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Value Orientations of Future Teachers-Researchers

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ABSTRACT

Values are keystones of society; they can vary depending on the professional activity. Teacher's values play an important role, since they directly affect the formation of knowledge of students. The paper presents the characteristics of one of the structural components of future teachers' active scientific position - pedagogic values such as "goal", "means", "knowledge", "attitude", "quality". These values serve as an internal regulator, a guide of future teachers' behaviour, determine preference of aspirations and desires, and promote the transformation of the norms and ideals of personal beliefs and life principles. The methodological basis of the work consists of methods of analysis, synthesis and summarizes the experience of researchers, who have considered this problematic. A study of "World Declaration on Higher Education for the Twenty-First Century", which was adopted in the course of an international conference under the auspices of UNESCO is of particular concern. Formation of competences and professionalism would be the consequence of inculcate of these values to future teachers. It will be easier to teacher to find a common language with the students; he/she will be able to increase their interest in science.

KEYWORDS Value orientations, pedagogic values, future teacher, active scientific position, system of values ARTICLE HISTORY Received 14 April 2016 Revised 22 September 2016 Accepted 11 October 2016

Introduction

System of value orientations is one of the important features of the human, a characteristic of a mature personality, expressing a meaningful attitude to the social reality. This system determines the motivation of human behavior, has a significant impact on all aspects of his/her activities. The problems of value orientations of the individual occupy important and central position in philosophy, sociology, psychology, pedagogics (Nikitina, 2004; Rubchevsky,

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2003). Its importance is determined by the fact that the value orientation fulfills functions of regulators of human behavior and all kinds of human activity.

Thus, value orientations are a subsystem of consciousness in which values are recognized by a person as strategic goals in life and general worldview attitudes (Schunk, Pearce, 2012; Sandri, 2013). In other words, the system of value orientations include the principles of behavior in society, as well as the principles of understanding of their own behavior and the behavior of other people.

Determination of value orientations reveals individual and group commitment to certain universal values, goals, means of life activity, level of their significance to humans and general orientation for a certain type of behavior.

Studies on value orientations by K. V. Rubchevskij et al. (2003) clearly demonstrate that the professional activities affect the hierarchical structure of value orientations (Rubchevsky, 2003).

Education is an essential tool for social development, the process of systematic training in order to transfer knowledge and skills necessary for the development of society (Banks, 2015). The quality of education depends on the competence of the teacher and his/her value orientations (Cohen et al., 2013; Sallis, 2014).

Valuable orientations of future teacher play a crucial role not only in the formation of his/her own personality, but also serve as specific valuable benchmark to students in further professional activity (Greene et al., Spring, 2014; Beck et al., 2016). All this shows the necessity of studies of value orientations of students, in particular, such a group as students of pedagogical universities. This is because the state of society and the dynamics of its changes to a large extent depend on teacher's work.

Value orientations, along with beliefs, attitudes and principles characterize the orientation of the person, including the pedagogical orientation, and therefore have an impact on human behavior (Valerian et al., 2016).

In psychology, students age is recognized as sensitive period for development of valuable motivational and semantic structures of the future teacher's personality (Alekseev, 2013).

Valuable orientations of the future teachers are largely due to their professional orientation, and the system of orientations as well as a system of values and personal meanings of a particular professional group, has its own characteristics.

A question of engaging young people in science is widely discussed now, concepts are being developed, and a variety of government measures is being offered (Sandri, 2013; Spring, 2014; Banks, 2015). Preparing of future scientific elite is possible only with an early admission of students to researches, their familiarity with scientific activity. This is important not only for the education of future scientists, but also for providing qualitative education. The realities of the time require training for not just teachers but teachers-researchers, as only a

teacher, who is competent in research and takes active scientific position can accustom students to science.

Active scientific position is understood as manifested in behavior, generating combined with deep competence high socially significant results, the integration of the dominant, stable relations of future teachers to scientific activity, to themselves as future teachers-researchers, the participants of research activities and the role they will perform in this sphere.

Considering the specificity of our position, we believe that its structure should include pedagogical values, as they serve as a guide and a stimulus for social and professional activity of the future teacher. The presence of professionally significant values provides a conscientious attitude, induces to search, creativity, and to some extent compensates underdeveloped skills (Shadrikov, 2012).

Aim of the Study

Considering the system of values of the future teacher.

Research questions

What is the characteristic of future teacher's values?

Method

The methodological basis of the research consists of provisions on the leading role of activity in development of individual, on dialectical unity of theory and practice, as well as the methodological concepts of formation of teacher's personality in the system of education.

In order to achieve this goal we used a complex of complementary research methods:

- theoretical methods: analysis and study of specific philosophical, psychological, educational, scientific and methodical literature on research issues; analysis of educational and methodical documentation, general theoretical methods of analysis and synthesis.

- general-logical methods: study and generalization of pedagogical experience on the research problem, conceptualization of educational practice; application of methodological orientations, determined by information paradigm, and theory of self-organization.

Data, Analysis, and Results

In our opinion, pedagogical values are the most completely presented in classification of V.A. Slastenin and I. F. Isaev (1997), which includes two levels of existence. Let us consider each of them.

The horizontal level is composed by goal-values, means-values, knowledgevalues, attitude-values and properties-values. We believe that categories "goal", "means", "knowledge", "attitude" and "quality" should be values of future teacher, who has formed an active scientific position. "Goal" category as a value. The goal is "an anticipation of the result in consciousness, at achieving of which actions are directed" (Philosophical Dictionary, 1990).

There are different classifications of goals in pedagogics:

- goal from a position of global and local expressions;
- national goal, the goal of a certain educational institution, the goal of training and education of a particular class, and student;
- goal of education;
- long-term, close and immediate goal;
- general goal, subgoal;
- interim goal, final goal;
- pedagogical, social and other goals.

Despite the variety of classifications, the essence of the concept of "goal" in each of them is represented equally, and its value is as follows:

- goal, expressing an active side of human mind, is in line with the objective laws, real possibilities of the world and of an entity;
- content of the purpose, its relevance and clarity predetermine nature of voluntary actions of the future teacher;
- goal is a system-creating characteristic of activity.

In the current educational situation, when there are a number of concepts of training and education, where the role of the institution is rising in determining the strategy and tactics of the educational process, pedagogical collectives of schools develop and create a model of a graduate, based on the concept that they have chosen and available resources. In this connection there is a need for implementation of goal-setting – "a conscious process of identifying and setting goals and objectives of the educational activity, transforming the public goals into goals of joint activities with the pupils" - at high theoretical level, taking into account current socio-economic situation as well as needs and opportunities specific educational institution (Kodzhaspirova, 2013).

However, according to V. A. Slastenin and Isaev I.F. (1997), N. N. Nikitina (2004), and N. V. Kislinskaya (2004) research, a distortion of purposes of pedagogical activity in the minds of teachers and future teachers is common in educational environment now. "Egocentrism" and "subject-centrism" are evident in their focus on own purposes, which serves as the assimilation by students of system of knowledge, not their personality (Nikitina, 2004).

It is possible to change the situation if the goal will become a value for the future teacher. Then he/she would be able to set goals that would allow to carry out the selection of content, forms, methods and means of training and education of students in the process of pedagogical practice as well as in the future professional activity.

"Means" category as a value. "Means is that, the use of which (that) leads to the achievement of the selected goals" (Philosophical Dictionary, 1990).

Analysis of pedagogical literature revealed the existence of the following types of means:

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- means of teaching (visual filmstrips, slides, slide projection apparatus; audio –sound-recording and sound-reproducing equipment, phonograms; audiovisual – videos, movies, TV shows, film, video and TV equipment; manipulation – simulators; automatic – computer hardware, packages of application programs; natural and other material objects);
- means of education (material and spiritual objects; print, visual and verbal propaganda of any ideas, theories; agitation, public and group opinion);
- mass media (press; television; radio; cinema; computer facilities; video resources; telephone);
- means of pedagogical process (various activities teaching, play, work, communication, cognition);
- means of educational activity (training aids and facilities).

Despite such a variety of means, V. A. Slastenin and I.F Isaev (1997) rightly pointed that many teachers use in their work one "solitary mean" that, in turn, affects the efficiency of the organization and realization of pedagogical process (Kodzhaspirova, 2013). The reason for this is a lack of consideration of "means" category.

The value of this type consists in the fact that the means:

- are necessary material objects, and objects of spiritual culture for organization and realization of future professional activity, including research work of both the teacher and the teacher with the students;
- contribute to the formation of human activities related to the environment;
- promote rational organization of independent work, activate the learning process and its close connection with life;
- provide practical realization of goals, in cooperation with which they can change reality.
- Considering the means as values, the student would not only be aware of their diversity, but also will use them effectively in the process of teaching activities, namely:
- create optimally saturated (without excessive abundance and lack) integrated multifunctional environment by various means, taking into account gender-role specificity;
- choose those means which, influencing the identity of the student, not only will awaken his thought, but also make him to reflect on his behavior and acts, to cause self-improvement.

"Knowledge" category as a value. "Knowledge is a product of social material and spiritual activity of people; perfect expression in the symbolic form of objective properties and relations of the world, natural and human" (Philosophical Dictionary, 1990).

Knowledge can be every day and scientific. Scientific knowledge, in turn, is divided into empirical and theoretical (Kodzhaspirova, 2013). Future teachers should operate scientific knowledge in the various spheres of life, as the reliability of everyday knowledge is established through direct application in practice, and the reliability of scientific knowledge can be established by experimental control on their receipt and deducibility of some knowledge of the other, the truth of which has already been proved.

Famous philosopher, science theorist V. S. Stepin (2007) states that any person, who is engaged in research activities, should take basic aim to find the truth of knowledge and its constant growth. These aims are expressed in the system of ideals and normative principles of scientific work: for example, the prohibition of plagiarism, the admissibility of the critical review of new knowledge, the requirement of logical consistency of the theory and its experimental verifiability (Stepin, 2007).

Based on the foregoing, we believe that scientific knowledge should be significant for future specialists, the value of which is following:

- knowledge is an interpretation of disparate ideas into a systematic theoretically arranged form;
- knowledge is a true reflection of reality in the human mind in the form of ideas, concepts, opinions, theories;
- skills are forming on the basis of learned knowledge;
- being part of a person's worldview, knowledge increasingly determine his/her attitude to reality, moral attitudes and beliefs, strong-willed personality traits;
- knowledge is one of the sources of human inclinations and interests, a necessary condition for the development of his/her abilities;
- knowledge is a tool of world transformation and now it is "becoming a major source of value in the information space" (Nazarbayev, 2006).

The value of knowledge for future specialists was mentioned in the speech of the President of the Republic of Kazakhstan Nursultan Nazarbayev (2006): "No matter how good and professional the teacher is, he was not able to teach the student anything, if he does aspire after knowledge, if he does not want to become a professional.

It is necessary to acquire new knowledge constantly, to work on yourself. This is the only way to become a successful person.

Every 10 years, the volume of human knowledge doubles. As a result, knowledge is becoming the most valuable resource and is always in demand.

Not computers, communication lines or machines, but the knowledge and creativity of thought will be of critical importance in the information society" (Nazarbayev, 2006).

Future teachers, considering knowledge as a value, will own ways of acquiring knowledge and substantiation of the truth, be able to find creative application of acquired knowledge, teach their students. Moreover, future specialist should be able to distinguish scientific knowledge from pseudoscience, because now cheats disguised as scientific theories can spread with lightning speed throughout the world, rapidly possessing people's minds, disorienting them. In addition, students would learn how to synthesize knowledge from

various fields of science and turn them into private property, and tool of educational activity, and professional and personal self-improvement.

"Attitude" category as a value. "Attitude is a moment of relationship of all phenomena" (Philosophical Dictionary, 1990). In philosophy, attitude of objects to each other is studied: the foundation and consequence, cause and effect, part and whole, necessity and accident, obedience and subordination, and so on. In pedagogy and psychology, human's attitude to the world, to others, to the activities, to things, to themselves is examined.

The value of "attitude" category is as follows:

- it is impossible to solve the problem of truth without taking into account an attitude: "the collection of all aspects of the phenomenon, and the fact of their relationship – that is what constitutes the truth";
- attitude determine the nature of human preferences in various spheres of life, and influence behavior through them in general;
- dominant attitude of a person to certain circumstances can become a feature of his character;
- changing of a set of attitudes, where there is a particular object, a phenomenon, a process, may lead to its change.

Future teachers, who considers attitude as a value can correctly determine the relationship and the nature of the location of elements of the system (education, training systems, values, and so on), to express their position, quickly adapt to its environment, influencing other people in the process collaboration and communication.

"Quality" category as a value. "Quality is a holistic integral characteristic of a subject, phenomenon, process (the unity of its properties) in its system of connections and relationships with other objects" (Philosophical Dictionary, 1990). In philosophy, this concept is considered in terms of the dialectic of quantitative and qualitative changes. In psychology, the question of the mechanisms of formation and functioning at certain stages of the formation of the "quality" category is studied from the standpoint of this science. In pedagogics, this term means a quality of life, personality, knowledge, education, educational training of graduate, educational services.

Value of quality as a category is following:

- quality makes it possible to satisfy the needs and demands of people, fit for their purpose and requirements;
- every object, phenomenon, process has a high quality definiteness, which
 is based on its material composition (if this subject), the structure,
 characterized by stable relationship of components of the studied object
 and reflecting its specificity and functional properties of an object,
 phenomenon or process. With the loss of quality definiteness, the object
 ceases to be itself, acquires new features that determine its belonging to
 different class of objects, phenomena and processes;
- quality reflects the relative stability of objects, phenomena and processes in a certain period of time;

quality (the quality of the personality, the quality of services, etc.) predetermines competitive position of a person in various spheres of his/her activity. In order to prepare the competitive expert, first of all, it is assumed to integrate education and research, to update educational programs and the content of education in general, taking into account current state of science and scientific ideas about the world (Salamanca, 2001).

Discussion and Conclusion

World Declaration on Higher Education for the Twenty-First Century, adopted in 1998 at an international conference organized by UNESCO, states: "Quality in higher education is a multidimensional concept, which should embrace all its functions, and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment".

The problem of quality of education and its evaluation has become one of the main on agenda at the meeting of representatives of more than 300 European universities in Salamanca in 2001. Adopted Address to Quality plays a key role in a number of fundamental academic values that are essential to the creation of the European educational space. It was noted again the value of a comprehensive multidimensional concept of quality, and emphasized that it is not being unchanged category; it needs constant confirmation (Salamanca, 2001).

Future teachers, considering the category of "quality" as a value will to strive to achieve results that meet the requirements of standards, requirements documents that regulate this type of activity, which, in turn, would affect its productivity. As we know from psychology and pedagogy, activity is considered highly productive, when it has a high degree of quality of the main indicators (performance, optimal intensity, accuracy, reliability, orderliness, stability), preserving the physical and mental health of the person and his pupils pursuing positive social goals.

Thus, an inculcate of proposed set of values to future teachers leads to following:

- Increase of motivation and professional competence of the future teacher
- Continuous self-education
- Increasing of interest in science among students
- Formation of the friendly relations between teachers and students

As a result of these changes, the level of education and an interest in science among the population will increase.

Implications and Recommendations

Thus, categories of "goal", "means", "knowledge", "attitude", and "quality" compose horizontal level of pedagogical values, which, in turn, depending on the development of society, education and the human mind, lies at a certain vertical.

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The vertical level consists of socio-educational, professional-group, individualpersonal values. Socio-educational values reflect the nature and content of values that function in different social systems and regulate the activity and communication throughout the community. Professional-group values reflect the nature and content of the values that govern and guide vocational teaching activities within the framework of certain educational institutions. Individualpersonal values reflect the nature and content of the values that characterize target and motivational orientation of the personality. This means that a future teacher, accumulating socio-educational and professional-group values, create his/her personal value system, based on which student's consciousness is being formed; it is not only the result of his emotional response to objects, phenomena, processes, professional activity, but their interpretation, awareness and personal decision.

It should be noted that abovementioned pedagogical values have a syncretic character due to their interaction and interconnectivity in the process of operation. Furthermore, these values serve as an internal regulator, a guide of future teachers' behaviour, determine preference of aspirations and desires, and promote the transformation of the norms and ideals of personal beliefs and life principles.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

Alekseev V. G. (2013). Valuable orientations of the person and the problem of their formation. M. Banks J. A. (2015). Cultural diversity and education. Routledge.

Beck C. M., Crittenden B. S. & Sullivan E. (2016). Moral education. University of Toronto Press.

Cohen L., Manion L. & Morrison K. (2013). Research methods in education. Routledge.

- Greene J. P., Kisida B. & Bowen D. H. (2014). The educational value of field trips. Education Next, 14(1).
- Kodzhaspirova G. M., Kodzhaspirov A. Yu. (2013). Pedagogical vocabulary. M .: Publishing Center "Academy".
- Nazarbayev N. A. (2006). To the knowledge-driven economy through innovation and education: Message of the President of Kazakhstan. Astana.

Nikitina N. N., Kislinskaya N. V. (2004). Introduction to the teaching activity: Theory and Practice. Moscow: Publishing Center "Academy",

Pearce J. L., Huang L. (2012). The decreasing value of our research to management education. Academy of Management Learning & Education, 11(2), 247-262.

Philosophical Dictionary. (1990). Edited by Frolov I. T. 4th ed. M.: Politizdat.

- Rubchevsky K. V. (2003). Socialization of the person: internalization and social adaptation. Social studies and modernity, (3), 147-151.
- Salamanca. (2001). Shaping our Own Future in the European Higher Education Area. Convention of European Higher Education Institutions. 29-30 march.
- Sallis E. (2014). Total quality management in education. Routledge.
- Sandri O. J. (2013). Exploring the role and value of creativity in education for sustainability. Environmental Education Research, 19(6), 765-778.
- Schunk D. H., Meece J. R. & Pintrich P. R. (2012). Motivation in education: Theory, research, and applications. Pearson Higher Ed.
- Shadrikov V. D. (2012). The problem of genesis of systems in professional activity. M.: Prosveshhenie.
- Slastenin V.A., Isaev I.F. (1997) Pedagogics: Lesson book for students of pedagogical institutions. Moscow: School-Press.
- Spring J. (2014). Globalization of education: An introduction. Routledge.
- Stepin V. S. (2007). Philosophy of Science M.: Gardariki.
- Valerian F. G., Elvira G. G. & Olga V. Y. (2016). The Use of Problem-Based Technologies in Multicultural Education of Future Teachers. *IEJME-Mathematics Education*,11(4), 755-766.