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*V. A. Molchaniuk, SI “Luhansk Taras Shevchenko National University” (the city of Starobilsk)*

## **MEANS OF FORMATION OF INFORMATIONAL AND COMMUNICATIVE COMPETENCE OF SPECIALISTS IN PHYSICAL CULTURE AND SPORTS**

Molchaniuk V. A.

Means of Formation of Informational and Communicative Competence of Specialists in Physical Culture and Sports

The article is devoted to the analysis and generalization of theoretically grounded pedagogical conditions of formation of informational and communicative competence of future specialists in physical education and sports.

The author considers some of means of information technology that can to be used in the formation of informational and communicative competence of future specialists in physical culture and sports (teachers of physical culture, sports judges, instructors, etc.), as well used in professional activities (on physical culture lessons at school, in the process of sports training and competitions, for diagnostics and monitoring of the physical condition of students and athletes). The author believes that the formation of informational and communicative competence requires increasing the specialists' general communicative and informational culture, knowledge and skills apply informational and communicative technologies in professional activities.

*Key words:* informational and communicative competence, information and communication technologies, multimedia technologies, recommendations of UNESCO.

In the conditions of information society the requirements for professional training of future specialists are increasing. The social ordering of the information society should be considered to ensure the formation of their information competence required to work in a specific area of professional activity. Nowadays, information is seen as a source of resources along with employment, and information technology as a means of improving productivity and efficiency. Information and everything related to it plays and will continue to play a decisive role in all life situations. As is already known today,

scientific and industrial technologies, business technologies, various arts and sports are constantly developing, educational technologies are being created and improved on the basis of information and communication technologies (ICT). Higher education institutions are tasked with training professionals who are able to adapt quickly in today's context and respond quickly to problems that need immediate resolution.

The process of training future professionals should provide not only fundamental theoretical knowledge, but also a wide range of practical professional skills. Of particular importance is the problem of training specialists in physical education and sports in a new format.

In modern pedagogical science, the concept of competence approach to education has become widespread, which is the basis of meaningful changes in ensuring that education meets the needs and opportunities of society in the period of informatization and global mass communication.

According to B. S. Hershunskyi, professional competence is a literacy that will be demanded and updated at the professional level, “these are the components that can be attributed not so much to the subject content, but to the formed qualities of personality: responsibility, creativity, curiosity, perseverance, the desire to acquire new knowledge, the aesthetic perception of reality and, of course, to high morality, without which a true professional of his business is unthinkable ...” [1].

With the development and dissemination of the latest technologies, one of the components of the professional competence of the specialist, including the teacher, is information and communication competence (IC-competence).

IC-competence is considered by methodologists as an integral quality of personality, which determines the readiness and ability of professionals to use information and communication technologies in their professional activities. In addition, scientists note that IC-competence is first of all the quality of a person, which includes a set of knowledge, skills and skills to perform different types of information activities and value attitude to this activity, while the information activity means a set of processes

of collection, analysis, transformation, storage, retrieval and dissemination of information; second, IR competence is directly related to the field of professional activity [2–4].

UNESCO has identified three levels of teachers' IC-competency [5]:

- 1) application of IC-competence;
- 2) development of knowledge;
- 3) production of knowledge.

The strategic objective, which is decided on the **first level** – training of students, citizens and workers who can use ICT for social development and economic growth of the country. At this level, the teacher acquires IC-competence and works more at the individual (personal level). In the early stages of the implementation of this approach, teachers should be able to select and use in their work ready-made training and game programs, various web resources, as well as training simulators.

Teachers need to be able to organize work in a computer class or using ICT tools available in other classrooms, as well as apply ICT to achieve educational outcomes as required by educational standards, to carry out assessment activities, to implement thematic plans and existing (traditional) teaching methods. In addition, teachers should be able to use ICT to keep up-to-date with their reporting and professional development.

At the **second level**, the task of forming students (future citizens and workers) with the ability to contribute to the social and economic development of the country is solved. Teachers need an understanding of educational policy goals and social priorities. They must be able to select, design and conduct training activities that meet these goals and priorities.

The task is solved on the **third level** – education students, citizens and workers are able to produce new practical knowledge necessary to participate in the innovation process and learn throughout their lives. Teachers at this level need to be able to design and deliver training to achieve these strategic goals, and to be actively involved in the development of appropriate programs for the development of their schools.

Vorotnykova I. P. highlights the possibilities of developing the teacher's IR competence based on the use of the potentials of the individual, the school and the community, society [6].

Lytvynova S. H. notes that for the subject-teachers the informatics is not a profile subject, therefore for them in the foreground the formed information-communication competence in application of ICT becomes important. It implies the presence in the personality of abilities [7]:

- apply ICT in learning and daily life;
- make good use of the computer and computer tools when solving tasks related to the processing of information, its search, systematization, storage, submission and transmission;
- build information models and research them using ICT tools;
- to evaluate the process and achieved results of technological activities.

Ivaniy I. under the professional competence of the future specialist of physical education and sports understands the integrative quality of the emerging personality, the system of necessary knowledge, skills, experience and perceived values that provide the future specialist to perform professional functions (goal setting, communicative, technological, cultural ) in accordance with established in the society at a particular historical moment the rules, standards and requirements for sports and sports activities [8, p. 45].

Danyso O. V, Svertniev O. A consider information and communication competence of a future physical education teacher as his ability and willingness to use tool-software and subject-oriented information systems and digital technologies in his professional activity. Scientists note that the structure of the IC-competency of a physical education teacher contains the following skills: to highlight in the curriculum key concepts and processes that are desirable to learn using ICT; to relate educational standards to specific software tools, to help students acquire the skills and abilities of using ICT tools within their curriculum; use digital and web-based learning resources;

use ICT as an additional didactic tool in the organization of individual and group work of students both in the classroom and after-school activities; use ICT to increase productivity and as a tool to acquire methodological and professional knowledge. The authors argue that providing appropriate professional training for future teachers of physical education, normalization of indicators of their IC-competence, informatization of the educational process in the conditions of reforming the national education system is an urgent task of higher educational institutions of Ukraine [9].

Volodko I. V defines and theoretically substantiates pedagogical conditions of formation of IC-competence in future specialists of physical education and sports during the study of sports disciplines, which include: development and approbation of multimedia didactic means of training in the respective discipline; taking into account the possibilities of multimedia technologies as a means of activating the educational and cognitive process; variety of multimedia form methods; special preparation of the teacher for the use of multimedia technologies. The realization of these conditions makes it possible to organize the training process in accordance with the modern requirements of professional education and improve the quality of training of future specialists in physical education and sports. Scientists have developed a model of formation of IC-competence in future specialists of physical education and sports [10].

Summarizing the scientific intelligence of scientists, it should be noted that as a result of the formation of IC-competence, specialists in physical culture and sports should:

- understand the nature and importance of information in the development of modern society;
- know the basic methods, methods and means of obtaining, storing, processing information;
- have computer skills as a management tool;
- be able to work with traditional information carriers, distributed knowledge bases;

- be able to handle information on global computer networks;
- use modern technical tools and information technologies to solve professional problems;
- evaluate the software and the prospects for its use, taking into account the professional tasks being solved;
- be able to work with software methods to protect information when working with computer systems;
- know the organizational arrangements and techniques of antivirus protection;
- acquire new knowledge and skills, including in new fields of knowledge not directly related to the field of activity, to expand and deepen their scientific outlook.

Let's look at some information technology tools that can be used in the formation of IR competencies in future specialists in physical education and sports (physical education teachers, referees, instructors, etc.), and used in professional activities (in physical education lessons in schools, in the process of sports training and competitions, for the diagnosis and monitoring of the physical condition of students and athletes).

**MS Word** – is a text editor that is part of the Microsoft Office suite of software that creates text documents (reports, orders, competition entries, sports protocols, etc.).

**MS Excel** – is a spreadsheet processor, a spreadsheet program. MS Excel is part of the Microsoft Office suite of programs. It can be used to create a summary table of sports competitions, to prepare a report on competitions, to draw up summary records of sports competitions.

**MS PowerPoint** – a presentation preparation and presentation viewer that is part of the Microsoft Office suite of programs. PowerPoint-prepared materials can be displayed on a computer monitor, as well as on a large screen through a large projector or television screen. Use for demonstration of sports techniques and analysis of sports competitions.

**MS Publisher** – an application that is part of the Office suite of Microsoft Office applications, with which you can create a variety of publications - from business cards and promotional booklets to complex brochures and directories. Easy to use MS Publisher gives you the ability to create colorful invitations to sports, announcements, sports certificates, calendars of the sports section.

**Skype** – is a freeware software that provides encrypted voice communication over the Internet between computers, as well as paid services for calls to mobile and landline phones. Skype allows its users to make individual correspondence, exchange messages in real time, organize so-called conference calls. With these calls, several people in different parts of the world can participate in the conversation.

**Viber** – is a mobile application that allows you to call and send text messages to other users of this messenger for free. You can use it via WiFi or mobile Internet. Viber has a very high sound quality. There are no restrictions on the number of messages sent or received, or the duration of the conversation.

**Webnode** – is a site designer that allows you to create a simple website for free. No programming skills are required to set up your site. In addition, Webnode works simultaneously as a free hosting service. That is, with the help of it you can create a full-fledged site of a sports club.

**Блог** – network diary of one or more authors that consists of entries in reverse chronological order, or a site in a magazine, sorted by date.

**Sony Vegas, Adobe Premiere Pro** та **Pinnacle Studio** – video editing software, creating videos that can be used to promote sports events.

**YouTube** gives you the opportunity to post online competition results and videos that you can view and analyze at any time.

Separately, we note the urgency and prospects of use in the process of infrared IC-competence sports simulators and trainer-simulators for the purpose of deeper scientific study of various sports processes.

**A sports simulator** is a video game genre that underlies the rules of a real or fictional sport based on the gameplay. The genre games can focus on different aspects of the sport, from the game process itself to the planning and management of participants.

**Simulator imitator** provides the opportunity to study sports situations that are particularly difficult and require deep analysis.

**Social networks** (Facebook, Instagram, Telegram) are nowadays unique channels that allow for long-term communication in the form of a dialogue with users, demonstration of material for general use, as well as for advertising their professional activity.

Thus, the formation of IC competency requires specialists in physical culture and sports improve their overall communication and information culture, knowledge and skills to use information and communication technologies in professional activities.

Prospects for further research are aimed at conducting a comparative analysis of curriculum, training program and disciplines in higher education institutions that shape the IR competences of specialists in physical education and sports.

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Молчанюк В. А.

Засоби формування інформаційно-комунікативної компетентності у фахівців з фізичної культури і спорту

Стаття присвячена аналізу та узагальненню теоретично обґрунтованих педагогічних умов формування інформаційно-комунікативної компетентності у майбутніх фахівців фізичного виховання і спорту.

Автором розглянуті деякі засоби інформаційних технології, які можуть бути застосовані при формуванні інформаційно-комунікативної компетентності у майбутніх фахівців з фізичної культури і спорту (учителів фізичної культури, суддів по спорту, інструкторів тощо), а також використані у професійній діяльності (на уроках з фізичної культури в школі, у процесі спортивних тренувань і змагань, для діагностики та моніторингу фізичного стану учнів і спортсменів).

Автор вважає, що, формування інформаційно-комунікативної компетентності вимагає від фахівців з фізичної культури і спорту підвищення їх загальної комунікативної та інформаційної культури, знань та вмінь застосовувати інформаційно-комунікативні технології в професійній діяльності.

*Ключові слова:* інформаційно-комунікативна компетентність, інформаційно-комунікаційні технології, мультимедійні технології, рекомендації ЮНЕСКО.

Молчанюк В. А.

Средства формирования информационно-коммуникативной компетентности у специалистов по физической культуре и спорту

Статья посвящена анализу и обобщению теоретически обоснованных педагогических условий формирования информационно-коммуникативной компетентности у будущих специалистов физического воспитания и спорта.

Автором рассмотрены некоторые средства информационных технологий, которые могут быть применены при формировании информационно-коммуникативной компетентности у будущих специалистов по физической культуре и спорту (учителей физической культуры, судей по спорту, инструкторов и т.д.), а также использованы, в профессиональной деятельности (на уроках по физической культуре в школе, в процессе спортивных тренировок и соревнований, для диагностики и мониторинга физического состояния учащихся и спортсменов).

Автор считает, что формирование информационно-коммуникативной компетентности требует от специалистов по физической культуре и спорту повышение их общей коммуникативной и информационной культуры, знаний и умений применять информационно-коммуникативные технологии в профессиональной деятельности.

*Ключевые слова:* информационно-коммуникативная компетентность, информационные коммуникационные технологии, мультимедийные технологии, рекомендации ЮНЕСКО.

#### Information about the author

*Viktoria A. Molchanyuk* – Assistant Professor of the Department of Physical and Technical Systems and Computer Science of the SI “Luhansk Taras Shevchenko National University” (the city of Starobilsk).

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