

Blended Learning Approach to Youth Entrepreneurship Skills Development

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ABSTRACT

The relevance of youth entrepreneurship education has been growing recently. There is also a growing trend to focus on blended learning. However, there is still a gap of knowledge on how blended learning approach can foster youth entrepreneurship education. The paper examines the preconditions for application of blended learning approach to develop youth entrepreneurship skills at school level. Empirical research is based on the case of Lithuanian–Polish cross-border cooperation project “Business can be simple.” The research revealed that blended learning mentoring was helpful as it led to the development of new innovative products and solution of problems. To achieve a smooth blended learning process, emphasis should be placed on time planning, mutual communication, motivation of students, and experience and competence of educators.

Keywords: Entrepreneurship skills, Blended learning, Youth, Mentoring

INTRODUCTION

Entrepreneurial activities play a key role in achieving smart, sustainable, and inclusive economic growth. According to OECD (2020), young people are more likely to start a business than to work as employees. However, young entrepreneurs face challenges such as awareness, practical skills, financial resources, and networking. Not everyone can become a successful entrepreneur, but entrepreneurial mindset and competencies are certainly useful both in employment and in personal life (OECD, 2020). Only 6.6 % of working youth (20–29 years old) in the EU were self-employed in 2017. Based on the data provided by Global Entrepreneurship Monitor, only 3 % of young people (18–30 years old) successfully started a new business. Lithuania (7.9 %), Latvia (7.7 %), Romania (7.0 %), Netherlands (7.0 %), and Estonia (6.2 %) are the EU countries where youth entrepreneurship was the most active (OECD, 2020). Entrepreneurship education has become a central issue for the government, policy and decision makers. The EU Strategy for the Baltic Sea Region is concerned with improving the quality of education and vocational training through work-based learning and fostering entrepreneurial mindsets. It stresses that talents with entrepreneurial mindsets need to be traced early at school. Lithuania was one of the first EU countries that developed entrepreneurship education strategies at the school level. The young generation requires new innovative teaching methods. They are prepared for

learning and improving, are able to operate technologies efficiently, and seek regular feedback. Therefore, educators have to find the most sufficient and reasonable method of entrepreneurship skills development. Blended learning (BL) approach responds to youth learning attitudes and provides the opportunity to mix learning online and face-to-face. Although in recent decades the number of research works focusing on blended learning has been growing, there is still a gap of knowledge on how blended learning approach can be employed to enhance youth entrepreneurship education at school. The paper examines the effects of blended learning approach application for youth entrepreneurship skills development at school level. Empirical research is based on the case of Lithuania–Poland cross-border cooperation project “Business can be simple”.

LITERATURE REVIEW

Entrepreneurship is a multifaceted paradigm analyzed by various schools and authors which still lacks its consistent definition (Iwu, 2021). Entrepreneurship is associated with job creation, motivation to take risks, start and perform a profitable, goal-oriented business (Nicolaidis, 2011; Mokaya, Namusonge, and Sikalieh, 2012). The European Entrepreneurship Competence Framework (2018) defines entrepreneurship as “the capacity to act upon opportunities and ideas, and transform them into value for others. The value that is created can be financial, cultural or social” (p. 13). The framework provides 15 entrepreneurship competences that are divided into three areas: 1) Ideas and Opportunities (spotting opportunities, creativity, vision, valuing ideas, ethical and sustainable thinking); 2) Resources (self-awareness and self-efficacy, motivation and perseverance, mobilizing resources, financial and economic literacy, mobilizing others); and 3) Into action (taking the initiative, planning and management, coping with uncertainty, ambiguity and risk, working with others, learning through experience). Roblesa and Zárraga-Rodríguez (2015) present a list of entrepreneurship competencies that can be considered as a key factor in achieving success in business. They emphasize risk assumption, autonomy/self-determination, search and analysis of information, the quality of work, communication, self-confidence, social networks, dynamism, change management, initiative, innovation, integrity, leadership, results orientation, social mobility, negotiation, troubleshooting, responsibility, and teamwork. Entrepreneurship education includes the development of general and professional skills; it is an important way of developing young people’s innovative skills and personalities, individual creativity, values and lifelong learning attitudes (Wang et al., 2021). According to Wei et al. (2019), youth entrepreneurship education creates preconditions for innovative talent development that creates important positive effects for future development, including social and economic aspects at national and global levels. The development of entrepreneurial competencies is already an integral part of higher education and high school curricula. Entrepreneurial competencies can be acquired through learning and coaching (Jang, 2021; Kynd and Baert, 2015), using theoretical orientation and practice-oriented

approach (Piperopoulos and Dimov, 2014), applying simulation entrepreneurship (Sirelkhatim and Gangi, 2015), and applying mentoring practices (Nabi et al., 2019). Mentoring is meaningful as mentees may acquire practical knowledge on how to develop a business idea, discover and evaluate the market for new products, determine product viability, plan finances and resources. Most often mentors are experienced entrepreneurs who contribute not only to the development of entrepreneurship skills, but also to personal development (St-Jean and Audet, 2013).

The past decades could be characterized by digital transformations, and nowadays educational institutions more often combine traditional face-to-face teaching methods with online components (Jost et al., 2021; Szadziwska, Kujawski, 2017; Okaz, 2015). The result of such integration is the blended learning method. Some scholars refer to it as the “new traditional model” or the “new normal” (Dziuban et al., 2018; Norberg et al., 2011). It emerged as one of the most popular pedagogical concepts at the beginning of 2000 (Güzer &Caner, 2014). Blended learning can be defined as the integration of face-to-face sessions at a given time in a physical classroom, online modes of learning delivered via learning platforms, and autonomous study (Bonk and Graham, 2006; Graham, 2006; Graham, 2013; Winstead, 2016). It provides an effective combination of different modes of delivery, models of teaching, and styles of learning, which are exercised in an interactively meaningful learning environment (Kaur, 2013). According to Kaur (2013), there are three main components of blended learning model: 1) learning environment, which can be synchronous or asynchronous; 2) media component for content delivering; and 3) instructional component aligned with learning outcomes that supports the learning. Blended learning courses have the proven potential to enhance both the effectiveness and efficiency of learning experiences, student success and satisfaction (Garrison and Kanuka 2004; Norberg et al., 2011; Kaur, 2013; Winstead, 2016; Szadziwska, Kujawski, 2017; Dziuban et al. 2018, Arifin, 2020, Jost et al., 2021; Statnicke et al., 2019). Although the advantages of blended learning are strong and widely recognized, disadvantages should also be revealed. Based on literature analysis, Table 1 summarizes the advantages and disadvantages of blended learning.

Blended learning provides many benefits related to greater audience coverage, better access to the teaching materials, a more active and tailored learning process. It is attractive to both the student and the institution which adopts the blended learning approach. On the other hand, there may be some problems and challenges in using learning technologies and platforms, connection problems, plagiarism and credibility problems. Disadvantages of blended learning exist, but they are not invincible. The negative impact can be minimized or even eliminated if the school and the educator keep an eye on student feedback, improve technology skills and infrastructure, and deliver quality content. Interest in blended learning is constantly increasing, and the current situation related to COVID-19 pandemic, including home closure, social isolation, and school closures, also contributes significantly to this (Dietrich et al. 2020).

Table 1. Advantages and disadvantages of blended learning. (Source: own elaboration).

Advantages of blended learning	Disadvantages of blended learning
<ul style="list-style-type: none"> • Well-suited for large groups • Increased accessibility to the teaching materials • Advanced collaboration tools, faster and better communication and feedback • Switch from passive to active learning • Opportunity to be either together or apart • Greater flexibility, the ability to learn and access material in a variety of modes • Easier acquisition of knowledge and skills • Better preparation, increased students' chances of meeting course learning outcomes • Decreased dropout rates • Interactive content • Learning content tailored to the unique needs of different segments of the audience • Self-study of additional tasks • Effective use of lecture time, possibility to set own pace • Reduction in costs 	<ul style="list-style-type: none"> • Temporary increase in the workload (transition phase) • Technology challenge (infrastructure) • Requires a variety of technology-based media • Log-in and connection problems • Download problems • Not enough materials available • No solutions to tests and tasks • Need to have basic technology knowledge • User-unfriendly interface • Lower motivation to learn • Lower creativity in searching for information • No direct communication with other participants • Plagiarism and credibility problem

CASE STUDY

Case study is based on the project “Business can be simple”, implemented in July 2020 - December 2021 in the Lithuanian–Polish border region. The project idea is based on the application of blended learning approach to develop youth entrepreneurship skills. During the project, a network of Lithuanian–Polish border mentors was established, mentoring tools and business cases developed, trainings for mentors provided, an online entrepreneurship training program developed, creative workshops of new product development and a prototyping camp organized. Student teams presented their products at international exhibitions and participated in a camp of business leaders, during which they acquired entrepreneurial skills while playing a business game. Online training material such as a textbook, videos, tests, and cases were combined with face-to-face classes and meetings with teachers and business mentors. The structure of the entrepreneurship skills development program is presented in Figure 1.

More than 200 secondary school students from Lithuanian and Poland border regions participated in the project, and they were taught using the blended learning approach by 9 mentors. At the beginning of the project five

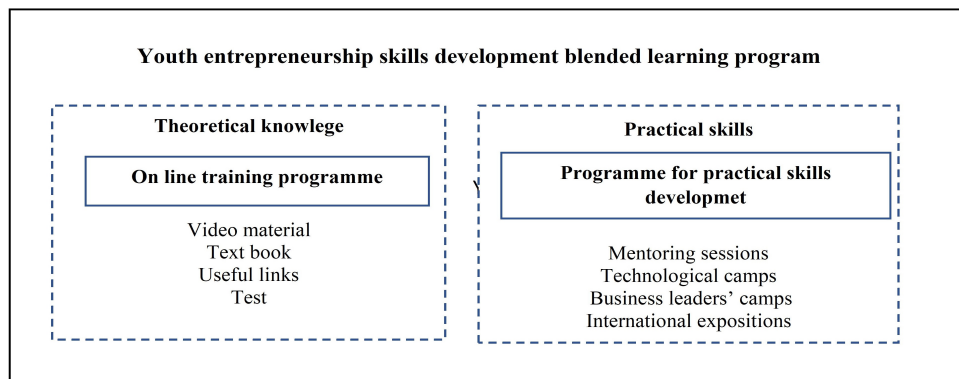


Figure 1: The structure of entrepreneurship skills development program (Source: own elaboration).

teams were assigned to each mentor (45 teams in total). However, only 30 teams reached the end of the project and developed a new product prototype or idea. At the end of the project, lessons learned were analyzed. In order to investigate the preconditions for youth entrepreneurship training using blended learning approach, an expert evaluation was conducted. Project business mentors from Lithuania ($n = 6$) and Poland ($n = 3$) were chosen as experts as key entrepreneurship educators. For the purposes of the study, a questionnaire was developed. The research was carried out in November 2021. Data collection was conducted online, using platform apklausos.lt. Seven complete responses were used for the analysis. For experts' evaluation, ten statements representing mentoring experience in the blended youth entrepreneurship skills development program were provided. The reliability of the questionnaire was evaluated using its internal consistency of the questionnaire items estimating the Cronbach's alpha value. The calculated Cronbach's alpha for statements was 0.884, which is adequate for social science research and indicates the internal consistency of the questionnaire. The Kendal concordance test (parameter W) was processed to assess the homogeneity in experts' opinions regarding the statements. Calculated Kendall's coefficient of concordance W was quite low (0.282) yet significant with the probability of 99 percent (p (sig.) is 0.038), which is sufficient, and it means that experts concede with the statements, although the agreement parameter is low. The results let us reveal the most important preconditions for youth entrepreneurship training using blended learning approach (Table 2).

The results of the study revealed that mentoring through blended learning approach was helpful, it allowed to develop new innovative products and solve problems. At the same time, the study revealed the particular importance of time planning, communication, and motivation.

Significant correlations were found between statement 8 and statements 1, 2, 3, and 4; between statement 5 and statements 2, 3, and 4. Significant correlations between precondition statements are presented in Table 3.

Moreover, the reasons why some of the teams dropped out during the project were analyzed. The experts mentioned the following: lack of time, lack

Table 2. Preconditions for youth entrepreneurship training using blended learning approach (Source: own elaboration).

Precondition statement	Mean rank
1. Mentoring has been helpful in product development.	6.93
2. As a mentor, you have helped to solve any problems that arose.	6.36
3. As a mentor, you had enough knowledge to develop the products.	6.36
4. You, as a mentor, had enough time to achieve the result during the project.	6.36
5. The chosen communication platform Zoom was easy to use.	5.71
6. Mentoring activities went smoothly.	5.64
7. As a mentor, you had enough practical mentoring experience.	4.93
8. The time for mentoring was convenient.	4.93
9. Communication between mentors and student teams went smoothly.	4.21
10. The teams you mentored were motivated to get involved in product development activities.	3.57

Table 3. Significant correlations between precondition statements (Source: own elaboration).

		St. 1	St. 2	St. 3	St. 4	St. 8	St. 5
St. 2	Pearson correlation	0.645	1	1.000**	1.000**	.806*	.930**
	Sig. (2-tailed)	0.117		0.000	0.000	0.029	0.002
St. 3	Pearson correlation	0.645	1.000**	1	1.000**	.806*	.930**
	Sig. (2-tailed)	0.117	0.000		0.000	0.029	0.002
St. 4	Pearson correlation	0.645	1.000**	1.000**	1	.806*	.930**
	Sig. (2-tailed)	0.117	0.000	0.000		0.029	0.002
St. 8	Pearson correlation	.801*	.806*	.806*	.806*	1	0.615
	Sig. (2-tailed)	0.031	0.029	0.029	0.029		0.141
St. 5	Pearson correlation	0.320	.930**	.930**	.930**	0.615	1
	Sig. (2-tailed)	0.484	0.002	0.002	0.002	0.141	

of motivation, peculiarities of distance learning, and natural breakout due to internal team disagreements. The experts were also asked to identify the main challenges they faced in mentoring project teams in a blended way. The following challenges were identified:

- Online mentoring is a challenge to motivate a team if it has doubts.
- Communication with all teams at the same time during joint meetings was complicated as the age and experience of the teams varied greatly.
- Some teams wanted to produce a product quickly without regard to its quality; they had to be convinced that quality is especially important for the final result.
- Idea generation through distance learning, idea design development, prototyping (schools and laboratory were closed), testing to potential users (quarantine time).
- Loss of interest and lack of students' motivation.

- Some team members were too busy with school-learning.
- Some team members did not want to be in business.
- Finding business companies interested in cooperation.

CONCLUSION

Youth entrepreneurship education plays a key role in sustainable growth of the country. The blended learning approach fulfils youth learning expectations to balance face-to-face sessions, online modes, and autonomous study. The case of Lithuania–Poland cross-border cooperation project “Business can be simple” disclosed the main preconditions for blended learning in developing youth entrepreneurship skills. Preconditions were identified from the perspective of mentors who contributed to students’ entrepreneurship education. Empirical research revealed that blended learning mentoring was helpful as it led to the development of new innovative products and solution of problems. To ensure a smooth blended learning process, emphasis should be placed on time planning, mutual communication, motivation of students, and experience and competence of educators.

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