PROFESSIONAL DEVELOPMENT OF THE PROSPECTIVE EDUCATION CULTURE TEACHER: THE THEORETICAL AND METHODOLOGICAL ASPECT

Quality postsecondary training has always been of special interest for educators and psychologists, since it is directly related to the preparedness of prospective physical education teachers for professional activity in the informational and educational space. Our study of the professional development of prospective physical education teachers in the context of the informational and educational space reveals a lack of research into this problem in the academic resources.

The goal of the article is to present the results of the research and experiment and substantiate the theoretical and methodological basis for the professional development of the prospective physical education teacher in the informational and educational space.

In the course of research, we attempted to determine the theoretical foundations for the professional development of prospective physical education teachers in the informational and educational space, which can be subdivided into two blocks. The first block is represented by the works dealing with the issues of personal and professional development in the course of prospective teachers’ training on the basis of the systemic approach (Ye. Zeier, N. Kuzmina, et al.) [3; 5]; educational space, informational and educational space, as well as informatization in education in the process of higher education modernization (Yu. Zhuk, L. Panchenko) [2; 6]. The second block includes the research focused on the modernization of physical education degree training (S. Yermakov, R. Klopov) [1; 4]; the use of information
In the course of our research and experimental work, we analyzed the normative acts that regulate the functioning of the system of education in the informational and educational space of Ukraine; studied the theory and practice of teachers’ professional activity; paid attention to the practical experience in using information technology in the training of prospective physical education teachers. Our analysis reveals a number of conflicts that arise in the course of training in the field of Physical Education, Sports and Health, including: a) the conflict between the social demand for highly qualified professionals in physical education equipped with knowledge, skills, and abilities of applying information technology and pedagogical techniques in the conditions of the information society and the lack of theoretical and methodological guidelines for the pedagogical system of prospective physical education teachers’ training in the light of the informational and educational space that would be directed towards the modernization of the system of physical education in Ukraine; b) the conflict between the traditional system of training of prospective physical education teachers and a limited application of the acmeological approach and information technology in the process of the postsecondary training of the youth; c) the conflict between the modern requirements for the training to be holistic and life-long and the lack of systemic ties with the psychological and educational practice of prospective physical education teachers’ training; d) the conflict between the need for the improvement of the qualification of the prospective physical education teacher to facilitate his/her adaptation to working under the pressure of the informational progress in the informational and educational space and limited opportunities for the organized training that would provide for the preparation of the physical education teacher on the basis of the subject-subject interaction of the student and the instructor in the educational process with the use of personality-oriented approach and information technology. The afore-mentioned conflicts, the topical significance of the problem and the lack of research in the field, as well as its practical value bring about the need for substantiating the theoretical and methodological foundations of the
professional development of prospective physical education teachers in the context of the informational and educational space.

We came to the conclusion that the professional development of the prospective physical education teacher in the information society, and in the informational and educational space in particular, should have a brand new theoretical and methodological basis determining the way the pedagogical system of the physical education teacher’s professional development in the informational and educational space is built. This system should be able to provide for the requirements of the mass informatization of training in the field of physical education.

Therefore, the subject of our research was the pedagogical system of professional development of the prospective physical education teacher in the context of the informational and educational space, while our goal was to substantiate the theoretical and methodological foundations of the pedagogical system of prospective physical education teachers’ professional development in the informational and educational space and its implementation into the university educational process.

To achieve the goal set, we developed the conceptual basis of the research, which includes the following assumptions: a) the theoretical and methodological foundations of the prospective physical education teachers’ professional development should be understood as a set of scientific principles that direct the process of the educational system transformation, so that it would satisfy the requirements of the mass informatization of education happening in the world, as well as in Ukraine, and, on the other hand, would be oriented at the implementation of the innovative approaches in the national system of physical education; b) the theoretical basis of the educational system, including the systemic, acmeological, personality-oriented, objective activity, informational, and competence-based approaches should provide for the professional development in the conditions of the informational and educational space as the main goal and the outcome of research and experimental work. This view takes into consideration the subject-subject mode of interaction between the prospective physical education teacher and other participants of the educational process in a higher educational institution; c) the methodological basis
for the professional development of prospective physical education teachers includes the theses that determine the content characteristics of the educational system components and reflect the personality-oriented techniques based on the principles and requirements of the curriculum and methodological support of the educational process in order to maintain research, as well as educational and methodological approaches to the improvement of degree training in Physical Education, Sports and Health. The methodological basis required the designing of the pedagogical system of the professional development in the educational process and resulted in putting forward the criteria, characteristics, and levels of professional development in the context of the informational and educational space; d) the efficacy of the theoretical and methodological foundations was proved in the course of the realization of the components of the pedagogical system of prospective physical education teachers’ professional development in the conditions of the informational and educational space (the goal, the content of training, teaching techniques, the subjects (university instructors), and the objects (the students)). The content of the training of prospective physical education teachers corresponds to the requirements of the modern system of training in physical education and the national system of physical education in Ukraine. The primary direction in the realization of the concept suggested was the acmeologization of the training of prospective physical education teachers in the informational and educational space of the university. The essence of the professional development of the physical education teacher in the conditions mentioned can be determined as the unity of the necessary components and connections characteristic of this process as the pedagogical phenomenon in the system of physical education and the system of training in the field. Our concept allowed the articulation of the general hypothesis, which is based on the assumption that the professional development of physical education teachers in the informational and educational space will be effective if this process is organized as a pedagogical system. Partial hypotheses, which reflect the components of the pedagogical system, were articulated as well.

To substantiate the theoretical and methodological foundations of this problem,
we developed a pedagogical system of the prospective physical education teachers’ professional development in the context of the informational and educational space, which included the goal, content, teaching techniques (personality-oriented, focused on the professional development of the prospective teacher), as well as the subject (university instructors) and the object (students) of the system. This led to the articulation of the scientific and theoretical foundations of the system of the professional development of students in the informational and educational space; specification of the goal, content, subject and object of the system of professional development in the informational and educational space; and the verification of the merits of applying personality-oriented techniques of the professional development of prospective physical education teachers during degree training.

In the course of summative assessment, the following elements were determined: the criteria of the professional development (professional skills, informational competence, informational culture), the levels of the professional development (reproductive – low, reflexive – intermediate, creative – high), and the characteristics with the help of which the professional development of prospective physical educational teachers in the context of the informational and educational space could be monitored. The main task of the monitoring was the diagnostics of the dynamics of the professional development of prospective physical education teachers and the implementation of corrective measures in the process of their training. The analysis of monitoring outcomes demonstrated the need for the profound theoretical substantiation of the content of training as the component of the pedagogical system in accord with the conditions of the informational and educational space; as well as the transformation of curricula in the field of Physical Education, Sports and Health suggested by the Schools and Departments of Physical Education taking into consideration the requirements of the information society and the informational and educational space.

At the formative stage of the experiment, the procedure of implementing the pedagogical system of the professional development of prospective physical education teachers in the context of the informational and educational space was
developed. This system was realized in three stages. At the first stage, the courses that could be used to partially realize the concept of our research were singled out in the curriculum. Two elective disciplines were also introduced, namely *Professional Development of an Individual in the Informational and Educational Space* and *Informatization of Degree Training in Physical Education*. At this stage, the development of the web-site *Modern Physical Education Teacher: Professional Development and Self-Realization in the Information Society* was also appropriate ([http://svfk.luguniv.edu.ua/](http://svfk.luguniv.edu.ua/)) in order to form the need for revision of professional preparation in accord with the European and world standards by the teachers.

At the second stage, we shared with the students working towards their degree in physical education the theoretical information on the use of computers in their teaching, paying special attention to the individual work, which was one of the main components of the educational process in this field. We distinguished three directions of students’ individual work, such as fitness and sports, informational and educational, and creative. The fitness and sports direction included the study of the methodological support of fitness activities and healthy lifestyle; the encouragement of interest in and need for exercising, etc. The informational and educational direction implied the students’ independent analysis of the web-pages of Physical Education Schools, web-sites on fitness activities, web-pages of physical education instructors, e-libraries, etc. The creative direction of the individual work included writing reports and scholarly articles devoted to the use of information technology in professional activity; participation in the research conducted at the university or school.

At the third stage, which encompassed the realization of the theoretical foundations of training in physical education in the context of the educational system modernization and the use of information technology in the professional activity of the physical education teachers, two courses were introduced, namely *Computer Technology in the Professional Activity of Physical Education Teachers* and *Information Technology in Physical Education*. This allowed us to substantiate the methodological basis of the professional development of prospective physical
education teachers in the context of the informational and educational space and was reflected in the content structure of training in the form of personality-oriented techniques, development and experimental verification of the courses, methodological guidelines, and the web-site.

In accord with the logics of conducting scientific research, we compared the data acquired at the beginning and at the end of our research and experiment. To compare the results of the summative and formative stages of the experiment, we used the Pearson’s criterion $\chi^2$, Wilcoxon criterion, and Spearman and Kendall rank correlation coefficient. The analysis of the results demonstrates the statistical discrepancy at the level of 0.05 between the control and experimental group at the beginning of the experiment, while at the end of it the difference between the control and experimental groups in the formation of competences, professional qualities, professional skills, informational culture and competence was more significant (at the level of 0.01). Therefore, on the basis of the statistically proved difference and its analysis according to the criteria, characteristics, and levels of professional development, we may state that research outcomes confirm the effectiveness of the designed pedagogical system of the professional development of prospective physical education teachers in the conditions of the informational and educational space.

The research and experiment have substantiated the theoretical and methodological foundations for the professional development of prospective physical education teachers in the context of the informational and educational space. The theoretical basis embraces a set of scientific principles that determine the organization of the pedagogical system that can correspond to the modern requirements of mass informatization in education and orientation towards innovations in the system of physical education in Ukraine. Scientific principles that define the theoretical basis include the systemic, acmeological, personality-oriented, activity, informational, and competence approaches, as well as the principles and approaches that are part of the pedagogical system of the professional development of prospective physical education teachers in the informational and educational
space. The methodological basis of the system is the principles concerning the content characteristics of the components of the pedagogical system that encourage the use of personality-oriented techniques based on the requirements of the program and methodological support of the educational process and are aimed at the implementation of scientific research and educational/methodological approaches to training in Physical Education, Sports, and Health.

By the end of the research, the goal was achieved and the hypothesis of the research and experimental work was confirmed. It should be mentioned though further research in the field is required. More attention should be paid to the revision of the curricula in Physical Education to ensure their correspondence to informatization and acmeologization tendencies in training; to the informational competence and informational culture of the prospective physical education teachers and the professional self-realization in the context of distance learning.

References


Драгняєв Ю. В. Професійний розвиток майбутнього вчителя фізичної культури: теоретико-методичний аспект

У статті подано результати дослідно-експериментальної роботи з обґрунтування теоретичних і методичних зasad професійного розвитку майбутнього вчителя фізичної культури в умовах інформаційно-освітнього простору. Під час дослідження було обґрунтовано теоретико-методологічні засади професійного розвитку майбутнього вчителя фізичної культури в інформаційному суспільстві; розкрито інформатизацію вищої педагогічної освіти як передумову професійного розвитку майбутнього вчителя фізичної культури; розроблено педагогічну систему професійного розвитку майбутнього вчителя фізичної культури в умовах інформаційно-освітнього простору;
обґрунтовано процес організації експериментального впровадження педагогічної системи професійного розвитку майбутнього вчителя фізичної культури з метою отримання результатів дослідно-експериментальної роботи; визначено сутність процесу професійного розвитку майбутнього вчителя фізичної культури в умовах інформаційно-освітнього як суккупність необхідних компонентів та зв’язків, властивих цьому процесу як педагогічному феномену в системі фізичного виховання та вищій фізкультурній освіті.

Ключові слова: дослідно-експериментальна робота, професійний розвиток, майбутній учитель фізичної культури, інформаційно-освітній простір, вища фізкультурна освіта.

Драгнев Ю. В. Професіональне развитие будущего учителя физической культуры: теоретико-методический аспект

В статье представлены результаты исследовательско-экспериментальной работы по обоснованию теоретических и методических основ профессионального развития будущего учителя физической культуры в условиях информационно-образовательного пространства. В ходе исследования были обоснованы теоретико-методологические основы профессионального развития будущего учителя физической культуры в информационном обществе; раскрыта информатизация высшего педагогического образования в качестве предпосылки профессионального развития будущего учителя физической культуры; разработана педагогическая система профессионального развития будущего учителя физической культуры в условиях информационно-образовательного пространства; обоснован ход экспериментального внедрения педагогической системы профессионального развития будущего учителя физической культуры, с целью получения результатов исследовательско-экспериментальной работы; определена сущность процесса профессионального развития будущего учителя физической культуры в условиях информационно-образовательной среды с необходимыми компонентами и связями, присущими этому процессу как педагогическому феномену в системе физического воспитания и высшем физкультурном образовании.
Dragnev Yu. V. Professional Development of the Prospective Education Culture Teacher: the Theoretical and Methodological Aspect

The article presents the results of the research aimed at substantiating the theoretical and methodological foundations of the professional development of prospective physical education teachers in the context of the current informational and educational space.

It further determines the theoretical and methodological grounds for the professional development of prospective physical education teachers in the informational society. The informatization of higher education is described as the basis for the professional development of physical education teachers; the pedagogical system of the professional development of prospective physical education teachers in the informational and educational space is developed.

The article also deals with the implementation of the system of the professional development of physical education teachers. The author of the article defines this process in the context of the informational of the educational space as a combination of the necessary components and relations. The latter are characteristic of this process as the pedagogical phenomenon in the system of physical education and in the course of acquiring a degree in physical educational.

Key words: research, professional development, prospective physical education teacher, informational and educational space, degree in physical education.

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