

Formation of Competitiveness of Future Teacher of Technology and Business

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Abstract

This article shows a technique of formation of competitiveness of future teacher of technology and business on the basis of modifications of process of vocational (professional) training, education and self-development. The purpose of article is directed on development and research of efficiency of pedagogical conditions of formation of competitiveness of future teacher of technology and business. As the basis of article acts the theory of competitiveness, forming need of development and improvement of professional qualities of future teacher. In article are provided structural components and factors of readiness of future teacher of technology and business to the competitive relations, studied pedagogical conditions of their realization. This article is intended for future school and university teachers, researchers, heads of the educational organizations, dealing with issues of improvement of vocational training of teachers.

Keywords: professional education, teacher of technology and business, competitiveness, readiness, pedagogical conditions

1. Introduction

1.1 Background

Modern dynamic development of society defines need of formation at future specialists of ability to active professional functioning in the conditions of intensive updating of all spheres of social activity and high competitiveness in labor market. Modern training of future teacher focuses attention on its professional mobility, flexibility and adaptation in the conditions of real professional activity and to strengthening of control of future activity (Zimnyaya, 2003, etc.). The high skill level, ability to creative professional activity, social activity and humanistic values define competitiveness of the teacher, his readiness to work in modern conditions, to carry out personal and social formation of school students (Zagvyazinsky, 2007; Kuzmina, 2009).

This aspect defines need of formation of such qualities of future teacher of technology and business at which he, and his pupils will be fully able to answer social inquiries of society. Specifics of training of the teacher of technology and business consist in its integrated character, including scientific knowledge of other disciplines, generalizing fundamental knowledge natural and the humanities, technical and technological knowledge and skills, enterprise ideas, business abilities for further creative activity of the school student (Akhmetov, 2013).

1.2 Status of a Problem

The competitive relations act as one of the most important mechanisms of ensuring of quality of professional activity of any specialist (Ansoff, 2009; Fatkhutdinov, 2008).

Some aspects of development of personal potential of future teacher (Slastenin, 2002; Vygotsky, 1996), professional formation (Elkanov, 1986; Adolf, 2006), creative orientation (Reeve, 1992; Andreyev, 2003) are considered in pedagogical literature. However, in educational standards in the requirements for the preparation of future teachers the concept “competitiveness” is not reflected (Mezinov, 2007; Faizrakhmanov, 2010).

The particular interest is caused problem of formation at future teachers of technology and business of readiness for the competitive relations, to continuous confirmation of own solvency in multilevel and multicomponent system of the professional relations.

1.3 The Research Hypothesis

The analysis of theoretical researches and practical work in aspect of the considered problem showed that the questions connected with formation of readiness of future teacher of technology and business to the competitive relations remain insufficiently studied area of scientific knowledge and practice, that allows us to formulate a hypothesis now: formation of competitiveness of future teacher of technology and business in the course of training will effectively take place, if to determine levels of readiness of future teacher for the competitive relations, criteria of their assessment and methods of their formation.

2. Experimental

2.1 The Objectives of the Research

The following research objectives were set: 1) choice of experimental and control groups of students; 2) realization of pedagogical conditions of formation of competitiveness of future teacher of technology and business with students of experimental group and traditional methods of training and education in control group of students; 3) comparison of readiness for the competitive relations of students of experimental, control groups and the working teachers of technology and business is carried out; 4) the analysis of results of experiment and efficiency of the offered innovations.

2.2 Theoretical and Empirical Methods

For check of a hypothesis of research are used theoretical methods (the analysis of scientific researches, standard and legal documentation, a benchmarking, etc.) and empirical methods (supervision, polls, testing, statistical methods).

2.3 The Basis of the Research

Base of research were the educational organizations: Elabuga Institute of Kazan (Volga) Federal University, schools of Almetyevsk, Yelabuga, Tukaevsky, Nizhnekamsk, Mendeleevsk district of Tatarstan Republic.

2.4 The Stages of the Research

Research was performed in three stages:

At the first stage the experimental platform was defined, the stating experiment is made, poll of skilled teachers of technology and business is executed regarding identification of competitiveness level at them.

The second stage was intended for development of pedagogical conditions of formation of readiness for the competitive relations of students of experimental groups which realization was carried out in educational process, by carrying out methodical councils and consultations for the teachers participating in experimental work.

At the third stage were generalized results of pedagogical experiment, results of the analysis of efficiency of pedagogical conditions of formation of competitiveness of future teacher of technology and business, both performed sistemtization and generalization of results of research.

2.5 Evaluation Criteria

Assessment of efficiency of professionally motivational education of students was carried out by means of the following levels and criteria of readiness of future teacher for the competitive relations:

1 level—emotional (positive emotional perception of a profession; positive emotional relation to self-education; success of emotional self-presentation; internalization in the field of the emotional relations);

2 level—activity (existence of the expressed interests in the professional sphere; systematicity of self-education in the professional sphere; the sociometric status in the field of activity competence; internalization in the field of the activity relations);

3 level—valuable (valuable self-determination of professional growth; specification of vital prospect; acceptance of values of a teacher's profession; internalization in the field of the valuable relations).

2.6 Proceedings and Description of the Experiment

In the course of the stating experiment are conducted interview and questioning of the working teachers of technology and business from schools of Tatarstan Republic, all 79 people were captured. Rather high rates of competitiveness (are approached to the maximum values) at the emotional, activity and valuable levels are revealed. Also was carried out research of readiness for the competitive relations of future teachers—students of Engineering and Technological Faculty of the Elabuga Institute of Kazan (Volga) Federal University (control group, 151 persons), results of their testing showed insufficiently high level of competitiveness.

Students of 3 academic groups (experimental groups, 78 people) took part in the forming pedagogical experiment. Realization of a complex of pedagogical conditions was provided with participation in experiment of 8 teachers who had special training, and more than 30 students of older years. Before experimental work for curators of experimental groups was conducted the short-term course “Formation of Readiness of Students for the Competitive Relations”.

3. Results

3.1 Structural Components, Pedagogical Conditions of Formation of Competitiveness of Future Teacher of Technology and Business

Competitiveness of future teacher of technology and business is defined by set of the qualities and properties necessary for effective professional activity (a basic component):

- professional self-determination, understanding of essence of pedagogical activity in subject “Technology”;
- readiness and ability to self-education in the conditions of the continuous growth of information, emergence of new technological decisions, change of essence of the production and economic relations;
- quality of vocational training as existence of professional and common cultural competences of future teacher of technology and business;
- the responsibility as manifestation of the humanistic principles in professional activity connected with interaction with pupils, their parents, pedagogical staff.

Thus, readiness of future teacher of technology and business for the competitive relations is shown in three main directions of interpersonal interaction: emotional, valuable and activity, which contents is provided in table 1.

Table 1. Structural components of readiness of future teacher of technology and business to the competitive relations

Competitiveness components	Competitiveness factors
Professional self-determination	Adaptation to training, knowledge of the teacher’s profession, valuable choice of profession, positive pedagogical experience
Readiness for self-education	Adaptation to training, continuous professional development, independence, strategic and tactical design of professional activity
Quality of vocational training	Abilities and motivation of future teacher, professional competence of teaching staff of university, valuable and semantic nature of communication and interaction of teachers and future teachers, focus on the personal purposes of education
Responsibility	Internality in the field of the activity, emotional and communicative relations and a valuable component of activity

Pedagogical conditions of formation of competitiveness of future teacher of technology and business:

- 1) The organization of communicative activity in the course of vocational training of future teachers of technology and business on the basis of organizational forms of education (trainings, discussions, design activity, active forms of education) and education methods (formation of consciousness, stimulation and motivation of training, the organization of independent activity), considering need of consecutive formation at them emotional and communicative, activity and communicative and valuable and communicative components readiness for the competitive relations. This condition provides formation of readiness for the competitive relations of future teacher of technology and business on emotional (1 level), activity (the 2nd level), the valuable level (the 3rd level).
- 2) Preparation of teaching structure of university for formation in future teacher of technology and business of readiness for the competitive relations on the basis of communicative activity. It is reached by means of a choice of members of teaching structure of the university participating in the organization of communicative activity of students; in the organizations of courses of teachers for work.
- 3) Realization in university of a system of multilevel communicative interaction, providing development by

future teacher of technology and business of various levels of readiness for the competitive relations, and also formation of experience of interaction at him in uneven-age groups (students of different courses, graduate students, teachers). These are the corresponding instructions on the organizations of educational work, tradition, existence of uneven-age student's associations according interests, etc.

3.2 The Process and the Results of the Experiment

The beginning of experimental work corresponded to the beginning of study of students of experimental groups in university. At the initial stage of experiment was also conducted polling survey of the current teachers of technology and business which confirmed the professional solvency (table 2).

During experimental work were received statistically reliable differences in formation degree at future teachers of technology and business of readiness for the competitive relations of all its components in comparison with student of control groups (table 2).

Table 2. Formation of readiness for the competitive relations of students of experimental, control groups and the working teachers of technology and business (the maximum value—5 points)

№	Levels and criteria of competitiveness	Experimental groups (point)	Control groups (point)	Current teachers (point)
1.	Emotional level:	4.3	3.7	4.4
	<i>positive emotional perception of a profession</i>	4.1	2.6	4.0
	<i>positive emotional relation to self-education</i>	5.0	3.6	4.9
	<i>success of emotional self-presentation</i>	4.5	4.6	4.5
	<i>internalization in the field of the emotional relations</i>	3.9	3.8	4.3
2.	Activity level:	4.7	3.7	4.5
	<i>existence of the expressed interests in the professional sphere</i>	4.9	4.0	4.3
	<i>systematicity of self-education in the professional sphere</i>	4.7	3.0	4.6
	<i>the sociometric status in the field of activity competence</i>	4.9	4.2	4.6
	<i>internalization in the field of the activity relations</i>	4.4	3.4	4.5
3.	Valuable level:	4.7	3.1	4.9
	<i>valuable self-determination of professional growth</i>	4.9	3.0	4.8
	<i>specification of vital prospect</i>	4.7	3.9	5.0
	<i>acceptance of values of a teacher's profession</i>	4.6	2.8	4.9
	<i>internalization in the field of the valuable relations</i>	4.6	2.8	4.9
	General readiness for the competitive relations	4.5	3.5	4.6

In addition, results of experiment confirmed higher level of development at students of experimental groups of various components of readiness for the competitive relations:

1) Professional self-determination. The brightest are differences in satisfaction with training (4.8 against 3.1) that is natural for the situation, connected with optimization of communicative interaction. The smallest value

characterizes confidence in choice of profession (4.1) that is defined by specifics of the higher pedagogical education, including the low social status of education as spheres of professional activity. The minimum distinctions in indicators of experimental and control groups are connected with tendency to design the life (4.4 against 3.6).

2) *Readiness for self-education*. The most significant changes are connected with adaptedness to training (4.6 against 3.0). It completely corresponds to ideas of communication between communicative interaction and process of adaptation. Also significantly differs degree of the relation to education as to a way of life (3.8 against 2.7). Insufficient degree of expressiveness of the considered indicator both in experimental, and in control groups is connected with the traditional relation to education as to means to occupy a certain professional niche, but not to a way of life. The smallest distinctions characterize independence (3.4 against 3.1).

3) *Quality of vocational training*. The most expressed results are received in the field of the relations with teachers (4.1 against 3.3) and concerning skills of debatable interaction (4.1 against 3.2) that naturally reflects emphasis on the organization of communicative activity at carrying out experiment. The minimum gap between experimental and control groups were between a GPA by results of examinations (4.2 against 4.1). This is due to the fact that in the experimental groups, a significantly smaller percentage of dropout students on the results of the test session.

For an assessment of efficiency of experimental work were used methods of an expert assessment and methods of statistical data processing. The assessment was made in the course of interview with students of experimental groups on a 100-mark scale. Experts gave in general a positive assessment of results of experimental work (on average 93,625 points) that confirms a research's hypothesis.

4. Discussions

Formation of readiness of future teacher of technology and business to the competitive relations, assumes existence in it aspiration and ability constantly to confirm, support and improve the skills, reaching a certain level of professional development. The basis of readiness for the competitive relations is made by set of the qualities and properties necessary for effective professional activity of the teacher: professional self-determination, readiness and ability to self-education, quality of vocational training, responsibility as manifestation of an internality.

Research showed increase of considered parameters of competitiveness of future teachers at experimental groups, in comparison with the control. Comparison of level of readiness for the competitive relations in experimental group confirms efficiency of the developed pedagogical conditions and promotes optimization of process of vocational training of future teachers of technology and business.

5. Conclusions

The way of a solution offered in research opens possibilities of use of experience of increase of competitiveness of future teacher of technology and business for the most effective achievement of the objectives and the solution of the tasks facing system of professional pedagogical education; consideration of process of formation of readiness of future teacher for the competitive relations causes possibility of an adequate theoretical assessment of efficiency of process of training of future teachers.

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