

FORMATION AND DEVELOPMENT OF ENTREPRENEURIAL INITIATIVE OF FUTURE MANAGERS IN THE UNIVERSITY

Milyausha K. Biktemirova¹, Anna V. Sychenkova², Alexey I. Prokopyev³,
Marina A. Zhukova⁴, Vadim A. Zhukov⁴ and Lyudmila A. Bezborodova⁵

The relevance of the paper is conditioned by the need to form the foundations of the entrepreneurial initiative of future managers, as components of professional competence which stipulate their willingness to use the potential of the external and internal environment of the enterprise in order to achieve profit. The purpose of the paper is to develop a mechanism for the formation of future managers' entrepreneurial initiative based on the adaptation of pedagogical technologies and active teaching methods. The authors developed a "matrix of initiative learning", which allows them to change the position of students in the educational and professional activities within the framework of professional training, thus contributing to the development of entrepreneurial initiative. The effectiveness of this technique is proved by the results of experimental work, in the course of which the indicators of the effectiveness of the educational and professional activities of university students were evaluated. The paper is intended for educational specialists, teachers, researchers engaged in the optimization of educational technologies in modern learning environment.

Keywords: professional education, professional training of future managers, professional competence, entrepreneurial initiative, teaching technologies, teaching methods.

INTRODUCTION

Formation of the domestic market economy began relatively recently and this transition from planned management is quite difficult, not only in the socio-economic aspect, but also in staffing the process. The priority direction of domestic economic policy is "innovation" of all spheres of activity - ideas, methods, mechanisms and their effective implementation, ensuring profit and competitiveness. Situational analysis demonstrates that the multidimensionality of emerging new ideas, the implementation of projects and inventions does not

¹ Institute of Management, Economics and Finance, Kazan (Volga region) Federal University, Kazan, Russia, *E-mail: dekanatfm@mail.ru.*

² Department of History and Public Relations, Kazan National Research Technical University named after A.N. Tupolev, Kazan, Russia.

³ Department of State and Legal Disciplines, Plekhanov Russian University of Economics, Moscow, Russia.

⁴ Department of Management in International Business and Tourism Industry, State University of Management, Moscow, Russia.

⁵ Department of Theory and Practice of Primary Education, Moscow State Pedagogical University, Moscow, Russia.

find its real “life” embodiment because of the lack of effective professional management, insufficient staffing of all levels of innovation activities’ management. This can be referred equally to industrial enterprises, as well as to scientific-technical and infrastructural organizations.

Meanwhile, higher education institutions (universities) massively train managers of various specializations that do not fully possess professionally significant qualities, and are forced either to acquire them in the course of their professional activities (essentially postponing their own career growth) or completely to change their occupation (Chernishova, 2013; Salmi, 2007; Popova, 2009; Kalimullin & Dobrotvorskaya, 2016; Sabirova & Zakirova, 2016).

Sample studies have shown that when implementing innovative management (on the example of Japan as a model for the development of high-tech and knowledge-intensive production), the manager of the top management (top manager, director) makes approximately more than 50% of innovative decisions over 5 years, while a domestic manager can do no more than 12% for the same period (Ponomarev, 2002). The precondition and incentive for a fundamentally different development of management in contemporary Russian realities is an innovative, scientifically appropriate approach that ensures optimization, fruitfulness and effectiveness of management.

Trends in the development of economic relations change approaches to management: to be efficient and an executive manager, clearly following the orders of the leadership is not enough. Russian managers should maintain the viability of their enterprise in the face of increasing market competition, maximize profits through the use of modern managerial methods, demanding the highest level of performance from each employee and the whole team through special knowledge and specific organization of work, studying, developing and implementing modern ways to manage the business, to achieve science and practice, taking into account the existing business conditions (Popova, 2011; Reznik & Savenkova, 2009; Zakirova & Shilova, 2016; Masalimova & Chibakov, 2016). Independence, individuality and creativity of the manager, manifested in initiative, development and constant search for sources of effective development of activities are necessary conditions for modern management.

One of such qualities, in our opinion, is an entrepreneurial initiative (Igoshina, 2010; Popova, 2009; Reznik & Vidgof, 2015), as a set of predictive and analytical qualities, variation thinking, flexibility and adaptability that determine the finding of such methods of development of the enterprise (or its projects and directions), the profit from which guarantees a long and stable existence of the enterprise for a sufficiently long period of time and requires professional knowledge of activities’ sphere and certain knowledge in the field of theory and practice of management of production and marketing activities.

METHODS

The solution of the task to form the entrepreneurial initiative of the future manager in the framework of professional training was carried out by the following methods: theoretical: the study and analysis of philosophical, pedagogical and psychological literature on the problems of vocational education, synthesis, analogy, generalization of research results; empirical: observation, experiment (ascertaining and forming), studying the experience of training managers in the new economic conditions, questioning, observation; statistical: mathematical processing and evaluation of experimental results.

The experimental base of the research was the Federal state budget educational institution of higher education “Tyumen State Oil and Gas University”. Experimental work was conducted in the period from 2013 to 2016. The experiment involved students studying in the training areas “Economics and Management in the Oil and Gas Mechanical engineering “; “Economics and management in the transport enterprise (pipeline)”; “Development and operation of oil and gas fields”; “Management of the organization” (totally 224 people).

The study was conducted from 2013 to 2016 in three stages:

The first stage (2013-2014): the study of the source database on the problem under study, the pedagogical experience, the definition of the topic, the purpose, the object, the subject of the study, the specification of the research tasks, the study rationale, the search and substantiation of the theoretical and methodological basis for the study, development of the methodic of Experimental work.

The second stage (2014-2016): theoretical justification and practical introduction of pedagogical methods of forming an entrepreneurial initiative of a manager, as a willingness of students to the professional activity of a manager.

The third stage (2016): systematization, comprehension, generalization of survey results, processing of the obtained data, clarification of theoretical conclusions, and determination of the prospects for researching the problem under study.

RESULTS

Selection of the forms of development and improvement of the entrepreneurial initiative as the personal quality of the future manager

Projecting the educational process, regardless of the educational technology chosen, consists of a sequence of basic technological procedures: diagnostic goal setting; transition of goals into learning objectives; projecting of educational and professional activities of students and teachers; projecting of the educational process; diagnostics; correction (according to the diagnosis, if necessary)

(Zavarykina, 2012; Levina *et al.*, 2015; Prokofieva *et al.*, 2015; Masalimova & Benin, 2016).

Today, a set of traditional didactic tools is significantly expanded due to all the various types of multimedia forms.

In the process of forming an entrepreneurial initiative, the future manager also uses a variety of modifications to the training facilities: data and knowledge bases, video tele-text, computer networks, electronic conferences, information retrieval systems, expert training systems, teleconferences, electronic bulletin boards, digital libraries, imitative Models, programming systems, learning management systems (Efimov, 2010; Ischuk, 2010; Ziel, 2011; Gorshkov, 2010; Klyuev, 2006; Mikhaylenko, 2007).

We have evaluated the advantages and disadvantages of individual forms for conducting classes with students in the framework of forming an entrepreneurial initiative.

TABLE 1: ADVANTAGES AND DISADVANTAGES OF SEPARATE FORMS OF CONDUCTING CLASSES

<i>Form of the lesson</i>	<i>Purpose of using</i>	<i>Advantages</i>	<i>Disadvantages</i>
Report	Transfer of knowledge	Time-saving, coverage of the whole group	Weak learning effect, passivity of listeners, their fast fatigue
Educational conversation	Activating of knowledge, working with content	Good academic control, more active work of students	It takes a lot of time, lecturing
Group work	Teamwork, development of communication skills	Active learning, good memorability, intensive interaction, communication correction	It takes a lot of time, intensive training of the teacher is necessary
Role-playing game	Entering into a role and a flexible change of roles, developing a strategy for solving problems	Proximity to practice, activation of students' activities	There are problems associated with the inhibition of participants, intensive training of the teacher is needed
Moderation	Full involvement of participants in the workflow and development of an action plan on the issue under discussion	Allows systematically to conduct meetings (seminars) with transparent methods	There are problems with communication processes between the participants
Training	It is aimed at obtaining knowledge, acquiring skills	Helps quickly to understand what personal qualities and occupational skills are needed and which ones to develop	Incorrectly delivered training can lead to undesirable consequences

contd. table 1

<i>Form of the lesson</i>	<i>Purpose of using</i>	<i>Advantages</i>	<i>Disadvantages</i>
Business game	The transfer of a holistic view of professional activity and its large fragments taking into account the emotional-personal perception	It helps to find solutions to complex problems by applying special rules of discussion, stimulating the creative activity of participants	It is necessary to take into account the psychological specific features of participants
Case	With the joint efforts of a group of students to analyze the situation arising in the concrete state of affairs, and to work out a practical solution	To learn to solve complex unstructured problems that cannot be solved analytically	Forms a stereotyped, prejudiced approach to solving similar problems, and the student will not be able to rise to a higher level of generalization

In our aspect, the primary forms will be: role play (Golub, 2007), business game, moderation and case method at different levels (courses) of training. Methods of forming an entrepreneurial initiative are based, mainly, in a dialogue that involves a free exchange of views on ways to resolve a particular problem (Ginkel, 2008; Lazarev, 2012; Popova, 2005). The use of such methods is conditioned by the new tasks arising in the learning process, which means not only to give students knowledge, but also to ensure the formation and development of cognitive interests and abilities of creative thinking, abilities and skills of mental labor.

Designing a matrix of “initiative learning” in order to form an entrepreneurial initiative of future managers

The formation of an entrepreneurial initiative as a professional feature of a personality requires from the pedagogical organization of educational and professional activities of the following qualities:

- encouraging all students to be proactive, creative and active in the process of any cognitive activity;
- formation of productive communication skills;
- development of the ability to argue their point of view, clearly articulate and clearly state their thoughts;
- the development of the ability to analyze complex situations, the causes of their occurrence, identify the main and secondary, find ways and means of solving, etc.

We propose to lay the matrix of “initiative learning” based on the cyclic repetition of the following processes: reflexive-analytical, active-applied, actively-reflexive, reflexive-applied, as the basis for forming an entrepreneurial initiative. We believe that the multiple cyclic repetition of precisely this sequence of

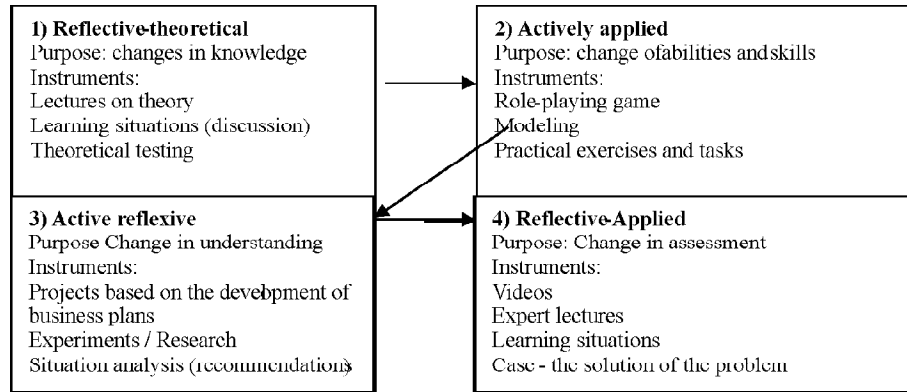


Figure 1: Matrix of initiative learning

processes will ensure, at each stage of training, the increment of professional competences and their acceptance as personality traits and the basis of professional behavior.

The matrix is built on the basis of two criteria: the degree of concretization (theory or applied field) and the way of students' participation and involvement in the process in the formation of professional competence (active and reflective).

The results of the psychological and pedagogical experiment on the formation of the entrepreneurial initiative of future managers

Within the framework of our psychological and pedagogical experiment, we have identified the categories of entrepreneurial initiative that allow us collectively to assess the level of its formation: physical and mental activity, freedom of self-expression, enterprise and resourcefulness, communicative ability to represent the project and the result of activities. An important factor is knowledge about the sphere of activity in question (design, entrepreneurship). Evaluation of the level of formation of entrepreneurial initiative, we suggest to conduct in the context of solving situational problems from the professional field on one of three levels - high, average, low (table 2).

We conducted a study in which training was specially organized for the experimental groups (based on the initiative learning matrix) within the framework of a variation course "Entrepreneurship". The control group studied the same subject without changes in the organization of the educational process. Comparison was made between the results of the decision of cognitive testing, control work and situational educational and professional tasks aimed at testing the entrepreneurial initiative, the students of the control group (113 people) with the experimental group (111 people) (Figure 2).

TABLE 2: CRITERIAL ASSESSMENT OF THE FORMATION OF ENTREPRENEURIAL INITIATIVE OF FUTURE MANAGERS

<i>Form of valuation means</i>	<i>Description of the evaluation procedure</i>	<i>The result was not achieved (less than 60 points)</i>	<i>The result is low (60-75 points)</i>	<i>The result is average (80-89 points)</i>	<i>The result is high (90-100 points)</i>
<i>Test (consists of 20 tasks)</i>	<i>The correctness of the tasks' performance is assessed.</i>	Less than 70% of absolutely correctly performed tasks	70-75% of absolutely correctly performed tasks	75-89% of absolutely correctly performed tasks	90-100% of absolutely correctly performed tasks
<i>Test work (consists of 5 tasks)</i>	<i>The correctness of the tasks' performance is assessed.</i>	Less than 3 absolutely correctly executed tasks	3 absolutely correctly performed tasks	4 absolutely correctly performed tasks	5 absolutely correctly performed tasks
<i>Situational problem (one situational problem, consisting of 3 stages)</i>	<i>The accuracy of the stages of the situational task is estimated.</i>	Less than one absolutely correctly performed stage of the situational task	1 absolutely correctly performed stage of the situational task	2 absolutely correctly performed stages of a situational task	3 absolutely correctly performed stages of a situational task

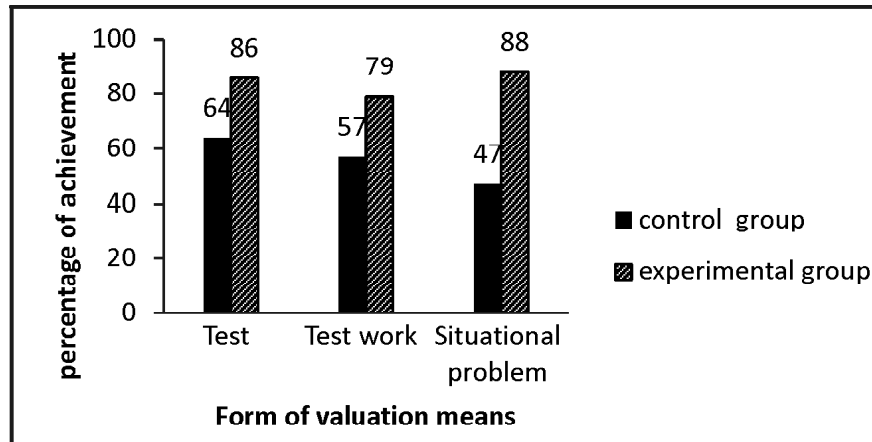


Figure 2: Analysis of the formation of entrepreneurial initiative among students of the control and experimental groups

From the presented statistic data it is evident that the level of entrepreneurial initiative among the students of the experimental group is much higher, which indicates the effectiveness of the initiative learning matrix offered by the authors, the formation of their actualized quality - entrepreneurial initiative and professional and general professional competences in general.

Based on the results of the experimental work, we calculated the statistical significance of the difference in the results at different stages of the experiment using Student's t-test. The performed calculations confirmed the assumption of a significant change in the levels at the forming stage for all indices of the formation of the components of university students' entrepreneurial initiative ($p < 0.05$).

DISCUSSIONS

In modern conditions, there is an acute need for skilled managers who manage the production of goods or services. This issue becomes especially relevant in connection with the need to create and implement innovations that optimize or completely change the production process based on new techniques and technologies. Thus, the level of development not only of an enterprise, a separate industry, but the economy of the whole country, largely depends on the professionalism of managers (Gorshkova, 2012; Perfilieva, 2010).

The significant gap between the theoretical and practical training, the requirements of the employer to the abilities of graduates of universities - managers to solve production issues, high turbulence of the socio-economic environment determines the problem of inadequate practical training of production managers, which in the future will affect not only the productivity of the enterprise, but also the economic level of the whole country.

The need to prepare a future manager for entrepreneurial activity, involving his high professional activity, continuous monitoring of the market, the creation of his own mechanisms for the implementation of innovations stems from the need for mastering and willingness to apply the fundamentals of management theory and process organization, management and marketing in professional activity, and is an objective law, which meets the challenges of transforming the modern society, professional activity, organizational and creative development of the individual, the priority of the ability and willingness for activity in a market economy.

CONCLUSION

From the experimental work carried out, the following conclusions can be drawn:

- 1) the accentuation of the concept “entrepreneurial initiative”, its definition as a property of a personality, manifested through the totality of components (physical and mental activity, freedom of self-expression, enterprise and resourcefulness, communicative ability to represent the project and the result of activities) contribute to the development of professionally significant personal qualities
- 2) the study of the variation course introduced into it as a “learning initiative matrix”, based on active teaching methods and specific forms of reflection, contributed to students’ awareness of the importance of training, its professionalization, and increased motivation for learning activity;
- 3) the methodology of professional training of managers is complemented by innovative forms of implementation of the educational process;
- 4) the formation of an entrepreneurial initiative is a sufficiently effective condition for students’ training - future managers on the basis of a competence approach;
- 5) the results of the formative experiment showed the productivity of the developed system of criteria, positive changes were made for each of them in the process of the teacher’s work with the students.

References

- Chernishova, E.R. (2013). ‘Methodological approaches to the assessment of the human resources potential of higher education institutions’. *Alma Mater*, 1: 42-48.
- Efimov, V.S. (2010). ‘Higher education in Russia: the challenges of the 21st century’. *Journal of University Management: Practice and Analysis*, 4: 6-17.
- Ginkel, G. (2008). ‘University in the 21st century: challenges, challenges, opportunities, management’. *Alma Mater*, 1: 41-49.
- Golub, G.B. (2007). ‘The paradigm of actual education’. *Issues of education*, 2: 20-42.
- Gorshkov, M.K. (2010). *Modernization of Russian education: problems and prospects*. Moscow: Center of social forecasting and marketing.

- Gorshkova, O.V. (2012). 'Management of the human resources potential of the entrepreneurial university: new competencies'. *Journal of University Management: Practice and Analysis*, 4: 57-63.
- Ischuk, T.L. (2010). 'Transformation of the content of higher education in the knowledge economy'. *Economics of Education*, 5: 5-18.
- Kalimullin, A.M. & Dobrotvorskaya, S.G. (2016). 'Higher Education Marketing Strategies Based on Factors Impacting the Enrollees' Choice of a University and an Academic Program'. *International Journal of Environmental and Science Education*, 11(13): 6025-6040.
- Klyuev, A.K. (2006). *Institutional management in universities: reader on modern problems of organization of university activities*. Ekaterinburg: publishing house Ural University.
- Lazarev, G.I. (2012). 'Effective management of the university: stages, key areas and prospects'. *University management: practice and analysis*, 4: 8-15.
- Levina, E.Y., Saglam, F.A., Skorobogatova, A.I., Shaikhislamov, A.K., Fayzullina, A.R., Sagitova, V.R. (2015). 'Quality control optimization of university students training'. *Asian Social Science*, 2(11): 296-300.
- Masalimova, A.R. & Benin, V.L. (2016). 'Conflict Humanitarian and Natural Knowledge: the Way to Exit From It'. *International Journal of Environmental and Science Education*, 11(13): 5993-6001.
- Masalimova, A.R. & Chibakov, A.S. (2016). 'Experimental Analytical Model of Conditions and Quality Control of Vocational Training of Workers and Specialists'. *IEJME-Mathematics Education*, 11(6): 1796-1808.
- Mikhaylenko, T.V. (2007). 'Model of development of entrepreneurial thinking in the process of training managers'. *Scientific notes University named after Lesgaft*, 3 (25): 48-51.
- Perfilieva, O.V. (2010). 'The role of universities in regional development'. *Bulletin of International Organizations*, 3: 11-20.
- Ponomarev, I. P. (2002). 'Feature learning Text'. *Management in Russia and abroad*, 5: 130-139.
- Popova, A.A. (2005). 'Formation and assessment of business success'. *Sports training, rehabilitative medicine, education, legal and economic aspects of physical culture and sport: collector of theoretical transactions of young scientists*, 4:101-102.
- Popova, A.A. (2009). *Formation and assessment of business success of sport and health-improving business-type organization: a tutorial*. Chelyabinsk : UrSU of Ph.C.
- Popova, A.A. (2011). 'Formation of an installation for the business success of future managers in the educational process of the physical culture university'. *Pedagogical-psychological and medico-biological problems of physical culture and sports*, 4 (21): 97-102.
- Popova, I.P. (2009). 'Professions and professionalism in the international discussion'. *Sociological research*, 8: 52-57.
- Prokofieva, E.N., Leyfa, I.I., Demyanenko, M.A., Ibraeva, G.R., Akhmetov, L.G., Maksimov, I.N., Marfina, L.V., Kamashева, Y.L. (2015). 'Pedagogical diagnostics of professional and cultural competences of university students'. *Review of European Studies*, (7): 161-167.
- Reznik, G.A, Savenkova, Yu.S. (2009). 'Formation of the loyalty program as a factor of the university's competitiveness'. *Problems of theory and practice of management*, 2: 83-92.

- Reznik, S.D, Igoshina, I.A. (2010). *Student of the university: technology of study and professional career*. Moscow: Infra magazine.
- Sabirova, E.G. & Zakirova, V.G. (2016). 'Formation of Mathematical Terminology in Junior School Children'. *IEJME-Mathematics Education*, 11(6): 1787-1795.
- Salmi, D. (2007). 'Russian universities compete in world class universities'. *Issues of education*, 3: 5-45.
- Vidgof, B.E. (2015). Comprehensive approach to the formation and assessment of business success. *Development of economic thinking : transactions of exit theoretical and practical conference*. New-York-Chelyabinsk : UrSA of Ph.
- Zakirova, V.G. & Shilova, Z.V. (2016). 'Integrative Connection of Mathematics and Economics'. *IEJME-Mathematics Education*, 11(8): 3021-3036.
- Zavarykina, L.V. (2012). 'Comparative analysis of international methodologies for ranking higher education institutions'. *Bulletin of International Organizations*, 1: 70-121.
- Ziel, N. (2011). 'Reforms of higher education in Europe on the example of the University of Freiburg'. *Issues of education*, 1: 114-124.