

# The Modelling of Professional Competence Formation Process of Future Specialists in Psychology and Education

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**Abstract:** In our study, the competence approach to teaching brings out the essence and structure of the professional competence of students in the field of multimedia technologies and in accordance with the definition of new methods, means and forms of education, also the researchers indicate the goal, objectives and content of this process.

Depending on the main idea in different years in pedagogy and psychology developed various learning technologies, including targeting the formation of a systematic approach to the tools, techniques and methods of teaching.

The ongoing reform of the high education system places high demands on the training of professionals encourages the search for new ways to improve the educational process in high school.

**Keywords:** Professional competence, technique, education system, to determine the effectiveness, pedagogical technologies.

## 1. INTRODUCTION

The study discusses the modelling of professional competence formation process of future specialists in psychology and education. The aim of the study is to make the research in the area of modelling professional competence formation process in psychology and education.

Nowadays the problem of professional competence of future specialists is urgent, because we always need the highly qualified specialists in order to enhance the educational system.

The diversity and complexity of the current stage of knowledge creation, working conditions require high school to make significant adjustments to the training. That is why the School gradually moving from the transfer of knowledge to students in finished form to the management of their self-learning and cognitive activity in the formation of their experience of creativity. This transition involves accounting psychological, theoretical and practical readiness of students to Learning in Higher Education; selection of material in accordance

with the specifics of the university; the use of advanced learning technologies; diagnosis of acquired knowledge and skills of students, the level of formation experience of independent activity at various stages of their enhancement as future professionals [1].

Technique from the Greek word *techne* (art, craft, science) and *logos* (the concept, doctrine). In the dictionary of foreign words: "technique - totality of knowledge on ways and means of production.

Technique is combination of methods used in any case, skill and art.

In the narrow sense of educational technique is full justification for the choice of professional operational effects on the student teacher in the context of its interaction with the world, in order to form his relationship to the world, harmoniously combines the freedom of personal appearance and socio-cultural norms.

In the scientific literature devoted to the theoretical justification and design of pedagogical techniques, it is possible to find a new understanding.

According to it the pedagogical technique is "not simply researches in the sphere of use of technological tutorials; it researches with the purpose to reveal the

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principles and to develop methods of optimization of educational process by the analysis of the factors increasing educational efficiency, by designing and application of receptions and materials, and also by means of an assessment of the applied methods.

This approach is currently being circulated as widely as the original understanding of educational (that is application of technical means in teaching).

Evaluation of the results of professional practice in the rating system allows to move away from traditional assessments and allows each student to get a certain number of points for work during practice. All students are equal, since each proposed design operates according to its capabilities.

Evaluation (rating - from the English slovarating "evaluation", assignment to a particular class, category) is a kind of indirect observation. Rating - estimation method, or a method of psychological measurement, based on the judgments of competent judges.

Its essence is concluded in idea of full controllability of educational institution and above all, its main component educational process. According to T. Sakamoto's characteristic, the pedagogical technique represents introduction in pedagogics of a system way of thinking which differently it is possible to call "education systematization"

The subject of educational technique in higher education the construction of higher education and professional training of future specialists.

## 2. METHOD

The study was done on a group of a hundred twenty Kazakh undergraduate learners learning in BA degree in university, named Gumilyov Eurasian National

University in Astana city. Most of the students were juniors (58 %), (42%) were seniors. In terms of the gender, the students were not balanced with 104 Females (83%), 16 males (17%) and their age ranged from 18 to 21.

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## 3. RESULTS

One of these ways is enhancement and fulfilment of educational practice in modern pedagogical technologies aimed at improving the quality of training of future specialists:

Content and structure technique is based on the model of the expert and profессиogram of a specialist;

Technique functioning through certain stages, each of which has clearly defined tasks and contents;

Technique of formation of a professional orientation of students is a basic branch, the main part of general psychological and pedagogical technologies of formation of professional skill of a specialist [2].

In the enhancement of a substantial part of the formation of technique competence in the field of multimedia technologies, we dare questions: definition of diagnostic training purposes; justify the maintenance of training in the context of future professional activity; identify the structure of the content of educational material, its information capacity and system of semantic relationships between its elements.

The overall objective of the proposed technique is to increase the level of formation of competence of students in the field of multimedia technique, consisting

**Table 1: Demographic Information of Participants for Study**

Category		Number	Percentage
Gumilyov Eurasian National University		95	100%
School year	Junior	38	40%
	Senior	55	59%
Gender	Male	13	14%
	Female	81	86%
Nationality	Kazakh	73	78%
	Russian	8	8%
	Other ethnic groups (Uyghur, Turk, Ukrainian, Uzbek, Tatar).	14	14%

of three components (motivational-value, the activity and cognitive-emotional and volitional)

Initially, under the educational technique means to try technisation of the educational process; the first child of this trend, and simultaneously a foundation on which subsequent floors lined educational technique has been programmed instruction (Moos).

The further enhancement of researches in the field of educational technique has expanded her understanding, which is reflected in the different definitions of the concept by famous teachers and methodologists.

Despite differences of opinion, all scientists agree that the concept of "competence" wider knowledge and skills, not their sum, as it includes all aspects of activity: knowledge-operatively-technological, motivational.

Signs of competence:

- constantly changing (with the change of the world, requirements, etc.);
- future-oriented (manifested in the possibility to organize their education, relying on their own abilities to meet the requirements of the future);
- have activity character of generalized skills in a situation with skills and knowledge in specific areas;
- manifested in the ability to make choices on the basis of knowledge itself in a particular situation;
- appear in the motivation for continuous self-education activity.

#### **4. DISCUSSION**

Systematic approach covers all the main aspects of the enhancement of education systems from setting goals and designing of the educational process to test the efficiency of innovative educational systems, their testing and distribution.

V.M. Monks under the pedagogical technique realizes a certain "technological shell", which is comfortable for a teacher and student. The main characteristics of the "technological shell" should be stable and not depend on the author and the artist. The distribution of students to practice should take place at the beginning of the school year, so that they could prepare methodical "package" for the classroom of the

type they have chosen for themselves. It was during this period was focused refunding experience of students. Students in the preparatory period, in addition to preparation of various teaching materials, enhancement, interesting methodological findings are engaged on special courses such as "Methodical features of student learning in the classroom in-depth study.

In addition, the preparatory time students studying purposefully theoretical course of the following disciplines: pedagogy, psychology, technique and methods of teaching physics workshop solving physical problems, etc. Allocated to elective courses, depending on the choice of school for practice, class - natural sciences and mathematics, humanities.

He suggests that any educational technique expresses a certain conceptual approach to education, therefore it is desirable to compare different technologies as possible to develop a universal methodological approach to the design and examination of educational technologies. In other words, it is time.

New pedagogical technologies arise not as a craze,, but as a result of research, demand-driven university theory and practice. Formation of technologies should be carried out in the following sequence:

Identifying opportunities for using basic research;

Determine the effectiveness of using applied research;

Analysis of the needs and demand among teachers and students;

Enhancement of documentation, software and methodical means;

Printing and distribution.

Modern educational technique is a holistic didactic system that should fulfill the following requirements:

while maintaining the collective forms of organization of educational process enable personalization of training each student on an individual professional educational path, taking into account the cognitive abilities, motivation, and personal preferences of the student;

promote the optimization of educational process through innovation in a broad educational practice;

ensure the fulfilment of the principles of teaching in the educational process (motivation, activation, independence, continuity, continuity, and others.);

Does not contradict the principles and laws of pedagogical science.

Educational technique should be considered as an instrument with which the new educational paradigm can be implemented. The construction of these technologies should be conducted in accordance with the following principles, which are directly related to the above system requirements:

the principle of integrity technologies representing didactic system;

the principle of reproducibility of technique in a concrete educational environment for achieving educational goals;

the principle of nonlinearity of pedagogical structures and prioritize those factors that have a direct influence on the mechanisms of self-organization and self-regulation of the relevant educational systems;

principle of adaptation process of training for the individual cadet and his professional and cognitive abilities;

the principle of the potential redundancy of educational information, to create optimal conditions for the formation of professional competence.

The process of training for which you want to design pedagogical technologies, has a dual nature.

On the one hand, it is possible to allocate a purely technological, in the narrow sense, the plane of professional and academic knowledge and skills that amenable to rational comprehension and algorithmization.

On the other hand, the educational process is a process of socially organized interaction of people with their values, the individual characteristics of behavior, communication and activities with their creativity potential.

To pass the professional practice in our study, we have identified the basic provisions underlying the organization and passing a professional practice:

the principle of mutual cooperation of high school - a school that is expressed in the establishment of close

links between secondary schools and the university, based on mutual cooperation, mutual consent. As a result of this work the university and the school should become one of the pedagogical process;

humanization principle expressed in changing the relationship between teachers and students; the departure from the methodology designed for the average student; in the creation of didactic and methodological conditions for self-realization, self-actualization, self-expression of the student during practice;

principle of fundamental nature of knowledge, expressed in the establishment of a close relationship between the basic elements of school physics course and university physics; in the formation of the need for lifelong learning;

the principle of independence, which is expressed in the enhancement of students' skills of self-education, self-education, self-actualization, self-reflection.

For pedagogical technologies is important to consider this duality. It can not be eliminated or overcome, but it is important to find the optimal combination of using both sides of this is the function of educational technique. Suitable for specific conditions should be technique vector ways to achieve the goals and the very process of achieving these goals.

## 5. CONCLUSION

The main challenge in conditions of competence approach in education, teach future specialists to think and based on the thinking function effectively work in the modern world.

Thought-activity forms of educational content are: design, construction, management, which most effectively promotes personal self-determination.

Socially conditioned society's need for training of engineers, professionals, fluent operations of computers, on the one hand, and new approaches to the formation of professional competence of the other, urgently require improvement and diversity of methods of teaching special disciplines.(Rubenstein)

Imperative for the survival and work rights in the information world becomes mastery of the method of scientific knowledge of the world, the research style of thinking.

Highlights the fact from the surrounding world, to analyze these facts, should be able to compare each person in the XXI century, regardless of their chosen profession.

Identified appropriate levels of formation of professional competence of students of technical colleges by means of individualization of learning in an environment of information technologies and levels of information culture.

To the fore training students fundamentally new technologies work with the knowledge, primarily associated with the processes of generation and use of knowledge. The student must not only remember - he needs to understand how knowledge arises and how it can be used.

The forms organization of classes in conditions of the competence of education should be different; it is not only the traditional lessons.

It is shown that the possibility of improving the teaching of special disciplines in high school with the help of information technique professional use diverse. Individualization of the educational process with the use of asynchronous teaching in the medium of information technique contributes to the formation of professional competence of future specialists.

This emphasis in the educational process in the best prevailing paradigm of open education as an integrated didactic system, provides the most complete and efficient to reveal the full potential of the individual.

One of the new educational technologies that meet the needs of key competencies, as new results are education, research and design technique training.

Professional competence, according to some psychologists, including the ability to perceive and understand the personality, their emotional state, knowing the rules of behavior in professional situations, ability to navigate in them, establish contacts with the individual and with groups of people, own culture of

debate and argument, to be able to manage in the process of communicating to their mental state, emotions.

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