CLUSTER OF EDUCATIONAL COMPETENCES IN THE SYSTEM OF VALUES OF DESIGN STUDIES STUDENTS

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Abstract

Reforming the system of training as one of the main directions of modernization of higher education in Russia highlights the issue of correlating the requirements with the qualifications of graduates, as specified in the Higher Education Standards, learning outcomes, and employer needs. One of the burning issues of Russian higher education is lack of well-functioning system of interaction with the labour market. The majority of employers remain passive consumers of the higher education system services. Thus, it is expected that young people look for work outside their region.

Employment not according to the specialisation is an issue marked both by employers and graduates. University students choose the system of education as an alternative employment (comprehensive schools, colleges, lyceum schools, institutions of secondary and further education). This 'niche' is traditionally occupied by graduates of teacher training universities and institutes. Inactivity of potential employers does not create competition in the labour market that could boost innovative processes in the universities the graduates of which are ready to be engaged in teaching in the region.

The tool for matching the labour market requirements and achievements in the European educational space is a methodology of qualifications framework as an innovative technology for developing education programmes. Competence clusters that meet the demands of educational service consumers should become guidelines in selecting the content of education. Being a key concept of qualification framework, competences carry out a function of the language to exchange information between the labour market and education.

A competence is an integrated concept that indicates the ability of the individual to independently use various knowledge, skills and experience in everyday life and new situations. A cluster of educational competences as an expected result of education, though formalized, is currently being developed under the influence of interaction of relevant institutions and labour market segments. The result of such an interaction is the Professional Teacher Standard which regulates the requirements of the employer for the applying teacher (educator).

Category *Teacher* defines a number of functions of the teacher, which can be grouped in the cluster segments: paperwork management, organization and implementation of educational process, monitoring and evaluation of educational process. When offering a job the educational institution employer also pays attention to the personal qualities of the applicant, i.e. their attitude to teaching. Each cluster segment represents a 'bush' of knowledge, skills, abilities to form which a sufficiently large number of training hours is required. An academic university, as opposed to a teacher training one, can allocate on student teaching only a limited part of selective courses. Therefore, students' motivation is crucial in mastering the competence cluster.

The authors of the paper have conducted a study to determine the role of the cluster of educational competences in the system of values of Design Studies students of Kazan Federal University; correlated them with similar teacher's values working in the field of general education; offered ways to integrate student training in the academic university and teacher training; proved the leading role of student teaching in the process.

Keywords: cluster, educational competence, values, student, designer, professional and educational activities, competence, school practice.

1 INTRODUCTION

1.1 Background

Modern economy has led to the formation of new requirements for graduates of higher educational institutions, including the growing demand among the systematically organized intellectual, communicative, reflexive, and self-organizing moral principles that contribute to successful organization of activities in a broad social, economic and cultural context. Recently it has become a tendency to see working graduates at jobs not related to their degrees obtained at university. Such state of things allows us to talk about the necessity of reorienting the educational paradigm. So, first, the Lisbon Convention "On Recognition of Higher Education Qualifications in the European Region" 1997 (Russia joined in 2000) formulated the concept of international recognition of the results of education and made demands to the academic community to develop a convertible commonly understood criteria for such recognition. Later, within the framework of the Bologna Process, there were actively developed various versions of such criteria, and this new methodology was called competence-based approach [1, 8]. Today the vocational education system is dealing with a shift from the qualification (knowledge-based) approach to competency-based one. The former involves linking vocational education programme with the objects of labour, relation with gualifying characteristics, but it does not guarantee their use in professional life. The gualifying characteristic refers to "the predominance of activities in the framework of sustainable professional fields and algorithms", while competence meets the "requirements of 'floating' professional boundaries, dynamics of professions, their globalization, destruction of professional aloofness". [11].

Competence is an integrated concept that indicates the ability of the individual to use independently various elements of knowledge, skills and attitudes in everyday and new situations. [14]. The teacher's professional work is teaching. The term "teaching" reveals an individual's belonging to education that serves teaching. Thus, the terms "professional work of the teacher" and "teaching" carry the same meaning. Accordingly, the terms "professional competence" and "educational competence" can be used synonymously. Professional competence is a key concept to characterize teaching. V. Sukhodolsky notes that professional competence of the teacher is the ability to effectively implement professional activity that is defined by the position based on scientific education, emotional and evaluative attitude to teaching. In this context it presupposes possession of professionally significant personal qualities and attitudes, theoretical knowledge, professional skills and abilities [9], focusing on the values of teaching profession.

The system of values is formed in the youth as a conscious, generalized attitude to life that allows you to understand the objective of human life and defines vital perspective, direction of the individual's development as its major source and mechanism [7].

A cluster of educational competences as a planned result of education is currently being formed under the influence of interaction, though formalized, appropriate structures and labour market segments. The result of this interaction in Russia is the Professional Teacher Standard [15] which provides requirements of the employer to the applicant for the position of a teacher (child minder). By analyzing the Standard, we can point out five groups of educational competences: special, methodological, psychological and educational, educational and differential, and autopsychological (the latter two notions were offered by N. Kuzmina, et al [16]). These groups form a cluster. The cluster of educational competence is interrelated universal competence demanded for work in an educational institution. The nature of the competence is that it can appear only in organic unity of human values, that is, under the condition of deep personal interest in the activity and under practice.

The content of Bachelor's degree in Design programme involves educational competences of a Bachelor's degree in professional scientific and teaching activity: "it is aimed at teaching at educational institutions, institutions of secondary professional education and further education; it is able to manage the learning process, to perform methodical work, read lectures and provide practical training". [2]. However, the curriculum provides little time for this. The solution is seen in the actual filling of the production (school) practice with teaching activities and involvement in the educational process of highly qualified educators, teachers-innovators, as well as focusing university students on educational activities in the course of vocational training in the chosen direction. Guiding students in the values of teaching is the result of interaction of external and internal determinants of personality development of culture [10] and bases of formation of culture of professional and educational activities.

1.2 Status of a Problem

The issue of determining the place and role of the cluster of educational competences in system of values of Designer Studies students needs studying the structure and content of the latter. The system of values is one of the characteristics of the person and its indicator of formation. Accounting for changes in the values, mediated by changes in society and the conditions for the formation of values of the person in the educational process of higher education provide a professional and personal growth of students. [5] Mainstreaming the issue of formation of values of professional educational activity in students of higher educational institutions of non-teaching profile determines the effectiveness of cluster formation of educational competences, which further removes the problem of unemployment and, if necessary, creates willingness to acquire a new specialization. Personal qualities of the applicant for the position of a teacher due to their system of values are significant for the employer. Analysis of studies has shown that the value-motivational component of educational culture of students, which is a system of educational values and personal meanings, motives, interests and future professional needs, is a leading one (Yavgildina Z., Dyganova E.). [15]. Investigating the specificity of professional teacher's work, many researchers have concluded that the most important condition for its productivity is the educator himself. The quality of education, efficiency of teaching is determined not only by high professionalism and productive technologies, but above all by the teacher's personal characteristics, the value-semantic sphere. [13]. Today it is recognized that the value of such quality as the potential of the individual, development of creativity, originality, critical thinking, independence, creativity, etc. are important. [14].

Motivation of university students to do teaching in the course of vocational training in the chosen direction is directly related to the formation of their valuable relation to a educational activity. To successfully complete professional activities its subject must have a set of psychological, physiological, and personal qualities. The dominant professional competence of the teacher is the personality of the teacher that includes motivation of the individual (personal orientation and its views), property (teaching abilities, character, and its features, psychological processes and states of personality, integrated personality characteristics (teaching self-awareness, personal style, creativity -. as the creativity), values as the meanings of activity value-orientation target professional teacher training is to promote integral formation of personality characteristics, which act as direct indicators of student professional development and formation of educational competences.

The teacher professional standard [15] defines a number of functions of the teacher, which can be grouped in segments of the cluster: work with documents, organization and implementation of the educational process, monitoring and evaluation of the educational process. When applying for a job in an educational organization the employer pays attention to the personal qualities of the applicant, in particular, their attitude to teaching, which we also consider as a component of a cluster of educational competences.

Under the cluster of educational competences we understand the interrelated universal competence demanded for work in educational institutions, including: ownership of the subjects taught in the field of knowledge and skills (meaning the quality of Design Studies education), legal and ethical knowledge, self-management and self-organization, self-motivation. Each cluster represents a segment of a "bush" of knowledge, skills, and abilities the formation of which within the framework of educational process at university must require a sufficiently large number of training hours. Classic university as opposed to teacher training university can devote to teacher training student only a limited part of the disciplines of the variable part of the curriculum. Therefore, students' values in the development of this cluster of competencies are essential for the effectiveness of its development.

The study of the system of values of professional activity of teachers of Fine Arts, Drawing and Technology in the Republic of Tatarstan and Orenburg region (127 teachers were involved in the study) revealed that modern educators believe major components of professional competence to be the following abilities: to model the educational process; implement educational effect adequate to the nature of the child, childhood, national, regional, and cultural traditions; organize communication, build relationships with each student so as to contribute to their spiritual development and education; keep a landmark of self-determination, self-organization, self-education of the individual, creating the conditions for self-development of the student as the subject of activity, as a person, as an individual and develop independently. [1]. We regard these competences as valuable reference points of the development by Design Studies students of the cluster of educational competences.

2 MATERIALS AND METHODS

2.1 Thematic justification

The issue studied in this article is crucial in improving the quality of vocational training of students of classical university for educational (non-core) activities, which affects the development of education in the rapidly changing face of fierce market economy. Changes in the system of values of students of classical university, traditionally of age-related and associated with the important task at this stage of development - the formation of autonomy of the individual, have a tendency of motivation to achieve personal success, in contrast to the previously dominant concern for the welfare of other people and society. Educational competence involving orientation of the person on the other, the system of system of values of modern students are not a priority and dealt mainly in the context of the possible means of economic stability. Lack of research of valuable orientations of students of classical university and the peculiarities of their formation as a cluster component of educational competences in preparation for vocational and educational activities in the Republic of Tatarstan and the whole country, complicates the students the process of adaptation to work in the field of education, as evidenced by the results of surveys among novice teachers.

2.2 Objectives of the Research

In order to determine the place and role of educational competences in the system of values of Design Studies students, the staff of the Department of Design and National Art at Leo Tolstoy Institute of Philology and Intercultural Communication of Kazan Volga Federal University in the 2015-2016 academic year, a series of diagnostic measures was undertaken. During the diagnostics of junior students with the help of Schwartz's questionnaire values were seen as the choice of student and evaluation criteria of the actions, other people and events, on the basis of which a person builds his attitude to the world and himself. Given the value bases of educational activity, we believe it is possible to use this technique to identify the place of educational competences in the system of values of students.

All values in the form of conscious goals designed to meet the three universal basic human needs: as a biological organism, needs for coordinated social interaction, needs related to the survival and wellbeing of social groups. According to S. Schwartz, universal basic human needs reflect the motivational goals: self-regulation, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence (kindness), universalism. The two parts of the test led to the review of the values of students (identified normative ideals and values of the individual to the level of conviction) and to define personal profiles of students (students explore the values at the level of behaviour, individual priorities).

Analysis of hierarchy of system of values of students showed that at the level of ideals are for them to achieve self-sufficiency, and most important that reflect the profile of their design direction, allowing the freedom to think, to create, to achieving some results and recognition. Also at the level of ideals values lined up in the following order: security, conformity, benevolence, conformity, universalism, hedonism, power, full of life experiences, tradition. The values on the level of individual priorities are somewhat different hierarchy: independence, safety, achievement, benevolence, conformity, universalism, hedonism, power, full of life experiences, tradition. Unpopular with students were values such as power, conformity, and tradition. Age peculiarities of value sphere of students related to the necessity of solving the problem of overcoming addiction and the formation of individual autonomy, led to an increase in the value of self-regulation, motivation, self-transformation and self-development. The structure of the system of values of students has a clear focus on achievement and personal success in reducing the significance of favour as caring for others.

A similar study was conducted in the teaching environment. The hierarchy of system of values of teachers different from student: normative ideals reflect the orientation of teachers in the tradition of concern for the welfare of others and society as a whole that is characteristic of Russian culture and mentality. This independence, as well as students, took the first position. The normative ideals of teachers: autonomy, benevolence, tradition, safety, achievement, full of life experiences, conformity, universalism, hedonism, power. Values of teachers on individual priority level is not much different from the standard.

Analysis of the situation showed the need for the formation of the students of the valuable relation to the formation of educational competences. To do this, we have been codified and put into practice various forms of classroom and extracurricular activities. In the classroom one of the most effective

methods of training of students, contributing to successful adaptation to the profession, a lesson in the form of training. According to AV Grey, namely training sessions allow students to "higher quality absorb knowledge, since it is based on personal involvement and emotional experience" of students [7].

We have developed the training of educational interaction accumulates the content of practiceoriented disciplines, promoting adaptation of students to the professional-educational activity: "Workshop on the decision of educational problems," "Introduction to the teaching profession", "Methods of teaching fine arts and technology." Work on training sessions devoted to issues of professional identity, problem situations students: the life and professional, personal characteristics that are important for professional activity. In each session, students are offered to study the problem situation, proposed by the students or the teacher. At the same time, students can act as direct participants or observers.

Methodological section of the work programs of special disciplines is focused on the formation of subject-methodical knowledge and student presentations. Special disciplines that form the basis of training students in Design programme (by industry) - drawing, painting, composition, design (in accordance with industry - graphics, environmental design, fashion design, etc..), Vista, etc.. - aimed at creating a specific subject competences.

2.3 Methods of the Research

Introduction to the discipline manner, the structure of several topics related to the subject tracking techniques (drawing, painting work, project) facilitating study questions the methods of teaching art subjects cycle specialized courses for selection and the passage of educational practice. Special courses chosen by the student and manufacturing practices, as required for the study of the student section of the basic educational program, define substantive content generated educational competencies. Production (teaching) practice is a form of the educational process, in the course of which the direct connection of theoretical education with practical future professional activity (in this case, the teacher). During teaching practice the students get a real opportunity to learn a new social role - the role of the teacher, the system of relations in uneven-age team where, as a consequence, there are directly related to the performance of new emotional experiences. Emotions reflect relationships between motives (needs) and the possibility of success or the success of their meeting the entity's activities; experiences occur after the actualization of motive [13].

The following scientific methods were used to achieve the objectives and solve research problems (analysis, synthesis, comparison, generalization, classification) and specific research (questionnaires and interviews with students and practicing teachers, the study of the educational documentation, analysis of experience), you can review the situation, to give it educational interpretation and to suggest possible solutions within the framework of the research leading to the competence approach.

The theoretical and methodological basis of the research was the theory of the system of values of the individual by A.V. Kiryakova (1996), the work of local researchers S.F. Anisimov (1970), K.A. Abulkhanova-Slavskaya (1980), A.G. Zdravomyslov (1986), D.A. Leontiev (2003), who studied the system of values of the person. Research by Russian scholars and educators of the problem field of vocational and educational activities - V.A. Slastenina, I.F. Isayev (2000). The study also includes an analysis of the theory of the system of values of American cultural anthropologists F. Kluckhohn and F. Strodbecck teachers and scientists of Kazan (Volga) Federal University, such as Khurmatullina RC, Yachina NP, Karkina S.V., Dyganova E.A., Yavgildina Z.M., Gabdrakhmanova E.V.

2.4 Factual Material of the Research

The study was attended by full-time 1-2-year students of Kazan Federal University totalling 46 people (19 men, 27 women), course participants professional development of teachers of fine arts and Kazan Federal University of Technology in the amount of 87 people (12 men and 75 women) and Institute of Advanced training of education Orenburg state educational University in the amount of 40 people (37 men and 3 women). The average age is 42. The total work experience of the respondents ranges from 3 to 54 years of work experience in the subject - from 3 to 28 years old. 94 respondents have a degree corresponding to the subject taught. Remaining in the "Function" is specified: a primary school teacher, teacher of biology and chemistry, health and safety teacher, educational psychologist. Selecting a group of respondents and research materials due to the need to analyze the opinion of those who are directly associated with teaching and has a set of required competencies, i.e. the objective is to express a professional opinion. A survey of teachers has also been linked with the need

to detect changes in the content value-semantic sphere of the person of the teacher in the education modernization period. The tests and selective interview, "is the most common method of data collection survey" were used as a tool. Data were analyzed by counting the number of responses that are below a certain category.

3 RESULTS

In the course of the preliminary work, respondents noted a favourable environment of educational institutions of the Republic of Tatarstan. It was found that the majority of general and additional education organizations (86%) of an aesthetic cycle subjects are teachers with higher and secondary teacher education. A number of teachers' basic level of knowledge in the field of contemporary art and design do not always meet the requirements of modern school curricula, oriented to achieve not only high art, but also its new directions. So, 27% of teachers has difficulty answering the questions regarding the names and works of famous designers, iconic design artworks, modern trends of arts, while students demonstrated fluency in art history material; 13% of the teachers indicated that they have only a general idea of the project activities and they did not know what a design-project is, while the students had no difficulty in that.

To determine the formation of the system of values among students and teachers we used an adapted to our research method of unfinished sentences by I.S. Batrakova, A.V. Mosin, and A.P. Tryapitsinoy [16], a test on the system of values by M. Rokich and a test on life values by D. Leontieva. The teachers' answers were compared with the available typical descriptions and acted as a template for checking the responses of the students.

Answering the question "What is the meaning of the work of the teacher," the dominant opinion of the students was to teach children specific subjects, develop imagination and creativity. Thus, the activity of the teacher of classical university students linked to didactics.

To the question "Are you ready to make changes in the traditional teaching of subjects of artistic and aesthetic cycle system?" the most common answer is that they cannot do anything global, all depends mainly on the management of the educational organization and the educational policy of the state, while 58% of Design Studies students show a desire to make the world better through their activities and its products, the desire to be necessary and useful to society. 46% of the students showed active interest in the professional educational activity, justifying this by interest in creative interaction with children. The students chose to work in institutions of additional education, explaining their choice by greater freedom. According to them, it all depends on professionally, have a skill. Analysis of the students' answers shows partial development of the system of values of professional educational activities that are mostly purely personal orientation, misunderstandings integration of educational and personal values.

The study of life orientations associated with education and prospects of professional activity, showed that most of them share the point of view of the importance of obtaining a diploma of higher education (96%), many prefer to work and develop within their designer profession (62%), given the high payment agree to work not by profession, particularly in education (42%) believe that the designer profession will provide opportunities for self-realization of 67% of respondents to self-actualization in the formation count 29%, 58% of students believe that for self-realization in the chosen profession acquired the course of training in high school of knowledge and experience will be enough. The study of motives of professional choice and action and the use of methods of ranking the importance of factors that are important in their future work, confirmed the willingness of some students in the selection of the teaching profession and the unwillingness of others, which was already evident in the previous tests. The satisfaction with the mastered profession and not the university was shown by 75%, while 25% of the respondents were satisfied with the university rather than the profession.

The results of the survey showed that while still a student you need to generate in students the system of values of professional activity and skills to develop themselves and their activities.

More than half of the students do not own the technology of self-realization in the profession, and hence the chaos in the labour market, lack of professional achievement.

Final-year students, who followed the model of the formation of the system of values of professional and educational activities, when ranking their needs, showed that the ranking in the subject knowledge requirements continues to hold a leading position. But at the same time the rating requirements for

knowledge of new educational technologies increased considerably (72%) in the study of new techniques (62%). The fourth place rating is divided between the need to conduct research and engage in personal self-development (38%). After the experiment there significantly increased the values that relate to personal and professional development (development of abilities was 15%, now 52%, self-knowledge was 13%, now 38%).

4 DISCUSSION. MEETING THE CHALLENGE

The study showed that the system of values of professional-educational activity is determined by students' emotional and psychological state, satisfaction and fullness of life, meaning. The system of values regulates behaviour and activities defines the need-motivational sphere, willingness to be guided by these values in professional and educational activities.

In the study, the problem of professional identity of students has been identified as well as lack of formation of professional educational values.

The study revealed the influence of the system of values of intending Design Studies students on their opinion, direction, and awareness of the content of professional-educational activity of the designer. It revealed lack of formation of professional educational values, difficulties encountered in the application of theoretical knowledge in practice.

This allows us to make the following conclusions: the system of values of intending designers is dominated by the values of personal self-development necessary for the activity of the designer, however, students do not fully realize the value of educational activities. It is obvious that traditional training of Design Studies students should change and acquiree new forms.

Based on the above findings, we looked at the need to create such a model of training of Bachelors, which will be the basis for the formation in intending designers of the system of values in their professional activities, including teaching.

This model can be implemented in the educational environment of all non-teaching universities for students and should consist of the unity of the following components: objectives, effective co-operation of the subjects and transparency of relations of the subjects of study, content, information and methodological support, motivation, resources, monitoring and effective.

One of the conditions for implementation of the proposed design model of learning should be the creation of clusters (college, venture partner, or general educational organization of additional education) that integrate the educational, professional and educational activity of the student; the use in the educational process of educational technologies that contribute to the development and adjustment of value and meaning of professional and educational activities.

We see the possibility of implementation of the educational model of the formation of values and meaning of professional educational activity for Design Studies students by:

- developing a regional training program for students of classical university to perform professional and educational activities in educational institutions and supplementary education, in art schools;
- introducing a mechanism of coordinated and effective inter-agency cooperation of research and educational institutions of various levels to ensure the quality of training of students of classical university for educational activity in the Republic of Tatarstan and beyond;
- improving the monitoring and support of young teachers, by developing mechanisms to assess their educational growth;
- by maintaining a database of best teaching practices, new educational ideas, creative development laboratories;
- by improving the legal framework to support young teachers.

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