Skvortsova S.A. Ways of formation of professional competency of future teachers

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Abstract. Article presents the author's interpretation of the concept of "teacher's professional competency"; focuses on the methodical competency of teachers and its structure, which is presented as the composition of: motivational-value, cognitive, activity and reflexive and creative components; details cognitive and activity components of methodical competency through the following components: regulatory, variative, partly methodical, control-estimating, designing- modeling, technological. The system-forming one in this hierarchy with respect to regulatory, variative, control-estimating, designing-modeling and technological competencies is partly methodical competency; and the governing one is regulatory competency, because it regulates and directs the activity of teachers to achieve the goals and objectives of training specified in the regulations. The interpretation of definition of "teacher's professionallycommunicative competency" is presented. The principle of pedagogical work requires the detalisation of individual-personal and interactive-practical components of the structure of professionally-communicative competency of teachers through specifying of emotional, verbal and logical, interactive, social and communicative, technical components in the teacher's professional activity. In order to form the teacher's professional competency it is necessary to design the expected result clearly by means of creation of a graduate's model that presents the list and the expected level of competences and competencies, the basis of which is knowledge, skills, experience of activity and the emotional attitude to this activity, that is one of the conditions for increasing the efficiency of this process. The second condition for improving the efficiency of formation of professional competency of future teachers is development of competency-oriented programs of academic disciplines; the third condition is the introduction to the educational process of technologies that activate educational and cognitive activity of students and design future professional activity. The implementation of the given conditions is possible through our model of formation of future teachers' professional competency, including the teaching of Mathematics, containing the goal, informative, technological and resultative units (see figure). Obviously this system is common and several subsystems are implemented in it - it is the system of formation of teacher's methodical competency, the system of formation of teacher's professionally-communicative competency.

Keywords: teacher's professional competency, teacher's methodical competency, the structure of teacher's methodical competency; teacher's professionally-communicative competency, the structure of teacher's professionally-communicative competency

Since the mid-60s of last century, scientists from Europe and the United States justified the introduction of new educational constructs — competencies competencies. Learning outcomes can not be limited knowledge, skills and abilities, as it is not a guarantee that a person will be able to act in efficiency of a non-standard conditions, to successfully find a solution to the problem situations. The purpose of the competency approach is the formation of ability and willingness to effectively act outside of learning situations, to deal effectively with life, social or professional problems. Detailed retrospective analysis of the development of competence-based approach in Europe, America and the CIS countries is presented in the author's paper [1, p. 8-15].

Based on the regulations, such as the National Qualifications Framework, Ukraine National standards of general primary and secondary education, competence is understood by us as a person's ability to perform a certain activity, which is expressed in terms of knowledge, understanding, skills, values and other personal qualities acquired and exhibited by the person after the training [2]. Competence – as a socially significant result of education as a basis of an internal reserve competence. Competencies constitute a basis of knowledge, skills and experience appropriate activities. On this basis, competence can be considered as the ability to demonstrate ownership of certain competence in real practice. Therefore, competence is a system of relations between the acquired knowledge, skills and ability to use them to solve the efficiency of a standard and problematic situations in life. Based on the needs of society, the labor market, since the 90s. in Western countries introduced the concept of "professional competence", "pedagogical competence", etc. Contemporary American scholars consider the professional competence as the ability to solve problems and a willingness to their professional role in a particular field of activity. In this context, competence appears to employers in the form of some specific expectations related to the professional activities of the graduate school.

Analysis of the works of American Scientists Indicative that to this day there is no uniform interpretation of the concept of "professional competence of the teacher"; it is used together with a number of related concepts such as "pedagogical success", "successful teacher", "professional development of teachers". A similar situation is observed in the works of scientists from Europe, which increasingly exploring new role of the teacher, highlight the quality of the teacher-researcher. A more detailed analysis of the approaches of American, European, Ukrainian and Russian scientists, for the concept of "professional competence of teachers", its structure is presented by the author in [1, p. 76-90].

Professional competence of teachers we treat as property of the individual, manifested in the ability to pedagogical activity, namely the organization of the educational process at the level of modern requirements; as the unity of theoretical and practical readiness of the teacher (subject-theoretical, psychological, educational, didactic and methodological) in the implementation of educational activities; as the ability to act effectively, efficiently solve standard and problematic situations that arise in the process of training and education of schoolchildren. On the basis of that competence is a complex personality formation, the majority of scholars in this pedagogical phenomenon allocates separate groups, based or informative, or the activity, or personal components. In our study, taking into account the approach of European, American, Russian and Ukrainian scientists developed the structure of professional competence of teachers as a composition of components: professional-activity (social, contextual, objective, information components), personal (personal, integrative, reflective, creative, adaptive components) and

communicative (communicative, social and cultural components).

At the same time, we consider the professional competence as the composition of key, basic and special competencies. Key competencies are the foundation, the basis of all the components and components of professional competence of teachers, they should be common to the members of any profession for effective life in the outside world, the basic competence - representative for the teaching profession, and special-teachers of a specific subject. Thus, each component of the professional competence of the teacher appears in the key, basic and advanced level, the key is the foundation upon which the base, and later on a special level - the level of manifestation of special competence. With content provided by the structure of professional competence of teachers can be found in the author's paper [1, p. 91-101]. In our study, we focused on the study of the two components of the professional competence of the teacher - methodical competence of teachers (vocational component of the activity, the subject component of professional competence of teachers, special level) [3] and communicative competence of the teacher (the communicative component communicative constituent basic and special level) [1]. In the structure of the professional competence of the teacher, in her professional activity-component on a special level, one of the main places takes methodical competence. Under methodical competence teachers we understand personal education system, which is manifested in the ability to organize the process of learning the subject up to date, the possibility of successful solutions methodological problems, which is based on theoretical and practical preparedness for teaching the subject.

Methodical competence regard as socially significant result of teacher education; as a basis, an internal reserve methodical competence, based on subject- scientific, didactic, methodological and psychological knowledge, and the ability to solve methodological problems, to have experience training activities subject and emotionally valuable relation to this process. Methodical competence of the teacher is an integrated multi-level professional characteristic of his personality. To define this concept, scientists have resorted to examine the structure of methodical competence.

Structure methodical competence of the teacher presented us as a composition: motivational-value, cognitive, and the activity is reflexive and creative components [3, p. 56-67]. As a result of analysis of the content of the teacher in teaching the subject, there is a need for detailed and cognitive components devatelnosnogo methodical competence through components: normative variability partly methodical, control and evaluates, design modeling, process. Backbone in the hierarchy with respect to regulatory, variability, control and evaluates, design -modeling and technological competences is partially methodical competence; and management - regulatory competence, because it regulates, directs the activities of teachers to achieve the goals and objectives of the training specified in the regulations. Structure methodical competence of the teacher in teaching the subject clearly defines what must acquire competence future teacher, what competencies are their internal reserves, what knowledge, skills and experience of activities are the basis of these competencies. This approach to developing a framework of methodical competence of teachers is implemented on the example of methodical competence of primary school teachers in teaching younger students solving mathematical problems scene [3, p. 127-138]. The next step is to define the criteria and indicators of formation of methodical competence of teachers in order to describe the possible compositions of individual performance and to determine the level of formation of methodical competence of teachers [3, p. 138-155]. Thus developed structure with methodical competence levels of its qualitative characteristic of formation is an integral part of the overall professional competence model. Thus, there is simulation result of teacher training, which should be the basis for determining its content and technology of formation of methodical competence.

In communicative component of professional competence of teachers we have identified, in fact, two components: the communicative and sociocultural. The definition of "communicative competence" is defined by us as an integrated personal formation, which manifests itself in the communication process as the ability to update and use the experience gained communicative activities, as well as individual psychological qualities of the person to achieve the communicative purpose. Communicative competence needed to representatives of any profession to succeed in life in society, namely communicative competence is defined by all the participating countries DeSeCo program as a key competence. Meanwhile, communicative competence has significant features of the representatives of different professions, manifested in the aggregate of verbal and nonverbal means of communication, the ability to enter into communication with the aim of understanding, in the possession of professional terminology and appropriate methods of professional communication and a willingness to use them in practice.

Given the developments of European scholars who emphasize the multicultural content of communication, we have developed a structure of communicative competence, which is a composition of five blocks: individual and personal; voice, interactive and practical, multicultural, detail-information. These units combine the components of communicative competence - emotional, verbal and logical, reflective, linguistic, speech, interactive, social and communicative, technical, socio-cultural, sociolinguistic, and domain- meaningful information, internal reserves which act communicativecompetence. Basis of communicative skills make communication knowledge, skills, experience and emotionally communicative activity - value relation thereto [1, p. 57-75]. Availability of components communicative competence necessary for the efficiency of a human life in the modern world, so the listed components are a key level of communicative competence.

In the course of a detailed analysis of psychopedagogical and linguistic- didactic sources we have found that the communicative aspect of professional AC-TIVITY teacher has essential features, so in our study we use the term "professional communicative competence of the teacher"(GAC); its content is defined as an integrative personal formation, which manifests itself in the process of teacher communication with students, their parents, colleagues, as the ability to update and use the experience

gained communicative activities, as well as individual psychological qualities of the person to achieve the goals and objectives of the training and education solutions through communicative tasks. The essence of a teacher's work requires detailed individual and personal and inter-

active and practical components of the structure by specifying the PAC emotional, verbal and logical, interactive, social and communicative, technical components in the plane of the professional work of the teacher (baseline) [1, p. 127-138].

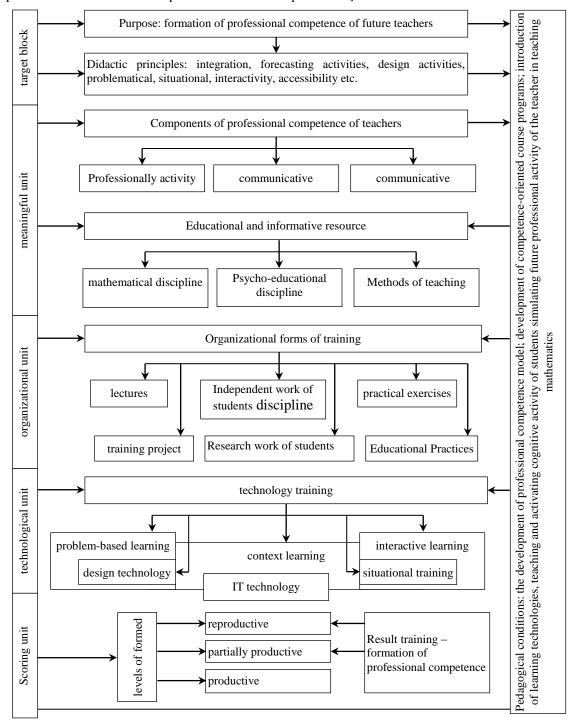


Figure 1. Model of formation of professional competence of future teachers

Obviously, especially PAC teachers of a specific subject appears on a special level. Thus, in contrast to the existing counterparts, the study comes from the PAC teachers' general to the particular, "when your home's contents of this phenomenon on the key level that should be inherent in any trade representative, and then details the components of its representatives for the teaching profession (baseline), and more – for teachers of a specific subject (key level). As an example, based on the pro-

posed hike, we have developed a structure of elementary school teacher PAC [1, p. 140-150]. Composition of key, basic and special levels and fully discloses details PAC teacher. Selecting criteria and indicators, the next step is to characterize the levels of formation of PAC teacher [1, p. 150-160]. Developed structure PAC teachers with quality levels of its characteristic of formation is an integral part of the overall professional competence model. Thus, there is simulation result of teacher training, which should

be the basis for determining its content and technology forming PAC teacher. In our study, focusing on only two components of professional competence of teachers – professional communicative and methodical. Obviously, for the formation of this system is necessary to develop the quality of the content and structure of all components of the professional competence of the teacher. So, in order to create professional competence of the teacher must be clearly design the expected result in the creation of a graduate model, which presents and the expected level of competence, competency, which constitute the basis of knowledge, skills, and experience of the emotional value attitude in it, that is a one of the conditions for increasing the efficiency of the process.

Based on the model developed by graduate competence- oriented syllabuses disciplines with the release of the list and the level of competences and competencies, which are formed as a result of the students study the whole course, from the study of a single module. In this program the structure of the course, each module accordingly - theoretical and practical content blocks, bibliography, exercises for self-study, evaluation criteria. Such a program can be traced back through what jobs are formed individual competence to follow the dynamics of this process from module to module; if desired, the teacher can make a map of formation of competencies. Thus the second condition is realized improve the efficiency of formation of professional competence of future teachers – development of competence- oriented course programs of academic disciplines. Formation of professional competence of future teachers requires the use of modern learning technologies students focused on the competence approach. An analysis of the problem of technology, design, interactive, situational, contextual learning [3, p. 67-99], we found that the formation of professional competence of teachers need to introduce technology which activate the educational and cognitive activity of students, technology, simulating future professional activity. Based on this, we have developed a dynamic model of the formation of the professional competence of the teacher, which defines the composition of technologies used in practical classes during independent work of students, creating educational projects. This model is instantiated using the example of methodical competence of primary school teachers [3, p. 198-201], which defines the structure of a lecture with the problem, a situation, interactive learning, including the use of IT technologies; formulated kinds of tasks for independent work of students (context, problem, situational training, IT- technologies); the structure of the practice session (technology context, situational, interactive learning, IT- technologies); generally presented a plan to create a training project using technology problem, project, contextual learning, IT- technologies. It should be noted that in the present model determined the effect of each type of work on the components and components methodical competence.

Thus, the following condition for improving the efficiency of formation of professional competence of teachers is the introduction of technology into the learning process, training and activating cognitive activity of students, future modeling work professionally, and therefore methods, tools, forms of work occur within each of these technologies. Problematic use of technology, design, interactive, situational, contextual learning involves teachers design learning process problematic nature, the use of teaching methods, content modeling teacher's professional activity; designing learning activities of students as independent work phase, aimed at problem solving under group dialogic communication with the participation of the teacher; inclusion in the student's personal learning activities. Implementation of the above conditions is possible by our model of formation of professional competence of future teachers, including those in the teaching of mathematics, containing the target, informative, technological and productive units (see figure). Clearly, this system is common within it implemented several subsystems - in our study is a system of methodical competence formation, formation system PAC teacher. Examples of such subsystems are developed by our model system methodical training primary school teachers to teach younger students solving mathematical problems scene [1, p. 175-227], a model of professional competence of primary school teachers [1, p. 220-246].

REFERENCES (TRANSLATED AND TRANSLITERATED)

1. Скворцова С.О. Професійно-комунікативна компетеність учителя початкових класів: [монографія] / С.О. Скворцова, Ю.С. Вторнікова. — Харків : «Ранок-НТ», 2013. — 290 с. Skvortsova S. Professionally-communicative competency of primary school teachers [monography] / S. Skvortsova, Y. Vtornikova. — Kharkov: "Ranok-HT", 2013. — 290 p.

2. Національна рамка кваліфікацій. — Режим доступу: http://document.ua/pro-zatverdzhennja-nacionalnoyi-ramki-kvalifikacii-doc81930.html.

 ${\it The National Qualifications Framework.} - {\it Mode of access:}$

http://document.ua/pro-zatverdzhennja-nacionalnoyi-ramki-kvalifikacii-doc81930.html.

3. Скворцова С.О. Підготовка майбутніх учителів початкових класів до навчання молодших школярів розвязувати сюжетні математичні задачі : [монографія] / С.О. Скворцова, Я.С. Гаєвець. — Харків : «Ранок-НТ», 2013. — 332 с.

Skvortsova S. Training of primary school teachers of teaching younger pupils to solve plot mathematical problems [monography] / S. Skvortsova, J. Gayevets. – Kharkov: "Ranok-HT", 2013. – 332 p.

Скворцова С.А. Пути формирования профессиональной компетентности будущих учителей

Аннотация. В статье Скворцовой Светланы Алексеевны презентовано авторскую трактовку понятия «профессиональная компетентность учителя»; акцентировано внимание на методической компетентности учителя и ее структуре. Представлено трактовку дефиниции «профессионально-коммуникативная компетентность учителя». Сущность педагогической деятельности учителя требует детализации индивидуально-личностного и интерактивно-практического компонентов структуры профессионально-коммуникативной компетентности учителя.

Ключевые слова: профессиональная компетентность учителя, методическая компетентность учителя, структура методической компетентности учителя; профессионально-коммуникативная компетентность учителя, структура профессионально-коммуникативной компетентности учителя