

Practical Recommendations for University Graduates' Readiness Formation to Occupational Mobility

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ABSTRACT

The research urgency is caused by the development of economic integration and demand for professionals able to adapt to constantly changing working conditions. The purpose of the paper is to develop practical recommendations on formation of University graduates' readiness to occupational mobility. A leading approach to the study is the structural-functional approach allowing revealing of the nature and structure of occupational mobility, to identify the pedagogical conditions of formation of University graduates' readiness to professional mobility. The study involved 300 teachers, 450 students who took part in characterizing levels of readiness for occupational mobility and definition of its criteria. Main results of the research consist of the identification of core components of occupational mobility (axiological, epistemological, praxeological) and pedagogical conditions of formation of University graduates' readiness to occupational mobility (formation of occupational value orientations of students; the modular structure of educational process; organization of project-based learning), identifying of levels of readiness for occupational mobility (high, average, low) and the criteria (motivational, cognitive, activity-related). The significance of the results obtained is that the identified components of occupational mobility allow us to consider it as an integrative quality of the personality of the specialist, which characterizes the readiness for rapid and successful acquisition of new activities. Identified pedagogical conditions of formation of University graduates' readiness for occupational mobility provide their focus on the active acquisition of the latest occupational achievements and expansion of the scope of activities, qualification enhancement and development of competitiveness. Levels of readiness for occupational mobility help to develop the ability to quickly mastering of new skills and changes in them arising under the influence of scientific, social and technical changes. Criteria of readiness for occupational mobility reflect the unity of fundamental knowledge, occupational competences and personal qualities.

KEYWORDS

Occupational mobility, occupational value orientations, project-based learning

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Introduction

The research urgency is caused by development of economic integration and demand for professionals able to adapt to constantly changing working conditions. The study of the problem of mobility has its roots in the beginning of the last century. A great interest belongs to the work of P.A. Sorokin (2005), the impetus for the writing of which was socio-economic problems of the period of the First World War. P.A. Sorokin (2005) explores the phenomenon of mobility, considering it in a comparative historical perspective. He believed that the pace and kind of mobility are not structured in time and represent by themselves any movement of individual or social object or value – anything that was created or modified by human activity from one position to another (Sorokin, 2005). Currently, mobility is defined as the ability to fast moving, action (Ushakov, 2008). The content of mobility involves different components: social, occupational, labor. Social mobility is treated as a change by the individual of its social status (vertical mobility) and a change in location without change of status (horizontal mobility). The focus is done on individual movement for the following reasons: inequality, power, education, prestige (Khridina, 2003). Labor mobility is considered as a specific form of social behavior in the field of employment, namely the transition of workers from one place to another, changing their sector of employment, nature of work (Mishchenko, 2010). The subject of our study is occupational mobility, as a triplex of: 1) the quality of the person, providing the internal mechanism of its development; 2) human activities, determined by events changing the environment and aimed at self-realization in occupation and life; 3) the process of transformation of oneself and one's surrounding life and occupational environment (Goryunova, 2006). It should be noted that occupational mobility expands the horizons of the individual, stimulates intellectual agility, and increases competitiveness on the labor market, ensuring the success of the movement in the space of social, economic, cultural, political relationships and interactions. It is known that the basis of occupational mobility consists of occupational competences, which are formed in the process of professional education. It is professional education that enables a person to develop one's skills, acquire a good profession and, accordingly, to climb higher on the social ladder, and to self-actualize (Kamasheva et al., 2016). All written and actualized the purpose of this paper - to develop practical recommendations on the formation of readiness for occupational mobility of University graduates.

Materials and Methods

The leading approach of the study is the structural-functional approach allowing revealing the nature and structure of occupational mobility, to identify the pedagogical conditions of formation of readiness of University graduates to occupational mobility. The essence of the structural-functional approach is to consider the subject of research as a structured system of interrelated components, each of which has its own functions and goals (Magdanov, 2010). If occupational mobility of experts is an integrative quality of personality that characterizes the readiness for rapid and successful acquisition of new activities and allow to manage the resources of subjectivity and occupational behavior, its structural components can be correlated with such personality characteristics as



activity, self-determination, self-regulation, self-development, self-improvement, self-realization (Pugacheva et al., 2016). Structural-functional approach directs us to identify such components of occupational mobility, which together provide a synergistic effect in adaptation of future specialists to the conditions of production and allow him to be competitive in the labor market. During research the following methods were used: theoretical (analysis, synthesis, generalization, systematization); sociological (observation, interviews, questionnaires).

Results

The main results of this study are: 1) structural components of occupational mobility (axiological, epistemological, praxeological); 2) pedagogical conditions of formation of readiness of University graduates to occupational mobility (formation of occupational value orientations of students; the modular structure of educational process; organization of project-based learning); 3) levels of readiness to occupational mobility (high, average, low) and its criteria (motivational, cognitive, activity).

Structure-forming components of occupational mobility (axiological, epistemological, praxeological)

It is found that structure-forming components of occupational mobility ensure the readiness of the individual to being creative and independent, critical thinking and finding of innovative solutions to new situations.

Epistemological component includes the combination of fundamental and professional knowledge, general cultural and occupational competences representing a coherent entity. The function of this entity of knowledge and competences is to ensure productive activity in various professional communities. It is on the base of knowledge and competence there is a search of ways and methods of problem solving, the choice of actions necessary to achieve the result. In the process of professional education of future specialist epistemological component determines the success of preparation for entry into the relevant socio-professional group and is the basis for the evaluation of the quality and accessibility of public services in education (Terentyeva et al., 2016).

Axiological component includes value orientations, motives of educational and occupational activity, occupationally important qualities of personality, willingness to self-education. The function of the axiological component is to ensure valuable attitude to the chosen occupation, the formation of an occupational Outlook, awareness of the future as valuable for the individual. In the process of professional education of future specialist axiological component determines the success of learning, perseverance in achieving of one's goals, forms the inner core of culture.

Praxeological component includes the occupational experience, the ability to rapid implementation of results of professional education and quick adaptation to the environment. Adaptation is a complex multifactor and multilevel phenomenon which can be seen as a process, condition, property or results of the activity. To be adapted and be able quickly to adapt (adaptive) – different concepts, since the first of them is the result of adaptation, and the second is quality, the condition of the entity, allowing him or her varying speeds to achieve a state of adaptability. Adaptability is one of the characteristics of

praxeological component of professional mobility of technical profile. Adaptation takes place due to change as of personality traits, and so mental states. It is often largely determined by the number of features of a person constituting his or her adaptability. Function of praxeological component consists in identifying and developing of adaptive important personal qualities that promote achievement of high results in occupational activities. The quality of the implementation of this function is the basis for selective support of the development of regional professional education (Akhmetov et al., 2016).

Pedagogical conditions for formation of readiness of University graduates to occupational mobility (formation of occupational value orientations of students; the modular structure of educational process; organization of project-based learning)

It is established that the set of pedagogical conditions for formation of readiness of University graduates to occupational mobility determines the success of the training to the changing of activities within the industry and in related industries.

It is found that the formation of occupational and value orientations allows the student to satisfy the material and spiritual needs and serves as a guide to his social and occupational activity aimed at achievement of socially significant purposes. The system of vocational value orientations characterizes the integrity of a future specialist, loyalty to ideals, persistence in achieving goals, forms the inner core of the occupational culture, spiritual set of occupational needs and interests. Training of modern specialist requires not only the development of occupational competencies, but also the formation of the value attitude to the occupation. It is in consequence of this and the awareness by the identity of the future as valuable, in which it is competitive, willing to adapt to the changing conditions of life. Without vocational value orientations, while the future will not be realized as desired competencies remain unfulfilled, and the projects will not occur.

It is established that the modular construction of the learning process ensures the development of entity-entity relations in the process of professional education. The information functions of the teacher are replaced by consulting, with preserving of the leading role in the educational process with the purpose to form students' abilities and skills of self-education. Modules are autonomous portions of educational material, including a complete block of information, targeted program of actions of the learner, advice (councils) of the teacher for its successful implementation. Their assimilation a priori envisages increasing of the role and importance of independent work of students in the educational process and requires the development of initiative, creativity and socio-professional activity of future specialists. As a result, the modular construction of the educational process provides individualization of training in the content, pace of learning, level of independence, teaching methods, methods of control and self-control. It is established that the efficiency of modular construction of the educational process is enhanced under the conditions: determination of the purpose and objectives of study of each module; assessment of all performed by students, assignments and attendance of classes.

It is revealed that the organization of project-based learning enables the integration of theory and practice. It is in the process of project-based learning



students acquire occupational experience and master the practice of occupational mobility. The active involvement of student in creation of projects gives him the opportunity to learn new ways of occupational activity in the socio-cultural environment and industrial cluster (Lunev et al., 2016). Organization of project-based learning is focused on independent activity of students – individual, pair, group performed during a certain period of time. It is established that the organization of project-based learning leads to the integration of knowledge, acquiring abilities and skills of self-education, development of creative thinking, formation of culture of business communication.

Levels of readiness for occupational mobility (high, average, low) and its criteria (motivational, cognitive, activity)

It is established that the highest level is the aim to form readiness of future specialists of technical profile to occupational mobility, and medium and low are necessary steps on the way to achieve it. Criterion is a feature on the basis of which an assessment is made, a definition or classification of anything, a measure of evaluation. A measure of the level of criterion is indicator, as the data on which one can judge about the development and course of something. The identified criteria are associated with structure-forming components of the occupational mobility: motivational with axiological component, knowledge with epistemological, activity with praxeological. Table 1 shows structure-forming components, criteria and indicators of occupational mobility.

Table 1. Structural components, criteria and indicators of professional mobility

Structure-forming components	Criteria	Indicators
Axiological	Motivational	awareness of the importance of future professional activity, persistence in the formation of professional competence, and interest in future professional activity
Epistemological	Knowledge	the volume of knowledge mastered, meaning of knowledge, the speed of execution of control tasks
Praxeological	Activity	Abilities and skills to acquire knowledge independently, to use the acquired knowledge in professional activities, the ability to transfer their skills to other knowledge, professional experience

Table 1 shows that the readiness of future specialists to occupational mobility can be formed only when there is a unity of core components of occupational mobility: axiological, epistemological, and praxeological. Table 2 presents the characteristics of the level of readiness of future specialists to occupational mobility based on the selected criteria.

Table 2. Characteristics of the level of readiness of University graduates to professional mobility based on the selected criteria

Criteria	Levels		
	High	average	Low
Motivational	The student is aware of	The student understands	Student don't have

	the need to implement professional activities, shows the persistence in the formation of professional knowledge, competence, has a strong interest in future professional activity.	the importance of professional activities, but is not active enough in acquisition of knowledge and competences. The student shows sustained interest in future professional activity but not enough.	need in professional activities, there is no persistence in the formation of professional knowledge and skills. Overall, the student shows no interest in future professional activity
Knowledge	The student learns the educational material quickly and in full volume, can use knowledge to solve non-standard tasks. Very high speed of execution of control tasks, tests.	The student learns the material in full, knows the basic concepts, characterized by the insufficient degree of awareness. The execution speeds of control tasks, tests by the student meets the allotted time.	The student doesn't learn the material in full, his knowledge is little understood and is fragmented, the slower speed of execution of tests
Activity	The student knows how to acquire knowledge independently, can fully implement in practice the acquired knowledge, and is able to quickly transfer skills to other tasks.	The student knows how to acquire knowledge independently only in the direction of the teacher, partially can implement in practice the acquired knowledge, the ability to transfer skills to other jobs is not high.	The student doesn't know how to acquire knowledge independently and to implement them in practice, is not able to transfer skills to other jobs

Table 2 shows that the level of readiness of University graduates to the occupational mobility is associated with its structure-forming components.

Experimental verification of the efficiency of pedagogical conditions for formation of readiness of University graduates to occupational mobility

Experimental verification was conducted from 2014 to 2016. Experimental testing was attended by 300 teachers, 450 students of the Kazan state University of architecture and construction. Experimental testing took place in three stages: ascertaining, forming, and control.

During the ascertaining stage with the help of questionnaires the opinion of teachers and students was found about the necessity to form the readiness of University graduates to occupational mobility. It is established that the majority of students (74 %) believe that they are not sufficiently prepared for occupational mobility, which is manifested in the inability to manage the events, use them for self-development. The majority of teachers (83 %) believe in the opposite: that students are prepared for occupational mobility, as a basis is considered by them a the system of occupational knowledge, abilities and skills of high level of generalization, ownership of the system of occupational competencies, and the ability to apply them to perform any tasks in the field of future occupation.



On the forming stage the efficiency of pedagogical conditions was tested for formation of readiness of University graduates to occupational mobility. To form occupational value orientations of students in the process of studying of professional disciplines (Engineering graphics, Electrical engineering and electronics", "Metrology, standardization and certification", "Technical mechanics", "Fundamentals of the economy", " Life activity safety", "Labor protection" and other) teachers also used examples from practice (vocational situations), which provide for correlation of theory with future vocational activity. Teaching was not only aimed at the assimilation of knowledge and development of competences, but also on the development of self-motivation, awareness of multiple possibilities of self-development, formation of skills to adapt to rapidly changing conditions, consistency of occupationally significant personal qualities that contribute to successful self-realization in occupational activity. It is found that professional knowledge and competencies mastered by the students in the logic of the relevant science is not directly a "guide to action" and undergo a complex process of conversion, of transformation, including in its categorical apparatus of occupationally significant personal qualities [113, p. 49]. As a result, there is a change of motives of behavior of the student in connection with his value orientations. Being allocated as cognitive basis for decision-making, professional knowledge and competences become direct participants in the process of formation of readiness for occupational mobility.

To test the effectiveness of modular construction of the teaching process the rating assessment of students' cognitive activity was introduced. The concept "rating" is interpreted as the procedure to determining the location of students in the process of fulfillment and control of pre-determined system of tasks, evaluating them by corresponding points on the basis of various control measures. Rating system allows us to go from a five-point system and return to it when summing up the results and during exams. The introduction of the rating system is a good way to encourage healthy competition among students, which should organize a systematic self-study and to improve the effectiveness of anti-corruption policy in higher education (Zamaletdinov et al., 2016). This system stimulates the students' cognitive activity, increases the competition academically and eliminates chance in the exams. The final examination at the end of each module serves as the input control for the next. The final test should show the level of mastering of the module. After studying each module, the teacher will give students the necessary recommendations. The number of points earned by the student helps them to judge the degree of their preparedness.

Organization of project-based learning led to professional changes in the mindset of the student that defines the formation of readiness for occupational mobility: he took into account at a greater extent the objective conditions of activity, actively seeks a way out of difficult situations, responds adequately to failures, is more inventive in creating the program to achieve the goal. Students were involved in the development and implementation of projects of different types: research, information, practice-oriented. For example, in the study of discipline "Life Safety" the students worked on the project "Emergency at peace time". Students were asked to organize rescue work, where they should: to give general information about emergency situations in peacetime; to conduct forecasting of natural and technological disasters; to declare the tasks of civil defense for the protection of the public from danger; to plan the evacuation; to provide data on the radiation monitoring devices; to organize the provision of

first medical aid. The algorithm of work on the project had three phases: preparatory (selection of topics, group formation, problem definition, allocation of tasks to groups), main (collection and processing of information, development and implementation of the project), final (defense of the project, summarizing, reflection).

At the control phase the dynamics of the levels of readiness of future specialists to the occupational mobility was identified on the basis of selected criteria, which are reflected in table 3.

Table 3. The dynamics of the levels of readiness of University graduates to professional mobility (%)

The levels of readiness of future specialists to professional mobility	Ascertaining stage	Control stage
High	47	81
Average	32	11
Low	21	8

Table 3 shows that implementation of the proposed pedagogical conditions ensured positive dynamics of the levels of readiness of University graduates to occupational mobility.

Discussion

The problem of University graduates' readiness formation to occupational mobility is the subject of scientific debate. This is because the concept "occupational mobility" has an ambiguous meaning. The analysis of scientific publications has allowed us to highlight different approaches to the definition of occupational mobility: 1) occupational mobility as a set of professional knowledge, skills and abilities (Igoshev, 2008; Pidkasisty, 1999); 2) occupational mobility as the most sustainable qualities and personality traits that help in their occupational activities (Asmolov, 1990; Balyagova & Rasskazov, 2011); 3) occupational mobility as an integrative characteristic of level of professional readiness of the student, based on fundamental and professional knowledge and developed practical skills, manifested in unity with the personal qualities (Goryunova, 2006; Mishchenko, 2010); 4) occupational mobility as the coherence between knowledge, practical skills and subjective qualities of the student (Klimov, 1995; Khridina, 2003). We believe that all of these approaches have a right to exist. It is caused by the phenomenon of occupational mobility, which is manifested in integration of objective (possession the system of the knowledge, abilities, skills and competences) and subjective (the conglomerate of personal qualities necessary for the exercise of occupational activities). The ambiguity in the definition of the essence of occupational mobility, the need of modern production in the mobile, competitive specialists and actualized the topic of this research.

Conclusion

It is found that professional mobility involves the ability for rapid occupational and personal reorientation as while saving occupational or social identity, and so while it changing at required ratio of past experiences and new activities. Occupational mobility may be due to, firstly, external circumstances



(such as lack of jobs, low wages, poor living conditions, etc.) and can be dictated by the need to adapt to real life situations; secondly, the need of the person in self-improvement based on stable values (sustainability, education, professional competence, freedom, risk). The significance of the results obtained is that the identified components of occupational mobility allow considering it as an integrative quality of the personality of the specialist, which characterizes the readiness for rapid and successful acquisition of new activities. Identified pedagogical conditions of University graduates' readiness formation for occupational mobility provide their focus formation on the active development of the latest professional achievements and expansion of the scope of activities, qualification enhancement and development of competitiveness. Levels of readiness for occupational mobility help to develop the ability to quickly mastering of new skills and changes in them arising under the influence of scientific, social and technical changes. Criteria of readiness for occupational mobility reflect the unity of fundamental knowledge, professional competences and personal qualities.

The paper can be useful for teachers of universities; employees of the centers of training and retraining for scientific-pedagogical staff of universities in the selection and structuring of the content for qualification enhancement. The results of the study allow us to outline the prospects for further research on this problem which are associated with the development of scientific and methodical support of specific educational curricula for University graduates' training.

Disclosure statement

No potential conflict of interest was reported by the authors.

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