Abstract. The contradictions between the demands of the information society and the level of preparedness of teachers of the humanities subjects to the using of information technology in professional activities are mentioned in the article. The necessity to transform the system of learning information technology for teacher in higher pedagogical institution was determined on its base. The main purpose of the transformation of the system was to provide her adaptability in understanding the mandatory formation of readiness for the application of IT. The author's system of formation of IT-readiness of teachers, which is integrated into the educational process of higher educational institutions is offered. The effectiveness of the developed system is also confirmed by obtaining additional results: providing advanced training of teachers, the formation of their need for next self-development, self-education and skills, independent and creative approach to the process of acquiring knowledge.

Keywords: information technology, IT, teacher, IT readiness, education, humanities subjects, educational system, knowledge, student, university, school, personality

Last years in Ukraine important steps were made in providing the general educational establishments (GEE) with personal computers (PC), introduction of information technologies (IT) in the educational process, forming the new attitude of school teachers, teachers of higher pedagogical educational establishments (HPEE) and heads of educational establishments to introduction the IT in education. Appearance of digital educational resources (DER) as constituents of informatization of education provides availability of knowledge, developing of intellectual and creative abilities of pupils on the basis of individualization in studies, intensification of educational process etc.

We can state that objective, publicly predefined, transition processes to informative society require introduction of innovative methods in teaching and studies, which will provide the competitiveness in the system of education of Ukraine. Practical experience and results of the special pedagogical researches which were accumulated in the process of education informatization show that the use of IT in education positively affects the results of educational process at all its levels.

For today everyone knows that in pedagogical activity the systematic and systemic use of IT opens for the subjects of teaching the access to application modern technologies of mastering knowledge. Due to opportunities that are provided with introduction of IT in the educational process, the system of education can replace the authoritarian pedagogics by humanistic one in which opportunities for taking into account and developing the individual peculiarities of every person’s development are created. Such pedagogics provides to the subject of teaching the right for originality and unicity. However, the input of innovative forms in teaching, use of IT must be self-considered, expedient and inferior to the aim and contents of teaching and education.

However, the application of IT in teaching humanistic disciplines has its specific that is determined, from one side, by very high efficiency of multimedia facilities in teaching and, from other side, by difficulties of mastering the facilities of IT by humanitarian subjects teachers.

We carried out the retrospectively-essence analysis of scientific researches of information technologies teaching by humanitarian subjects teachers in HPEE of Ukraine, that allowed to show contradictions between the requirements of informative society and the present level of their preparedness to application of IT, that witnessed the necessary reorganization of their teaching in HPEE, grant to it the signs of techno-logicalness in understanding the obligation of forming the readiness to application of IT in professional activity and with the aim of self-perfection.

The conducted analysis of the state of teaching IT by humanitarian subjects teachers for its different organizational forms (both in Ukraine and in highly developed countries of the world), allowed to find out that overcoming of the found out contradictions is restrained by:

– development of scientifically-pedagogical and methodical bases of the informatization system falls behind from the development of IT;
– the faculty advisors of HPEE are not prepared enough to the use of IT;
– the present IT are not oriented to creation of the integral IT-systems that would give a possibility to provide the educational process all-round;
– the transparency of teaching and integral system vision of the technological approach to teaching of IT are absent: there is an orientation on the achievement of "narrow" aims (succeeded presentation of educational material, absence of professional aspiration, repressing study of text editors, use of IT for monitoring of educational process, etc.);
– there is an insufficient level of co-ordination and collaboration development of HPEE with the developers of the program and methodical providing of informatiation process teaching.
It is also set, that the process of introduction of IT-branch achievements in the teaching system of HPEE of Ukraine in the conditions of informative society differs from analogical processes characteristic for other countries, and requires determination of terms and ways peculiar only for Ukraine. The requirement of the forming system development of IT-readiness and its introduction in the educational process of HPEE was found out. By methodological basis of worked out and applied in the system of teaching at Kyiv national linguistic university the polystructural system of IT-readiness forming (SITRF) was chosen the personally-orientated approach and principle of professional orientation, the basic components of which are: formed of theoretical base of knowledge in the branch of IT, mastering practical abilities and skills, and, especially, forming the motivation of the use of IT in teaching and future professional activity and readiness, to logical, expedient and effective application of IT in professional activity (Figure 1).

The personality orientation of the inculcated system is especially distinctly looked in that the process of studies for every student is carried out in the individual trajectory. The suggested system differs from the systems worked out and described before, that it is envisaged: intensive continuous application of IT and as objects of teaching, and as component technologies of teaching; organic combination of individual and group forms of educational activity of students; forming the personal trajectory of studies and addition to the contents of studies by the student himself (chronologic and richly in contents).

Introduction of SITRF in the educational process of HPEE forms IT-readiness of teachers as important constituent of professional readiness. Forming of IT-readiness of humanitarian subjects teachers has three content lines: the use of IT as an object of study, facilities of teaching and facilities of the educational-searching professionally oriented activity. The use of IT as an object of study is envisaged in the process of continuous teaching the discipline "Modern information technologies in philological activity" (first year of studies) and teaching the elected course of the same discipline (fourth year of studies). The use of IT as facilities of teaching envisages their application by the teachers of HPEE in the process of teaching as IT and humanitarian disciplines as well. The use of IT as facilities of activity envisages their application in activity of both teachers and students with the aim of forming the practical skills (senior years of studies are in HPEE). We also distinguished organizationally-methodical terms with forming of which the effective functioning of SITRF becomes possible: – providing with educational influences of higher efficiency than traditional one;
– forming of motivational component readiness of students to the use of IT;
– admitting the level of previous preparation of every student at the branch of IT as the alarm parameter that determines the individual trajectory of his studies;
– accordance of studies contents to the requirements set forth on the basis of analysis of professional activity of humanitarian subjects teachers of general educational establishments and its planning taking into account the necessity of students’ use of IT in the process of future professional activity, in the process of studies in HPEE and self-training during the life;
– selection of the variant constituent of teaching contents, intended for the use in compensatory teaching; invariant constituent that provides the forming professionally oriented IT-readiness at the compulsory level; variant part, studying of which serves to providing of deep mastering IT;
– planning the educational process taking into account the necessity of achievement the maximum of IT-readiness in the moment of passing the pedagogical practice by the students;
– introduction (at the level of HPEE) of the system of measures directed to the increase of IT-competence by corresponding profile disciplines teachers.

On the basis of the set forth determinatives of invariant and variant construction of discipline contents "Modern information technologies in philological activity", in particular, concepitive structuring and providing the professional orientation of teaching students, in HPEE the continuously-successive system of teaching the leading (professional) educational subject on the block-module principle can effectively function.

We consider IT-preparation of humanitarian subjects teachers as a dynamic process of realization of mutually-connected and mutually-conditioned fundamental and professional constituents that provide the predicted quality of forming professionally meaningful properties in personality. Therefore, a new methodical principle of integration of solidity and professional orientation is firstly suggested and reasonable in teaching the information technologies of humanitarian subjects teachers, realization of which assists the forming in every fragment of teaching the elements of professional students competences, that is the educational activity gets future professional activity features. The basis of this process is carrying out the system of professionally directed tasks adapted to the educational process.

According to our supervisions, application of SITRF provides the passing ahead studies of teachers, forming their necessity of continuous self-perfection, abilities and skills of self-education, independent and creative approach to the process of acquiring knowledge. We can mark that the analysis of the state and progress of society trends gives an opportunity to predict the necessity of further SITRF development, as the results of studies must correspond social, scientific and technological aims, the level of society development, inside aims and necessities of the education system. The suggested system leans against scientific knowledge, forms, facilities and methods of teaching, that reflect fundamental progress of pedagogical science trends.

The worked out SITRF assumes updating and filling it with new contents; allows to activate the process of IT teaching in the conditions of orientation on personal development of personality, creates conditions for more effective acquiring of knowledge and abilities, develops the creative orientation of the teacher, assists the forming of corresponding professional and personal qualities. Within the framework of the suggested system the possibilities of forming the scientific worldview and personal qualities of humanitarian subjects teacher with the aim of providing his readiness to realization and introduction the personally oriented teaching. Orientation on the personality of student, taking into account his personal interests, desires, intentions, necessities and his style of activity, assist the flexible modeling of educational process.

The author worked out recommendations that include the conditions of effective SITRF introduction:
– compulsory systematic teaching to students the use of IT through their introduction in the process of humanitarian disciplines study (studies according to sample);
– permanent and regular realization of the measures (at the level of HPEE) directed to the humanitarian disciplines teachers IT-readiness level increase;
– rigging HPEE with modern computer and telecommunication techniques;
– rigging the educational rooms with the corresponding program and methodical providing;
– creation the IT-center (IT-labs) with the aim of providing the management with scientifically-methodical work in HPEE.

Estimating positive results from introduction of authorial SITRF, we can point out that the further researches are necessary, in particular: the integrated processes, connected with IT-discipline cycle teaching and humanitarian disciplines, theoretically-methodological ground of introduction the distance studies into the external form studies of teachers, Typical positions about the multimedia cabinet of HPEE development and about creation of mediafolder; development of measures as for humanitarian subjects teachers motivation to the use of IT in educational activity (making alterations to the
Стратуэт которест, etc.); developing and providing HPEE with the licensed or alternative programmatic products (basic one and HPEE) with the further introduction in the educational process.

**ЛИТЕРАТУРА**


Карташова Л.А.
Пути формирования ИТ-готовности учителей гуманитарных предметов: авторское предложение

**Аннотация**: В статье обозначены противоречия между требованиями информационного общества и уровнем подготовленности учителей гуманитарных предметов к применению информационных технологий в профессиональной деятельности. На их основании была определена необходимость преобразования системы обучения учителей информационным технологиям в высшем педагогическом учебном заведении. Главной целью преобразования системы стало предоставление ей технологичности в понимании обязательности формирования готовности к применению ИТ. Предлагается авторская система формирования ИТ-готовности учителей, которая внедрена в учебный процесс высшего педагогического учебного заведения. Эффективность разработанной системы подтверждается и получением дополнительных результатов: обеспечение опережающего обучения учителей, формирование их потребности в непрерывном саморазвитии, умений и навыков самообразования, самостоятельного и творческого подхода к процессу приобретения знаний.

**Ключевые слова**: информационные технологии, ИТ, учитель, ИТ-готовность, обучение, гуманитарные предметы, система обучения, знания, студент, университет, учебное заведение, личность.

Ковтонюк М.М.
Формирование профессиональной математической компетентности будущего учителя математики

**Аннотация**: В статье поднимается одна из важных проблем в теории и практике педагогического образования – формирование профессиональной компетентности будущего учителя математики. Профессиональное математическое образование будущего учителя строится на базовой математической компетентности выпускника средней общеобразовательной школы на уровне Государственного стандарта базового и полного среднего образования Украины и далее проходит три ступени своего развития: функциональная математическая компетентность, профессионально-математическая компетентность (до уровня «математика-методолога»), научно-математическая компетентность, которая гарантирует дальнейшую научную деятельность выпускника-математика в области математики, методики математики и т.д. Предлагаются условия формирования образовательного пространства будущего учителя математики на основании компетентностного подхода.

**Ключевые слова**: профессиональное математическое образование, образовательное пространство, компетентность, компетенция, будущий учитель математики

Постановка проблемы. На Всемирной конференции по высшему образованию (Париж, 1998 г.) обращалось внимание на то, что компетентностный подход в образовании, в конечном счете, является приведением образования в соответствие с новыми условиями и перспективами – это возникновение стратегической установки образования, в том числе и высшего, на адекватность. В современном мире конкурентоспособный выпускник характеризуется фундаменталь-