Innovative Entrepreneurship in Education: A New Look in the Students Training Content and Existing Problems


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ABSTRACT

This article is aimed at scientific and methodological justification of students’ training content to innovative entrepreneurship. The leading method in the study of this problem is the analysis of students’ innovative entrepreneurship learning experience in Russian universities, which reveals the predominance of the traditional approach in the content of students’ training, as well as unwillingness of the teaching staff and students to innovate. The article identified the necessary competences in the field of innovative entrepreneurship (professional, business, functional, social and communicative), as well as entrepreneurial qualities (integrity, credibility, intelligence, presence of imagination, ability to make decision, ability to organize control, to provide justification of decisions); the methodology of students’ gradual of entrepreneurial competences is developed; factors blocking the effectiveness of the students’ entrepreneurial competences’ formation are revealed.

Keywords: Innovative-entrepreneurial Competences, Students, Content of Training, Methodology

JEL Classifications: A12, H11, I21, I28

1. INTRODUCTION

The task of production and services competitiveness ensuring in our country makes it necessary fully develop the civilized business, able to give the flexibility and dynamism to the domestic economy. The most important criteria to determine the efficiency of business activities, is the willingness of an individual to carry out such activities in today’s complex, rapidly changing socio-economic environment, social responsibility of the entrepreneur, the high level of entrepreneurial culture (Vasilev et al., 2001; Urukov, 2005; Ivanov et al., 2001; Khairullina et al., 2016; Komelina et al., 2016; Zakirova et al., 2016). However, modern Russian entrepreneurs in many positions do not meet the requirements necessary for the conduct of civilized business, which is based on adherence of the established by professional community ethic of entrepreneurship, respect for law, awareness of the social nature of entrepreneurship as a phenomenon.

In the Concept of Socio-economic Development of Russia Until 2020 (2015) the priority development of the education system is training of the innovation economy. The transformation of scientific and technological developments in the goods can be provided by professionally trained experts in the field of innovative entrepreneurship, owning the competencies of commercialization of innovations, technology audit, intellectual property management, project financing and management of innovative projects (Strategy of Innovative Development of the Russian Federation for the Period up to 2020, 2011).
To date, the development of educational-curricula documentation, methodical support of the educational process in teach innovative entrepreneurship and their implementation are priority tasks for the vocational education system (Gatiyatullin, 2008; Ivanov et al., 2011; Zaitseva, 2011; Priymak et al., 2014, 2015; Alekseeva et al., 2015).

2. LITERATURE REVIEW

2.1. The Concept “Entrepreneurship”
As a result of the literature analysis a wide range of the concept “entrepreneurship” is revealed. Researchers define “entrepreneurship” as: Activities aimed at profits’ maximizing; the initiative of entrepreneurs, which consists in the production of goods and services the result of which is profit; the process of organizational innovations; a direct function of the implementation of property; action to increase capital and to develop production; specific activity aimed at a relentless search for changes in existing life forms of enterprises and society, continues implementation of these changes; as a style of management; as the process of organization and implementation of activities in the market conditions; as the interaction of market participants, etc. (Asaul, 2004).

Entrepreneurship as a process consists of four stages: Formulation of new ideas, activities’ direction and its evaluation; development of the business plan; mobilization of necessary resources; enterprise management (Gatiyatullin, 2009; Irismetov et al., 2013; Ilragimov et al., 2015; Tararina et al., 2015).

Entrepreneurship as the activity implements a number of functions:
• Social function (every citizen can show his or her individual talent, showing economic activity as a form of existence of a free person).
• Creative function (entrepreneur creates new material and non-material benefits and vacant jobs for society).
• Organizational function (the entrepreneur directly organizes the production, identifies the strategy and tactics of the company’s development, resolves management problems, minimizing business risk).
• Function of an innovator (entrepreneur carries out activities aimed at the search for innovations for introducing latest technology). An innovative function of business for our study is of particular interest and involves activities aimed at the search for innovations for introducing latest technology to be competitive.

2.2. The Concept “Innovation”
Initially, the term “innovation” was used to define new technical devices, which had no counterpart, but today the term is used much more widely, including innovations’ identification in social life (Volynkina, 2005).

In the concept until 2020 the notion of innovation is seen as “new good’s or service’s bringing to market, the implementation of a new production process, the development of new business models, creation of new markets” (Strategy of Innovative Development of the Russian Federation for the period up to 2020, 2011).

In the Russian sociological encyclopedia innovations are interpreted as phenomena of culture, which are absent at the earlier stages of its development, which appear at this stage and get in it recognition (“are socialized”); are entrenched (are fixed) in a symbolic form and (or) in activities by changing the ways, mechanisms, results, contents of the activities themselves (Osipov, 1998).

In the concept of Schumpeter it is emphasized the innovative nature of entrepreneurial activities aimed not only to choose from the available alternatives of resources distribution, but also on creating of new market opportunities (Schumpeter, 1982).

2.3. The Essence of Innovative Entrepreneurship
An innovative entrepreneur is a mobilizer of resources, recognizing and using favorable market opportunities, implementation of which requires significantly more resources than are at his disposal at the moment (Stevenson and Spence, 2011).

Sharov (2009) defines the innovative entrepreneurship as a special innovative process of creating something new, the process of management, which is based on the search for new ideas.

3. RESULTS

3.1. The Necessary Competencies in the Field of Innovative Entrepreneurship
It has been established that the conversion of intellectual goods into effectively acting business requires a whole range of business skills.

Professional competencies involve the understanding of the nature of the innovation and characteristics of innovation processes, the importance of the development of national innovation systems as the main factor to increase the competitiveness of national economies, of Russia’s policy in the field of science and core technologies’ support; understanding of innovation’s role as the main factor for companies’ value creation; knowledge of the theoretical foundations, models and methods of innovation management and marketing; knowledge of the legal foundations of intellectual property.

Business competence means the knowledge of market laws; ability to analyze possibilities of innovations’ application; ability to identify, select and summarize information required for the analysis; the ability to form a strategy of innovations’ commercialization, to apply a wide range of instruments for innovations’ financing, to promote the development on the market, negotiate; knowledge of methods of project management and business planning; possessing of skills to use information technologies, design contracts, including foreign economic contracts; foreign languages skills.

Functional competence is the ability to form a team; ability to work effectively in groups; ability to work in conditions of information overload (with large amounts of unstructured information); being initiative, commitment, stress resistant,
mobile; possession of systems thinking; openness to the new; availability of communication skills; the ability to highlight key points and priorities; the ability to represent the results of the work and keep the audience’s attention.

Socio-communicative competence is the innovative worldview; belief in success; the ability to listen; ability to eliminate conflicts; understanding of cross-cultural differences).

Among entrepreneurial qualities (integrity, credibility, intelligence, imagination, the ability to make decision, ability to organize control, to provide justification of decisions) as the main ones the researchers highlight the integrative, combining the competences of different professions: Marketing, economist - analyst, accountant, tax consultant and lawyer for the organization, competent management and business development (Gatiyatullin, 2009).

In the research process within the individual topics the state of innovative entrepreneurship training is identified in the conditions of building educational cluster; in technical and technological education (University-enterprise); in the integration of science, education and manufacture; service sphere’s specialists in the system of vocational and higher professional education.

3.2. Experience of Innovative Entrepreneurship Teaching in Terms of Building Educational Cluster

Building scientific-educational cluster, the leading element of which is the Kazan architectural and building University, is represented by educational institutions of different educational levels.

Training of preschool and school children is organized on the basis of children’s architectural school “Dashka” and in preparatory courses. Primary and vocational education is received by students in lyceums and colleges that are parts of building an education cluster. Higher and additional professional education students and workers of the construction industry receive at the University. Higher architectural education in combination with additional economic, legal, psychological and pedagogical disciplines, its practical orientation serve as subject basis of students’ entrepreneurial skills’ formation. Innovative entrepreneurship training in the University is implemented through the content of all subjects of the curriculum (modular training curricula and modular courses). The student receives education in his specialty and at the same time is steadily acquiring the qualification and competence level of entrepreneurial activity in the profession of a builder.

In the specialty “water supply and sanitation” are involved disciplines that contribute to the formation of readiness to entrepreneurial activity: “Pedagogy and psychology,” “psychological bases of collective’s life activities,” “jurisprudence,” “legal bases of building activity,” “sociology,” “philosophy,” “logical and methodological bases of scientific-technical activities,” “project business,” “economy,” “reforming of ownership and economic security of the country,” “Organization, management and planning in building,” “examination of projects,” “economics of enterprises” property of water supply and sanitation,” “economy of industry,” “basics of business,” “organization of entrepreneurial activity at the enterprises of water supply and sanitation” on specialty “heat and ventilation,” there is a special course on “marketing of systems of heat and ventilation.”

In the training process methods to enhance the students’ learning for entrepreneurial activities are used: Case studies, business games.

3.3. Methodology of Students’ Entrepreneurial Competences’ Formation

The methodology of gradual formation of students’ entrepreneurial competences on road transport occupation is developed:

The first stage - The general human and natural scientific training, forming the world outlook of professionals and entrepreneurs.

The second stage - The general professional training, aimed at competencies’ creating. The main task is the acquisition of knowledge and understanding of future business activities from the perspective of system-professional relationship developing between people at the level of “man-production technology,” “man-enterprise,” “man-state,” “enterprise-state.”

The third stage - Specific professional and economic knowledge of the business activities, formed in the theory study of the road transport production (transport construction in the whole) in the part of special disciplines and specializations, as well as training courses.

The fourth stage - The rules of “business game” in the study of legal disciplines, disciplines of planning and management of the economy.

The fifth stage - Special courses, forming special skills and entrepreneurial thinking stereotype (general management, including the theory of organization, development of management solutions, planning in management activities, systems’ and road sector management models study, PR-functions in the field of road transport, etc.).

The sixth stage - The development of students’ cognitive abilities, focus on specific pieces of business activities and development of certain skills (modeling, design, graduation projects) during the production practices (Gatiyatullin, 2009).

3.4. The Study Results

The experimental results show: Students note the relevance of innovative entrepreneurship training; according to the majority of students (77%) it contributes to the development of new building technologies and an increase in the number of vacant jobs. To be engaged in entrepreneurial activity is planned by 62.4% of the students, 38.1% of them are going to start their own business. 54.2% of respondents believe that they can implement their plans in reality; 40.8% of students consider that for the organization of business professional and economic competencies are important.
The high level of their readiness for entrepreneurial activities was indicated only by 3% of respondents, 44% of students believe that their preparedness for entrepreneurial activities does not exceed the average level, and none of the respondents consider themselves unprepared for the business activities. According to the majority of respondents (62.5%) it is very important to have knowledge and skills of operating in construction machinery and technology, 81.4% of respondents indicate the importance of business activities organization skills.

The importance of future entrepreneurs’ moral and ethical qualities’ formation is indicated by 28% of respondents. According to the basic qualities of the entrepreneur it is revealed: 75.9% of respondents indicate the ability to take risks, 42% - for decency, 32% - for honesty. As a core value - “A culture of a customer service in the building,” - is noted by the majority of respondents (74.7%), but the quality of construction works is selected only by 39.3% of the respondents.

4. DISCUSSIONS

According to the analysis of the experience of innovative entrepreneurship learning in the Russian educational institutions problems of innovative entrepreneurship teaching in the system of continuous professional education are revealed:

- There is no concept of advanced training of specialists for innovative entrepreneurship.

- There is a in the organization of psychological events (lectures, practical sessions and training) aimed at improving of the general psychological knowledge, developing students’ communication skills in the business environment.

- There is a need to develop innovative educational curricula: Adequately reflecting the current state and characteristics of the market economy; with a clear practical orientation of students’ training with the content, objectives and conditions of organization and doing business; providing a combination of formal and informal education by minimizing the formal restrictions, the research approach to understanding of emerging problems; the diversity and multiplicity in solutions of any problem; a differentiated, creative, and combined use of skills depending on the specific conditions, objectives and practical tasks; the ability to predict the nearest future, based on the trends of economic development, which are now latent, and tomorrow may manifest themselves fully, came to the forefront, will show its relevance.

- There is no entrepreneurship education in primary vocational education: With a few exceptions, one of which is the joint Russian-German project “support to crafts through vocational training.” The project, based on the Ekaterinburg Professional Lyceum of craftsmen - entrepreneurs it is introduced experimental integrated educational curriculum of primary and secondary vocational education on management training for small businesses organization in the service sector of a building profile.

- In secondary vocational education: The organization of educational process is carried out mainly in the traditional form, the innovative component in the content is presented as separate topics, there are no developed modules (curricula) to train innovative entrepreneurship.

- In the system of higher education: Training curricula are focused on manager training of classical type, manager and entrepreneur, while there is a demand for professionals capable of strategic innovations’ making and ideas’ creative development. Under present conditions of socio-economic development of Russia a trend of educational institutions’ interaction with market infrastructure of the region is revealed. A good example is resource centers. For example, a resource center on the base of Ulan Ude Engineering Pedagogical College acts as a coordinator in the interaction of interested educational institutions and enterprises of a particular sector of the economy, provides information, marketing, methodological and organizational support of innovative educational curricula in accordance with modern requirements of the region’s economy and the needs of the population in the implementation of entrepreneurial initiatives (Biliktueva, 2012).

An equally important aspect of training for the business sector of the economy is the problem of overcoming the stereotype of thinking of continuous professional education system’s correspondence to the labor market. Such an approach has the discrete nature and does not give opportunity to consider the problem in the dynamics of social and economic development. “Compliance” does not provide advanced development of vocational education system that is required for the development of innovative economy, therefore it is correct to assert that this condition is not sufficient. It is necessary for the entities of pedagogical interaction in the system of continuing professional education to be interested in innovations, generation of the new, both in content and in procedural terms that will provide the expected outcomes of innovative entrepreneurship training.

In the system of vocational education the innovations in teaching include the introduction in the educational process of new technologies, methods and techniques of training, aimed at organizing of independent cognitive activity of students, the implementation of new possibilities of information support of the educational process, the development and implementation of individual educational trajectories, training and retraining curricula, focused on the quality of education and level of training in accordance with professional standards and qualification requirements for the profession. Taking into account the analysis results of content filling of the basic concepts the solution of the research task is determined by the need to define the conceptual basis of experiences’ generalization of professionals’ innovative entrepreneurship learning in the system of continuing professional education in Russia.

In the system of higher education in order to stimulate innovation activities, “a growing number of universities create their so-called science parks,” around of which there are small mixed companies, specializing in research and development, whose shareholders are both the universities and the private sector (Ivanov et al., 2015).
Training and consulting centers are created providing innovative entrepreneurship training, as an independent structure within the state higher and secondary educational institutions in various fields. The most common forms are business schools, educational and business centers, the agency for small and medium-sized enterprises’ support, business incubators, social and business centers, technology parks, innovation and technology centers, business centers.

5. CONCLUSIONS

Thus, the experience of Russian universities revealed undeveloped theoretical and methodological foundations of the problem; discrepancy of students’ basic knowledge with the latest achievements of science, technology and the basics of innovative entrepreneurship; low level of skills’ mastery for their practical application and commercialization; in SES of VT in technical and technological areas of training there is no innovative entrepreneurship training and in the content of some disciplines included in the curriculum of technical universities, for example, “the methodology and the history of science and research,” “organization of scientific research” only some issues on innovative development, commercialization of results of scientific research are discussed.

The success of innovation and entrepreneurship activities as a socially and economically demanded in today’s society is determined by the level of training of future entrepreneurs as a professional in a certain field of activity and the level of its readiness for innovation and entrepreneurship in this sector, including the motivation for entrepreneurship, development of professionally important for the entrepreneur abilities and personality traits, the foundations of an entrepreneurial culture and appropriate competencies.

In this regard, the structure of professional activities and values of the entrepreneur should be taken into account already at the stage of the educational content and structure formation, designed to develop the student as self-regulating highly moral person.

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