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USE OF ICT AND FOLK DECORATIVE AND APPLIED ARTS IN THE PROCESS OF PROFESSIONAL TRAINING OF FUTURE TEACHERS

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ВИКОРИСТАННЯ ІКТ І НАРОДНОГО ДЕКОРАТИВНОГО ТА ПРИКЛАДНОГО МИСТЕЦТВА У ПРОЦЕСІ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНІХ УЧИТЕЛІВ

The article highlights the possibilities of using ICT and folk decorative and applied arts in professional training of future teachers. The use of ICT and decorative and applied arts in the process of training future teachers, in the course of artistic and labor activities, in particular, forms positive motives for learning. Future teachers feel the need to know the history and artistic traditions of the native land (at the stage of choosing the object of work, clarifying its purpose, methods of decoration in accordance with regional peculiarities, etc.), they are eager to master the basics of artistic techniques and technologies

(at the stage of manufacturing and decoration the object of labor), they learn to justify the economic feasibility of the manufactured decorative and applied article, etc.

It is generalized that in the process of professional training of future teachers the most effective use of ICT and folk decorative and applied arts occurs in the course of the study of artistically creative and design-technological subjects using audiovisual aids in teaching which together with other equipment form a system of a dynamic design, for instance, of technological process of manufacturing decorative and applied arts article.

It is emphasized that the process of professional training of future

teachers must be provided with up-to-date material and technical facilities, connection to the Internet

Key words: professional training of the future teacher, information and communication technologies, folk decorative and applied arts.

Анотація. У статті висвітлено можливість використання засобів ІКТ та народного декоративно-ужиткового мистецтва у професійній підготовці майбутніх педагогів. Доведено, що застосування засобів ІКТ та декоративно-ужиткового мистецтва у процесі підготовки майбутніх педагогів, зокрема, у процесі художньо-трудової діяльності формує позитивні мотиви навчання. Окреслено потребу майбутніх педагогів у знанні історії та

мистецьких традицій рідного краю (на етапі вибору об'єкта праці, з'ясування його призначення, способів оздоблення відповідно до регіональних особливостей та ін.), в оволодінні основами художніх технік і технологій (на етапі виготовлення й оздоблення об'єкта праці), у навчанні обґрунтування економічної доцільності виготовленого декоративно-ужиткового виробу тощо.

Узагальнено, що у процесі професійної підготовки студентів найефективніше використання засобів ІКТ та народного декоративно-ужиткового мистецтва, що відбувається під час вивчення художньо-мистецьких і проєктно-технологічних дисциплін через аудіовізуальні засоби навчання.

Акцентовано, що процес професійної підготовки майбутніх педагогів повинен бути забезпечений сучасною матеріально-технічною базою, підключенням до мережі Інтернет.

Ключові слова: професійна підготовка майбутнього педагога, інформаційно-комунікаційні технології, народне декоративно-ужиткове мистецтво.

The aim of the study: to reveal the peculiarities of the use of ICT and means of folk decorative and applied arts in professional training of future teachers in the course of studying the humanities.

Statement of the problem in a general way. Formation of Ukraine as a European democracy in a period of geopolitical and economic instability, the influence of internal and external factors on educational institutions requires dramatic changes in training of highly qualified, competent and at the same time patriotic teachers. Social requirements for a today's graduate of a higher pedagogical education institution include two interrelated characteristics of professional qualities of a future teacher: on the one hand, a nowadays graduate is a competent, self-motivated and creative teacher who possesses knowledge of information and communication technologies

and, on the other hand, he/she is a bearer of high universal culture and Ukrainian national identity, a specialist who is ready not only for effective teaching and harmonious development of students, but also able to influence radically the formation of spiritual and moral world view and patriotism of young people [Buchkivska Abstract].

Analysis of research and publications. The scientific works of I. Bakhov, G. Buchkivska, N. Bibik, K. Binytska, V. Greskova and others are devoted to the problem of professional training of future teachers. G. Buchkivska and H. Tereshchuk addressed the issues of professional training of future teachers by the means of folk decorative and applied arts. Various aspects of the formation of teachers' computer competencies were considered in the works of domestic and foreign scientists V. Baranovska, V. Bykov, M. Zhaldak, N. Morse, O. Spirin, O. Shyman. Despite the scientific and practical significance of these studies, a number of aspects need further study.

Methods of research. To achieve the purpose of the study the method of the analysis of literary and information sources was used, thereby the problem under study was investigated, forms, methods of using ICT and folk decorative and applied arts in the process of professional training of future teachers in domestic pedagogy were identified.

Presentation of the basic material. Let us consider the main features of using ICT and folk decorative and applied arts in the process of professional training of future teachers.

The ideas about the possibilities of using information and communication technologies (hereinafter ICT) should be formed in the process of studying the entire course of academic subjects, regardless of their particular characteristics; the amount of knowledge about information and communication technologies and its content should be significantly

differentiated according to the focus of learning. The use of ICT in the process of professional training of future teachers should not be limited only to the course of teaching computer science and mathematics, but should also merge into humanitarian, artistically creative academic subjects.

Firstly, the methodological basis of innovative changes in training of future specialists is its focus on the competency approach – the implementation of the competency approach to assessing the results of training allows graduates to form the qualities necessary for their integration into the wide world socio-cultural environment (*Kharkivska, 2009*). According to N.M. Bibik, these qualities include: awareness of the polysemanticism of standpoints and views on a phenomenon; ability to use information resources; learning of cooperation and dialogue at the level of interaction of individuals, bearers of different views and cultures (*Bibik, 2004, p. 25; Bibik, 2001, pp. 12–13*).

Secondly, the new system of training of future teachers places special demands on the personality of a modern teacher.

At the present stage of the development of education it is necessary to focus on such professionally significant qualities of a future teacher as humanistic orientation, profound knowledge of the subject and related disciplines, methodical flexibility and responsible personal attitude (*Bibik, 2001*).

Thirdly, the more accurately pedagogical education will respond to innovative processes in an educational institution, the more prerequisites for improving its quality will appear. Among the main achievements of the modern pedagogy are those that need to be implemented in the practical training of future teachers, namely:

- humanization of education and its personality development nature;
- introduction of a competency-based approach to assessing the academic achievements;
- variability of effective

approaches to achieving the final result;

- the focus of a teacher's work on organizing monitoring research of the quality of students' achievements in the educational institutions (*Kodzhaspirova & Kodzhaspirov, 2005*).

Fourthly, there should be a unity of a man and his consciousness, which represents the existential mode of existence in the world as a creative experience and non-trivial vision of the objects of cognition every time in new connections and relationships (*Abramtsov, 2018, p. 16*).

One of the areas of training teachers for using ICT and folk decorative and applied arts is to acquaint them with the possible options for educational software. That is:

- academic programmes for teaching mathematics, Ukrainian and English, science, music, fine arts, etc.;
- general-purpose programmes for training exercises or control the knowledge of students;
- programmes-patterns (samples) to create computer-oriented methodological support of training lessons (*Shyman, 2005, p. 9*).

The main didactic goals of using ICT are the implementation of the social procurement, dictated by the informatization of the modern society; optimization of the educational process, increasing its efficiency and quality; development of creative potential of students, their abilities to communicative actions; formation of culture of educational and creative artistic and labor activity; increasing learning motivation, etc.

A progressive teacher must know the basic techniques of using the Internet, understand a way the global network services are organized, what resources can be used to supplement methodological knowledge, how to learn over the Internet about a particular pedagogical experience. The teacher needs knowledge, skills and abilities to organize and perform the search for the necessary information stored in web-documents, to communicate by e-mail

with colleagues (*Dragniev, 2009*).

That is why effective education is possible due to the information interaction between future and practicing teachers. Successful results are achieved by the teachers who share professional experience, discuss new developments, methodological findings, ideas, results of their methodological research. In this way, teachers not only improve their professional level, but also do not spend time on research work, on issues that have already been studied. Sharing of the information is possible through personal communication, meetings, experience exchange seminars, conferences, as well as through computer networks, which have many advantages. This makes it easier to transfer the information, you can much faster increase the number of interested people, save time and money.

Infoglut (or "information noise") often hinders the search for information resources. To avoid this complication, you should learn how to formulate search queries properly, because it is a guarantee of the general training level of many professionals. The found data are not always of sufficient quality, and sometimes they can be unreliable and even harmful. Only a teacher who is well versed in professional methods and has relevant professional experience can assess the quality of information products and their suitability.

It can be concluded that in the process of teaching information and communication technologies in institutions of higher education the system of knowledge acquired in secondary school must be constantly developed and improved, the theoretical knowledge base should be expanded and adapted to specialized training, the groundwork for constant self-improvement of knowledge, abilities, skills in the conditions of fast increasing importance of an information component in professional activity must be laid and be based on the principles of continuity of education and

professional growth and improvement (*Baranovska, 2015, p. 37*).

For the effective use of ICT in the process of professional training of future teachers it is necessary to master the fundamentals of required knowledge and gain personal experience in the practical use of computer technology, to have general cultural and methodological training of their implementation in educational process. Professional training of future teachers on the principles of folk decorative and applied arts is considered: firstly, as a process of creative self-realization, aimed at increasing spiritual and material values, conservation and development of traditions of this art; secondly, as a cultural and educational environment that provides a specific way of creative artistic and labor activities of students, regulates their behavior as bearers of national culture. Folk decorative and applied arts cannot be determined only on the basis of its practical (utilitarian) feature, because in this case its historical tradition is ignored, the succession of generations, the appeals to ethnic consciousness as determining factors of art in the world of culture are reduced. At the same time, it is not always possible to use authentic products of folk decorative and applied arts during the educational process, but it is possible to demonstrate them with the help of computer and modern technical means of teaching in graphic images, photos, videos, presentations, etc. Therefore, the future teacher must be a competent user of a personal computer and have the skills to vary the use of different software. This also includes pedagogical software specifically designed or adapted for the use in educational process of a higher education institution. Also, future teachers must have a sufficient base of knowledge, skills, abilities and strong motivation to improve constantly their proficiency (*Tkachuk, 2002, p. 44*).

The use of ICT and decorative and applied arts in the process of

training future teachers, in the course of artistic and labor activities, in particular, forms positive motives for learning. Future teachers feel the need to know the history and artistic traditions of the native land (at the stage of choosing the object of work, clarifying its purpose, methods of decoration in accordance with regional peculiarities, etc.), they are eager to master the basics of artistic techniques and technologies (at the stage of manufacturing and decoration the object of labor), they learn to justify the economic feasibility of the manufactured decorative and applied article, etc. Therefore, the professional training should be provided with modern material and technical resources (computer, scanner, printer, multimedia board, video projector, etc.), connection to the Internet, all these facilities provide an opportunity to form the need of higher education students in obtaining and processing information using various means of digital technologies (search, processing, analysis of samples of folk decorative and applied arts products, methods of their manufacture and decoration, etc.) (*Buchkivska, 2019*).

We believe that in the process of professional training of future teachers the most effective use of ICT and folk decorative and applied arts occurs during the study of humanitarian subjects, artistically creative and design-technological subjects using audiovisual teaching aids, such as:

1) audio devices in which sound is a carrier of the information (microphones, loudspeakers, sound amplifiers, mixers, that together form sound amplification systems; players, etc.) and which allow, for example, to record the stories of folk artists about the unique features of a particular craft;

2) visual aids in which an image is a carrier of the information (multimedia projectors and screens, interactive whiteboards, smart boards, DVD players, LCD panels, video cameras, TVs, monitors, etc.) and which together with other

equipment form a system of a dynamic design, for instance, of technological process of manufacturing decorative and applied arts article.

Audiovisual teaching aids as a source and carrier of information can be used during the demonstration of folk decorative and applied arts means. This combination is possible during the improvement of the form of presentation of educational material, it expands the use of visual methods, specifies concepts and categories, organizes and directs perception, increases interest in learning, enhances cognitive activity, and most importantly – promotes students' conscious learning, development of thinking, creative imagination, observation, etc. (*Kodzhaspirova, 2005*).

In the process of studying design and technological subjects bitmap graphic editors – Artweaver, Adobe Photoshop, GIMP; vector graphic editors – Macromedia Free Hand, Adobe Illustrator, Corel Draw; three-dimensional graphic editors – 3D Studio Max, LightWave3D, Maya, etc. are popular among students. For automatical conversion of any images (photos, drawings, etc.) into schemes of ornaments, harmonious selection of colors and shades for future decorative and applied arts products, students often use specialized computer programs: Pattern Maker, PCStich, Bisercheler, Easy Bead, Win-Stitch 6.4, etc. In addition, various computer-aided design (CAD) systems such as Compass, SolidWorks, AutoCAD, etc. are used to perform more complex graphic operations, ornamental compositions and art-design works (*Buchkivska, 2019*).

Practice shows that the use of the above mentioned graphic editors, specialized computer programs and CAD in the implementation of art projects, development of schemes of ornaments, etc. helps to speed up and even automate the process, and most importantly – to develop a long-lasting interest of students in creative artistic and labor activity. Thus, the digital form of new teaching materials,

education guidances, modern software products most fully meet the set objectives of bringing the content of professional training of future teachers by means of folk decorative and applied arts in accordance with the forms of its presentation, tasks of harmonization and efficiency of the educational process.

Purposeful use of ICT and folk decorative and applied arts in the process of professional training of future teachers provides an opportunity for complete involvement of various forms of sense and rational cognition for comprehensive study and thorough mastering the content of the studied subjects and phenomena; formation of scientific style of thinking of students; development of creative abilities of future specialists; increasing the efficiency of the educational process, etc. (*Nyshchak, 2020, p.104*).

Conclusions and directions for future research. Thus, the use of ICT and folk decorative and applied arts in the process of professional training of future specialists, allows the teacher not only to draw students' attention to the educational problem, to achieve profound disclosure of the content of informational and cognitive material, but also to increase their motivation to study folk decorative and applied arts and the use of its potential in future professional activity.

Despite the wide scope and variety of functions that ICTs perform, they cannot completely replace the teacher who has always been, is and will remain a central figure in the educational process. Thus, teaching aids do not replace, but expand the range of possibilities, become a pedagogical tool, which the teacher must be able to use properly, relying on the key provisions of their implementation. These key provisions include:

1) motivation and methodological justification of using ICT and folk decorative and applied arts: appropriate and motivated use of a particular teaching aid is the case when the same pedagogical

effectiveness cannot be achieved with other more accessible teaching aids;

2) purposefulness and functional certainty of the use of ICT and folk decorative and applied arts: in each case the general (information-cognitive or psychological-pedagogical) and didactic (immediate didactic learning goals) purposes of using teaching aids should be determined, and functional certainty requires clear identification of the roles that can be performed by teaching aids at a particular stage of the educational process;

3) systematic use of ICT and folk decorative and applied arts: occasional use of teaching aids usually does not give the expected learning effect, so the teacher needs to develop a system of their implementation; organizational and pedagogical aspect of this system involves the teacher's analysis of all topics in the academic subjects and the distribution of teaching aids according to the topics, i.e. the creation of a system of inclusion teaching aids as a component in the study of educational material by students.

REFERENCES

- Abramtsov, R. (2018). The phenomenon of non-reflexive (emotional) consciousness of Sartre. *Psychology of personality*, 9, 16–21.
- Baranovska, V. M. (2015). Methodical system of formation of computer competences of future primary school teachers. Khmelnytskyi: PE Zakolodnyi M. I.
- Boichenko, E. B., Bakhov, I.S., Martynovych, N. O., Shestopalova, I.O., & Binytska, K. M. (2020). Building research work skills in students as a component of their professional training. *Journal of Advanced Research in Dynamical and Control Systems. Special Issue*, 12, 04, 840–848.
- Bibik, N.M. (2001). Problems of professional development of a primary school teacher. Training of teachers to work in a new structure and content of primary education: materials of the All-Ukrainian scientific-practical conference. (pp. 12–13). April 23–25, 2001, Poltava, Ukraine: Poltava V. G. Korolenko State Pedagogical University; Institute of Pedagogy, Academy of Pedagogical Sciences of Ukraine.
- Bibik, N. M. (2004). Competence approach to the presentation of educational results. *School of the first degree: theory and practice*, 10, 18–26.
- Buchkivska, G. (2019). Training of future primary school teachers on the principles of folk decorative and applied arts. Khmelnytskyi: PE Zakolodnyi M. I.
- Dragniev Yu. V. Formation of student health culture in the conditions of computerization of education. Luhansk: LNU named after T. Shevchenko.
- Kodzhaspirova, G. M. & Kodzhaspirov A.Yu. (2005). *Dictionary of Pedagogy*. Moscow: ICC "MarT".
- Kharkivska, A.A. (2009). Formation of information competencies of the future teacher of computer science in pedagogical higher educational establishment. *Problems of engineering and pedagogical education*, 24–25, 411–419.
- Lokshyna O. I. (ed.). (2004). Monitoring of the quality of education: global achievements and Ukrainian prospects. Kyiv: K.I.S.
- Nyshchak, I., Martynets, L., Kurach, M., Buchkivska, G., Greskova, V. & Nosovets, N. (2020). Didactic Opportunities of Information and Communication Technologies in Graphic Training of Future Technology Teachers. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11, 2, 104–123.
- Semichenko, V.A. (1992). The concept of the integrity and its implementation in the professional training of future teachers. (Dissertation ... Doctor of Psychology). State ped. Dragomanov university, Kyiv, Ukraine.
- Shyman, O. I. (2005). Formation of bases of informational culture of future primary school teachers. (Dissertation ... Candidate of Pedagogical Sciences). National ped. Dragomanov university, Kyiv, Ukraine.
- Tkachuk, V. (2002). Information technologies in the system of higher education: stages of implementation. *Higher Education of Ukraine*, 4, 43–47.

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