

Craft training in Russia: theory and practice of development

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ABSTRACT

The relevance of the research topic is substantiated by the social commitment to the establishment of a system of craft training focused on training personnel for craft enterprises. The purpose of the article is to provide theoretical and methodological substantiation of the necessity to provide organizational and pedagogical foundations for the development of craft training in Russia. The main method of research on this problem is the method of studying and generalizing the pedagogic experience to identify the main tendencies and contradictions of formation of a new kind of vocational education in Russia. The outcome of the research is the theoretical and methodological justification of the development of craft training as a special kind of vocational education, revealing its role and place in the social economic sphere and in the system of vocational education; the identification of the value and target base and organizational pedagogical foundations of the development of vocational education in crafts as a set of interrelated managerial and organizational, informative and technological ideas, principles and conditions taking into account the patterns and contradictions of development of this kind of education. The material of the article may be useful for practitioners and researchers in the field of vocational education, for lecturers and graduate students who are interested in the development of the system of vocational education and training.

KEYWORDS

Craftsman, craft activities, craft training, craft vocations, entrepreneurship

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Introduction

In recent decades the world economy has witnessed the formation of a new type of public relations described as post-industrial society in which prominence is given to science intensive, resource-saving and information technologies while knowledge is the primary driving force for the social and economic development (Bell, 1999). These changes have affected all the areas of human activity,

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including the type, technical equipment and organizational forms of productive labour, the personal service economy sector is growing rapidly. Due to this the occupation and qualification structure of manpower is changing rapidly, there is a growing demand for new skills from small enterprises working in the market of individual demand. In the system of international economic relations such enterprises belong to the category of craft enterprises, whose goods and services are distinguished as a separate commodity group, and the corresponding types of professional activity make a group of craft occupations (Kobelev, 2000).

Craft activities represent a significant segment of the Russian economy, which is included in two dozen industries related to the processing of raw materials and public services, and craft occupations include about hundreds of occupations, such as, for example: joiner, roofer, mason, jeweler, tailor, seamstress, car mechanic, blacksmith, pastry cook, hairdresser, gardener and many others.

In many countries the work of craft enterprises is based on the appropriate legal framework, supporting infrastructure and craft training system (Lokotnikova, 2002). The need to single out and institutionalize craft training is determined by the complex, many-sided nature of professional activities of craftsmen, which, on the one hand, are similar with those of skilled workers, on the other hand, many craftsmen have to work as technologists and craft production organizers. Therefore, the content of craft activities is considered to include components of at least three occupational areas: skilled worker occupations, production technology sphere and business management processes.

The multifunctional nature of craftsmen's work requires special training different from the existing vocational education of workers in structure, content and methods. However, experts point out a paradoxical situation: manpower for craft enterprises continues to be trained on the basis of the educational model that was created in the time when craftsmanship was purposefully forced out of the economic structure of the country. It seems that the vocational education system should have responded to these challenges by revaluing the fundamental objectives, principles, tasks, content of vocational training, and the centuries-old experience of training skilled workers should have been modified according to the needs of the craft sector (Moiseev & Efanov, 2014). But that is not the case, in our opinion. While the socio-economic role of vocational education and its position in society are strengthening, its internal contradictions and shortcomings become even more evident, the most common of them are: the narrowness of special training, which limits the occupational mobility of workers and specialists; insufficient job skills, according to employers; the low level of professional autonomy; graduates' dissatisfaction with their social and professional status; the "deadlock nature" of worker training (Romantsev, 1997).

Methodological framework

Research methods

The following methods were used in the research: theoretical methods (analysis of philosophical, psychological, pedagogical literature, studying and summarizing the teaching experience, systematization and conceptualization techniques); diagnostic methods (comparative and systemic analysis); empirical



methods (observation, interview, method of expert evaluations); experimental methods (forecasting and modelling) and other methods.

Experimental site of the research

The experimental site of the research was located at vocational education institutions of the Sverdlovsk region and other regions of Russia that develop and carry out experimental educational programs in training workers for craft enterprises: Russian State Vocational Pedagogical University, Magnitogorsk State University, Ural College of Technology and Entrepreneurship, Asbest Polytechnic School, Social Vocational College "Builder" in Yekaterinburg, Kamensk-Uralsky Technical School of Construction, Housing and Communal Services, Tarko-Sale Vocational College of the Yamalo-Nenets Autonomous Area. The experimental work of the research involved more than 900 students, 135 instructors, researchers, lecturers and vocational trainers, more than 250 representatives of public organizations of craftsmen and of the craft sector of economy.

Stages of research

The research was conducted in three stages:

The first stage included the study of the current status of the problem in the field of craft activities and craft training, the accumulation of empirical material, the development and clarification of the conceptual system of the research, the study, systematization and generalization of the data on the history of development of craftsmanship and craft training in Russia and in European countries, the study of the methodological bases for craft training development in present-day conditions.

the second stage was devoted to the provision of the theoretic background for creating organizational and pedagogical foundations of vocational craft training in Russia, to the development of the methodological basis of the study, to the elaboration of the legal framework for the development of craft activities and craft training in Russia, to carrying out the experimental work at educational institutions where the formulated hypothesis was tested and the underlying assumptions of institutional and substantive development of craft training were clarified.

the third stage consisted in the continued work on the elaboration of the legal framework for the development of craft activities and craft training, in the processing and theoretical reflection of the research data, in the revision of the concept of organizational and pedagogical foundations of craft training, in the systematization and generalization of the results of the study, in the formulation of conclusions.

Results

The development of scientific and theoretical foundations and the practice of organizing the system of craft training in Russia are determined by the following contradictions:

- between the necessity of reproducing the socio-professional class of craftsmen and the lack of legal, social and educational institutions and scientifically credible mechanisms for such reproduction;

- between the conception of the professional activity of craft workers inherent to the society, and the necessity to understand the new socio-economic realities that arise in the context of transition to the post-industrial society;
- between the necessity to develop and implement a new educational model for the formation of socially and professionally significant qualities of graduates of craft training institutions and the insufficient scientific and methodological support of its implementation.

Today most of the existing educational programs are aimed at training the so-called "heteronomous type" of workers (Gessen, 1995), good executors for large factories, which is certainly justified, due to the projected demand for mass industrial occupations. But it must be recognized that such a model of vocational training does not prepare graduates to live in conditions of the market society, does not take into account the ongoing technological changes in the economy, in which the share of small and medium-sized businesses will grow. And, most importantly, because of the anonymity of mass production, such training does not orient future workers towards being responsible for the results of their work, does not encourage their creativity, independence and their individual work style development, which are needed in craft activities.

Let us examine in detail the features that distinguish craft activities from the activities inherent to the occupations mentioned above. Comparing the job description of craftsmen with that of industrial workers, it should be noted that modern enterprises employ a technological cycle of production strictly separated in time and space into individual operations, workers do not participate in all stages of production, i.e. they do not handle complex technological tasks and are not personally responsible for the final quality of the production. Such a worker is a typical example of "a partial human" whose external and internal activities are not interrelated and united (Chapaev, 2011).

Craft labour is not divided into segments, so the difference between craft labour and productive work is not in the manual component, they are very similar, but in completing the work as an undivided whole. Therefore, the work of a craftsman requires a full, completed cycle of professional activity: starting from the idea to be generated and evolved according to the customer's order, to the design, production, responsible realization of craft products or services. All the stages of craft activity are linked by virtue of the self-government function. Moreover, craftsmen take into account not only internal but also external factors, such as socio-economic factors (prices for their services on the market) and socio-psychological factors (the desire of the client, the necessity to fine-tune the product upon delivery of the finished produce to the customer), i.e., the work of a craftsman is seen as something whole and complete.

For example, the craft occupation "painter" implies that the worker can carry out certain decorative work inherent to the industrial occupation "painter", but besides that he also develops the design of the premises and gets it approved by the customer, applies, if necessary, computer programs, uses modern materials, tools, technology, bears responsibility for the results of his work, etc. Besides, industrial workers do not have the important vocational competences required in craft activities. For example, they do not possess sufficient communication skills, they do not know the economic and legal bases,



they have weak creative skills, they show a low level of ability in labour mobility and adaptation to new production conditions. One can figuratively compare the work of an industrial worker and the work of a craftsman with the work of a stonemason and a sculptor. They would seem to be engaged in one job: they take a block of stone and cut off the redundant parts. But the stonemason uses the algorithm provided to him from the outside, while the sculptor uses the inner directions in his work.

In sum, it should be noted that craft activity is understood as an integrated type of production and/or business activity, based on the personal labour of the worker, supported with special knowledge, skills, technology, modern tools and materials, high-efficiency equipment (Romantcev, 2012).

Today the craft sector of the economy in Russia needs a different type of worker who should be able not only to carry out the necessary manual actions, but also to comprehend the basics of technology, to work with high-performance equipment, to be prepared for competent communication with clients, to acquire entrepreneurial competencies. This is especially timely as a significant number of craftsmen create jobs themselves, carry out activities in the form of self-employment. Thus integrating the creative, technological and business components in one person.

The multidimensional and personified nature of the activities certainly requires special organization of vocational training with the structure, content, methods and forms different from those of the existing vocational education of workers. Craft training needs specialized educational programs, complemented by blocks of competencies, aimed at building all the above-mentioned professionally important qualities, requires a special scientific-methodological and organizational-methodological basis.

However, the increase in the number of craft enterprises over the past two decades has not been accompanied by the creation of the craft training system. The lack of the legal framework and professional standards for craft activities, does not make it possible to train modern craft entrepreneurs within the existing educational programs. A paradoxical situation has come about: a substantial increase in the number of small craft enterprises, craft entrepreneurs, self-employed people in the past three decades has not been supported by the establishment of the specialized training system for craftsmen that continue to be trained on the basis of the educational model that was created in the 1960-s when craftsmanship was purposefully forced out of the economy of the country.

Since then there have been enormous changes in all spheres of society, the socio-economic structure, industrial relations, technological base, public policy, ideology have dramatically changed. The requirements for the training quality at vocational schools have also changed. A new generation of young people has grown up and developed in this new reality. It would seem that the vocational education system should respond to these challenges of the time with a profound re-evaluation of the fundamental purposes, principles, content, requirements for the quality of training, etc. But, in our opinion, it has not happened. The existing list of occupations as well as the requirements for the training content set out in the state professional and educational standards do not form the background for the development of craft training. The current legislative and regulatory framework of education regarding craftsmanship represents, metaphorically

speaking, the Procrustean bed, which fails to fit in even what has already appeared in the course of experimental work.

An adequate response to this situation would be the creation of a specialized branch of craft training in the country's educational system for purposeful training of workers for craft enterprises, which requires tackling several clusters of tasks. The first cluster of tasks is associated with the legitimization of craft activities and craft training at the federal level through the adoption of appropriate legislative acts regulating relations in the sphere of labour and education. The second cluster of tasks is dedicated to creating a separate list of craft occupations and professional standards, documents to be used by human resources and social services. The third cluster of tasks is associated with introducing changes into the list of occupations and specialties of initial and secondary vocational education, as well as with the development of state educational standards for training craft entrepreneurs in order to form a regulatory framework for craft training.

The analysis of the problems and solutions is presented in table 1.

Table 1. The existing problems in the development of craftsmanship and craft training in Russia and the solutions proposed (Efanov, 2011).

The existing problems in the sphere of craft activities and in the craft training system	Organizations that need to be involved in resolving problems in the craft sphere
In Russia, at the federal level, there is no systematic legislation on crafts, the key norms are not introduced: "craft activity", "craft enterprise", "craftsman", without which it is impossible to legalize crafts as an economic activity and as a system of training	The solution to this problem depends largely on the position and actions of the supreme legislative body of the state power, specialized committees of the State Duma. Initiative and coordinated actions taken by associations of craftsmen - All-Russian and regional crafts chambers - could speed up these steps
The All-Russian classifier of occupations of workers, posts of employees and specialists contains no group of craft occupations, there are no approved professional standards for craft occupations	This problem can be solved with the participation of the Ministry of labour and social protection, public associations of craftsmen; research centers for the study of crafts, etc.
The low qualification of workers and, as a consequence, the poor quality of goods and services of craft enterprises	The problem is complex and must be tackled jointly by the regional authorities, scientific, public and educational organizations by improving training
In the sphere of education there are no universally recognized federal regulatory and policy papers and training materials: a list of craft training specialties and approved educational programs, state educational standards and curricula for training craftsmen, etc.	This task requires an active involvement of the relevant departments of the Ministry of education and science of the Russian Federation, research and educational institutions, providing training of craftsmen, etc.
At present there is virtually no special educational and methodological literature for most craft occupations	The development of teaching materials for craft training can be fulfilled by the training and methodological resource centres for crafts, research and educational subdivisions of vocational pedagogical



institutes, faculties and departments	
The practice of pilot educational institutions engaged in craft training shows that new educational programs require new teachers, therefore to ensure their successful implementation we need to start training and retraining of vocational teachers for craft training	The training and retraining of vocational teachers for craft training can be carried out by vocational pedagogical universities, engineering pedagogical faculties and departments of technical and pedagogical universities, vocational teacher training colleges
The small number, economic weakness and disunity of craft enterprises does not allow them to become the orderers of staff training for their needs or otherwise participate in the training of craftsmen	The regional and municipal authorities, crafts chambers may become the orderers of craft worker training, taking into account the popular craft occupations of the region or territory

The list of the most acute problems hampering the development of craftsmanship and craft education shows that only one interested party cannot change the situation.

The spiritual values of the country's craft education can be based on the concept of the Russian philosophy, the works by N. A. Berdyaev (1992), I. A. Ilyin (1992), S. L. Frank (1992) and others, which reflect the values of the national culture of labour, such as the beauty of the process of labour, love of work, creativity, insight, passion, dedication. Besides the above mentioned values, we can add other features characteristic of the domestic pedagogical culture: religiosity, democracy (national spirit), statehood, collectivism, multiculturalism, social orientation. Of course, the value context of craft education will be narrowed, if it does not include the elements of rationalism and industrialism as well as responsibility and commitment, result-orientation and other positive values, well embedded in the Western world.

The analysis of foreign and domestic experience of craft training in 1998-2015 made it possible to work out a number of concepts underlying the vocational education of future craft entrepreneurs. These include the following theoretical provisions:

1. The training of future craftsmen must be carried out on the basis of the basic general education with a maximum orientation of general education subjects and the humanities to the specificity of the occupation, providing upper secondary school education, while the training of craft entrepreneurs - on the basis of initial vocational (craft) education.
2. General technical and special disciplines should be tied to practical training in structure and content.
3. Craft training should include all the activities required in the process of executing a customer's order (discussion of the intended result with the customer, design, planning of time, financial, material and human resources; logistical resources, delivery of the product and arranging payments, self-control of the quality of work).
4. There should be a maximum individualization of training (each apprentice should have a workplace, tools, work wear; the independence of work performance and personal responsibility for the result).

5. The vocational training system can be multilevel (the system of obtaining two qualifications on the basis of the initial and secondary vocational education, differentiated by years of training).
6. The formation of professionally important qualities of the individual craftsman and craft entrepreneur is possible only in conditions which are as close as possible to the actual production.
7. Students should be autonomous in choosing the professional career (one's own business or team work in small or medium craft enterprises).

In the logic of addressing these challenges the Ural college of technology and entrepreneurship of the Sverdlovsk region has implemented a number of experimental educational programs to prepare construction craftsmen (painter-designer, mosaic tiler, carpenter, roofer, specialist in sanitary and ventilation equipment) since 1998: on the basis of initial vocational training, craftsmen are trained, then on the basis of secondary vocational education heads of craft enterprises (craft entrepreneurs) are trained. To date, a set of organizational and pedagogical conditions has been developed and tested, which includes a model for training craft entrepreneurs, the structure and content of craft education, technologization of the educational process and the creation of the learning environment.

The scientific and methodological guidance of the development of craft education in Russia is carried out by the Russian State Vocational Pedagogical University, which did not only initiate the deployment of experimental craft education, but all these years has actively supported the development of this new type of education. During this period, together with German party, there have been implemented two international educational projects, several international conferences have been conducted, research grants have been received, theses have been defended, hundreds of scientific and scientific-methodological works have been published. Since 2003, the structure of the University includes a specialized scientific unit scientific-educational centre for the development of crafts, with the assistance of which an application for the project "New craftsmen of Russia" was prepared for the Agency for strategic initiatives in 2012: it was supported and recommended for implementation by the President of Russia V.V. Putin as head of the Agency for strategic initiatives. The implementation of the project included the elaboration of the content of the Federal law on the development of craft activities in Russia and the national road map for the development of crafts. Currently in the State Duma of the Russian Federation there is an ongoing discussion on one of the versions of the bill on the legalization of craft activities, in which the issues of craft training are reflected insufficiently in our opinion.

The correctness of the chosen course is confirmed by the training of more than 1000 graduates of craft specialties within the years of experimental work, a large number of applicants competing for taking part in craft training programs, successful participation of students of craft training programs in the regional and all-Russian *WorldSkills* competitions and in the contest of professional skills "We Glorify the Man of Labor", in which they mainly take prize-winning places.

In recent years, the experimental work on training craftsmen has spread beyond the Sverdlovsk region. Today it is gaining momentum in the Chelyabinsk



region and Yamalo-Nenets Autonomous county, and on the basis of the partner university and partner educational institutions a pilot site of the Federal Institute for the development of education, devoted to the prospects for the development of vocational education of workers in the post-industrial society, was registered in 2012. In 2014 the Tarko-Sale vocational college opened an internship site for the transfer of scientific-pedagogical knowledge and teaching technologies in the field of craft education for the teachers of the district implementing educational programs for training craftsmen.

The experience of many countries shows that social development forecasts indicate that in the twenty-first century one can expect the Renaissance of craftsmanship and the formation of the new craft economy, in which craft enterprises will become more flexible and dynamic (Intuit Future; Vodianova, 2010). They will be equipped with the most modern technology, have access to local and global markets, cooperate and compete with large companies. The organization of the systemic training of workers for the craft sector of the economy and the development of craft activities should lead to the creation of a new social stratum in Russia - the stratum of craft entrepreneurs who can be attributed to the middle class according to their institutional and functional characteristics, the increase in this class will contribute to the socio-economic equalization of incomes, will ensure social stability, will create prerequisites for political stability in the country.

As the cultural and historical, productive and economic signs have been lost, the new social stratum of craftsmen will need to go through the process of socialization, facilitated by institutions of socialization in the form of vocational educational institutions and associations of craftsmen, and agents of socialization represented by vocational teachers.

Discussions

Russian craftsmanship and its educational component are a relatively new direction of research for the humanities, the analysis of the conceptual field of which has shown that it is not theoretically developed is not supported by the legal framework, is semantically contradictory, which gives rise to certain scientific problems and practical tasks: 1) the complexity of the scientific description; 2) the existence of barriers to the creation of a modern regulatory framework; 3) uncertainty of the status of craftsmen; 4) lack of educational programs for craftsmen.

Over the past two decades, a number of dissertation researches were carried out which were devoted to the Organization of apprenticeship in pre-revolutionary Russia, D. A. Kuprikov (1994), A. V. Moiseev (2015); identification and characteristics of craft activity in modern conditions of D. E. Gavrilov (2012), A. Meyer (2000); justification of organizational and pedagogical conditions and psychological-pedagogical support for craft training N. A. Doronin (2003), D. P. Zavodchikov (2004). In recent years several monographs on craft education prepared by the specialists of the Russian State Vocational Pedagogical University have been published E. F. Zeer (2004), E. D. Telmanova (2013).

The pedagogical science of Russia today has little information on the research of problems of training workers for small craft enterprises. The foreign theory and practice of training workers for craft enterprises has over a century

of experience and related conceptual and empirical material. However, the historical, economic, and cultural differences of Russia are so essential that they make it impossible to take over the theoretical bases of craft education, educational systems and technologies used abroad. What we need is not the adaptation of the existing foreign educational models and schemes, but the development of our own essentially new conceptual pedagogical and methodological basis through the understanding of the foreign pedagogical experience, taking into account the Russian mentality and the national educational specificity.

Conclusion

In conclusion it should be noted that the foreign experience (primarily European) shows that in many countries the so-called new craft economy has evolved over the past decade, in which the machine industry is giving way to the personalized labour of craftsmen, the relative number of whom is growing. This is justified because craft business is based on the personal ownership of the means of production, personal work and personal attribution of results of this work. Simply speaking, the craftsman is an owner, a man who will not watch the surrounding space indifferently, but will try to make it comfortable. And the proportion of people who will choose the professional autonomy and free labour - the signs characteristic of crafts, will grow. All this makes it possible to consider the new craftsmanship in Russia not as a relic of the middle ages, but as a demanded social order of the near future, in which the local government may find its socio-economic base. These people are independent and active, they are tied to their place of residence, they will have the values, goals and means. The main thing is that they will be interested in the development of the territory, because they themselves will be the creators and consumers of this development.

It should also be noted that almost any craft activity has an enormous educational potential, since it is based on an important human forming function, implemented through the mixture of the system of knowledge, practical and spiritual experience, the revival and reintegration of which into the modern world based on new technology will create the conditions necessary for the professional formation and creative self-development of a large part of the younger generation. The mass reproduction of a new generation of craftspeople today requires a recognised scientific theory, new professional and educational standards, new curricula, as well as curricula for training vocational teachers who will educate craft entrepreneurs in the future. Today the country needs serious research that could become a scientific basis for the formation of a new kind of education in Russia - craft training.

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References

- Bell, D. (1999). *The coming post-industrial society: social forecasting experience*. Moscow: Academy, 787 p.
- Berdyayev, N. A. (1992). *Russian Soul. Russian idea*. Moscow: Republic, 304 p.
- Chapaev, N. K. (2011). Integrative mission craft education. *Formation and development of artisan craft and professional education in Russia: collection of scientific papers of the International Conference. Ekaterinburg, Russia, The Russian State Vocational Pedagogical University*, 285-291.
- Doronin, N. A. (2003). *Organizational-pedagogical conditions of professional formation of craftsman*. PhD Thesis. The Russian State Vocational Pedagogical University, Ekaterinburg, Russia, 199 p.
- Efanov, A. V. (2011). The fate of craft education: the way from the beginnings to the present. *Mathematical and software systems in the industrial and social spheres: collection of scientific papers conference. Magnitogorsk, Russia, Magnitogorsk State University*, 25-31.
- Frank, S. L. (1992). *Spiritual Foundations of Society: a collection*. Moscow: Republic, 511 p.
- Gavrilov, D. E. (2012). *The economic nature and characteristics of craft activities*. PhD Thesis. The Russian State Vocational Pedagogical University, Ekaterinburg, Russia, 176 p.
- Gessen, S. I. (1995). *Pedagogy Basics: Introduction to Applied Philosophy*. Moscow: School Press, 448 p.
- Ilyin, I. A. (1992). *On the Russian idea*. Moscow: Republic, 440 p.
- Intuit Future of Small Business Report. Third Installment: the New Artisan Economy (2008). The intuit future of small business series. Direct access: http://www.iftf.org/fileadmin/user_upload/downloads/researchagendas/IFTF_SR-1037C_intuit_future_sm_bus.pdf
- Kobelev, N. B. (2000). *Organization of craft activities: Problems of Russia. German law*. Moscow: BON, 409 p.
- Kuprikov, D. A. (1994). *Formation of craft and vocational training in Russia*. PhD Thesis. The Institute of General Education, Moscow, Russia, 118 p.
- Lokotnikova, E. M. (2002). *Pedagogical bases of preparation of youth to the craft work in the system of primary vocational education (on the basis of Moscow)*. PhD Thesis. The Moscow State University of Service, Moscow, Russia, 203 p.
- Meyer, A. (2000). *Handicrafts and its features in the market economy*. PhD Thesis. The Kostroma State University, Kostroma, Russia, 169 p.

- Moiseev, A. V. (2015). The development of craft education in the Urals in the XVII - beginning of XX centuries (historical and pedagogical aspect). PhD Thesis. The Russian State Vocational Pedagogical University, Ekaterinburg, Russia, 147 p.
- Moiseev, A. V. & Efanov, A. V. (2014). Formation of institutional forms of apprenticeship in the Ural region in the XVII-XVIII centuries. *The Education and science journal*, 7, 103–114.
- Romantsev, G. M. (2012). *Problems of formation of professional craft education in Russia*. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University, 233 p.
- Romantsev, G. M. (1997). *Theoretical basics of higher vocational education*. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University, 333 p.
- Telmanova, E. D. (2013). *Social and educational management as a tool for craftsmen-entrepreneurs socialization*. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University, 160 p.
- Vodianova, I. N. (2010). New handicraft economy as a kind of small business. *Problems of Modern Economics*, 2, 206-219.
- Zavodchikov, D. P. (2004). *Monitoring meta competencies craftsman personality on stage, training*. PhD Thesis. The Russian State Vocational Pedagogical University, Ekaterinburg, Russia, 203 p.
- Zeer, E. F. (2004). *Theoretical and methodological bases of preparation of craftsmen-entrepreneurs*. Ekaterinburg: Publishing House of the Russian State Vocational Pedagogical University, 121 p.