



Features of Structural and Functional Model of Students' Professional Mobility Formation

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ABSTRACT

The relevance of the study to these problems reasoned by the fact that in economic crisis and social dynamism times the problem of professional self-determination of the individuals considered from a different point of view, because people can repeatedly change their occupational status, qualifications and enterprise team during their whole lives. In this regard, this article is dedicated to the development of structural-functional model of students' professional mobility formation in modern conditions. The article presents the features of the regional structural and functional model of students' professional mobility formation developed by the authors, comprising the following relationship of its components: The regional social order for human resources' training, target, content-procedural, technological, monitoring and assessment-productive ones. These models based on social partnership and coordination of students' vocational training with an innovative educational environment of the region. Pedagogical conditions of students' professional mobility formation are proposed, the practical implementation of which in a particular individual institution of higher education is related to the need to take into account regional factors: The possibilities of the institutions, the availability of companies and organizations in which the students can have practice, geographical location and regional affiliation of the city where the high school is located.

Keywords: Structural and Functional Model, Professional Mobility Formation, Management

JEL Classifications: A22, I23, Z39

1. INTRODUCTION

The process of professional mobility formations is rather complex by nature and depends as on the personal characteristics of individual and the conditions of its spontaneous socialization, so on its purposeful formation, carried out through the use of different forms of pedagogical and psychological impact. In this situation, the study and implementation of the professional mobility formation with young people has become one of the important tasks of modern pedagogy and educational psychology. Modern high schools necessary to generate this quality with their graduates to help them in a successful professional career making and a certain social status achieving (Mishchenko, 2009). The purpose of education, in this case, is to be focused on high-quality

mastering by the students of the necessary content on the one hand, and, on the other - on the development of personal qualities that is caused by society's need for specialists who are able to transform the surrounding reality and themselves in accordance with the needs of the development in society in higher education.

In this country the meaning of the term "professional mobility" in recent decades has undergone a significant transformation, which is reflected in the change of the concept's definition. In conditions of socialist economy, when a leading role in young professionals' job finding belonged to a public distribution, professional mobility was usually interpreted as the ability and willingness of the individual quickly to master new technologies, acquire the missing knowledge and skills ensuring the effectiveness of

new professional activities. However, in the last two decades, the situation in the country has changed noticeably, and the profession's change has become largely to be determined by a combination of economic and social factors, personality traits and needs of the individual.

2. LITERATURE REVIEW

To various aspects and problems of professional mobility formation are devoted studies of many modern domestic researchers (Ashcheulova and Kugel, 1998; Zeer, 1997; Arkhangelskiy, 2003; Goryunova, 2006a; Igoshev, 2008a; Kon'kov, 1995; Makeyev, 1991; Amirova, 2009; Merkulova, 2008; Novikov, 2001; Sidorova, 2006; Mishchenko, 2008a; 2008b).

Depending on the direction and scope of these studies, a number of authors (Goryunova, 2006a; Igoshev, 2008a; Mitina, 2002; Nedel'ko, 2007) take into consideration in detail the phenomenon of professional mobility, its essential characteristics and methods of forming during the students' training in higher educational institutions. Others (Ashcheulova and Kugel, 1998; Sidorova, 2006) are focused, first and foremost, on the sociological aspects of this phenomenon; others - on its various pedagogical (Vlasov, 1998; Zvereva, 2006; Nechaev, 2005) and psychological (Klimov, 2007; Pryazhnikova, 2007) aspects. In a considerable part of works on the formation of professional mobility, this phenomenon is considered in relation to the students of pedagogical higher education institutions (Amirova and Amirov, 2011; Goryunova, 2006b; Igoshev, 2008b). Other works are devoted to the study of the elements' development of students' professional mobility studying on technical and other specialties (Arkhangelskiy, 2003; Merkulova, 2008; Nedel'ko, 2007).

Some aspects in the research of mobility as a scientific and pedagogical phenomenon are paid attention by the studies on the problems of formation of specialists' professional competence in different fields, because social and professional mobility is considered by many authors as one of its most important components (Zeer, 1997; Mazhar and Slastenin, 1991). It should also be noted that the common psychological and pedagogical problems of students' professional mobility on pedagogical specialties redeveloped studies of authors such as: Levanova and Slastenin (2005), Levina (1998), Podymov (1998).

To the study of the specifics of regional and socio-cultural factors that affect the socialization and education of young people, are devoted works of Mudrik (1999) and Pleshakov (2010).

In general, the analysis of the sources shows that the study of professional mobility in the scientific and pedagogical aspect is just beginning, many of the identified characteristics of this phenomenon are only marked, and some positions which are put forward by scientists are debatable, and therefore need a more comprehensive study. In addition, problem areas are quite clearly identified which require further methodological, theoretical, scientific and practical development. Thus, further research on the formation of students' professional mobility during their studies in higher educational institutions is very important.

3. RESULTS

The article proposes a two-dimensional view of the model of professional mobility, which includes eight main scales that reflect different criteria characteristics of professional mobility: Educational level; creative abilities; psychological stability; initiative; physical and mental health; the level of intellectual development; next career prospects, motivation to change profession.

3.1. Components of the Model

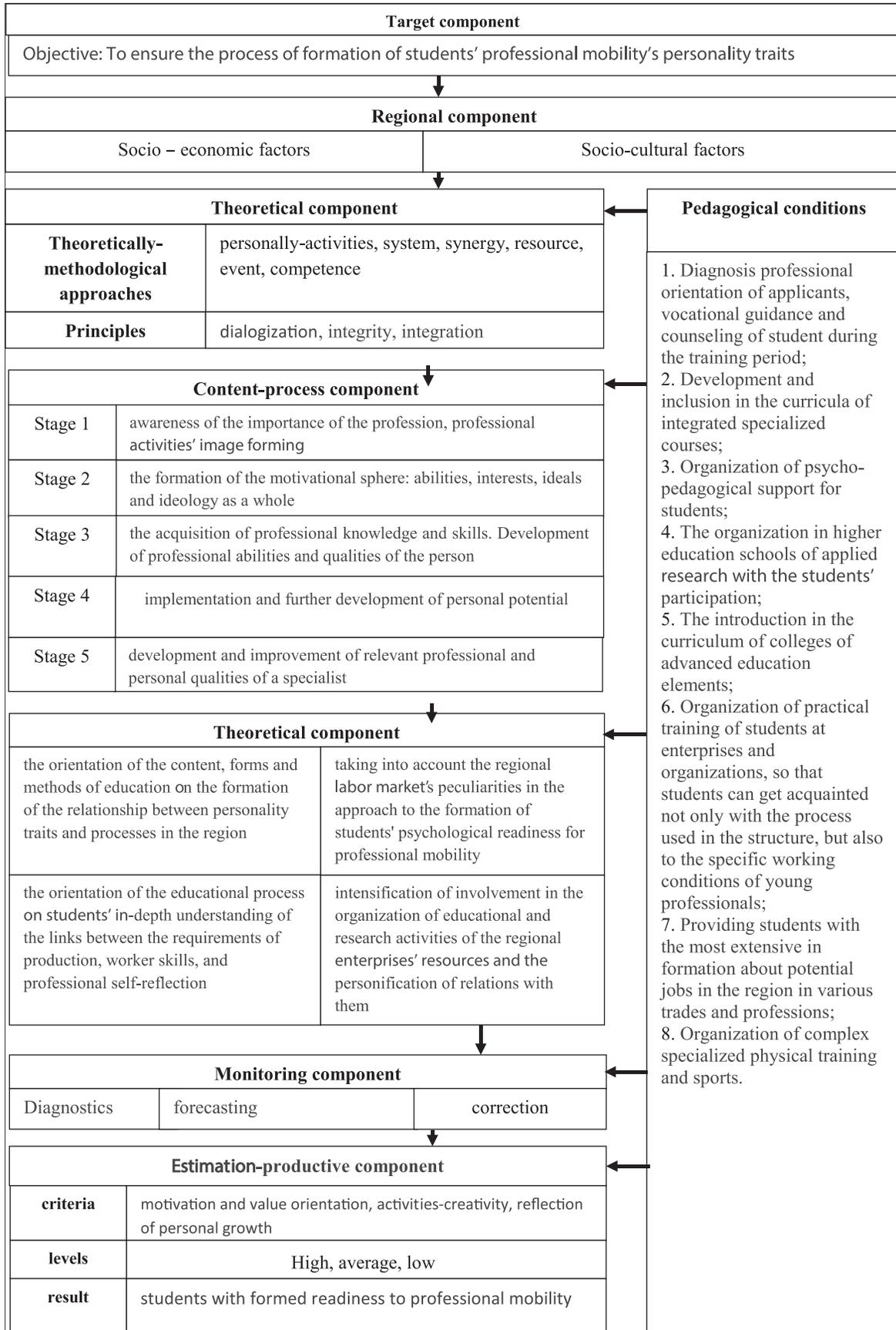
In the proposed model, the authors identified four major components: Motivational, cognitive-competence, reflective, evaluative and generally personal ones.

Motivational component includes the value priorities in obtaining professional education: Willingness to self-improvement and self-fulfillment, professional development, initiative, striving to be useful for society, the wish to create useful products (projects, ideas, organizations and funds, etc.).

- Cognitive - Competence component is based on: The ability to master independently various kinds of professional knowledge; to possess the elements of different professions; the ability to manage a team; competency in orientation in the labor market of the region, the country, the world; knowledge of psychological and pedagogical aspects of the personality, the group and the ability to use them in their own professional activities.
- Reflective - Evaluative component, in its turn, combines such qualities of the personalities as: Clarity of a person's own capabilities (potential) in professional activities and profession's change; the ability of self-reflection in the training process and activities; the ability to evaluate the situation in the labor market (and the situation evolving in the course of business) in accordance with their own abilities (capabilities, potential and willingness), change the position and the profession.
- Generally - Personal component includes the following personal traits: Intellectual and creative abilities, communication skills; psychological stability, physical and mental health. This structuring of professional mobility allows to construct a model based on the interaction of its individual components.

The regional model of students' professional mobility is presented in Figure 1. The authors discussed some assessment aspects of professional mobility of young people in Hanty-Mansi Autonomous District - Yugra. This estimation was obtained as a result of a research project's implementation to develop proposals to improve professional mobility in the labor market, conducted by Ugra State University after the order of the Department of Education and Science of the district. One of the objectives of this study is to determine the readiness of students and young professionals to change their profession and their level of training as a whole, as well as identification of problems of formation of students' professional mobility. The study used a qualitative assessment of these parameters resulting from the survey of representatives of different social groups (students, young workers, teachers, employers), living in Hanty-Mansi

Figure 1: Model of formation of students' professional mobility



Autonomous District - Yugra. Students were asked to answer a series of questions aimed at identifying of their readiness for professional mobility.

3.2. Results of the Survey

Potential willingness to change jobs was shown by 37% of students and 45% of employees. However, 44% of students and 26% of workers do not think about it. The results obtained were compared with answers to another question: "Do you think that you need to get a few jobs?" A positive response belonged to 68% of students and to 79% of employees. Comparison of these results leads to the conclusion that, firstly, many occupied graduates on their personal experiences appreciated the benefits and in some cases the need and the ability to change profession or specialty.

Secondly, the students' dominant view is the possibility of mastering several occupations, so they have the potential focus on professional mobility. A real readiness to change jobs belonged only to the third part of all students surveyed. Among employed the similar responses were give almost by half of the respondents. Thus, a potential awareness of the importance of professional mobility was fixed, but a real commitment to such action was formed much weaker. Meanwhile, the presence of the high professional mobility of young people is a necessary objective condition for economic development in the region and improving of living standards that is recognized by various social groups, including students and especially young professionals.

3.3. Problems of Formation of Students' Professional Mobility

Currently, in educational institutions of Khanty-Mansi Autonomous District - Yugra some of the major ways of students' professional mobility formation in vocational schools are planned and partially implemented.

In this regard, the problems have been isolated of students' professional mobility formation, due to socio-economic and socio-cultural factors in the region:

- Demand and proposals for vacancies misbalance in the regional labor market
- Localization of the education service's market in the major cities of the district, the narrowing of opportunities in choosing a career in small towns, far from the capital of the district and huge oil and gas cities.
- Shortage of personnel in remote villages from industrial centers
- Climatic conditions and geographical location of the North District
- The absence of major research centers on the development of innovative technologies, the lack of specialists in the field of high technologies
- A change of priorities in relation to traditionally prestigious profession for Russian regions and an increase in demand for education in the fields of oil and gas and energy
- Different attitude of various ethnic groups to the profession's choice and the possibility of its change.

3.4. Pedagogical Conditions of Professional Mobility Formation of Young People

An effective way to design a holistic pedagogical process, contributing to the formation of university students' professional mobility is the definition of pedagogical conditions of the organization of such a process.

In general pedagogical conditions of formation of university students' professional mobility can be defined as the totality of the circumstances (objects and actions) of the educational process, as well as some significant internal features of students' personality, the development and implementation of which influence the formation of professional mobility in the course of their training in high school.

Pedagogical conditions in this case are a necessary component in the process of directed formation of the students' professional mobility elements.

As the pedagogical conditions of students' professional mobility formation during their training in universities were allocated the following ones:

1. Diagnosis of applicants' professional orientation, vocational guidance counseling of students in training process, in the course of which the interests are identified, the structure of intelligence and personality characteristics of the student, which allows create some elements of the reflective-evaluative component of professional mobility;
2. Development and inclusion of integrated specialized courses of two types in the curricula: Associated with the general profile of the specific institution, and including the basics of legal, economic and psychological knowledge, regardless of the profile of universities. It promotes the formation of cognitive competency component of professional mobility, and to some extent, by the inclusion of elements of psychology and elements of it's generally - personal component in integrated courses.
3. Organization of psychological and educational support to students, aimed at developing their, first of all, important for the formation of professional mobility personal psychological qualities, and, secondly, at the development of communicative skills. This is due to the formation of the component elements of the overall personality of professional mobility.
4. The organization in higher education schools of applied research with the participation of students, aimed at the performance of specific tasks of enterprises and organizations that promotes the formation of cognitive competency and partly of reflective - evaluative component of professional mobility.
5. The introduction in the curriculum of colleges of advanced education elements taking into account the profile of the university and identifying of the most promising directions of various technologies' development, which is connected with the development of cognitive competence component's elements of professional mobility.
6. Students' training practice in enterprises and organizations so that students could get acquainted not only with the technological process used in the structure, but also with

the specific working conditions of young professionals. This practices' organization positively affect the formation of the elements of three components of professional mobility: Reflective-evaluative, cognitive competency and generally-personal ones (through the development of some of the professionally significant communicative qualities in the process of communication with the staff of organizations where the practice is held).

7. Giving the students the widest information about potential jobs' availability in the region in various trades and professions, as well as working conditions in various companies. Students' introducing to the sources of such information and the rules of their use.
8. Organization of complex specialized physical training and sports, aimed immediately both at developing students' healthy lifestyle, as well as the development of their physical and psychological stability. It contributes to the formation of such a component of the overall personality of professional mobility, as physical and mental health.

The implementation of these pedagogical conditions in the educational institution was preceded by a special monitoring of the labor market in the region, allowing estimate the excess or lack of vacant jobs in the region in various specialties. In addition, sociological investigations were conducted to assess the degree of real influence of individual factors on the level of formation of professional mobility of the university graduates.

4. DISCUSSIONS

It should be noted that the leading trends of students' professional mobility formation in higher education schools are the following ones: An increase in students' potential opportunities to have high-paying jobs in various specialties, due to the overall successful development and economy reconstruction of our country in recent years, as well as the development of science and the widespread introduction of innovative technologies; strengthening the universities' role in the purposeful formation of students' professional mobility; expansion of the knowledge base about different specialties, the possibilities of obtaining them and working conditions in these fields in the various organizations and enterprises; improving of career guidance in high schools, including working with undergraduates; implementation of integrated specialized courses in universities in various fields of knowledge related to the formation of students' professional mobility.

The basis for the formation of students' professional mobility are integrated nature of the phenomenon of professional mobility, which has its sociological, psychological and educational components, which are manifested in the aggregate interaction; the need to explore integrated specialized courses that include various foundations of scientific knowledge; the practice's peculiarities of students' professional mobility formation, which includes the provision of a significant quantity of training sessions, development of students' personal psychological qualities and the organization of their relationship with real companies - potential employers; the accumulated experience of theoretical understanding and

practical implementation of different ways of elements' formation of future specialists' professional mobility during their training in universities.

5. CONCLUSIONS

Thus, the proposed in the article structural and functional regional model of students' professional mobility formation includes the following interrelated components: Regional social demand for staff training, target (goal and objectives of the professional mobility formation), content and process (principles, stages, pedagogical conditions of professional mobility formation), technological (the organization of educational and research activities, based on the resources of regional enterprises and the personification of relations with them, the use of reflective and developing technologies), monitoring (diagnostics, prediction and correction of students' professional mobility on the basis of personal potential's and the regional labor market' reflection) assessment and result ones (criteria, levels and the results of formation of students' professional mobility).

The effectiveness of the basics' formation of university students' professional mobility in the process of training depends on the following pedagogical conditions' implementing: Establishment of coordination and social partnership of the university with an innovative and educational environment of the region and international cooperation; diagnostics' provision of initial state, total indicators and dynamics of students' professional mobility formation with its subsequent correction, career-oriented students' counseling during the training period; development and incorporation into vocational training curricula of integrated special courses related to the overall profile of the specific institution of higher education and including the basics of legal, economic and psychological knowledge, regardless of the profile of universities; organizing of psychological and pedagogical support to students, aimed at developing in them, first fall, important for the formation of professional mobility of personal psychological qualities, and secondly, the formation of communicative skills; organization in higher education schools of scientific and practical research with the participation of students, aimed at implementing the specific orders of enterprises and organizations; the introduction in the curriculum of colleges of advanced educational elements taking into account the profile of the institution and identification of the most promising directions of development of the various technologies; organization of students' practical training at enterprises and organizations to familiarize students with the process used in the structure, with specific social and group working conditions of young professionals; providing of students with information about potential vacant jobs in the region in various trades and professions, about working conditions in various companies; learning the rules of use and receive such information; complex organization of specialized physical training and sports, aimed both at developing students' healthy lifestyle, on the development of their physical and psychological stability.

The practical implementation of these conditions in each individual higher education institution is related to the need to take into account of a number of regional factors: The possibility

of the educational institution, the availability of companies and organizations in which the students can have industrial practice, geographical location and regional affiliation of the city where the university is located.

REFERENCES

- Amirova, L.A. (2009), Development of professional mobility of teachers in additional education system (Doctoral Dissertation). Ufa: Bashkir State Pedagogical University. p438.
- Amirova, L.A., Amirov, A.F. (2011), Development as a mobile person on the stage of pre-professional specialization. Ufa: Vagant. p194.
- Arkhangelskiy, A.I. (2003), Formation of professional mobility of students in the learning process in technical colleges (Unpublished Master's Thesis). Moscow. p146.
- Ashcheulova, N.A., Kugel, S.A. (1998), Motivation and direction of occupational mobility of researchers in the transition to market relations. The Annual Scientific Conference. Moscow: IIET RAS. p192-194.
- Goryunova, L.V. (2006a), Professional mobility specialist as the problem of developing education in Russia. Rostov-on-Don: Publishing House of Herzen. p228.
- Goryunova, L.V. (2006b), Theoretical and methodological basis of the strategy studying the phenomenon of occupational mobility. Humanities and Social and Economic Sciences, 2, 46-47.
- Igoshev, B.M. (2008a), Organizational-pedagogical system of training professional and mobile professionals at the Pedagogical University. Moscow: VLADOS Center. p201.
- Igoshev, B.M. (2008b), System-integrative organization of training of professional mobility of teachers (Doctoral Dissertation). Yekaterinburg. p394.
- Klimov, E.A. (2007), Psychology of professional self-determination. Moscow: Academy. p304.
- Kon'kov, A.T. (1995), Professional mobility as a factor of social differentiation youth (Unpublished Master's Thesis). Moscow. p136.
- Levanova, E.A., Slastenin, V.A. (2005), Psychological problems of employment of young professionals today. Issues of Teacher Education, 23, 460-466.
- Levina, M.M. (1998), Technology Basics of professional teacher education. Minsk: Public Education. p344.
- Makeyev, S.A. (1991), Social Mobility as a Behavior (Doctoral Dissertation). Kiev. p317.
- Mazhar, N.E., Slastenin, V.A. (1991), Diagnostics of professional competence of young people in educational activities. Moscow: Prometheus. p144.
- Merkulova, L.P. (2008), Formation of professional mobility of technical specialists by foreign language (Doctoral Dissertation). Samara. p40.
- Mishchenko, V.A. (2008a), Use of information technology in improving occupational mobility of young people. Siberian Pedagogical Journal, 9, 376-381.
- Mishchenko, V.A. (2008b), By the treatment of the concept of "professional mobility" in the contemporary scientific literature. Siberian Pedagogical Journal, 15, 75-81.
- Mishchenko, V.A. (2009), Professional mobility as one of the basic psychological and pedagogical qualities of the future specialist. Education and Science, 3(60), 35-42.
- Mitina, L.M. (2002), Developmental Psychology Competitive Personality. Voronezh: NPO "MODEK". p326.
- Mudrik, A.V. (1999), Social Pedagogy. Moscow: Publishing House Center "Academy". p184.
- Nechaev, N.N. (2005), Professionalism as the basis of professional mobility. Moscow: Ministry of Education and Science of Russia. p92.
- Nedel'ko, E.G. (2007), Formation of motivational readiness for professional mobility of university students (Unpublished Master's Thesis). Magnitogorsk. p242.
- Novikov, V.V. (2001), Professional mobility of graduates of technical high schools in Russia at the turn of XX-XXI centuries. PhD Thesis. Moscow: Moscow State University. p183.
- Pleshakov, V.A. (2010), Theory of the psychologist age-specific status of the individual and the technology of its development in the context of vocational training of the teacher-psychologist. Moscow: MGPU Prometey. p284.
- Podymov, N.A. (1998), Psychological Barriers in the Pedagogical Activity. Moscow: Prometheus. p239.
- Pryazhnikova, E.Y. (2007), Vocational Guidance. Moscow: Akademiya. p496.
- Sidorova, N.V. (2006), The role of innovative development of higher education in the professional mobility of young people (Unpublished Master's Thesis). Irkutsk. p194.
- Vlasov, V.V. (1998), Education - vocational guidance. Higher Education in Russia, 4, 29-32.
- Zeer, E.F. (1997), Psychology of Professions. Yekaterinburg: UGPPU Publishing House. p314.
- Zvereva, N.M. (2006), Prepare graduates for social and professional mobility. Higher Education in Russia, 6, 89-93.