

FOCUS ON PRACTICAL DISCIPLINES AS A METHOD OF DEVELOPING ENTREPRENEURIAL MINDSET

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ABSTRACT

The purpose of the study is to develop a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences. The research methods include analysis, inductive and deductive approach, comparative and systematic approach, methods of generalizing pedagogical experience regarding the organization of entrepreneurial education and approaches to the development of entrepreneurial competences. Within the framework of the study, a comparative analysis of the entrepreneurial education system in Russia and foreign countries was carried out; the shortcomings of the educational process organization in the context of the entrepreneurial competence development were identified; a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences was developed. The practical relevance of the research is an attempt to develop a model for optimizing entrepreneurial education in former command economies. Changes in the education system can contribute to the solution of socio-economic problems: employment of graduates, mismatch between education and labor market requirements, as well as insufficient development of dual education. The materials and results of the study can be used to optimize educational curricula, normative and legal regulation in the sphere of science and education, as well as to develop standards for entrepreneurial education in Russia.

Keywords: Practical Education, Entrepreneurial Education, Competence, Entrepreneurial Competence, Labor Market.

INTRODUCTION

Competence development is one of the key components of education, which actually reflects the efficiency of student learning. It should be noted that the concept of “*competence*” is debatable today and has many definitions, including the idea to consider it as a synonym for “*competency*” (Sakharova, 1999). The system of entrepreneurial education of the CIS and developing countries is being studied in our research through the example of Russia. Thus, it is advisable to focus on the definition of the Russian standard of higher education: competence is the ability to change knowledge, skills and personal qualities for successful work in a particular area. In addition, the definition includes the entrepreneurial education key criteria: the dynamics of the educational process (ability to change), as well as personal qualities as one of the main factors of successful entrepreneurial activities.

Competences are distinguished by various spheres of business. “*Entrepreneurial competence*” is a business or personal quality of a person, the skill and behavior model for successfully solving business problems and achieving high results (Bezrukih et al., 2016). In the European education system, entrepreneurial competence is developed in two aspects: to conduct business activities and in order to obtain the characteristics of an entrepreneurial person for any other types of employment (Tereshenko et al., 2017). Thus, the development of entrepreneurial competence must be considered taking into account the two aspects.

In Russia and many other post-Soviet countries (Belarus, Moldova, Ukraine, etc), entrepreneurial education is a relatively new concept due to their late transition to the market-based economy model. The main problems of entrepreneurial education in Russia include (Klyuev & Yashin, 2016): predominance of short-term programs or individual courses, lack of federal higher education standards, gap between the educational process and real entrepreneurial activities.

Thus, the prospects for the development of entrepreneurial education in Russia and other post-Soviet countries are associated with the solution of the above-mentioned problems, as well as adapting the education system to global standards and real business practices. The practical relevance of the research is an attempt to develop a model for optimizing entrepreneurial education in former command economies. Changes in the education system can contribute to the solution of socio-economic problems in Russia: employment of graduates, mismatch between education and labor market requirements, insufficient development of dual education, etc.

LITERATURE REVIEW

The introduction of entrepreneurship in the educational process has changed the role of educational institutions and combined them with industry (Dif et al., 2019). Today, entrepreneurial universities are considered as factors of regional economic development (Gianiodis & Meek, 2016). The concept of modern education involves the expansion of research and teaching functions through including innovative and entrepreneurial components in the educational process (Saiz-Santos et al., 2017). According to the study (Beugre, 2017), educational institutions can accelerate the development of entrepreneurship through the preparation of human resources, creation of business incubators and possibility of cooperation with concept validation centers to conduct research, as well as collaboration with economic entities for technology transfer and its commercialization.

It should be noted that the development of entrepreneurial competences is important for entrepreneurial education and related spheres of business, including economics and management. The article (Holmström et al., 2016) presents the findings of the study on the introduction of entrepreneurship courses for students studying “*Sports psychology*”. In particular, the introduction of the course allowed students to develop their abilities to create new ideas and commercialize them.

Entrepreneurial education has its own specific features. First of all, the lack of consensus between traditional pedagogy and innovative methods used in modern entrepreneurial education should be mentioned. In particular, it is estimated that there are not enough traditional pedagogical approaches for preparing future entrepreneurs (Higgins et al., 2018; Ziyadin et al., 2019). The results of the studies (Závodská et al., 2019) show that practical activities are the best approach in entrepreneurial education compared to traditional methods of developing business plans. According to Bauman & Lucy (2019), modern entrepreneurial education should include

the development of teamwork skills, communication and social skills, work ethics and courtesy. Toumi & Smida (2018) suggest that students focus on failures by analysing different types of risk situations in entrepreneurial activities. This pedagogical approach will allow students to identify their weak entrepreneurial competences. For example, a failure could occur due to insufficiently convincing arguments given to the opponent, poor analysis of the competitor's market and internal capabilities of the enterprise, etc.

Entrepreneurial education in foreign countries is characterized by the availability of incubator programs, which combine educational campuses with business structures, including small and medium-sized enterprises (Nieuwenhuizen et al., 2016). An incubator is a symbiosis that is beneficial to both entrepreneurs and students. Students receive mentoring, investments for the implementation of their ideas, infrastructure support while entrepreneurs get qualified personnel, innovative ideas, etc. New enterprises can also be created within incubation centers (Brito et al., 2018). This is due to the fact that all necessary human and material resources are centralized.

Incubation centers also contribute to the successful development of student start-ups by providing necessary resources (Kepenek & Eser, 2018). The development, creation and promotion of a start-up cover key aspects of entrepreneurial competence development: from market analysis to communication interactions at the stage of attracting investors. The start-up methodology also allows students to have a closer look at the competitive market environment; it teaches them to demonstrate their advantage as producers of goods and services over other manufacturers. Start-up fundraising involves placing thousands of projects on a special platform where the investor chooses the most cost-effective and potentially profitable ideas. This necessitates the development of entrepreneurial competences that meet real market requirements. The experience of Nigeria is interesting. In order to solve socio-economic problems, the government of the country made students of all specialties study entrepreneurship as a compulsory subject. However, the experiment did not even help reduce unemployment. Therefore, the studies on optimizing entrepreneurial education in the country were aimed at studying business incubation as a more effective tool for enhancing entrepreneurial opportunities (Ikebuaku & Dinbabo, 2018). There was a similar program in Finland. It involved unemployed young people who attended short-term entrepreneurial courses. As a result, there was an increase in responsibility and labour skills (Mononen-Batista Costa & Brunila, 2016).

The analysis of recent research and publications indicates the growing need for quality entrepreneurial education in the world. At the same time, there is a significant gap between the level of entrepreneurial competences of graduates and real market conditions. This trend is primarily explained by the mismatch between traditional teaching methods and the objectives of entrepreneurial education. Based on this, there is a need to optimize the educational process model from the perspective of the entrepreneurial competence development.

Thus, one of the main problems of entrepreneurial education in Russia is a significant gap between the educational process and the real business activity. This leads to the insufficient development of professional competences and personal qualities of graduates that do not meet the requirements of the modern labour market. This problem may be caused by the focus of the Russian education system on the development of theoretical material instead of the practical component. As a result of this, students and graduates encounter difficulties in accomplishing production tasks.

It should also be noted that in Russian universities entrepreneurship theoretical studies mainly include the essentials of economics, management, marketing and other related disciplines. At the same time, insufficient attention is paid to modern technologies of business planning, management, communication, etc. This does not allow preparing students to work in dynamic market and innovation conditions.

In the view of the above mentioned information, the purpose of our research is to develop a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences (through the example of the Russian higher education system). In order to achieve the research goal the following objectives have been set:

1. To analyse the status, problems and prospects of entrepreneurial education in Russia.
2. To analyse global trends and foreign practices in the development of entrepreneurial competencies.
3. To develop a model for optimizing the practical component of entrepreneurial education in Russia.

MATERIALS AND METHODS

The research methods include analysis, inductive and deductive approach, comparative and systematic approach, methods of generalizing pedagogical experience regarding the organization of entrepreneurial education and approaches to the development of entrepreneurial competences.

The theoretical part of the study is based on the comparative analysis of the entrepreneurial education system in Russia and foreign countries, identification of the shortcomings of the educational process organization in the context of the entrepreneurial competence development. The practical part includes the development of a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences.

The research object is the Russian entrepreneurial education system (through the example of St. Petersburg State University, Lomonosov Moscow State University, Moscow State Institute of International Relations, Kazan Federal University, Plekhanov Russian University of Economics and other higher educational institutions).

The subject of the study is the development of entrepreneurial competences within the practical component of the educational process. The study is focused on the entrepreneurial education system of Russia and other post-Soviet countries (Belarus, Moldova, Ukraine, etc).

RESULTS

The issues related to the formation and development of entrepreneurial competences are of particular relevance to developing countries. The main problems of entrepreneurial education include: a significant gap between the curriculum and labour market requirements, the development of skills that do not match job requirements, the isolation of the educational process from economic entities, the dominance of the theoretical component, the unpreparedness of graduates to solve real production problems, etc. (Klyuev & Yashin, 2016). Considering these problems, we developed a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences. The model consists of three interconnected units: integration of education, science and business; optimization of the

theoretical and practical component of the educational process. Let us consider each unit of the proposed model in more detail.

The introduction of dual education should be the initial step towards reforming the Russian entrepreneurial education system. This involves the convergence of students with a potential employer. Dual education can take various forms: the participation of potential employers in the preparation of curricula and academic programs, student apprenticeship at potential workplaces which involves the solution of real production problems, etc.

Successful implementation of dual education in Russia will allow the establishment of incubation centers combining research, business and educational structures. In turn, this will create favourable conditions for the development of entrepreneurial skills and the possibility of reorienting the theoretical nature of the educational process to practice.

In particular, incubation centers can be regarded as platforms for student start-ups, communication with economic entities and search for investment, as well as a source of material, technical and human resources for the implementation of entrepreneurial projects, etc.

Incubation centers allow science and business integration. This turns research focus to solving specific production problems, commercializing scientific ideas and attracting investors.

The optimization of the practical component of the educational process in the proposed model is aimed at the development of individual components of entrepreneurial competences, which were combined into six groups: marketing, analytics, communication and teamwork, work ethics, management, development. Knowledge, skills and abilities indicated in these groups are the bottlenecks of the Russian entrepreneurial education system.

The proposed optimization pattern of the practical component includes:

1. The development of the information analysis, synthesis, induction, deduction, generalization and systematization skills.
2. The development of communication skills, including the ability to negotiate, solve disputable situation and find consensus.
3. The development of teamwork skills: working group organization, engagement with the team and team management.
4. Knowledge of work etiquette: understanding of formal and informal rules of business or personal communication, behaviour patterns and dress code, etc.
5. The development of product promotion skills: the ability to independently create a marketing concept for a product develops a branding model, form and attract the target audience.
6. The development of management skills that are necessary for strategic and crisis management; ensuring the operation of the enterprise in the dynamic environment; increasing the efficiency of the enterprise.
7. Development skills: the ability to independently create ideas, products and services that will be commercialized.

Let us consider the proposed optimization of the theoretical component of Russian entrepreneurial education. As a rule, entrepreneurial education curricula (for example, at Lomonosov Moscow State University, St. Petersburg State University, etc.) include economics, marketing, management and other related disciplines. There are no individual courses within the framework of entrepreneurial education. In this regard, there is a gap between the theoretical component of the educational process and the realities of entrepreneurial activities. Considering this information, we proposed the introduction of new applied and practical disciplines in the curriculum of Russian universities.

The disciplines proposed in the model (Table 1) cover the basic knowledge, skills and abilities for doing business in the modern market environment. For example, a course on the legal framework for small- and medium-sized businesses in Russia will allow students to quickly start their own business as they will be aware of tax issues, etc. Studying branding and modern marketing technologies along with the psychological methods of successful sales will help students develop entrepreneurial competences. This will allow them to successfully enter the market and occupy a certain niche.

Table 1	
MODEL FOR OPTIMIZING THE PRACTICAL COMPONENT OF THE EDUCATIONAL PROCESS FROM THE PERSPECTIVE OF DEVELOPING ENTREPRENEURIAL COMPETENCES	
Integration of Education, Science and Business	
<ol style="list-style-type: none"> 1. Introduction of dual education. 2. Establishment of incubation centers combining research, business and educational structures. 3. Focus of practical tasks, course papers and graduate works on real business problems or the creation of startups. 4. Focus of scientific developments on solving applied business problems, commercialization of scientific ideas, participation in grants and tenders. 5. Longer on-the-job training as a practical component of entrepreneurial education. 	
Optimization of the Practical Component of the Educational Process	
Group	Practical task
Marketing	<ol style="list-style-type: none"> 1. Analysis of the advantages and disadvantages of advertising strategies. 2. Development of new advertising technologies and methods for attracting customers. 3. Development of advertising projects for new products, optimization of existing advertising campaigns.
Analytics	<ol style="list-style-type: none"> 1. Analysis of the effective and ineffective decisions of enterprises, search for correlation and identification of success factors. 2. Analysis of existing market niches and search for the new ones. 3. Analysis of success and failure factors of modern startups, monitoring of startup platforms.
Communication and teamwork	<ol style="list-style-type: none"> 1. Introduction of project-based education. 2. Organization of discussion clubs.
Work ethics	<ol style="list-style-type: none"> 1. Organization of business games, roundtable simulations of negotiations.
Management	<ol style="list-style-type: none"> 1. Building behavior models of the enterprises of different types in the changing environment. 2. Development of anti-crisis strategies and strategies for improving the efficiency for existing enterprises.
Development	<ol style="list-style-type: none"> 1. Development of startups and their implementation. 2. Focus of student development assessment (business projects, startups, etc) on the success of their implementation and investment.
Optimization of the Theoretical Component of the Educational Process	
New disciplines	Development and promotion of startups, Blockchain technologies, Investing, Venture investments, Basic business etiquette, Legal framework for small and medium-sized businesses, Psychological technologies for successful sales, Modern marketing methods and tools, Branding
Source: Developed by authors.	

DISCUSSION

The implementation of the model presented in the study will optimize the system of entrepreneurial education in Russia by bringing it closer to the real market conditions and international standards. In particular, the model components conform to the characteristics of an entrepreneurial student proposed by the European Parliament: awareness of labour market conditions; adherence to ethical principles; ability to plan, delegate, inform and organize; ability to work independently and in a team; ability to assess the situation and risks, etc. (Tereshenko et al., 2017). The proposed model also ensures the development of the entrepreneurial competence components highlighted in other studies (Serebrennikova, 2016): general, professional, communicative, design, managerial, economic and legal. Our model meets the above mentioned characteristics and components. This means that it can be implemented in the framework of entrepreneurial education both in Russia and in Europe.

The developed model corresponds to the European principles of entrepreneurial education (Nieuwenhuizen et al., 2016; Bauman & Lucy, 2019). In particular, the development of communication and teamwork skills can be achieved by introducing project-based learning into the educational process (Ivanova, 2020). This will allow students to work in groups, take part in discussions, look for alternative solutions and organize roundtable negotiations. Project-based learning methods may include project presentations. This will allow students to have a closer look at the real conditions of their future professional activity through presenting their own goods and services.

An important aspect for the development of communication and teamwork skills, as well as understanding work ethics is the creation of working groups as part of project-based learning. As a rule, students work in groups when implementing a project. Teamwork provides students with the opportunity to delegate project tasks to other team members, which is a common business practice. Modern business structures, including small and medium-sized enterprises, are a single unified mechanism that works to achieve certain goals. Based on this, the ability to organize such a mechanism in the form of a working group and manage it will largely determine the success of students' future professional activities in the real business environment.

The work ethic can be developed through the organization of business games and simulations of roundtable negotiations. These methods will teach students to listen to the opponent and accept their arguments, seek consensus between the points of view of different people and working groups, offer and make mutually beneficial decisions.

It should be noted that the studies devoted to the problem of developing entrepreneurial education in Russia and other post-Soviet countries highlight the following barriers: dependence on the state when choosing activities, lack of cooperation between educational institutions and business structures, focus of educational institutions on personnel training rather than scientific research (Bunyak, 2016). However, the information seems outdated: firstly, post-Soviet higher educational institutions are gaining more autonomy and offer a wide range of specialties, which significantly differs from the Soviet model. This allows developing almost any spheres of activity similar to the foreign ones. Secondly, today the integration between universities and business structures is taking place. Thirdly, many universities are research institutes that should be involved in scientific research along with the preparation of students. In addition, the existing ranking systems of educational institutions include the indicators of scientific work, which does not allow universities to neglect research activities. Thus, the barriers to the development of

entrepreneurial education in post-Soviet countries identified in Bunyak (2016) are not significant.

CONCLUSION

The study is devoted to the problem of entrepreneurial competence development in the higher education system of Russia as one of the post-Soviet countries characterized by command economy. The existence of this economic model for almost a century has negatively affected the development of market-based economy, including entrepreneurial education.

In particular, the main problems related to entrepreneurial education in post-Soviet countries (now the CIS countries) include: lack of state education standards, mismatch between education and labor market requirements, unpreparedness of graduates for real production tasks, etc. It should be noted that these problems are found in almost all developing economies.

Thus, the above mentioned problems require the optimization of the entrepreneurial education system, taking into account key vulnerabilities, market requirements and global trends. As part of the study, we developed a model for optimizing the practical component of the educational process from the perspective of developing entrepreneurial competences. The model consists of three interconnected units: integration of education, science and business; optimization of the theoretical and practical component of the educational process. The theoretical unit includes the introduction of new applied or practical disciplines. This brings the entrepreneurial education system closer to the real market conditions.

The implementation of the model for optimizing the entrepreneurial education system can contribute to the solution of socio-economic problems: employment of graduates, mismatch between education and labor market requirements, as well as insufficient development of dual education. The materials and results of the study can be used to optimize educational curricula, normative and legal regulation in the sphere of science and education, as well as to develop standards for entrepreneurial education in Russia.

REFERENCES

- Bauman, A., & Lucy, C. (2019). Enhancing entrepreneurial education: Developing competencies for success. *The International Journal of Management Education*, 100293.
- Beugre, C.D. (2017). *Role of institutions of higher education. in building entrepreneurial ecosystems in Sub-Saharan Africa* (pp. 47-59). Palgrave Macmillan, New York.
- Bezrukih, Y.A., Lobanova, O.B., Kazakova, T.V., Pilchuk, M.D., & Tsigankova A.S. (2016). Entrepreneurial competence as a tool for success. *Problems of modern pedagogical education*, 51(7), 11-17.
- Brito, M.D., Brunstein, J., & Amaro, R.A. (2018). Education for sustainability beyond the classroom: Companies born in university incubators. *Iberoamerican Journal of Entrepreneurship and Small Business*, 7(2), 1-30.
- Bunyak, N.M. (2016). Entrepreneurial university: the essence and peculiarities of formation. *Juvenis scientia*, 2, 144-147.
- Dif, A., Bourane, S., & Benziane, A. (2019). The role of the startup competition and entrepreneurial ecosystem in the integration of entrepreneurship education within the Algerian universities. *Advances in Human Factors, Business Management and Society*, 783, 140-149.
- Gianiodis, P.T., & Meek, W.R. (2016). Entrepreneurial education for the entrepreneurial university: a stakeholder perspective. *The Journal of Technology Transfer*, 1, 1-29.
- Higgins, D., Refai, D., & Keita, D. (2018). Focus point: The need for alternative insight into the entrepreneurial education paradigm. *Journal of Small Business & Entrepreneurship*, 31(3), 225-242.
- Holmström, S., Lindberg, E., & Jansson, J. (2016). Entrepreneurial education embedded in sport psychology: a Swedish case study. *Journal of Education and Training*, 3(1), 126-138.

- Ikebuaku, K., & Dinbabo, M. (2018). Beyond entrepreneurship education: business incubation and entrepreneurial capabilities. *Journal of Entrepreneurship in Emerging Economies*, 10(1), 154-174.
- Ivanova, D. (2020). Risk management and its contribution to sustainable development of mining enterprises. *Scientific and Practical Studies of Raw Material Issues*, 182-190.
- Kepepek, E.B., & Eser, Z. (2018). Impact of pre-incubators on entrepreneurial activities in Turkey: problems, successes, and policy recommendations. In: *Innovation and the Entrepreneurial University* (pp. 57-82). Springer, Cham.
- Klyuev, A.K., & Yashin, A.A. (2016). Entrepreneurship educational programs in the modern university. *Higher Education in Russia*, 1, 22-33.
- Mononen-Batista Costa, S., & Brunila, K. (2016). Becoming entrepreneurial: Transitions and education of unemployed youth. *Power and Education*, 8(1), 19-34.
- Nieuwenhuizen, C., Groenewald, D., Davids, J., van Rensburg, L.J., & Schachtebeck, C. (2016). Best practice in entrepreneurship education. *Problems and Perspectives in Management*, 14(3), 528-536.
- Saiz-Santos, M., Araujo-De la Mata, A., & Hoyos-Iruarrizaga, J. (2017). Entrepreneurial university: Educational innovation and technology transfer. In *Entrepreneurial Universities* (pp. 105-121). Springer, Cham.
- Sakharova, N.S. (1999). Categories of competence and competency in the modern educational paradigm. *The Bulletin of Orenburg State University*, 3, 51-58.
- Serebrennikova, E.A. (2016). Organizational and pedagogical conditions of entrepreneurship competences. *Journal of Secondary Vocational Education*, 3, 27-30.
- Tereshenko, S., Zagorskaya, M., & Bobritskaya, Y. (2017). Entrepreneurial competences: European approach to students' education. *Problems of modern science and education*, 1, 54-56.
- Toumi, M., & Smida, A. (2018). Entrepreneurship education: Understanding the failure of entrepreneurial act for learners. *International Journal of Technology Management & Sustainable Development*, 17(3), 275-294.
- Závodská, A., Šramová, V., & Konečný, V. (2019). Developing Entrepreneurship Education: Case of the University of Žilina. In: *International Workshop on Learning Technology for Education in Cloud* (pp. 313-324). Springer, Cham.
- Ziyadin, S., Shash, N., Levchenko, T., Khudaibergenova, S., & Yessenova, G. (2019). Modeling of resultant effects in assessment of innovative activity of the hotel organizations. *Entrepreneurship and Sustainability Issues*, 6(4), 2180-2193.