

Model of Students' Professional Competence Formation

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Abstract: *The paper is focused on the process of students' professional competence formation. The major emphasis is on the competencies related to social and educational activities in the context of the commercialization of education. The authors' biggest contribution is a specially designed model. It describes the formation of students' professional competence in social and educational activities. Professional competencies of students are a qualitative integral manifestation of personal traits with a focus on social and educational activities. It includes a certain level of individual development and the mastering of special knowledge, skills, and abilities, as well as self-development that contribute to the successful implementation of professional activities in the context of the commercialization of education. The formation of professional competencies is presented as a focused, systematic process. There is much evidence that this process requires a systematic pedagogical, psychological, and special knowledge to develop skills and abilities in organizing and conducting social and pedagogical work. The content of this process is a complex activity targeting professionally significant qualities, the acquisition of systematized knowledge and skills in the field of social pedagogical activity. The results of the study are of much importance for practical use in the university. The proposed model allows identifying the levels of formation of students' professional competencies.*

Keywords: *model, formation, professional competence, students, social and educational activities, the commercialization of education.*

I. INTRODUCTION

There are many pieces of evidence that social and educational activities play a pivotal role in the modern world. The subject matter of the paper is the development of socio-cultural competencies in Kazakhstan universities. There is a growing body of literature describing professional competencies and their development in Kazakhstan. Much of the literature since the second half of the 20th century emphasizes two approaches to the understanding of students' professional competencies in social and educational activities. They are as follows: a functional approach: it describes the formation of students' professional competence for social and educational activities as the ability to mobilize the physical and mental resources necessary for the effective implementation of activities; a personal approach: it

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considers the formation of students' professional competence for social and educative activity as a stable characteristic and the synthesis of personal traits.

There is an unambiguous relationship between the already defined meanings of students' professional competencies for social and educational activities and their actual implementation. Undoubtedly, their scope and content remain debatable.

The current study has indicated that it is required to support students' professional competence of social and educational activities with a model which will demonstrate the essential features of the subject under analysis.

Consequently, the research resulted in a developed model of students' professional competencies related to social and educational activities. The proposed model differs greatly from the works of predecessors. Other scholars concentrated on single components, e.g. Zastrow C. [1], Celce-Murcia M. [2]; Budnik O.B. [3] focused on the functional component. Alternatively, Gorenkov E.M. [4]; Onalbek Zh.K. [5]; Henner E.K. [6] singled out personal components. The authors' model is unique in its innovative approach which helped to implement all the components of students' professional competencies related to social and educational activities, i.e. personal, motivational, cognitive, activity.

Of much importance is the fact that in the works by Utegenov Y. [7], Sibirskaya E.V. [8] the authors utilized a narrow vision of socio-educational activities. On the contrary, the structure of the proposed model included a wide spectrum of perspectives which were as follows: the public demand for teachers in the field of social and educational activities, targets, organizations, and principles. The authors also described the stages, social and training conditions, the levels of formation of students' professional competencies related to social and educational activities.

The current study attempted to form the professional competence of students related to social and educational activities.

II. PROPOSED METHODOLOGY

A. General description

The authors used a mixture of research tools to highlight the potential of the subject under analysis. They are as follows. A theoretical method which included the analysis of the literature on the formation of students' professional competence for socio-pedagogical activity. The method was chosen to accumulate and systematize scientific material characterizing the process under study.

The authors attempted to comprehend the process of defining a goal, developing a methodology and adequate research methods.

Another important method was the classification of the students' professional competencies, which resulted in the systematization of the necessary prerequisites for students' professional competence for social and educational activities. The empirical methods allowed the authors to develop and substantiate the model of forming students' professional competencies. In their practice, the authors resorted to the summative and formative experiments, as well as included additional survey methods, i.e. observation, modeling, the methods of mathematical statistics describing the process of competence formation. The methods of qualitative and quantitative data analysis helped systematize and summarize the results of the research, to discuss the outcomes of the study, draw conclusions, and determine the prospects for further research.

B. Algorithm

The experimental base was in Pavlodar State Pedagogical University. The experimental stage involved students trained as "Social Instructors". The experimental group amounted to 15 people, the control group numbered 15 people. According to the results of the first measurement, the number of students with high-level professional competence related to social and educational activities was bigger in the control group. The experimental group included the students with lower levels of competence development. The difference in the number of students with an average level of competence development in the control and experimental groups was insignificant. After the experimental exposure, the results of the second measurement show the dynamical change of professional competence development in the experimental group. The control group demonstrated weak dynamics. In the experimental group, there was a significant increase in the level of professional competence. A significant change in the experimental group is the most obvious confirmation of the validity of the selected theoretical and empirical methods. The experimental study showed that after the application of the socio-pedagogical conditions provided by the developed model, the number of students with the high level of personal criterion development in the experimental group increased by 16%, which was by 15% more than in the control group. The students with the average level of personal criterion development in the experimental group increased their competence development by 21%. The number of students with the lower level of personal criterion development in the experimental group decreased by 37%. However, in the control group, the number of students with the lower level of personal criterion development decreased only by 6%. The number of students with the high level of development of cognitive criterion in the experimental group increased by 16%, while in the control group the number of students with the high level of development of cognitive criterion increased by only 6%. The number of students with the high level of development of activity criterion in the experimental group increased by 13%, while in the control group the number of students with a high level of development of activity criterion increased by 8%.

The results of the experimental work show that the set of

criteria for assessing the level of formation of professional competence embedded in the developed model allows to successfully solve pedagogical problems. In the experimental group, the level of formation of students' professional competence related to the socio-pedagogical activity has increased. This result confirms the assumption that the use of the proposed model tools may develop into a separate method of accompanying the formation of students' professional competence. The model allows students to increase their efficiency and the level of formation of students' professional competence related to social and educational activities.

III. RESULTS ANALYSIS

The results of the study confirm the goal of the research, i.e. to substantiate the process of formation of students' professional competence with a special formative model.

There is a growing body of theoretical approaches describing this research area. In their works the distinguished authors, such as Omarov Y.B. et al. [9]; Henner E.K. [6]; Berkimbaev K.M. and B.T. Kerimbaeva [10]; Zhumabaeva Z., et al. [11]; Mirza N.V. [12] indicated that, despite the widespread and already defined meaning of the concept of "professional competence", its scope and content required evaluation and clarification. The authors of this article believe that the formation of professional competence in social pedagogical activities in the context of commercialization of education is a qualitative manifestation of the personal traits of a student with a special focus on social and educational activities. It includes a certain level of individual development and mastering special knowledge, skills, abilities, and self-development of those personal features that allow the student to successfully perform the functions of professional pedagogical activities.

The commercialization of modern universities plays a pivotal role in modern educational market. The commercialization of education makes the significant shift in developing universities into business corporations whose main goal is to increase efficiency and profit maximization. In this context, the formation of professional competence in teaching is viewed as a holistic manifestation of the inner activity of the individual. Modern students must overcome internal contradictions and creatively implement the plans and programs of training activities. The theoretical approaches to professional competence made it possible to consider the social and age characteristics of students of higher professional education. The following components of the competence development have also been specified: personal, motivational, cognitive and qualifying. Figure 1 describes these outcomes.

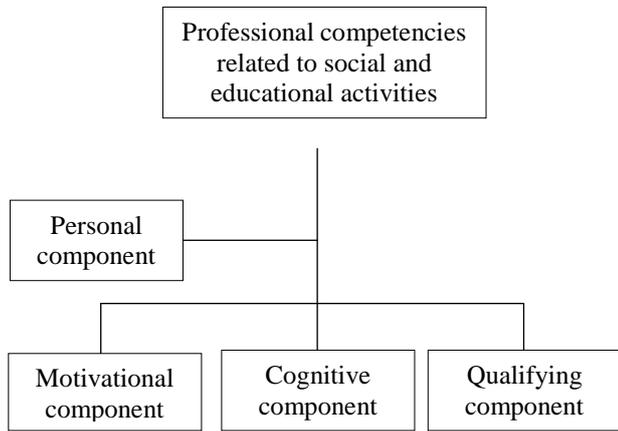


Fig. 1: Professional competencies of students related to social and educational activities

As is seen from the scheme, the professional competencies of students related social and educational activities include components which are as follows:

Personal component, i.e. personal correspondence to the profession, the system of professionally important qualities.

Motivational component resulting in a positive attitude to social and educational activities and attention to the profession;

Cognitive component actualized in professional awareness, good knowledge in the field of social and educational activities;

Qualifying component, i.e. professional skills in the field of social and educational activities.

One of the most interesting findings of the research is the original concept of “professional competencies related to teaching and social activities”. In the conducted study, this concept refers to a focused, systematic process that includes the integrated activities of all subjects of the educational process directed at the formation of professional qualities of an expert. The authors also define this term as the acquisition of systematic psychological and educational knowledge related to the field of social and instruction activities directed to the development of skills and abilities to organize and conduct social and training work with different categories of clients according to the job demands.

Another important finding is the subject-matter of social and instructional activities related to the sphere of social and instruction work. This study has shown that the subject-matter includes the science body of knowledge about the essence and the meaning of social and training activities, necessary skills for working with clients, strategic planning, organizing, conducting and analyzing social and educational activities.

The current study has indicated that the subject-matter of social and instructional activities contains the combination of personal and professional qualities of social instructors. Another important feature is the desire for continuous self-development and self-improvement, the ability to quickly solve any problem of clients’ adaptation, corrective work, and customers’ rehabilitation based on the existing experience in the sphere of social work. Proceeding from the best findings provided by prominent scholars [13-15] and the best practices [16, 17], the authors have formulated the outstanding features of professional competence in the socio-educational area. There is much evidence this type of

competence is a qualitatively unique socio-pedagogical process in the overall system of training and education. Of much importance is the motivation to be a good socio-educational professional. If the shortcomings in the motivation to be a good expert in this professional area are not big, they can be corrected by special training tools. Undoubtedly, the student should have a high level of self-awareness and motivation for the process of mastering knowledge, skills, and abilities. The focus should be directed at the development of psyche, and general culture of mental training. Later these developments will be transmitted into a high level of acquired knowledge; self-education and self-development.

As far as the main principles of the formation of students’ professional competence are concerned, it is critical to understand they are the mixture of the best interactions and impacts, practical oriented techniques, the ability to consciously comprehend the specificity of the process. The current study has shown that an individual and differentiated approach to students plays a pivotal role in the educational process. It results in consciousness, activity and the strong motivation of students to master their knowledge and skills of social and educational activities. A key instrument here is the systematic and sequential mastering by students of social and educational activities which results in the activation of self-tuition of students for future professional activities.

Proceeding from the theoretical positions, substantiated in the process of research, the authors have developed an original model of students' professional competence related to the sphere of social and educational activities (Figure 2). The model is based on the requirements of higher professional educational standards and social needs reflecting the demands to the level of professional training of a modern specialist with a higher professional education degree. The organized well-controlled process of education plays a pivotal role in this process. It contributes to qualitative planning and the organization of independent professional development. This process requires personally-oriented self-organizing educational activities, the resources of society, social institutions and the person. This process targets the correspondence of students’ professional competencies to social and educational activities and self-education. The model shows a vital role here belongs to the definition of principles, stages and socio-pedagogical conditions conducive to the formation of students’ professional competence related to the socio-educational activities.

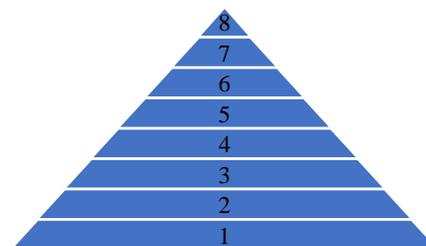


Fig. 2: The model of students’ professional competence related to social and educational activities

The structure of the model of the formation of students' professional competence for social and educational activities includes the levels which are as follows:

1 – The demand of society for teachers in the field of social and educational activities.

2 – The purpose to form students' professional competence in the field of social and educational activities.

3 – The organization of the formation of students' professional competencies related to social and educational activities.

4 – The principles which include the focus of all educational interactions and actions; practical orientation of teaching social and educational activities; individual and differentiated approach to students by the teaching personnel; consciousness, activity and motivation of students to master the knowledge and skills; the activation of independent work of students directed at the future social and educational activities.

5 – The stages of formation of students' professional competence, i.e. the diagnostic stage, the preparatory stage, the stage of practical implementation, the evaluation stage.

6 – The social and teaching conditions for the formation of students' professional competence, i.e. the orientation of the educational process towards the development of the student's personality. The correspondence of the university content to the trends of social and educational activities, the distribution of students on teaching practice in educational institutions, considering their personal characteristics.

7 – The levels of students' professional competence formation: high, medium, low.

8 – The result which comprises the formation of students' professional competence related to social and educational activities.

There is much evidence that the process of forming professional competence must be accompanied by diagnostics. Many scholars believe that counseling on the formation of students' professional competence is of vital importance because it results in activation and control of independent professional development and training of students.

Investigating professional competence is a continuing concern and it leads to the idea that personal training and professional development, self-regulation of the emotional sphere accompanied by maintaining a notebook for self-observation and self-development are very useful in this context. What is more needed is the organizational and pedagogical support, training meetings with social teachers of various educational institutions.

This study has indicated that the process of formation of students' professional competence comprises four interrelated stages. They are as follows: diagnostics, preparatory, practical implementation, and evaluation. The diagnostic stage implies the diagnostics of the professional competence level of students. It also means the identification of students' needs, interests, motives, and potentials. The preparatory stage stems from the organization of training directed at the acquisition of the required competence. It also targets the development of a special methodology

considering the specific personal capabilities and aspirations of the students. At the stage of practical implementation, it is necessary to make a timely direct impact on students and compare the results of this impact with the initial criteria. At the evaluation stage, it is necessary to record the changes that have occurred at the previous level and assess the effectiveness of selected strategies and tools. The model also includes a description of social and pedagogical conditions for increasing the efficiency of the training process.

Another important finding is that the model presents three levels of competence formation, i.e. high, medium and low. The result of the simulated process is the achievement of the goal – the formation of students' professional competence related to social and educational activities. The current study has shown the criteria and indicators of students' professional competence. They include 4 criteria: personal, motivational, cognitive and activity ones. Personal criterion means enough level of reflection, developing empathy, the low level of conflict, an open communicative culture, and self-balance. Motivational criterion includes the dominant motives and orientation of students to master the knowledge, skills, and abilities in the field of socio-pedagogical work, to show efficiency and diligence in implementing socio-pedagogical work, a high level of motivation to achieve professional success, the manifestation of students' desire for self-development and self-improvement. Cognitive criterion comprises the knowledge of basic legislative and regulatory documents on education and the protection of students' rights, the knowledge of the conceptual apparatus and terminology in the field of social and educational activities, the knowledge of technologies and methods of preventive and remedial help, rehabilitation work with clients, the knowledge of forms and principles of planning related to various types of professional social and educational activities. It also includes the knowledge of diagnostics technologies and monitoring of social and pedagogical phenomena. An activity criterion is characterized by the ability to implement the requirements of regulatory documents, the ability to use scientific terminology, the ability to use the potential of various technologies and methods in the field of preventive, remedial, rehabilitation activities with clients. It is also focused on the ability to apply various forms and structures in the areas of social and educational activities. Here also belong the proficiency in methods of diagnostics and monitoring achievements in the professional field. Based on the set of criteria and indicators, the authors highlighted the levels of formation of students' professional competence: high, medium, low. These criteria were used to describe three groups of students.

The experiment resulted in the following data: the number of students with a high level of personal development in the experimental group increased by 16%, which was by 15% more than in the control group. In an average level experimental group, the number of students increased by 21%. In a low-level experimental group, the number of students decreased by 37% versus 6% in the control group (Table 1).

Table 1: The rates of the personal criterion development among the students with professional competence related to social and educational activities

The criterion of the formation of professional competence among the students related to social and educational activities	Level	Control group %		Experimental group%	
		Before the experiment	After the experiment	Before the experiment	After the experiment
Personal criterion	high	11	12	4	20
	medium	37	42	34	55
	low	52	46	62	25

The current experiment has shown that the effectiveness of the formation of students' professional competence depends on the correspondence of the content of education to the modern and predictable trends in the development of professional social and pedagogical activities. The content of training and education of students should change rapidly with the emergence of innovations in the upcoming work, technology, and management. Profound, qualitative changes in the field of social and training activities, the need to master technologies in a short time require that each graduate of a university should have a sense of educational freshness. The graduate should see the prospects of his/her training, should

acquire a high general professional and special training. The research has indicated that the students of the experimental group confidently possessed knowledge of preventive, remedial, rehabilitation, diagnostic activities, as well as the scientific methods of managing the process of social education in educational institutions and educational teams. The number of students with a high level of development of the cognitive criterion in the experimental group increased by 16%, while in the control group the number of students with a high level of development of the cognitive criterion increased by only 6% (Table 2).

Table 2: The rates of the cognitive criterion development among the students with a professional competence related to social and educational activities

The criterion of the formation of professional competence among the students related to social and educational activities	Level	Control group %		Experimental group%	
		Before the experiment	After the experiment	Before the experiment	After the experiment
Cognitive criterion	high	28	34	39	55
	medium	71	65	60	45
	low	1	1	1	-

The discussion of the activity criterion follows next. The experiment demonstrated that the number of students with a high level of activity criterion in the experimental group

increased by 13%, while in the control group the number of students with a high level of the activity criterion increased by 8% (Table 3).

Table 3: The rates of the activity criterion development among the students with professional competence related to social and educational activities

The criterion of the formation of professional competence among the students related to social and educational activities	Level	Control group %		Experimental group%	
		Before the experiment	After the experiment	Before the experiment	After the experiment
Activity criterion	high	42	50	40	63
	medium	58	50	60	37
	low	-	-	-	-

IV. DISCUSSION

The current study has indicated that it is important to design a special model of a training process highlighting the formation of competencies. The biggest result of the research is a model describing the formation of students' professional competence related to social and educational activities. There is a substantial body of literature which introduces this subject-matter. The approaches described there are as follows.

– Functional approach. The main representatives of this approach are Zastrow C. [1]; Celce-Murcia M. [2]; Budnik O.B. [3]. They consider the formation of students'

professional competencies related to social and pedagogical activities in connection with mental functions. The formation of this competence is a necessary condition for professional performance. In their research competencies are referred to as a short-term or long-term state of mind during which mental functions are activated. Competencies also encompass an ability to mobilize the physical and mental resources necessary for effective activities' performance;

– Personal approach. This approach is represented by Gorenkov E.M. [4]; Onalbek Zh.K. [5]; Henner E.K. [6]. These scholars consider the formation of students' professional competencies in social and pedagogical activities as a stable personality characteristic, a manifestation of all aspects of the personality in their integrity, providing the ability to effectively perform their functions, the synthesis of personal traits, which determines its suitability for activities;

The approach proposed in this study is unique to the attempt in which authors combined and implemented all the components of students' professional competence related to social and educational activities: personal, motivational, cognitive, and activity ones.

In contrast to the well-known scientific studies, i.e. Utegenov, Y. [7], Sibirskaya E.V. [8], the model structure includes several segments which are as follows: the demand for teachers engaged in the field of social and educational activities, the purposes, organizational structures, principles, stages, social and pedagogical conditions, the levels of formation of students' professional competencies related to social and educational activities.

The methodology is implemented in three successive stages. The first stage includes the diagnosis of key indicators, such as the motives for social and training activities, the important personal qualities, the professional awareness of the intended social instructor, the synthesis of skills and abilities necessary to perform social and pedagogical activities. The second stage involves the creation of conditions for the formation of students' professional competencies and students' self-improvement, the disclosure of students' creative potential (individual counseling on how to build a student's self-development strategy; formula games, business games, personal and professional development and self-upgrading trainings, etc.), the development of students' independence in overcoming difficulties in the process of preparing for professional activities. The third stage relates to the discussion of the previous stages, resolving problems, the comprehension of the new life experience, the students' self-reflection which stems from the position of a subject realizing the need for self-transformation.

There is much evidence that comprehensive compliance with the socio-pedagogical conditions contributes to the improvement of educational and methodological work and is an important way to increase the efficiency of the formation of students' professional competencies related to social and educational activities.

V. CONCLUSION

The study has several practical implications. In contrast to the well-known scientific research by such distinguished scholars as Utegenov Y. [7] and Sibirskaya E.V. [8], the authors have developed their own model of the formation of students' professional competence related to social and pedagogical activities. The model includes the social demand for teachers in the field of social and pedagogical activities, the purposes for acquiring the competence, the description of organizational arrangements, principles, stages, social and pedagogical conditions. All these factors considered have

proven the originality of the developed model.

Another important finding is the description of the social and pedagogical conditions of the process of forming students' professional competencies. They are as follows: the focus of the educational process on the development of socially significant personal qualities of an expert with a higher professional education degree; the compliance of the content of education to current trends in social and pedagogical practice, which result in the cognitive development of social teachers based on the potential of social institutions. The results of the study clearly corresponded to the target settings. The authors managed to substantiate the process of forming the professional competencies of students with a special model.

The results of the study are of much practical importance in the educational process. The current study has gone through the successful approbation of the methods of forming students' professional competencies, as well as the development of diagnostic tools to identify the level of formation of students' professional competencies for social pedagogical activities. The research materials can be used in the educational process with the students learning humanities, as well as for the development of individual and group programs and strategies for self-improvement of the student's personality. The results of the research target further improvement of the learning process of university students in order to increase their level of readiness for further professional activities. The prospect of the study is to determine the reserves for the development of students' professional competencies for social and educational activities and the development of technologies aimed at self-improvement and the upgrading of their professional skills.

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