Modern Managers Training in the Context of Competence Approach

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Abstract
Despite the allocation of entrepreneurial competencies in a separate area of emerging professional competencies in the third generation in the Federal State Educational Standards (FSES), which should be mastered by future managers, this is not enough to prepare an effective manager. According to the results of the study, a model of formation of innovative and entrepreneurial competence of future managers including interrelated blocks of target, content-activity, technological, and evaluation-effective was made. It was concluded that in the context of modernization and restructuring of Russian professional education, the problem of training professional managers, associated with the legacy of traditional training of managers in the planned economy had become acute.

Keywords: Innovation and entrepreneurial competence; Professional training; Professional competence; Innovative economy; Criteria of innovation and entrepreneurial competence formation.

1. Introduction
According to experts in the field of management, a kind of “managerial revolution” should be implemented in the coming years, which is one of the most important prerequisites for Russia’s transition into economic growth and assuming that “human factor” and high professionalism of managers will be the main directions on the way to social and economic development of this country (Eliseeva, 2017). Training new groups of managers with economic thinking, mobility, and ability to carry out professional activities effectively, which is based on the sufficient level of formation of the innovative-entrepreneurial competence (IEC), is also becoming an integral task of modern professional education. In this regard, there is a need for the state to solve the problem of management education, which is reflected in the requirements for the content of education, fixed in the law of the Russian Federation “On education in the Russian Federation”, in the report “Russian education 2020: Model of education for the economy based on knowledge”, in the strategic objectives of the national doctrine of education development of the Russian Federation (up to 2025) and other legislative and regulatory documents (Pozharskaya and Deberdeeva, 2017; Sergeeva et al., 2018a; Sergeeva et al., 2018b).

Managers should have innovative thinking, professional mobility, resourcefulness, and ability to develop and continue self-improvement, and also be able to create innovative business projects that are competitive and in demand in the market conditions (Tatarinceva et al., 2018c).

Management education in Russia, being an intensively developing sector of the educational services market, also offers various training programs for managers, whose quality does not meet the needs of the society for the training of professional managers, so western experience is often implemented at the level of external attributes without analyzing its essential characteristics, there is, as a rule, “copying” of samples of professional activity and ready-made knowledge of a theoretical nature, detached from real management practice (Neverkovich et al., 2018). Professional training of managers at university should be transferred to a new level which requires the effectiveness...
of the process of innovative and entrepreneurial competence formation of future managers, ensuring productive professional activity.

2. Research Method

Most researchers are of the opinion that professional training of managers is a process aimed at the systematic development of theoretical knowledge, development of skills and practical activities, allowing the young specialist to adapt to the workplace and build a professional career in accordance with their needs and objectives (Bocharova and Rymanov, 2017).

The study of the problems of formation of professional competence of future managers as well as analysis of recent dissertation research have revealed lack of reasonable technologies and pedagogical conditions for effective formation of innovative and entrepreneurial competence of future managers during their studies at university.

Based on the analysis of modern psychological and pedagogical literature and advanced pedagogical practice, the following contradictions were identified and formulated (Sergeeva and Trubakova, 2017):

- At social and pedagogical level - between the increased and constantly changing requirements for the training of future managers, which makes a dynamic labor market, and the dominance in the teaching practice of professional training of priority learning theoretical knowledge, not consider the formed innovative and entrepreneurial competence of future managers as a result of training at university;
- At scientific and theoretical level - between the need for theoretical justification of the process of formation of innovative and entrepreneurial competence of future managers through implementation of pedagogical conditions for effective training of professional managers and serious differences in methodological and theoretical approaches to the essential characteristics of these conditions;
- At the scientific and methodological level - between the need to activate the process of formation of innovative and entrepreneurial competence of future managers with constant monitoring of their professional training success and lack of methods, technologies, as well as methodological support of the educational process aimed at the formation of innovative and entrepreneurial competence of future managers (Babichev, 2017).

The present research was based on the following scientific approaches (Anisimova, 2017; Enygin et al., 2017):

- System approach considering the personality of the student as an object of life, able to determine goals, set objectives and solve them, and achieve a positive result;
- Activity approach that allows carrying out the training and development of student’s personality through the simulation of future professional activity in the educational process;
- Competence-based approach, involving the development of the ability to master theoretical knowledge and their subsequent application in the process of professional competencies formation.

The theoretical basis of the study was as follows (Milovanov et al., 2017): the concept of continuous education; work on the reform and modernization of professional education; modeling and design of content and pedagogical technologies in the educational process; and research on updating the learning process in the national higher school.

In the course of this study, such groups of methods were used as (Ju et al., 2017): theoretical (study and analysis of psychological and pedagogical, economic, reference and encyclopedic, scientific and methodological literature on the problem under study; comparative analysis; and theoretical modeling); empirical (pedagogical observation, conversation, questioning, study and generalization of pedagogical experience, and ascertaining and forming experiments); statistical (arithmetic mean value and Mann-Whitney U-criterion).

3. Research Results

Analysis of the reasons for the development of a model for training managers in the United States and the designation of contemporary trends in the training of American managers, identified by Sukhinenko, revealed the following features of the American system of management training: professional training of managers as education for a career; the concept of the “professional manager”; the orientation of business schools to the specific requests of consumers of educational services; presence in the training of managers of equal academic and practical components (Badakhova, 2017; Wang et al., 2017).

The features of Russian management education are: prevalence of the classical model of higher education until recently, which does not take the needs of future managers and organizations experiencing a lack of managerial personnel into account; lack of specialization in the training of managers; need to develop models of modern professional manager; development of Russian MBA master’s degree programs; transition from the concept of “education for the whole life” to the concept of “education through the whole life”; transformation of management education into the main way of building and developing a professional career of a future manager; implementation of technologies of “training through reflective experience and actions”; development of Federal State Educational Standards of Higher Education of the fourth generation; development of professional standards taking the requirements of employers into account.

The solution of the problem of training professional managers in Russia in innovative economy is possible at the organization of the professional training process on the formation of innovative and entrepreneurial competence of future managers, by which the integral qualitative and professional characteristics of the individual are realized, including innovative and entrepreneurial competence, forming economically significant qualities of the individual (initiative, mobility, entrepreneurship, independence in making rational decisions, and perception of innovation) and reflecting the willingness and ability to carry out professional activities in various sectors of the economy through
building their professional career, taking the ability to identify new elements in stability and make reasonable, promising decisions in situations of risk and uncertainty into account (Sergeeva et al., 2018c).

The innovative and entrepreneurial competence was also considered as an open system of knowledge, skills, activities, experience of practical management activities, and personal responsibility, which is activated and replenished in the process of professional activity as real management problems arise, those a graduate of a professional educational organization faces (Sergeyeva et al., 2018).

The analysis of the classification of competencies on various foundations (the context of the tasks; general cultural and professional; the level of competence distribution: corporate, managerial, professional; level of development: threshold, differentiating; the essence and content: cognitive, personal, functional, social, etc.) allows developing the structure of innovative and entrepreneurial competence of students, including the following innovative and entrepreneurial competence (Sukhodimtseva et al., 2018):

- Basic - main economic and management knowledge required to adapt to professional activities in market conditions;
- Professional - presence of the ability to apply economic and managerial knowledge in practice, the ability to assess new management situations and make effective management decisions on them;
- Additional - ability of creative management behavior, effective behavior in the labor market, continuous professional self-education, etc.

4. Consideration

As a result of the study, the criteria for the formation of future managers’ IEC were identified: value and positional (stimulation of the future manager to the development of innovative and entrepreneurial position), cognitive (availability of necessary knowledge in the field of their own professional activities), professionally important qualities (professional intuition, triggered in critical situations), subject (level of self-assessment, the degree of criticality in assessing the results of their activities, confidence in success, in their own abilities, the ability to analyze their behavior in the event of conflict) and creative activity (behavior when looking for a way out of difficult innovation and business situations, rethinking the style of management of their actions in the innovation and business context).

The technology of formation of innovative and entrepreneurial competence of future managers included the following stages (Tatarinceva et al., 2018a):

Motivational and value stage is aimed at forming the attitude to the future professional and managerial activity as personal and social value; students’ awareness of the importance of the personal qualities formation of an economically competent specialist; as well as formation of the need for professional and managerial personal growth. At this stage, the main emphasis is placed on the development of students’ basic innovative and entrepreneurial competencies;

Cognitive-activity stage provides mastering the appropriate amount of economic and managerial knowledge, skills, activities and professional-managerial functions of a specialist and development of the ability to solve management problems at the level of innovation and creativity by students. At this stage, the main efforts are focused on improving the students’ basic innovation and entrepreneurial competencies and development of professional innovation and entrepreneurial competencies;

Reflective-transforming stage is focused on self-regulation of rational management behavior and management activities; students’ awareness and evaluation of their educational and professional management actions; actualization of economically significant qualities of the individual; and development of the ability to design their professional and management development. At this stage, there is a final formation of basic and professional innovation and entrepreneurial competencies, and also additional innovation and entrepreneurial competencies receive their development.

At the ascertaining stage of verification, a zero cross-section of the formation of innovative and entrepreneurial competence of future managers with the involvement of 54 students without division into expert and control groups was carried out. The results of the cross-section showed a predominance of low level of formation of IEC. As a result, the directions of increasing the efficiency of formation of innovative and entrepreneurial competence of students using the technology developed by authors were determined (Tatarinceva et al., 2018b).

During the formative stage of the experiment (2011-2013), 103 students of Shadrinsky State Pedagogical Institute were recruited, which were divided into 4 experimental groups and 1 control group:

Pedagogical condition - the introduction of a special course of “venture entrepreneurship” as an intensifying effect on the formation of IEC future managers;
- In the second experimental group (EG-2), the second pedagogical condition was tested - the introduction of a complex of reflexive and pedagogical techniques as an intensifying effect on the IEC formation;
- In the third experimental group (EG-3), the third pedagogical condition was tested - the creation of motivational and value, emotional and stimulating background of the process of IEC formation of future managers;
- In the fourth experimental group (EG-4), the set of all pedagogical conditions of IEC formation was checked.

The control group (CG) was trained using traditional methods and methods of IEC formation.

The obtained results revealed that IEC criteria levels of the students of all experimental groups of EG as a whole increased compared to the control group. But for future managers, students of the experimental group with a low level of criteria for the components of IEC formation remained large enough (from 7.4 to 16%). The worst result was a cognitive criterion and not all students (up to 16%) could successfully implement the theoretical thesis in practice.
The comparison of the IEC formation using the Mann-Whitney U-criterion showed no statistically significant differences between the CG and the experimental groups 1, 2 and 3 at the intermediate cross-section of the forming stage. This indicated a lack of effect of the use of a single pedagogical condition. Significant differences only had EG-4 compared to CG, which indicated a positive effect of the use of a set of pedagogical conditions of IEC formation; as well, the amount of students of EG-4 with low levels of innovative and entrepreneurial competence formation, decreased by 20%.

The results of the forming stage showed that the use of one of any pedagogical conditions was not effective enough in the IEC formation, so later in the final experiment in the experimental groups; a set of pedagogical conditions was used.

The final stage of the experiment (2014-2015) was further conducted at the Shadrinsky State Pedagogical Institute. A total number of 52 students took part in the experiment, who were divided into control (25 people) and experimental (27 people) groups.

The study revealed that the level of all criteria in the EG improved significantly compared to the control group. Given all IEC formation criteria, the calculated Mann-Whitney U-criterion was reported less than the tabular one, which showed the presence of statistically significant differences between the mean values in EG and CG.

The dynamics of changes in the formation of innovative and entrepreneurial competence of students was presented in Table 1 and Figure 1.

| Levels of IEC formation | Ascertaining stage | Forming stage | Final stage |
|-------------------------|--------------------|---------------|-------------|
|                         | EG-4 | CG | EG-4 | CG | EG-4 | CG |
| Low                     | 28.6 | 6.7 | 26.5 | 23.1 |
| Average                 | 44.9 | 50 | 44.9 | 55.6 |
| High                    | 26.5 | 43.3 | 28.6 | 44.4 |

Comparison of values of IEC formation at the final stage between EG and CG using Mann-Whitney U-criterion indicated the presence of statistical significance of differences between the two samples:

\[ U_{calc} < U_{tab}, \text{ where } U_{calc} = 183, U_{tab} = 211. \] (1)

At the ascertaining stage of the experiment, a significant number of students had a low level of formation of students’ IEC (up to 28.6%). The low level of IEC formation in CG at the ascertaining stage of the experiment also remained quite large (up to 23.1%). The changes compared to the ascertaining stage were 5.5%, which was within the statistical error for the present sample. As a result of application of the offered technology at the final stage in experimental group, there was no student with the low level of IEC formation (Figure 1).

Thus, in the course of the experimental work, it was established that the process of forming the innovative and entrepreneurial competence of future managers will be most effective in the implementation of the developed technology and pedagogical conditions aimed at training a competitive professional manager in demand in the managerial work market.
5. Conclusion

In the context of modernization and restructuring of Russian professional education, the problem of training professional managers associated with the legacy of traditional training of managers in the planned economy has become acute. Despite the allocation of entrepreneurial competencies in a separate area of emerging professional competencies in the third generation of Federal State Educational Standards (FSES), which should be mastered by future managers, this is not enough to prepare an effective manager. So, the solution of the problem of training professional managers in Russia in innovative economy is possible through the formation of innovative and entrepreneurial competence of future managers. The pedagogical conditions for the formation of innovative and entrepreneurial competence of future managers are also determined by the content and requirements of the third generation of FSES.

The developed criteria and indicators of formation of innovative and entrepreneurial competence of future managers (value-positional; cognitive; professionally important qualities; subjective; creative activity) formed the basis of intermediate and control cross-sections, conducted to determine the effectiveness of the developed and implemented in the professional training practice the pedagogical conditions of IEC formation of future managers. The results of the intermediate cross-section further confirmed the advantage of the introduction of a set of pedagogical conditions in the IEC formation of future managers; the results of the control cross-section also recorded a positive trend in all experimental groups; there were minor changes in CG.

Prospects for further research problems development were associated with the consideration of this issue in terms of the methodology of adaptation and socialization of graduates in rapidly changing social and economic conditions.

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