

Implementation of activity approach in formation of professional competencies of future teachers of new Ukrainian school (on the example of the discipline «Current Issues of Innovative Development of Education»)

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Abstract. The article presents a theoretical justification of the didactic possibilities of implementing the activity approach in the formation of professional competencies of future teachers of new Ukrainian school. On the basis of the analysis of scientific literature on a research problem and on generalization of own experience of formation of the competent teacher on an example of discipline «Actual Issues of Innovative Development of Education», different types of students' educational activities in the process of professional training are highlighted, in particular: heuristic, research, project activities.

Keyword: training of future teachers, activity approach, heuristic, research, project educational activities of the students.

Introduction. The concept of new Ukrainian school, one of the key reforms, envisages changing of the content of students' education to competency-based. The implementation of the competence approach in general secondary education requires significant changes in the training of future teachers, because a competent student can be prepared only by a competent teacher. The training of such a teacher requires significant changes in the system of higher pedagogical education, the creation of appropriate conditions that will motivate students to study, the development of their professional competencies.

The competence approach in higher pedagogical education involves the organization of the learning process, which focuses on what students do or know how to do as a result of learning, rather than on what they have to learn. Learning on the basis of the competence approach forms the students' qualities for the implementation of professional activities that are necessary for the labor market, and the criteria and parameters for evaluating educational outcomes are unified and expressed in outcomes that can be interpreted and implemented in any educational institution.

One of the ways we study in order to train future teachers at the level of professional competencies is the implementation of scientific principles of the activity approach.

Analysis of relevant research. The introduction of the competence approach, according to A. Khutorsky, in the normative and practical components of education allows solving the general problem, when the process of mastering the package of theoretical knowledge does not help to solve difficulties, but requires the use of this knowledge to solve specific problems or problem situations [7].

The competence approach is not new in defining the goals and content of education. The focus on the acquisition of skills, methods of activity, in particular, generalized methods of activity was leading in the works of V. Davydov, I. Lerner, M. Skatkin and their followers. In this aspect, both individual educational technologies and educational materials have been developed. However, this orientation was not decisive; it was practically not used in the construction of standard curricula, standards and evaluation procedures. Therefore, today to implement the competence approach it is necessary to take into account the work of European teachers and the work of domestic scientists who help determine the content and structure of competence in general and professional competence of future teachers, in particular (O. Karpenko, O. Lebedev, V. Lozova, O. Ovcharuk, I. Pro-

kopenko and others). The ways of formation of professional competencies of future teachers also remain insufficiently researched.

The aim of the article is to analyze the theoretical research and personal experience in the formation of professional competencies of future teachers based on the principles of the activity approach.

Materials and methods. Theoretical substantiation of didactic possibilities of realization of the activity approach in formation of professional competencies of future teachers has been carried out on the basis of the analysis and synthesis, generalization of the scientific literature on a research problem, and also generalization of own experience of formation of the competent teacher on an example of the discipline «Actual Issues of Innovative Development of Education».

Results and their discussion. Building education on the basis of competence, says I. Zyazyun, is one of the aspects of modernization of education, which serves as a step in the transition from the paradigm of subject-knowledge education to the model of forming a holistic experience of solving life problems, performing key functions belonging to many spheres of culture and performing many social roles. In particular, I. Zyazyun notes: «It has always been clear that competence is not identical to obtaining a diploma, but is associated with some «additional» prerequisites for the development of a specialist, his own creative potential and the quality of education he received. In a vocational school focused on competence such specific methods of training competent specialists as task approach, simulation-modeling, design and contextual teaching methods, integration of teaching and research work have appeared» [3, pp. 318-328].

We have implemented an activity approach in teaching students in order to develop their professional competencies, in particular, in the study of the discipline «Actual Issues of Innovative Development of Education». The activity approach involves the application of theoretical knowledge in practice, the formation of abilities for self-education and teamwork, successful integration into society and professional self-realization.

One of the examples of organizing independent creative activity of students can be the design of their own image of an innovative teacher with a proposal of ways to form such a teacher. We believe that the creative activity of designing such an image encourages each student to self-development, to self-improvement, focuses on the way of their own devel-

opment, which will bring each of them to the image created by them.

The next type of independent activity of students related to the reform of new Ukrainian school is the creation of a structural scheme of a certain level of generalization, which determines the main provisions of the pedagogy of partnership.

The students have created these schemes, and during the discussion described in more details each of the requirements. For example, in one of the schemes the student introduced: friendliness and positive attitude between a teacher, students and parents; showing respect for everyone's personality; voluntary acceptance of commitments, obligation to fulfill them; distributed leadership, activity of all participants, observance of the right to choose; dialogic interaction and mutual respect; adherence to the principles of social partnership (equality of the parties); trust in relationships (relationships); mandatory fulfillment of agreements.

The students have noted that an important component of partnership pedagogy is the ability of teachers to interact productively with their colleagues, to build their relationships with colleagues on the basis of respect and tact, willingness to cooperate, co-create, work in a team, professional problem solving, support and assistance, reflection on the results of teamwork, expression of gratitude, forecasting and initiating partnerships for professional growth and enrichment of the educational environment of the institution.

Moreover, the portrait of an innovative teacher who has the principles of partnership pedagogy is complemented by skills: to establish relationships with students, to create a warm atmosphere of love and support in the educational process; respect the student's personality and create conditions for the development of self-esteem and a positive self-image; to nurture each child to success, to find stimulators of creative activity for him, to capture him in the process of creative cognition, to develop emotional intelligence, applying new thinking skills; use various methods to ensure that the child's self-esteem was as high as possible and based on its real achievements; be sensitive, caring, sociable; a good listener; a good example to follow [8].

One of the leading changes in the new Ukrainian school is the change of the content of education from theoretical to competence. We find out with students that the competence approach differs from the traditional one in that the traditional system develops knowledge, skills and abilities while the competence approach involves their unity, the formation of students' ability to use them in different life situations. We emphasize that the competence approach involves changing the nature of the content of education to active, directs the educational process of general secondary education to practical nature.

In the heuristic dialogue we reveal with students the advantages of the competence approach over the traditional one. We come to the conclusion that the formation of an innovative student, in particular, key competencies provides their ability to: learn throughout life; quickly adapt to changes in the social environment and their own lives; use their knowledge and skills to solve various tasks and problems; quickly acquire new knowledge, new information, transform it; ensure personal growth; be competitive and successful.

The concept of «New Ukrainian School» declares ten key competencies that every student should possess and which actually characterize the diverse, much broader realization capacity of the individual. For the full value of educational

results, it is important not only to know what and how to do, but also to want to do (attitude), find non-standard solutions (design), interact and reach consensus with others (dialogue) and so on [6].

We emphasize the students' attention that these key competencies are cross-cutting, that is they must be formed by teachers of each discipline, regardless of special (subject) competencies. In particular, ten competencies are included. In the heuristic dialogue, students express their understanding and importance of each competence.

The first competence is communication in the state language. This includes: the ability to correctly and competently, orally and in writing express their thoughts, feelings, views, facts. Students are sure that in today's world, these skills will allow you to «present» yourself in society, get a prestigious job, to meet the status of «Ukrainian». It is formed not only with the help of the Ukrainian language lessons, where students are taught to speak their native language correctly, but also in all other disciplines. The students understand and say that every teacher must be fluent in the state language and instill a love for it by example. So, fluency in the Ukrainian language means being an educated person, a patriot.

The second competence is mathematical. The development of logical and algorithmic thinking will allow to solve various mathematical operations in different spheres of life: in everyday life, in sports, in the store. It is formed throughout school. Mathematics is one of the most important subjects, which develops all mental operations: analysis, synthesis, generalization, abstraction, comparison, classification. In addition, logical thinking can develop not only in mathematics lessons, but also in many others.

The third competence is foreign languages. First of all, it's English because it is global, because with its help different countries communicate with each other. Knowledge of this language will further provide an opportunity to communicate abroad with foreigners. The competence is formed at the English lessons.

Information and digital competence provides training for students to work with a computer, because now all information is stored electronically. The student must know how to find this or that information, edit it, print it, how to write reports, essays at school, term papers, dissertations, articles at the university. The students stress that information and digital competence is formed in all disciplines where information technologies are used, and they should be used at all lessons now. The student place special emphasis on the perfect mastery of new information technologies by each teacher. During the discussion, the students conclude that the educational process should be able to involve smartphones, which often distract students from classes. When students see their devices as valuable tools that support knowledge (rather than distract), they will begin to use it on their own for educational purposes.

The next competence includes competence in natural sciences and technologies. They are based on such school subjects as: biology, chemistry, physics, astronomy, geography. These sciences provide scientific understanding of nature, modern technology. They will form the student's ability to observe, analyze, conduct experiments, collect data and form a scientific worldview and the ability to apply scientific methods.

The following competence is awareness and self-expression in the field of culture. Knowledge of Ukrainian

culture allows the student to understand the very essence of Ukrainians, their spirit, their history. The formation of artistic tastes, self-expression in art, understanding of one's own national identity and respect for other cultures of the world takes place at the lessons of music, drawing, literature and all others. At the lessons, students form their own vision of art and the ability to understand it in sculptures, paintings, music, works and poems of the Ukrainian artists and foreign ones.

The next competence is environmental literacy and healthy living. At the lessons of all disciplines, the teacher needs to remind constantly of a healthy lifestyle and its importance. The students claim that their life experience suggests that the most powerful factor in this process is the teacher's own example and emphasize that if this is not done, a «painful generation» will grow that will harm not only themselves but also their future children.

Social and civic competence is of great importance. The problem of most people in modern society is the inability to behave politely in society, to resolve conflict situations in a calm, peaceful way, as well as people's indifference to public problems. They are solved by accustoming students to community service, selfless help to the needy, resolving conflicts without abusive words, resentment. The school provides this partly because family upbringing plays a crucial role in this: the relationship between parents, the resolution of their disputes, their civic position and activity are an example for the student.

The initiative and entrepreneurship competence of an innovative student lies in the ability not to be afraid to share your idea with others, to be decisive, confident, purposeful. Performing creative tasks at the lessons allows to form a student's initiative.

The last competence, the most important, without it all others will not be formed is the ability to learn throughout life. The ability to search, learn, apply new knowledge, evaluate their own learning outcomes is the task of every teacher in any discipline. The students in the dialogue come to the conclusion that the teacher himself needs to improve constantly in order to form a similar competence of the pupils.

Based on the analysis of the content of key competencies defined by the Concept of new Ukrainian school, we identify with the students the problems facing the school and each teacher that need to be addressed in order to ensure the formation of these competencies. Through productive discussion and debate, we conclude that it is necessary to change the objectives of training, improve the content of each discipline, change the teaching and methodological support of each discipline, in particular, new textbooks, manuals for teachers, new information, etc. But most importantly, students have noted, is the willingness to implement each teacher competence approach. The students pointed out their insufficient preparation for such activities, primarily due to the small number of hours of training and practical training directly at school while studying at Pedagogical University.

Given the fact that the discipline «Actual Issues of Innovative Development of Education» is taught to the students of Master Degree, an important component of its study is the formation of students' research competence.

One of the requirements of the educational-professional training program for students of any specialty is the development of research competence. The lecturer acts as a scientist in a particular field of knowledge, which not only introduces them to innovative transformations in education, but

also contributes to the formation of students as scientists, the development of their creative thinking, scientific worldview [1].

The purpose of such activities is to develop the ability of the future teacher in terms of building a new national education system, updating the content, forms and methods of work to implement the achievements of pedagogical science, progressive pedagogical practice, to carry out own scientific pedagogical research and to introduce its results into educational process.

One of the forms of creative research work is the design by students of their own educational creative product in the form of a project of the future school or university, which provides an in-depth analysis of the current state of relevant social institutions based on the analysis of scientific literature and their own observations, and most importantly the design of its own image of an innovative institution with a scientific argument for the effectiveness of the proposed changes. We believe that this activity form of education promotes the development of analytical, creative and critical thinking of students, their research competence.

Organizing educational research work of students, we pay attention to the observance of academic integrity. We focus students' attention on the «Regulations on the system of ensuring academic integrity in educational and scientific activities of Sumy State Pedagogical University named after A.S. Makarenko», which was adopted by the decision of the Academic Council of the University on June 18, 2020 [5]. Knowledge of this regulation is important in the organization of research and presentation of its results by master students.

One of the areas of innovative change in the education system, which we discuss with students, is innovative pedagogical technologies, in particular, distance learning [2]. This is primarily due to its active use by educational institutions in connection with the epidemiological situation. The purpose of such a discussion is not only to identify the features of such training, but also to enhance the cognitive activity of students on this topic, understanding its importance in their future professional activities, the formation of information and digital competence [4].

The students independently determine that their own experience and knowledge will be useful while working with pupils. The students shared their own thoughts and experiences on the use of information technology, created their own advice. Thus, one of the students offered her own vision of an innovative teacher, competent in information technologies. She has given the following advice: 1) Keep a blog. She spoke about the importance of blogs for both students and teachers. It is extremely important to write for a real audience and see their digital presence. 2) Go online. Another important point to reduce paperwork is to organize training materials for your activities on your own website. Give links to online resources and suggest discussions online. 3) Cooperate. Technology allows you to collaborate with other teachers and students. Creating digital resources, presentations and projects together with other teachers and students will make classroom activities real. Collaboration should go beyond sharing documents via email or creating a PowerPoint presentation. 4) Use twitter. Participating in Twitter chat is the cheapest and most effective way to organize your own audience, which will stay up to date with research, ideas and questions in a particular field. We can grow professionally and expand our knowledge if we talk about our work every day. 5) Involve like-minded people. Again, today's

tools allow you to connect with anyone anywhere, anytime. Do you have a question for an expert or colleague? Just connect them via social media! 6) Apply project-based learning. Today, students have an access to original documents, texts, experts from around the world, as well as like-minded people studying the same subject in another part of the world. They must develop the ability to think critically and ask the right questions, conduct research, communicate with experts and create projects using the resources they already have in their hands. 7) Build positive behavior online. This may seem obvious, but for today's teachers it is important to model how to use social media properly, how to produce and publish valuable content, how to organize the sharing of resources online. Maintaining professional behavior both in the classroom and online will help build positive student behavior. 8) Program. This may seem difficult, but coding is nothing more than a certain level of literacy nowadays. Programming is very interesting to learn. This lynda.com resource is a great thing to start programming. 9) Be innovative. I invite you to expand your toolbox and try new ways of teaching that you have not tried before – teach with social media, replace textbooks with web materials.

The student has noted that since she started using TED videos and making her own events based on these videos, her pupils have given her more positive feedback. They like to use Facebook for discussions and announcements from the class. They value new products – not new tools, but new, more productive and interesting ways to use them. Thus, these tips show that the student has a teaching experience and an innovative worldview that she wants to share with others.

Using distance learning, we try to enhance the cognitive and creative activity of students by involving them in discussing the problems of innovative development of education in forums, chats, zoom conferences, by making personal creative products, discussions, problem situations, thus implementing the basic principles of the activity approach in the formation of a competent teacher.

The conclusions. Therefore, on the basis of theoretical and methodological analysis of scientific pedagogical literature, legal documents, constructive analysis of the experience of teaching the discipline «Actual Issues of Innovative Development of Education», we can make some generalizations. Based on the analysis of changes made to the functioning of general secondary education institutions in accordance with the Law of Ukraine «On Education», the Concept «New Ukrainian School», the implementation of the activity approach in training future teachers is presented on the example of discipline «Actual Issues of Innovative Development of Education».

Methodological bases of preparation of a competent teacher capable to form the innovative pupil, to provide realization of the basic principles of pedagogics of partnership, change of the content of training in pedagogical university and school from knowledge to competence according to the Concept of new Ukrainian school are defined. The peculiarities of the use of information technologies in modern education are analyzed in the article.

Perspective may be improving teaching methods courses in pedagogical university to train future teachers who are able to implement in an institution of secondary education the basic Concept «New Ukrainian School».

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