

## **Formation of Professional Competence of Physical Education Teachers in Higher Education**

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***Abstract.*** Aim of the research: to explore the possibility of building professional competence of physical culture educators in higher education institutions. Methods and organization of the research: theoretical modeling, interpretation, survey and diagnostic methods, expert assessment, observation, pedagogical experiment, mathematical processing of research outcomes.

The study involved 30 teachers of the Department of physical education and sports and coaching staff in Kazan State University of architecture and civil engineering. At first, we selected the tools and methodology of the study. Secondly, we designed a competency development model for physical culture educators in higher education institutions. The third step included experimental research on building professional competence of educators with consideration of the developed model.

***Keywords:*** Teacher, Physical Education, Professional Competence of Teachers, Professional Development, pedagogical conditions, pedagogical model, training.

**Purpose:** to study physical culture at the University in the opportunities for the development of professional competencies of teachers.

Organization of research and methods. Theoretical modeling, annotation, interrogation diagnostic methods, expert assessment, observation, pedagogical experiment, chemical processing of mathematical research results. The study involved 30 teacher murabiyas. Gulistan State University Faculty of "sports activities". At the first stage, the tools and methodology were determined as we conducted research, at the second stage we developed a model for the formation of professional personnel the qualifications of physical education teachers at the University. The third stage involves experimental work taking into account the changes in the model in which studies on the professional qualification of teachers are developed. Research results. at the beginning of the experiment, the professional primary level is the qualification of teachers who have formed control and experimental groups. In the opposite control group, the formation of teachers ' qualifications was carried out through courses standard program qualification, according to which course participants were trained with whom they conducted lectures, seminars on various modules of the program. After mastering the course, each student completed a final attestation paper on the chosen topic. The teaching experimental group received training on the professional development program, taking into account the volume of the developed model of competence formation. Both groups re-identified previously studied indicators after the end of training and compared the data obtained. As a result of the studies, the level of professional skill of teachers was determined experimental group significantly increased compared to the control group.

**Conclusion.** In order to effectively formulate professional competence, dags are not sufficient in the standard skill development programs currently being implemented time in universities. It is necessary to have a special teaching technology that is carried out in the development of botanical pedagogical model of the formation of professional competence of teachers. Introduction.

Implementation of the modern requirements of the cadres of physical education to be broken standards in the higher education system ./ Education fulfills scientific and pedagogical obligations workers seek new approaches in organizing to improve the existing educational process, control the quality of teachers and students in the system, methods of teaching educational material and the organization of independent work. These issues influenced to a greater extent the science of "physical education and sports", the curricula for all areas of education are professionals, but at the same time differ significantly in content both theoretically and methodically related to other subjects [1, 9].

In the process of analyzing the following problems, the implementation of modern requirements of the federal state educational standard, preliminary work was carried out questionnaires, applications in the form of questionnaires, sed with teachers of physical education in the case. As a result of preliminary research in it, it is found that one of the main Pro's blem is the implementation of modern requirements for low-level competent professor teaching staff and coaches, as well as the lack of teachers motivation to increase it [3, 5, 10].

This statement is confirmed by the results of students ' surveys and surveys on the quality of teaching physical culture (GULDU) in universities, which are expressed as follows: JT or its complete absence after the implementation of an inefficient methodology of teaching heating part of the lesson students are actually "left out"; in the absence of strict students ' interest in both training and independent

At the same time, undoubtedly, it should be noted that in general, the problems of low efficiency of the State Physical Education Program, which are present in universities, are confirmed by extensive literary data [6-8] and in the stable dynamics of the incidence of students from the first year to graduation, the material and technical base of universities is unsatisfactory,

Unfortunately, surveys have shown that some teachers do not think, while others do not want to understand that the reason for the negative attitude of students to JT classes is not only the effectiveness of the state program in JT at universities, but also as teaching a directly related discipline.

In this regard, the study of opportunities is an urgent task to form the qualifications of JT teachers.

## **RESEARCH METHODS AND ORGANIZATION**

Theoretical methods: analysis and generalization of data of scientific and methodological literature, theoretical modeling, interpretation. Empirical methods: study and generalization of advanced pedagogical experience, survey and diagnostic methods (questionnaires, interviews, interviews), expert assessment, observation, pedagogical experience, mathematical processing of research results.

Scientific research in natural conditions 2022-2023 "Gulistan State University" Faculty of sports activities" .. The study was attended by 30 professors from the Department of physical education and involved sports and the coaching staff of the University. The organization of the experiment was carried out in the following sequence. At the first stage, scientific and methodological literature on the problem of research was studied, the tools and methodology of research were determined. At the second stage, taking into account the analysis of literature, a model for the formation of professional qualifications of physical education teachers was developed at the University. At the third stage, research on the formation of professional qualifications of teachers, analysis of the data obtained and drawing conclusions on the results of the work, taking into account the use of an experimentally developed model.

## **RESEARCH RESULTS AND THEIR DISCUSSION.**

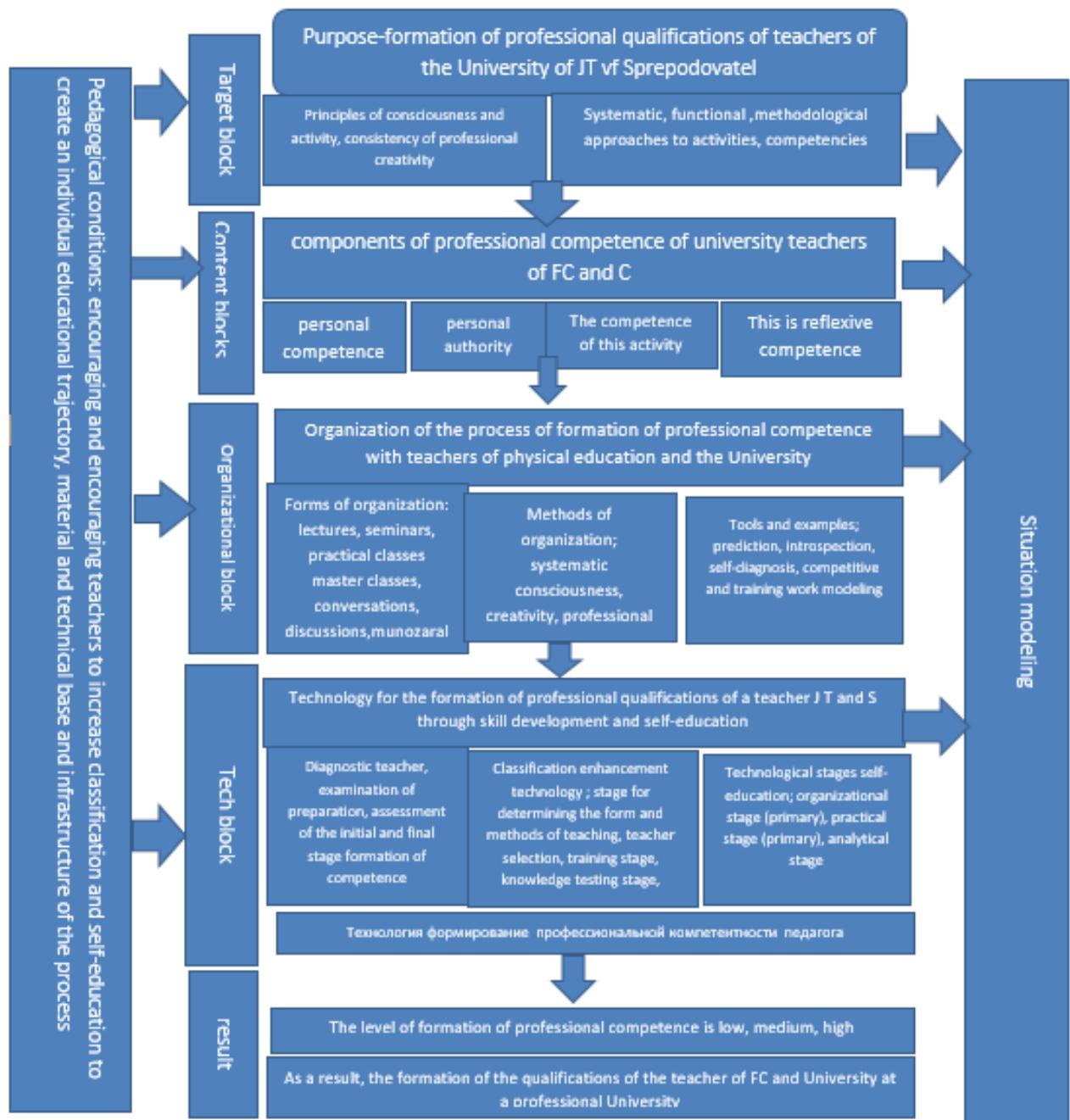
An analysis of the literary data [[2, 4] and surveys of teachers of the Department of Physical

Education found that the use of traditional approaches to increasing the powers of physical education lifters was ineffective. In particular, a very common way to improve the skills of teachers is to undergo a qualification program, this approach is also used in Kazan University of architecture and construction.

Each year, physical education teachers improve their skills at the University in order to improve their professional skills. In accordance with the standard qualification program, students of the course give lectures, with which they conduct seminars on various program modules, after mastering the course, each listener performs final attestation work on the selected topic and defends the work before the Attestation Commission. After successfully defending the work and obtaining a certificate of professional development, the tasks of the program were performed, and physical education teachers increased their professional qualifications to a relatively high level. However, repeated tests and requests from teachers who have qualified under convenient standard programs indicate their inefficiency. In particular, depending on the different conditions for the submission of training programs, their content, the qualifications of the audience and the growth of teachers, material and technical base professional competencies made up 5-15% of the course audience. In this regard, at the second stage of work, theoretical studies were carried out at the University on the creation of an effective pedagogical model of the formation of professional competence of JM teachers. The developed model is a comprehensive pedagogical process involving a purposeful, meaningful, organizational process and the result of modeling with technological blocks, the level of formation of competencies (high, medium, low) and pedagogical conditions for the effective functioning of the model. The developed pedagogical model of the formation of professional competence of teachers is presented in Figure 1.

The target block includes the main goal – the formation of professional qualifications of physical education teachers. The structural block determines the main components of professional competence: personal, cognitive, activity-effective, reflective. Personal competence includes the level of motivation, professionally important characteristics of the teacher's personality. Cognitive competence determines his learning ability; reflecting the self-esteem of the reflexive teacher. Activity and effective competence include the knowledge and skills that the teacher uses in his professional activities. The organizational block includes forms, methods of achieving the main goal, which should correspond to the modern level of development of pedagogical technologies, and choose, taking into account the skills of teachers.

Figure 1-pedagogical model of the formation of professional competence of teachers of physical education.



The technological block defines the sequence of steps through which the formation of proprofessional competence is ensured. The result of modeling is professional competence with the degree of its formation. The level of formation of professional competence is low, medium and high. It should be noted that before starting training, according to this model, a diagnostic stage is carried out, which involves the identification of weaknesses and gaps in the knowledge of teachers, their readiness and ability to learn. At the next stage, methods and forms of the technological stage (teaching stage) are determined from the results obtained, and only then the educational process itself is carried out. In addition, in the educational process, in accordance with the developed pedagogical model, teachers must engage in self-education on additional issues of the qualification program.

Important aspects of the effective functioning of the model include the following pedagogical

conditions. The first condition involves the creation of motivation pedagogical environment and the promotion and self – education of teachers for professional development; the second is the construction of Educational Trajectories in individual teachers, who increase their competence, including an individual approach to each student, the ability to master the level and content of education that meets his capabilities and interests; -teaching using modern pedagogical analogies. The third situation is ensured by the good availability of the material and technical base and infrastructure of the development process. At the third stage of work, taking into account the developed pedagogical model, the formation of professional patency of fk teachers and Kazan State architectural coaches was studied-the number of Construction University is 30 people. For these purposes, at the beginning of the experiment, the initial level of professional competence of teachers who formed control and experimental groups was determined, each of which consisted of 15 people. The division of teachers into groups was carried out taking into account their qualifications so that the groups were equal. During the academic year, in accordance with the Department plan, teachers of both groups trained under the program "modern approaches and innovative technologies in the work of a physical education teacher and coach." Under supervision, the group was trained under the standard program, the kobo Roy technology was previously described. Teachers of the experimental group were trained under this skill development program, taking into account the developed model of the formation of professional competence. After graduation, re-determination of the previously studied professional competence indicators of teachers of control and experimental groups and comparison of lignans were carried out data an expert assessment method was used to determine the initial and final level of professional competence of fk teachers and coaches. As specialists, specialists took part in training on the qualification program

qualifications. Expert assessment includes the comprehensive testing of teachers on all components of professional competence. The results are compared for all constituent groups, with positive competence formulated and presented as the average value of total professional competence. The results of the expert assessment by level prep professional qualification JT healers and control trainers (kg) and experimental (eg) groups before and after the percentage ratio of the experiment is shown in Table 1. The results obtained on the components of competence were presented as the average value of the overall professional competence and compared the data obtained before and after the experiment for each level of professional competence. Fisher, who calculated the criterion for each pair of compared groups (kg and eg), made it possible to assess the validity of the differences between them.

The degree of empirical significance of the Fisher criterion was determined by a special table. The larger the size of the Fisher criterion, the more reliable the differences in the comparable property. The results of the study are shown in Table 2 and Figure 2. From the data presented in Table 2 and Figure 2, it can be seen that before the experiment was carried out, there were no significant differences between the values obtained in kg and eg, compared at all levels of professional competence, for which the Fisher criterion is less than 0.1. This fact testifies correctly - when installing expel, select kg and eg raiment. - Hey?

The results of comparing the values obtained in kg and eg after the experiment show their significant differences for each level of professional competence, which is confirmed by the important values of the Fisher criterion. In particular, Fisher's "high" criterion for professional competence level was 1.85; for average level 0.82; for "low" level-2.75.

Table 1 Results of expert assessment based on the level of professional competence of educators n CG (n=15) and EG (n=15) before and after the experiment, %

Components of competence	Level of professional competence											
	Before the experiment				After the experement							
	High		Medium		Low		High		Medium		Low	
	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG
Personal	22,2	25,3	38,4	36,2	39,4	38,5	28,1	47,1	45,5	32,6	26,4	20,3
Cognitive	14,6	15,8	57,3	61,5	28,1	22,7	19,9	19,3	58,4	67,1	21,7	13,6
Activiti-effective	16,8	16,1	23,2	21,6	60,0	62,3	21,7	49,2	33,7	38,4	44,6	12,4
Reflexive	38,5	37,4	23,5	23,5	38,0	39,1	40,2	39,4	29,4	44,5	30,4	16,1
General	23,0±2,8	23,7±2,9	35,6±3,3	35,7±3,3	41,4±3,8	40,6±3,7	27,5±2,9	38,8±3,4	41,7±3,8	45,6±3,9	30,8±3,0	16,6±1,9

competence (M $\pm$ m)											
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**Table 2 The result of comparison of professional competence of educators in EG (n=15) and CG (n=15) before and after the experiment according to the Fisher criterion, %**

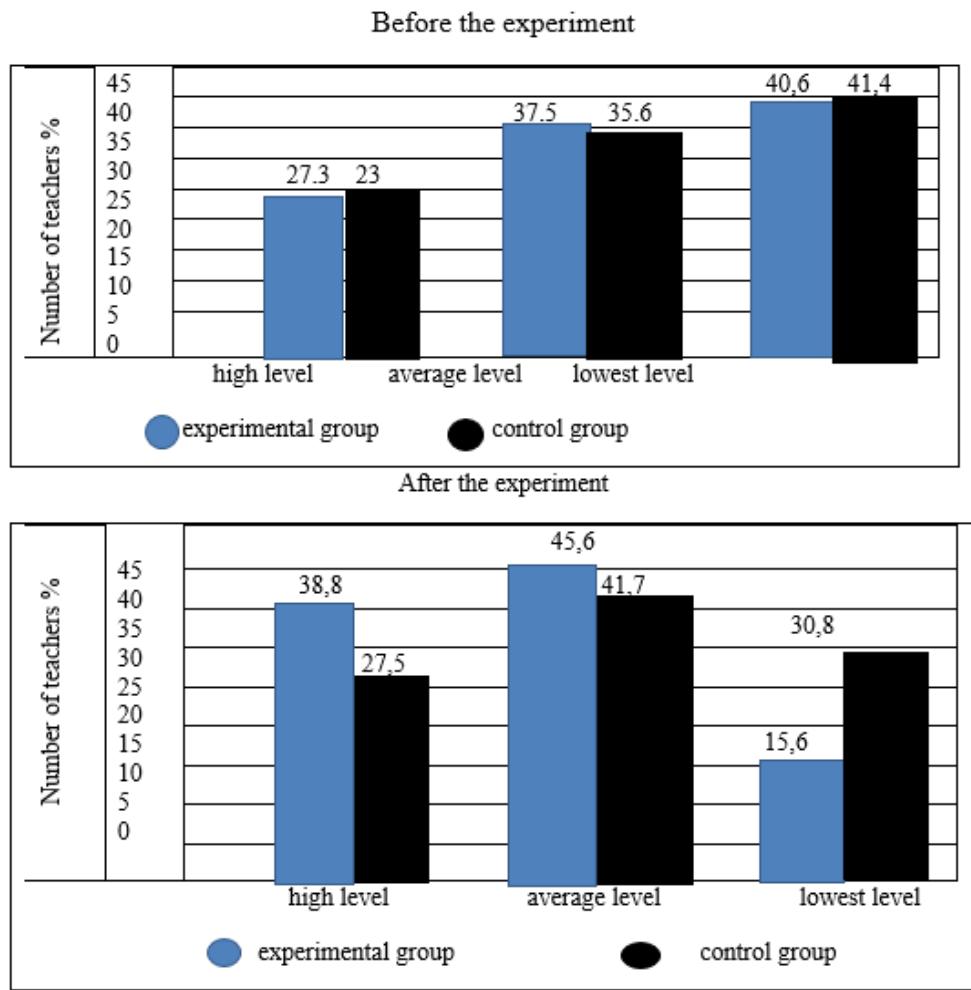
Compared group	Level of professional competence					
	High		Medium		Low	
	Before the experiment	After the experiment	Before the experiment	After the experiment	Before the experiment	After the experiment
EG,(M $\pm$ m)	23,7 $\pm$ 2,9	38,8 $\pm$ 3,4	35,7 $\pm$ 3,9	45,6 $\pm$ 3,9	40,6 $\pm$ 3,7	15,6 $\pm$ 1,9
KG,(M $\pm$ m)	23,0 $\pm$ 2,8	27,5 $\pm$ 2,9	35,6 $\pm$ 3,3	41,7 $\pm$ 3,8	41,4 $\pm$ 3,8	30,8 $\pm$ 3,0
The value of fisher criterion	0,05	1,85*	0,01	0,82*	0,07	2,75**

Note: \* – significant at ( $P < 0,05$ ); \*\* – significant at ( $P < 0,01$ )

At the same time, the percentage of teachers with a "high" level of professional competence in EG increased by 11.3% compared with that in KG; with an "average" level – by 3.9%. These changes occurred due to a decrease in the percentage of teachers with a "low" level of professional competence. In particular, after the experiment, the percentage of teachers with a "low" level of competence in EG compared to that in KG decreased by 14.8%.

Thus, it was found that the level of professional competence of the teachers of the EG compared to that in the KG has significantly increased due to the training program for advanced training, taking into account the proposed pedagogical model.

**Conclusion.** As a result of the conducted research, it was found that for the effective formation of professional competence of FC teachers and coaches, there are not enough standard professional development programs currently being implemented in domestic universities.



**Figure 2 – Result of comparison of professional competence of teachers in EG and CG before and after experiment according to Fisher criterion, %**

When implementing professional development programs, it is necessary to have a special training technology, which is implemented in the developed pedagogical model for the formation of professional competence of FC teachers and coaches. In this model, the process of formation of professional competence of teachers is considered as a continuous educational stage, including the construction of interrelated blocks: targeted, meaningful, organizational and technological; the result of modeling with the levels of competence formation (high, medium, low) and pedagogical conditions for the effective functioning of the model.

## REFERENCES

1. Ageev S.L. [Analysis of the development areas relating to building professional competence of physical culture educators in the advanced training system]. Problemy i perspektivy razvitiia fizicheskoi kultury v sovremenном obrazovanii: materialy dokladov Mezhdunarodnoi NPK [Problems and prospects of physical culture development in modern education: proceedings of the International Conference on Science and Practice], 2014, pp. 11-13 (in Russ.).
2. Andrukh O.N., Sidorova A.S. [Competence model of a university educator]. Izvestia Instituta inzhenernoi fiziki [Proceedings of the Institute of engineering physics], 2014, no. 2(32), pp. 81-84 (in Russ.).
3. Dorofeev A.A. [Professional competence as a quality indicator in education]. Vysshee obrazovanie v Rossii [Higher education in Russia], 2005, no. 4, pp. 31-33 (in Russ.).
4. Krilichevskii V.I., Golubev A.V. [Building professional competence of an educator]. Aktualnye problemy fizicheskoi i spetsialnoi podgotovki silovykh struktur: nauchnyi zhurnal [Actual problems of physical and special training for the security forces: scientific journal], 2014, no. 2

(25), pp. 60-64 (in Russ.).

5. Krivko O.A., Rusanov V.P. [Educational technologies of building professional competence of a sport coach]. *Vestnik KASU. Pedagogika i obrazovatelnye tekhnologii* [KASU bulletin. Pedagogy and educational technologies], 2010, no. 4(42), pp. 37-40 (in Russ.).
6. Lubysheva L.I. [Concept of physical education: methodology of development and technology of realization]. *Fizicheskaiia kultura: vospitanie, obrazovanie, trenirovka* [Physical culture: upbringing, education, training], 1996, no. 1, pp. 11-17 (in Russ.).
7. Mugattarova E.R. [Building health-friendly environment in a technical university using the strategic planning approach]. *Kazanskii edagogicheskii zhurnal* [Kazan pedagogical journal], 2019, no. 1 (132), pp. 20-24 (in Russ.).