<td>Cooperation with National and International Business Structures</td>
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National universities have little experience in the field of entrepreneurship project technologies but even with that, it is evident that there are specific pitfalls, namely:

- Project technologies require teachers to possess deep knowledge, high skills, systematic and creative thinking but every teacher is not a top professional.
- Project of choice may not fit with the purpose, goals and objectives of teaching and thus, reduce student achievement to nothing and demotivate him.
- Unclear problems for project development.
- Confusing purpose, goals and objectives of the project, which may inhibit the achievement of defined results.
- Unprepared students, academically (the lack of theoretical knowledge) and morally (complex project, unwillingness to work in a team, etc.).
- Underdeveloped facilities (limited access to the Internet, limited library collection, the lack of funds for project presentation, etc.).
- Lack of interaction with colleagues to develop interdisciplinary projects.
- Inability to involve appropriate computer technology.
- Assessment tools and criteria.

Because entrepreneurial education is derived from the economic situation, it reflects economic trends. Under uncertainty, the concept of less time with maximum effectiveness will gain importance in the field of education. Thus, theoretical knowledge will decrease in value, ending up shallow. In the long run, this process will affect the quality of education. Various business schools and training centers are expected to increase their role, as they demonstrate the capability of adapting and changing education programs in short time. Education programs are launched 2 to 3 times. New additions usually have modified and adapted modules for specific consumers or listeners.

With different additions, universities can provide various services, from classical education to master classes, as it is advisable to handle projects with core knowledge. In addition
to the logical strategy of understanding the project, which is practiced in the traditional learning system, there is a synthesis approach, implemented in various forms: from teacher’s reproductive, partly searching activity to the independent execution.

When this approach is used, teacher’s role changes from a sole keeper of knowledge to a project manager, who engages in cooperation. The focus is laid on active learning and the minimum set of necessary teaching aids. Learning content becomes a tool rather than a goal and the student acts as a subject of activity along with the teacher. Meanwhile, personality development is one of the main educational goals.

This is how the university turns into an entrepreneurship university (Schulte, 2004; Mukhin & Mukhin, 2017). The first direction of its activity is associated with the preparation of future entrepreneurs and the second—with entrepreneurial activity (business incubators and science parks, start-ups, technologies, collaboration with endowment funds (academic fundraising), innovations, etc.). The university must engage students and graduates in entrepreneurship, providing them not only with information and consulting but also with resource assistance. Given all this, entrepreneurship universities may become not only popular and necessary in the near future but also effective. Indeed, such universities combine scientific, educational, and innovation activities.

The main tasks of entrepreneurship universities are to (Pudjiarti, 2018):

- Create conditions for development and attract investments for innovations;
- Create an environment producing competitive graduates who are able to create innovative products and be in demand.

To transform a national university into an entrepreneurship university:

1. Cultivate “entrepreneurial spirit”, encourage students. This cannot be achieved if students do not possess entrepreneurial skills, are not able to act at risk, live in a consumer society, solve complex problems, think innovatively, engage in project and research activities, and be self-improving. This requires changes in the curriculum and new disciplines in the list of required shaping entrepreneurial culture and cultivating the entrepreneurial spirit.

2. Create a research environment, reward teachers and students. A university should have operating research centers, development centers, research laboratories, etc., as well as corresponding seats of a teacher-researcher, a teacher-consultant, and a teacher-expert.

3. Develop the infrastructure (in particular, business incubators, business laboratories, business centers, commercial and non-commercial organizations, which may be part of the infrastructure or exist separately).

**DISCUSSION**

In entrepreneurship education, there are the following tendencies observable at the current moment:

- Directions of economic development are not clear, so short-term course programs, master classes, and projects are the most popular.
- Individual courses seem to raise importance and universities become part of the Bologna system.
- Globalization and digitalization of economy made traditional education models inefficient. Education is now seen as an individual process that lasts a lifetime, while traditional education models provide for the intensive provision of services during first 20-25 years with occasional “professional retraining”. This necessitates a fundamentally new system of continuous education, which would take into account the growth of needs, the individualization of demand and ways to meeting it.
• Education tools are more often selected individually and the role of private (personal) expenditures in planning a person’s educational journey heightens. People are willing to pay for their education, so the flow of funds from citizens and corporations increases. Inflows increase not only in traditional sectors (secondary and higher education) but also in new forms of postgraduate (vocational) education.

• New effective means of entrepreneurship education are a subject of search. These short-term projects. The reason why this happens is that individual preferences now center around education programs rather than institutions. An individual program is selected among many modules offered by the institution.

• Practice-based approach gains importance, as it allows acquiring a set of competencies in a limited time. New opportunities are being created to speed up the acquisition of competencies through simulators, information and communication systems, and individual programs.

Despite certain shortcomings, project technologies are a promising direction for national universities. Although a teacher must be ready to take risks and overcome certain problems/obstacles at the beginning of technology introduction, this difficulty is not critical. In the end, we will have a practice-oriented program sparking interest in students and improving the quality of education.

Following these trends is a serious step towards the national market development so that it could provide high-tech products and resources for higher education. A civilized market involves an adequate social base (civilized manufacturers). Priority professions and businesses receive additional support and socially important sectors of the market are provided with an opportunity to develop.

CONCLUSION

Entrepreneurial education in the post-Soviet environment undergoes significant changes. On the one hand, universities rely on traditional methods and implement only some of the undertakings that progressive business schools offer. On the other hand, they understand that this approach places them aside Russian science and entrepreneurship education. Hence, national system of entrepreneurship education needs reforms to be made. However, changes should not mimic world trends. Business schools that will appear in former Soviet countries should not be a copy of Western business schools; in other words, catch-up development with successful reproduction of the best world practice is not an option, since even the best needs reforming. Implementing outdated is a dead end. The viability of a business school is tied to innovation. National universities came to an understanding of this problem, as evidenced by an increase in master classes, short-term programs, certification programs, re-training programs, etc. Even today, a project-based approach steps into the field of particular disciplines and touches upon the independent work of students. Unfortunately, these projects are modifications of term and graduation projects and only partially mirror the actual project. With projects introduced, knowledge is assimilated much better because interactive techniques are designed not for memorization but for a thoughtful, creative process of knowing the world, for stating the problem and searching for its solution. In this case, soft skills are developed with teamwork.

In the context of transition, former Soviet countries need to establish and develop entrepreneurship universities. The European society has these universities well-developed and the former Soviet countries have to look in the same direction.

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