

ISMGE 2020**II International Scientific and Practical Conference "Individual and Society in the Modern Geopolitical Environment"****PECULIARITIES OF FORMING ENTREPRENEURIAL
COMPETENCIES OF AN ENTREPRENEURIAL MANAGER.**

Boris A. Bukach (a), Anastasia A. Abdrakhmanova (b)*, Raisa N. Litvinova (c)

*Corresponding author

(a) Sevastopol State university, 299053, ul. Universitetskaya, 33, Sevastopol, Russia, BABukach@sevsu.ru

(b) Sevastopol State university, 299053, ul. Universitetskaya, 33, Sevastopol, Russia, AAAbdrakhmanova@sevsu.ru

(c) Sevastopol State university, 299053, ul. Universitetskaya, 33, Sevastopol, Russia, RNLitvinova@sevsu.ru

Abstract

The article focuses on the study of peculiarities of developing entrepreneurial competencies of future specialists. It presents an analysis of the business environment in Russia: the correlation between the target and actual values of the key indicators of small and medium-sized businesses. The authors identified the main barriers to the development of this sector, as well as barriers to the development of entrepreneurial competencies among young people. They introduced an approach to the acquisition of these competencies by updating the curriculum, diversifying educational and extra-curricular activities, and activating the processes of practice-oriented activities of undergraduate students. The proposed set of initiatives helps to form personal qualities, competences, skills in the training of students-managers of entrepreneurial type. Two years of experience in implementing project training allowed to make an intermediate assessment of the effectiveness of the applied approach using the example of students (Management training direction). The analysis of the obtained data confirmed the hypothesis about the efficiency of the project-oriented approach implementation in the educational process, its positive impact on the result expressed in the formed entrepreneurial qualities of future specialists. The results of the study provided the basis for the development of practical recommendations to implement an approach to forming entrepreneurial competencies of young students, that may serve as a training ground for future specialists in various fields.

2357-1330 © 2020 Published by European Publisher.

Keywords: Competence, entrepreneurship, management, model, pro-activity.



1. Introduction

The attention of the government to the development of small and medium business is due to a number of objective reasons, the main of which include providing new jobs for the population, participating in foreign economic activity through the production and sale of export products, providing conditions for increasing the GDP growth rate of the government, creating prerequisites for technological development, increasing the sustainability of the national economy, etc.

2. Problem Statement

Despite the existence of initiatives and outlined guidelines in this direction, the SME sector development trend lags somewhat behind the target values. Thus, according to the planned target figures, the share of GDP of small and medium enterprises should reach 32.5% by 2024. At the same time, the values of this indicator were 22% and 20.2% in 2017 and 2018 respectively (Rosstat, 2019). We should note that the average share of GDP of small and medium enterprises in developed countries ranges from 50 to 60%. Besides, in 2019 the number of SMEs decreased by 118 thousand (as compared to 2018), which resulted in the reduction of the employment in the SME sector to 18.8 million (the national project "Small and medium entrepreneurship and support to individual entrepreneurial initiative" indicated the target value of 25 million people by 2024). All the above evidences the negative trend of SME sector development in Russia, which is likely to strengthen in 2020. The forecast consequences of a new coronavirus infection also contribute to this trend.

3. Research Questions

One limiting factor in technological entrepreneurship is the low level of skills in "smart entrepreneurship" (Chepurenko, 2017). There is a disruption to the value chain: talented student youth with specialized knowledge, skills, and abilities show subsidence of over-professional skills in creating innovation, namely, developing and marketing products with commercial potential (Rubin, 2015).

The study of the Agency for Strategic Initiatives to Promote New Projects (ASI) (Ergunova et al., 2017; Vlasov et al., 2018) hypothesized the existence of a certain set of psychological indicators defining the personality of a technological entrepreneur (Lizunkov et al., 2017). These indicators characterize a person's potential for productivity and efficiency in professional activity.

An argument for mastering entrepreneurial competencies during higher education is that university years are the optimal period of life for crystallizing new values (Burt, 1992), which undergo further transformation and become a foundation for shaping the future social and economic picture of the world (Myslyakova, 2018).

Notably, access to all resource categories contributes to the successful launch of entrepreneurial initiatives (Klyver & Schenkel, 2013). Burt (1992) proposes a classification that distinguishes three categories of resources: human capital (knowledge, skills, skills of employees); social capital (social exchange resulting from involvement in social networks and interaction between the entrepreneur and his employees); financial capital.

An important aspect in exploring the mechanisms of entrepreneurial competencies is to overcome the problem of narrow understanding of the term entrepreneurship (Korotkov & Zobnina, 2019). Traditionally, this concept refers to the implementation of exclusively commercial projects, which does not meet the goals and aspirations of the majority of student youth. At present, there is a strengthening of a more comprehensive approach to entrepreneurship as a type of proactive human behavior, which may result in goods, ideas, technologies, etc. (Sarasvathy, 2001).

This shows that entrepreneurial competencies are a kind of superstructure in the graduate's competence profile, strengthening personal competitive advantages and successful promotion in the labor market (Abdrakhmanova, 2019).

The issue of mastering entrepreneurial competences is closely related to the entrepreneurial intentions of an individual. Research of Shirokova et al. (2015) examines the essence of this concept, as well as the mechanism for the formation of entrepreneurial intentions. The results of this study are reflected in the global study of entrepreneurial spirit of students (GUESSS).

Currently, there is a number of developments in the formation of entrepreneurial competencies. Thus, Johannisson (1991) identifies five key competencies of an entrepreneur: "know why", "know how", "know who", "know when", "know what". Another interesting approach is the EntreComp model consisting of three areas of competence: "Ideas and Opportunities", "Resources" and "In Business" (Bacigalupo et al., 2016).

In general, we can note that all these models have similarities in terms of step-by-step mastery of entrepreneurial competencies: from a basic understanding of entrepreneurship and awareness of personal entrepreneurial potential, to gaining real experience in developing and launching a startup (Slipenko, 2019).

4. Purpose of the Study

The Department of Management and Business Analysis of Sevastopol State University has been training management specialists for 20 years. Even at that time, during the formation of the general idea and principles of managers training, active practical management activities professors of the department made it possible to choose a course on entrepreneurship, small and medium business. The main concept of training managers was to form two types of specialists: business managers and entrepreneurs of managerial type. The first type assumes that the professional priority activity of such graduates can be the management of individual functional units, business units, etc., using an entrepreneurial approach to solving operational tasks. In this case, the focus is on the excellent mastery of management competences, enhanced by the desire to ensure efficiency, readiness for changes and possible risks. Entrepreneurs of managerial type include students-managers who saw themselves as creators of business activities, initiators of various projects. In this case specialists should form strong competences in the sphere of creating entrepreneurial objects, supplementing the knowledge set in the management sphere. Based on this typification, we did not suggest separate educational trajectories for students, but used different types of tasks aimed at forming professional competences in a preferred direction for students.

Starting from the 2018/2019 academic year the Department of Management and Business Analysis is implementing a project-oriented approach to training managers with a focus on entrepreneurial activity.

The target result of this approach is the training of a new type of management specialist, namely an entrepreneurial type manager with a proactive approach to activities. The analysis of potential employers of the city of Sevastopol made by representative of the department and aimed at defining the profile of professional competences of the desired graduate-manager revealed an acute need in entrepreneurial type specialists. Managers of Sevastopol small and medium-sized businesses express interest in graduates who, firstly, demonstrate such personal qualities as honesty, initiative, adaptability, readiness for instability and high level of responsibility for ensuring quality and timely results. On the other hand, given the accelerating dynamics of the external environment, it is necessary to create conditions for students-managers to master a sufficient set of universal skills to ensure the effectiveness of any activity in the modern world, in addition to special managerial competencies. To ensure the set goals, the educational process has undergone significant changes reflected both in the curriculum itself and related practices of the educational process. Thus, from the very beginning of the educational process, first-year students (2018/2019 academic year) became involved in practice-oriented activities, in the upgrading project of the sports and recreation camp, included in the university infrastructure. The best projects received financial and organizational support from the university management for their implementation. From the very beginning, such project work immerses students in a professional environment, ensures awareness of the competence gap and the formation of a target request from students to study special techniques, techniques, tools of project work. While developing, justifying investment attractiveness, and implementing the project plan, future managers gain huge experience of team cooperation and interaction with representatives of the real business environment and heads of business communities.

Ensuring focused learning and the ability to assess the effectiveness of the process required the identification of priority professional and universal competencies, a key set of specialized skills and personal qualities that enhance performance, and levels of absorption. The model conditionally reflects a set of typical initiatives that can form and further confirm the level of students' development in three key areas:

- personal qualities: the list of actions to define and develop qualities demanded in the business environment, as well as to ensure personal effectiveness. For example, purposefulness, responsibility, initiative, adaptability, creativity, tolerance, self-organization, constant striving for development, etc.;
- management competences: a complex of tasks, functions in planning, organization, motivation, control, coordination of activities of various objects;
- universal skills: an activity on forecasting a scenario of change of the external environment and formation of an optimum set of skills which can significantly improve efficiency of processes, both in the professional environment and other spheres of activity. The priority universal skills for today are modeling of development variants of the unstable situation (including forecasting of risks and methods of their leveling), effective communications in various formats, modern methods of decision-making, competent use of IT-decisions to provide efficiency of processes, maintenance of personal and team effective work in quickly changing environment, etc. (Suzdalova et al., 2017).

Figure 01 presents the vision of the implementation of the above initiatives for the formation of personal qualities, competencies, skills in the training of entrepreneurial students-managers distributed in the appropriate courses of the bachelor's degree program.

To ensure gradual and thorough mastery of the necessary managerial competencies with an entrepreneurial approach, we assume the following levels:

1) The basic level (personal) implies consideration of an individual as an object of management. Each student has to consider himself/herself as a complex of valuable resources, to define vectors of personal and professional development, to formulate target guidelines, to develop a program of activities to ensure the desired results, to develop useful habits.

2) Level of interaction (team): we consider team interaction, cooperation as an object of management for students in this case. Such an approach reveals the value of joint activities, identifies relevant resources, provides an opportunity to understand and practice the methods, techniques and tools for their effective management.

3) Level of influence (organizational) offers students tasks and cases, where they act as leaders of organizations, departments, teams. Thus, complicating the object of management, students need to strengthen and expand their tools for solving a set of management tasks and focus on ensuring the activities of teams of people.

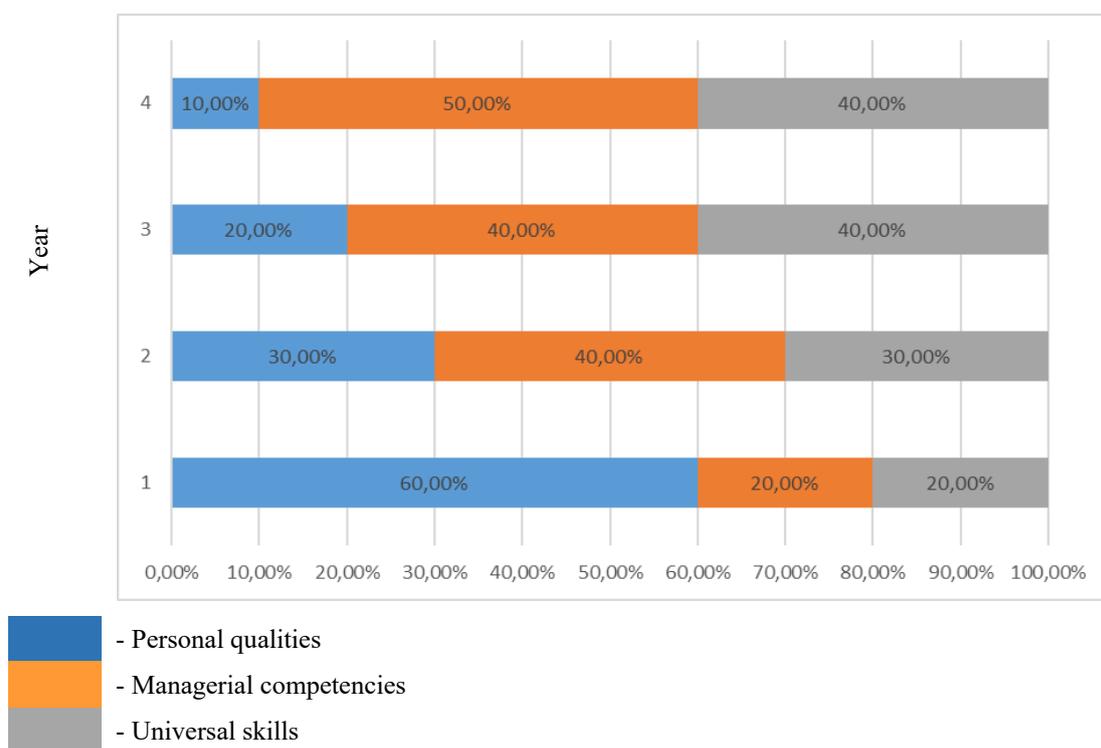


Figure 01. Stage of mastering key qualities, competencies, skills of students at the Department of Management and Business Analysts of the SevSU according to training courses

The curriculum provides for a set of relevant disciplines to support the gradual step-by-step mastery of managerial competencies. In addition to standard classroom trainings for professional and personal development of entrepreneurial managers, there is a whole complex of additional measures implemented with the support of the Sevastopol State University administration, practicing entrepreneurs, heads of business organizations and communities, and representatives of the Sevastopol city administration. Among the most significant events are the "Dialogue on Equals" business meetings,

"Business Polgon" foresight sessions, organization and holding of summer business schools on technological entrepreneurship together with students of other universities (RUND, YarSU), business projects with SevStar telecommunications company, social volunteer projects, career guidance events, projects with grant support from Rosmolodezh FAYA and Easy Start Foundation of the "My Business" city program to support small and medium business. These activities supplement the managerial competences of students obtained in the framework of studying disciplines, forming additional conditions for the development of entrepreneurial model of behavior. An extra advantage of this behavioral model among students is a higher motivation to master new knowledge, a responsible approach to the educational process, the desire to obtain personal and team experience of project and business activities, self-organized and supported by the department.

We decided to evaluate the intermediate results of the new project approach in training, using quantitative and qualitative indicators (Bershadszkaya et al., 2019). The main research method was online questionnaires.

5. Research Methods

To identify differences in student behaviour patterns and ensure comparability, we have identified two samples of students in the Department of Management and Business Analysis:

- 1) junior students (1-2 years) studying an updated curriculum, which implies a project approach with an emphasis on the formation of additional entrepreneurial competencies;
- 2) senior students (3-4 years) studying in a program that forms a standard set of management competencies.

The questionnaire includes 46 questions that characterize the level of performance in the current (2019/2020) school year in key areas of activity (education, sports, science, cultural, creative and social activities), as well as a block of questions aimed at identifying the manifestation level of a proactive model of behavior as an indicator of shaping entrepreneurial competencies of the individual.

The objectives of the survey include: analysis of students' performance in key areas of educational activity; analysis of the expression of a proactive behavioral model; identification of basic differences in the model of formed compensations among students of various courses in the management training direction.

We have implemented the survey using the Google Forms service. Respondents were 154 students of Sevastopol State University of Management and Business Analyst Department of 1-4 years of full-time education, the training direction was 38.03.02 "Management" (bachelor level).

The distribution of respondents by training courses seems proportional: 80 respondents represent 1-2 courses, 74 respondents represent 3-4 courses. However, there is some variation in the age of respondents, ranging from 1-3 years. The gender distribution is as follows: 66.7% are women, 33.3% are men.

Initially, we found that 1st and 2nd year students are very active in cultural and creative and social activities: among 1st and 2nd year students 43% of respondents systematically participate in cultural and creative activities, for 3rd and 4th year respondents this indicator was 18.98%, 86.2% of respondents are members of public organizations and 64.8% systematically participate in socially significant activities

(40.5% is for 1st and 2nd year students, 30.2% is for 3rd and 4th year students). 59.7 per cent regularly perform socially useful activities on a non-reimbursable basis. Regarding research activities, the results become more significant as students grow older. However, even in this area we should note an earlier (than traditional) start of research activities (56.57% of 3-4 year students and 40.5% of 1-2 year students have scientific publications in the current academic year). In general, 60.4% of students took part in All-Russian and international conferences in the current academic year. 25.3% of 1st-2nd year students and 15.78% of 3rd-4th year students systematically participate in sports events.

The analysis of the state of the practical component of the educational process showed that 80.5% of respondents have work experience. At the same time, the share of junior students (1-2) without experience is slightly higher than the corresponding indicator of 3-4 years students (22.8% and 15% respectively).

Students of 1-2 years (97.5%) have the highest values of indicators characterizing participation in project activities, among respondents of 3-4 years it was 38% of students. These changes have influenced the corresponding values of the indicators of participation in grant activities (46.83% of 1st-2nd year students and 13.15% of 3rd-4th year students), as well as the overall interest in the educational process (for example, 97.5% of 1st-2nd year students and 55.26% of 3rd-4th year students participated in the "Boiling Point" events of the University).

A separate block of the survey included indicators characterizing the level of entrepreneurial competencies of students. The analysis of the responses provided the following conclusions:

- 1) the vast majority of students are personally responsible for the results of their studies, regardless of the course. This position is more expressed in older students, perhaps due to age characteristics and the period when they started independent life;
- 2) in the issues of initiating events (without specifying the sphere), senior students are very active towards 1st and 2nd year students. However, the percentage of students who do not want to participate in such events is higher among senior students, suggesting a weak motivation for collective interaction.
- 3) junior students are more confident in their time management skills, with nearly 80% of students analysing their activities and time use, regardless of the course.
- 4) regardless of the course, students have shown approximately the same readiness for entrepreneurial activity, as well as for a multi-vector professional trajectory involving a combination of personal entrepreneurial activity and part-time employment as an employee.
- 5) there was a slight difference in expectations from the learning process. Junior students see a wide range of opportunities beyond the Diploma (61% and 32%), and only 7% study for the Diploma only. When analyzing the answers of 3rd-4th year students, we notice that more than a quarter of students (27%) expect only a diploma of higher education. Such priorities influence also on the interest to participate in the activities organized by the chair, institute, university, which are implemented in addition to academic activities and contribute to the development of additional competencies.
- 6) 1st-2nd year students are more aware of the impact on personal learning outcomes and see almost twice as many opportunities to influence the results of their classmates. Junior year

students demonstrate the willingness to influence the collective result through positive answers ("exactly yes" and "rather yes") in the share of 50% of the total number of participants in projects to increase the learning motivation of all students, senior students respond positively to the same question ("exactly yes" and "rather yes") only in 30% of cases.

- 7) all students, regardless of the course, have already formed a personal model of entrepreneurial competencies and are aware of their value. However, junior students are more likely to see the practical importance of developing and further applying such competencies.

6. Findings

The research results show that the implementation of the project-oriented approach in the training of specialists in the management direction increased the degree of students' proactive behavior. This fact is reflected in the desire to participate in all forms of the learning process, as well as in various extracurricular activities. This position allows the formation of entrepreneurial competencies at early stages of professional development. The data obtained from the survey confirm the effectiveness of the training approach, forms and methods.

7. Conclusion

Generally, we should note the slight difference between the entrepreneurial competencies of junior and senior students of the Department of Management and Business Analyst (especially in terms of quantitative indicators) at the moment. However, there are significant differences in the level of available intentions as well as prerequisites for the effective implementation of the entrepreneurial career path.

Further implementation of the proposed approach will make it possible to assess the performance of students in senior courses, which will provide more accurate data concerning the increase in the possession of professional competences of future entrepreneurial specialists-managers.

References

- Abdrakhmanova, A. A. (2019). Implementation of individual educational and career trajectories as a tool for developing the competitiveness in future specialists. *Economy and management: theory and practice*, 12, 59-63.
- Bacigalupo, M., Kamylylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Publication Office of the European Union.
- Bershadskeya, M. D., Serova, A. V., & Chepurensko, A. Yu. (2019). Competence-based Approach to Learning Outcomes Assessment: Russian Experience in Sociological Education. *Higher Education in Russia*, 28(2) 38-50.
- Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Harvard University.
- Chepurensko, A. (2017). How and Why Entrepreneurship Should Be Taught to Students: Polemical Notes. *Educational Studies*, 3, 250-276.
- Ergunova, O., Lizunkov, V. G., Malushko, E. Yu., Marchuk, V. I., & Ignatenko, A. Yu. (2017). Forming system of strategic innovation management at high-tech engineering enterprises. *IOP Conference Series-Materials Science and Engineering*, 177.
- Johannisson, B. (1991). University Training for Entrepreneurship: Swedish Approaches. *Entrepreneurship and Regional Development*, 3(1) 67-82.

- Korotkov, A. V., & Zobnina, M. R. (2019). *University Enterprise Ecosystem Standards: Recommendations for the Development of the Entrepreneurial Ecosystem*. HSE Publishing House.
- Klyver, K., & Schenkel, M. T. (2013). From Resource Access to Use: Exploring the Impact of Resource Combinations on Nascent Entrepreneurship. *Journal of Small Business Management*, 51(4), 539–556.
- Lizunkov, V. G., Marchuk, V. I., & Malushko, E. Yu. (2017). Economical and Managerial Competencies of Bachelors in Mechanical Engineering. *European Proceedings of Social and Behavioural Sciences*, 19, 456-463.
- Myslyakova, Y. G. (2018). Assessment of Enterprise Spirit of the Russian and Foreign Students. *Population and family policies in the context of sustainable development goals. Collection of articles of the IX Ural Demographic Forum*, 306-312.
- Rosstat, (2019). *Share of small and medium-sized enterprises in the gross domestic product of the Russian Federation*. <https://fedstat.ru/indicator/59458>
- Rubin, Y.B. (2015). Entrepreneurship education in Russia: diagnosis of the problem. *Higher education in Russia*, 11, 5–17.
- Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2), 243–263.
- Shirokova, G., Tsukanova, T., & Bogatyreva, K. (2015). University Environment and Student Entrepreneurship: The Role of Business Experience and Entrepreneurial Self-Efficacy. *Educational Studies*, 3, 171-207.
- Slipenko, V. O. (2019). Analysis of new standards of entrepreneurship education for secondary schools of the USA. *Scientific Vector of the Balkans*, 3, 2(4), 65-68.
- Suzdalova, M. A., Lizunkov, V. G., Malushko, E. Yu., Sytina, N. A., & Medvedev, V. E. (2017). Innovative Forms of Partnership in Development and Implementation of University-Business Cooperation. *The European Proceedings of Social and Behavioural Sciences EpSBS, XIX*, 450-455.
- Vlasov, A. V., Ilyin, A. B., & Nurbekov, M. K. (2018). Psychological Analysis of Specialists of the Institute for Leadership Development (National Technology Initiative): Training of Entrepreneurs of Technological Startups. *Management sciences in Russia*, 8(4), 94-103.