ORGANIZATION OF TEACHER’S PROFESSIONAL ACTIVITY IN CONDITIONS OF INNOVATIVE EDUCATIONAL ENVIRONMENT

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The problem of organization of teacher’s professional activity in innovative educational environment is revealed in the article. The fundamental definitions of the concept of "innovative educational environment" in different aspects are determined.

The analysis of researches of primary school teacher’s training in Ukraine and highly developed countries of the world is witnessed a number of contradictions that outlined necessity to generate the innovative (information) educational environment. Effective organizational and methodical decision in formation of competitive teacher is the introduction subject "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" to educational process of primary school teacher’s training. Its aim, objectives, information scope, requirements to level of mastering of content component, methods and forms of monitoring and evaluation of students’ competency have been revealed.

The course is based on designed innovative IT-based (cloudy-oriented) environment of pedagogical training of primary school teachers, and cloudy-oriented products are integrated in it, that will make the learning process interactive: OneNote, Skype, GoogleDisk, SkyDrive, teacher’s personal website, OneNote. The managing of students’ mastering process of pedagogical subjects is performed at lessons and using teacher’s electronic classroom.

Key words: pedagogical training, electronic educational resources, cloudy-oriented products, IT-oriented educational environment, electronic classroom.

1. AN INTRODUCTION

Social and economic reforms and informatization of society caused changes in the public consciousness and formation of new values in education: priority is given to the interests of each participant of educational process as individuality, taking into account its individual qualities at training.

In connection with this, significant importance is the issue of teacher’s training in higher pedagogical educational establishments (HPEE) and, consequently, the formation of their professional qualities that conform to the high level of competitiveness. The development of national system of pedagogical education increases the requirements to professionals’ practical and theoretical training. The necessity of new teachers with integral vision of professional activity that are capable to make decisions and have special abilities and skills of interaction and communication, formed at teacher’s training process in HPEE is formed.

Nowadays, the characteristic attribute of HPEE training systems is significant expansion of IT innovative impact. Formation of competence of future teachers to use IT in teaching activities can be considered as one component of readiness for its implementation, because the mentioned requires diverse learning and the appropriate level of competence in modern innovative pedagogical technologies.

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However, the global informatization objectively changes the traditional educational environment of teachers’ training in HPEE, there are transformational changes in the structure and the ratio of traditional and innovative means and forms. These changes are systemic and directly influence on development of teachers’ training system in conditions of innovative educational environment and competitiveness formation.

**Analysis of recent researches and publications.** The problem of educational environment formation is revealed in works of psychologists and pedagogies V. Gury, E. Zeyer, G. Kovalev, N. Kuzmina, K.Lewin, M.Moiseev, A.Markov, I. Oyla, E. Patarakin, John Rotter, S. Rubinstein, E. Tolman, M. Heydmet, V. Yasvin and others.

The design of innovative informational educational environment is considered in researches V. Bykov, I. Zakharova, L. Kartashova, A. Manako, S.Semerikov, O.Spivakovskiy, V. Stepanov, and others.

The results of analysis of research works suggest the variation of views and approaches to modeling, design and implementation of various models and systems of innovative learning environment in educational institutions of different types and levels. Therefore, the question of organization of teacher’s professional work in conditions of innovative educational environment requires further study.

The aim of the article is outline the basics of teachers’ professional activity in conditions of innovative educational environment in higher pedagogical educational institutions of Ukraine.

**2. THE RESULTS OF RESEARCH**

Innovative educational environment is considered in scientific literature as "a set of interrelated conditions which provide education of man, teacher’s personality formation with innovation and creative thinking, his professional competence" [8]; "it is pedagogically reasonable organized space activity, which promotes the innovative resource of person; integrated means of accumulation and realization of institution’s innovation capacity"[9, p. 110]; and "it accumulates purposeful created organizational, educational, procedural grounds, provides innovation as method and mechanism of subject’s positions formation of future teachers and content filling of forms, methods and techniques, technologies, aimed at pedagogical culture formation” [5, p. 43].

It is remarkable the fact, in recent times, the rapid IT development and its spread in the education system is started a new form of learning (educational) environment - information-educational environment. In scientific research of L.Panchenko the generalization of definitions “informational educational environment” is given, based on researches done in works of various scientists. The researcher found that information-educational environment is considered in such aspects as [6; 7]:
- set of conditions and actions in one environment;
- set of hardware, software, methodical, information, intellectual, financial resources;
- educational system, including students, teachers, teaching tools;
- factor of students’ personality development and teachers and disclosure of their creativity and talent.

According to profound author’s researches we can form the assumption that the requirements for modern teacher as competitive modern specialist and changes in IT provision of school and higher education in recent years, cause the necessity to develop IT-based teaching learning environment from system approach. The separation of subject’s motives of educational process in HPEE at implementation of innovations in pedagogy allows proving IT unity and teaching processes.

In our view, the modern innovative educational environment in HPEE should use advantages of access to electronic educational resources and teaching materials. Now the ability to create innovative learning environment has been formed that fully meets the requirements of the information society in training of modern, competitive primary school teacher and needs of each student as an individual. Innovative educational environment should enable each student to use effective, including electronic educational tools, contribute to obtaining the necessary knowledge and motivation of lifelong learning.

The researches of training of primary school teachers in Ukraine and in highly developed countries (Finland, USA, Japan, Israel, etc.) [1-4] witnessed the contradictions between:
increasing demands for quality and effectiveness of teachers’ training and insufficient development of learning and research activities of students and scientific-methodical activity of teachers in HPEE based on IT capabilities, including cloudy technologies;

- IT opportunities and insufficient level of its use in pedagogical teachers’ training of primary school;

- necessity of scientific substantiation of IT construction of pedagogical training of primary school teachers and insufficient developed methodological foundations;

- needs of primary education of teachers who are able to be competitive at education market and the absence relevant factors of influence in the current system of continuous pedagogical education;

- necessity and requirement to integrate IT into the process of pedagogical skills forming of teachers and insufficient level of its readiness for use them in education and teacher’s work.

It points out to the need to find and form proactive models of training of primary school teachers, the goal-setting of which is focus to free development of subjects of educational processes, the right of choice by future teachers the own concept of professional activity in conditions of innovative educational environment. Today, IT can become the basis and mechanism of development of higher pedagogical education in Ukraine with providing the aforementioned opportunities and solving distinguished contradictions.

Thus, systemic quality of pedagogical teacher’s training is based on quality and innovative educational tools and technologies of its use in competitive specialist formation.

The absence of formed innovative IT environment training of primary school teachers hinders the development of scientific educational researches that could lead to socially significant results and their dissemination and implementation in practice as teachers' training and profession activity. It appears the necessity and requirement to integrate IT into the process of pedagogical skills forming of teachers and insufficient level of its readiness for use them in education and teacher’s work.

Formation of innovative IT environment of educational institution is the way to solve the many problems, which are arisen, in particular, the joining of HPEE infrastructures into a single network that enables access to electronic tools and resources for educational purposes to educational institutions that do not have the powerful modern IT.

Effective organizational and methodical decision as a systematic influence on the formation of professional competence was the introduction the discipline "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" to the curriculum of future teachers of primary school. It is prepared in accordance with the educational and vocational training programs of the specialty 7.01010201 "Primary education".

In the process of designing of discipline’s curriculum the number of hours (credits) allotting to its study are: 90 hours (3 credits ECTS), of which 14 hours - lectures, 16 hours - practical classes, 60 hours - independent work. The discipline is completed by exam.

The subject of discipline’s studying is organization of professional activity of teachers of primary school in conditions of innovation (informational) educational environment. Format of discipline involves close links with interdisciplinary disciplines: "Modern information learning technologies", "Basis of Informatics with elements of programming", "Organization and management in primary education", "Teaching technologies in primary school," "Methodic of Informatics teaching " and " Recent problems of primary education".

The aim of the discipline "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" is professional competence formation of teachers of primary school in conditions of innovation (information) educational environment, conducting comprehensive training towards the use of innovative educational technologies in teaching activities, development and design of electronic educational resources (EER).

The author singled out the following main tasks of the discipline:
provide knowledge in: the theoretical foundations of innovation in education in implementing a strategy to modernize education in Ukraine; setting goals of learning subjects of primary school with the use of innovative educational technologies (including ICT) that are relevant to the personal development of each student; organization peculiarities of professional activity of primary school teacher in conditions of innovative educational environment;

- formation of skills: organization of educational process in innovative learning environment; planning and designing the portfolio of teacher’s innovation in conditions of innovative educational environment; analyzing and selecting the content of subjects in aspect of identifying the usefulness of innovative educational technologies in study of subject; selection of forms, methods and means of teaching subjects in conditions of informatization of education, focused on the development of student’s intellectual potential, formation of the abilities to acquire knowledge, collection, processing, transfer, storage and production of information;

- formation of knowledge: control of knowledge quality and students’ skills of disciplines with the use of tests, diagnosing methods based on means of innovative educational technologies; EER selection, implementation of different models of students’ activity organization (academic and extracurricular) based on EER in primary school.

Purposefulness and flexibility of making subordinate goal and described objectives of didactic needs of HPEE, autonomy in the choice of subjects - it points to free determination of personal preference, the choice of types and forms of educational activity of each subject of the educational process. Information scope of discipline "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" is summarized in Table 1.

### Table 1.

Information scope of discipline "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" (3/90)

<table>
<thead>
<tr>
<th>№</th>
<th>Module</th>
<th>Themes</th>
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<tbody>
<tr>
<td>1.</td>
<td>The main directions of content modernization of teacher’s professional activity of primary school in conditions of innovative educational environment</td>
<td>Modernization as a factor of influence on teacher's professional activity in terms of education informatization.</td>
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<td></td>
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<td>Theoretical and methodological foundations of primary school teacher’s activity in innovative educational environment.</td>
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<td>Information and educational environment of higher and primary education as an improving factor of the quality of education.</td>
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<tr>
<td>2.</td>
<td>Methodic of innovative educational technologies’ use in professional activity of teacher’s of primary school</td>
<td>Organizing and pedagogical conditions of professional activity of teacher’s of primary school in conditions of innovative educational environment.</td>
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<td>Information interaction of the subjects of the learning process in conditions of local and global computer networks.</td>
</tr>
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<td></td>
<td>Information and communication activities as a quality innovative feature of modern primary school teacher.</td>
</tr>
<tr>
<td>3.</td>
<td>Program and methodical support of innovative (information) educational environment of primary school.</td>
<td>Development, design and use of electronic educational facilities of primary school teacher.</td>
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<tr>
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<td></td>
<td>Improving of teaching methods of primary school subjects in conditions of innovative educational environment.</td>
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</table>
The curriculum of discipline "Methods of organization of teacher’s professional activity in terms of innovative educational environment" consists of three modules:

1. Content modernization of primary school teacher’s professional activity in conditions of innovative educational environment formation.

2. Methodic of applying of innovative technologies in professional work of primary school teachers.

3. Professional activity organization of teacher’s of primary school in conditions of innovative educational environment.

The curriculum of the discipline provides the use of various methods of students’ learning activities: role playing, discussions, training projects, development and presentation of fragments of lectures, workshops, creative developments, simulation teaching situations, analysis of teaching experience and so on. In addition, the practice shows that the introduction of modern teaching aids, use of the Internet, work with electronic databases, the use of television, video, audio and other materials in the educational process enhance students’ cognitive activity, as it allows to achieve maximum saving of time for learning a significant amount of learning material, stimulate creativity, form professional competence.

According to educational and professional program students should:

Know:
- principles of state policy in the field of modernization of education in Ukraine, current trends of innovative development of educational systems;
- theoretical foundations of educational innovation;
- the nature of the innovation process, its structure;
- basic approaches to innovation planning, requirements to plan development;
- features of teacher’s portfolio creation in conditions of innovative educational environment;
- methodology of innovation activities management; analysis’ principles of effectiveness of innovation activity;
- educational technologies associated with the use of innovative educational technologies (including ICT) in education;
- methodological and technical aspects of use of innovative educational technologies (including ICT) in primary education;
- techniques and methods of using innovative technologies in the organization process of working with children of primary school age, photo, video and audio tools for study of educational processes;
- modern software that can be used to enhance learning quality in primary school;
- tools for designing innovative (information) educational environment of primary school;
- the type and content of EER;
- problems of use of EER in the educational process and ways to overcome them.

To be able to:
- determine priorities of innovative development of educational systems;
- analyze the trends of development of innovation activity in conditions of competition in education;
- plan and organize the main stages of innovation process; track the effectiveness of innovative processes in education;
- implement, modify and develop pedagogical practices using ICT in solving professional tasks in the field of primary education;
- integrate innovative educational technologies with traditional teaching practices and methods of educational work;
- use multimedia creative environment and tools for educational materials designing, including network;
- use network software and affordable software for management, monitoring and evaluation of progress and results of educational process;
– assess the quality of EER, sources and tools for their appropriate use;
– develop and implement training activities using innovative educational technologies to achieve specific learning outcomes;
– use designing tools of activity (including collective), visualization roles and events.

To have skills:
– designing and development of EER via available and appropriate selected instruments of innovative educational technologies (including ICT);
– organization of students’ activity in conditions of innovative educational environment of primary school;
– develop content and lesson plans of different types with EER;
– development components of informational and methodological support of educational process of primary school subjects (Web resources, multimedia objects, presentations, etc.).

Current and final evaluation of students’ knowledge and skills of the discipline is conducted in accordance with the European Credit Transfer system. Student’s rating of the discipline is determined by the 100-point scale. Student at seminars and workshops gets marks according to national evaluation system "excellent", "good", "satisfactory", "unsatisfactory", including presence, polls and level of work’s performance. At the end of module the lecturer determines student’s level of theoretical training (final control) and transfers the marks in accordance with ECTS.

At developing content of discipline, including students’ independent work it was taking into consideration the choice of didactic models of the discipline "Methods of organization of teacher’s professional activity in conditions of innovative educational environment" should be based on their willingness to self-organizing, self-education, self-improvement. Practical experience shows that tasks for individual performance for each of discipline’s themes should be proposed to future teachers. It should be determined the approximate number of hours for tasks according to the level of complexity, harmonize schedule, familiarize them with the scale and approaches to the organization of evaluating of creative achievements (at seminars, individual consultations in the process of writing final tests, exam). Developed methodological guidelines and tasks for independent and individual work of students with which they are introduced at the first lecture are provided.

The course is studied during the semester. In accordance with results of current control, self-activity tasks and individual work, writing final test and passing exam the mark of discipline is given.

Cloudy-oriented tools that enable learning process interaction are integrated to innovative IT environment:
– OneNote – an organizational unit (create notes and organize teacher’s personal information);
– Skype – implementation of mutual messaging (sending of documents, images, etc.), demonstration of working field of screen;
– GoogleDisk – saving of images, text documents, spreadsheets, audio and video files;
– SkyDrive (Word, Excel, PowerPoint) – file storage, which is shared across multiple devices;
– Teacher’s site (Access: https://bahmat.at.ua);
– OneNote (synchronization with different devices).

Management of training process and its organization is conducted by teacher in conditions of learning environment of HPEE and through teacher’s electronic classrooms, which is shown in Figure 1 as a block B.
Fig. 1. The main modules of IT-based (cloudy-oriented) environment of pedagogical training of primary school teachers.

Electronic classroom (EC) of teacher is an electronic resource that virtually recreates classrooms (audience) of HPEE and it was created in educational social network «Accent» (Access: http://ac-cent.com/index.php/jomsocial) (Figure 2).

Fig. 2. Page of a lecturer in social educational network «Accent».

The project of innovative IT-based (cloudy-oriented) environment of pedagogical training of primary school teachers in HPEE actively is promoted in teacher training system and implemented as a continuous educational process. Its implementation involves the use of complex educational influences and is implemented through the algorithm that describes the process of gradual mastering of basic types of educational activities, educational, organizational,
informational and researching in teaching process of basic subjects studying (entrance to specialty, basics of pedagogy, didactics, theory and methods of education, pedagogical skills, the basics of educational researches, educational technologies in primary school, foundations of inclusive pedagogy, gender education, preventive education, history of pedagogy, organization and management in primary education, discipline "Methods of organization of teacher’s professional activity in conditions of innovation educational environment "and all kinds of pedagogical practices.

The structure and content of innovative IT-based learning environment that is a whole and sufficient high-level teacher’s training for primary school teachers with formed features of mobile, competitive specialist. Components of innovative IT-based (cloudy-oriented) environment of pedagogical training of primary school teachers are separate dynamic, open subsystems that form a single integrated system, goal-setting of which is quality pedagogical training competitive, modern mobile teachers in the field of primary education.

The conditions of innovative environment should promote providing the possibility of forming readiness of teachers go away from the framework of traditional forms of organization of educational process, motivation for creative and finding new creative effective ways of working with primary school students.

3. CONCLUSIONS, EXPECTED RESULTS AND PROSPECTS FOR FURTHER RESEARCH

Thus, pedagogical training of primary school teachers is a purposeful controlled process that ensures the formation of pedagogical competences, his personal qualities necessary for the successful and effective implementation of professional activity. Like any other process, teacher’s training has its goals, objectives, structure, function, which is effectively carried out by certain organizational and pedagogical conditions - formed integrated innovative IT-based (cloudy-oriented) environment of pedagogical training of primary school teachers. It provides knowledge mastering of pedagogy of primary school, formation of professional pedagogical competence based on the principles of didactics, regulations and requirements, ability to carry out reflection of the own activities.

Expected results from the introduction of IT based (cloudy-oriented) learning environment to the educational system of university teacher training:
- positive impact on improving the quality of education;
- new prospects of access of quality education for everyone;
- ensuring of the development of university’s e-infrastructure;
- ensuring of public access to continuously filling up electronic database of teaching materials;
- positive influence on the development of professional and IT competence of teachers and students;
- expanding of innovative possibilities of pedagogical education;
- social impact;
- innovative component of IT infrastructure of pedagogical education of Ukraine.

The predictions of prospects of implementation results of IT-based learning environment for pedagogical higher educational institutions and Ukraine as a whole:
- creation of an accessible, open, flexible distance training system of primary school teacher training that can be used in synchronous and asynchronous modes;
- support of continuity of educational process, regardless of events that prevent this (ATO, climatic disasters, disease, etc.);
- continuous filling the unitary electronic database of teaching materials;
- providing of unique educational facilities by attracting teachers’ researches;
- improve of IT teaching staff competencies through practical use of developed tools - collaborative learning.
REFERENCES


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методичним рішенням у формуванні конкурентоспроможного педагога визначено введення в навчально-виховний процес підготовки вчителя початкової школи навчальної дисципліни "Методика організації професійної діяльності вчителя в умовах інноваційного освітнього середовища", розкрито її цілі, завдання, інформаційний обсяг, вимоги до рівня засвоєння змістової складової, методи, форми контролю й оцінки компетенцій студентів.

Вивчення курсу побудовано на основі спроектованого інноваційного ІТ-орієнтованого (хмарно орієнтованого) середовища педагогічної підготовки вчителя початкової школи, в яке інтегровано хмарно орієнтовані засоби, що роблять навчальний процес інтерактивним: OneNote, Skype, GoogleDisk, SkyDrive, особистий сайт викладача, OneNote. Управління процесом оволодіння студентами педагогічними дисциплінами здійснюється на аудиторних заняттях за допомогою електронного навчального кабінету викладача.

Ключові слова: педагогічна підготовка, електронні освітні ресурси, хмарно орієнтовані засоби, ІТ-орієнтоване освітнє середовище, електронний навчальний кабінет.

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ОРГАНИЗАЦІЯ ПРОФЕСІОНАЛЬНОЇ ДЕЯТЕЛЬНОСТІ УЧИТЕЛЯ В УСЛОВЯХ ИННОВАЦІЙНОЇ ОБРАЗОВАТЕЛЬНОЇ СРЄДИ

В статті розкрита проблема організації професійної діяльності учителя в умовах інноваційної образовательної середовища, определена необхідність в більш глибокому її дослідження. Приведені основні дефініції поняття „інноваційна образовательная среда“ в різних аспектах.

Аналіз існуючих педагогічних підготовок учителя початкової школи в Україні та високорозвинутих странах світу визначив ряд противоречь чес, які обумовлювали потребу в формуванні інноваційної (інформаційної) образовательної середовища. Ефективним організаційно-методичним рішенням у формуванні конкурентоспроможного педагога визначено введення в учебно-воспитательний процес підготовки учителя початкової школи учебної дисципліни „Методика організації професійної діяльності учителя в умовах інноваційної образовательної середовища“, розкрити її цілі, завдання, інформаційний обсяг, вимоги до рівня засвоєння змістової складової, методи, форми контролю й оцінки компетенцій студентів.

Изучение курса построено на основе спроектированного инновационного ИТ-ориентированного (облачно ориентированной) среды педагогической подготовки учителя начальной школы, в которое интегрировано облачно ориентированные средства, делающие учебный процесс интерактивным: OneNote, Skype, GoogleDisk, SkyDrive, личный сайт преподавателя, OneNote. Управление процессом овладения студентами педагогическими дисциплинами осуществляется на аудиторных занятиях и с помощью электронного учебного кабинета преподавателя.

Ключевые слова: педагогическая подготовка, электронные образовательные ресурсы, облачно ориентированные средства, ИТ-ориентированная образовательная среда, электронный учебный кабинет.