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EDUCOLOGY AS A MAIN COMPONENT IN FORMATION OF PROFESSIONAL COMPETENCE OF FUTURE PHYSICAL TRAINING AND SPORT SPECIALISTS

Abstract. Purpose of the investigation is educology, which as synergetic learns reverse connection, studies not only the process of stabilization, but mechanisms of physical training development. The ways of training future sport specialists, such as formation of certain knowledge in physical training and rational mode of motion activity; system of scientific knowledge of physical training and practical ways of activity in this sphere; formation of the scientific outlook of a person and unity with general human's culture; skills of formation the needs and motives (interests) for training physical exercises.

The purpose of the article is investigating the influence of educology on professional skills of future physical training teachers and diagnosing of the level of formation of competence of students, training on direction 014. Higher education (Physical training). The investigational task is to determine the content of educology in training specialists of physical training and sport; to show the place of educology in formation of the competence of future physical training and sport specialists; to check the influence of educology on the formation of competence of future physical training and sport specialists. At the experiment took part 230 students of DSPU, divided into 2 groups: experimental and control. On the basis of determining the level of formation of professional skills of future physical training teachers lays the level of formation of professional competences. Peculiar features of these indicators were determined with the method of experimental marks. According to the results of comparison of initial and final stage of experiment was defined that the high level of professional competence was formed almost in 50% of student. The indicators of formation of professional competence of control group student's remained almost at the same level. The investigation defines main competences in professional training of future physical training teachers for interaction with modern school environment: generally professional, generally cultural, socially educational, scientific investigational, psychologically pedagogical, organisational managerial, instrumental, which give a possibility to follow up the dynamic of it's formation.

Keywords: physical training; educology; competence; professional skill; student.

Introduction

Educology at the process of preparing physical training specialists helps to show the connection of formation of physical training skills and its realization in livelihoods.

The development of European education is a dynamic process and gives reasons for reviewing the content of education in Ukraine. According to the view of modern educational system, the requirements of labour market dictate new marks for young generation, which are certain queries regarding the choice of profession. Educology, as synergetics, studies systems with reverse connection, investigates not only processes of stabilization but also mechanisms of development, appearing new educational structures at the expense of destruction of old ones. In our opinion synergistic approach is the most expedient for researching of educational problems of physical training in Ukraine. Education of physical training specialists not always meets the requirements and requests of the society.

We think that for optimal content of educationally professional program of training specialists in physical training and sport it is necessary to study children's requests in preschool institutions, and requests of schoolchildren and students. In view of present problems, the main task of physical training is studying and formation of life safety skills, maintaining health and extending legerity (Chepelyuk A., 2015).

As to the experts of British sport Rugby concept - Thomas Arnold, Charles Kingsley: the common influence of school, church and playground may educate consistent generation, that can stand up own interests and interests of its homeland in any part of world. If the rules of honest game, excepted in sport, will be the norm of adult's behavior, it will be easier to treat the ailments of the society with the help of Christian social means (Bobrovnyk S., 2008).

Literature review

We noted, that in different countries the concept of physical education of schoolchildren has certain specificity. Foreign researchers (Boyle S., Jones G., Walters S., 2008) point that national purposes of health safety are reached only in case if the efforts of school, society and politicians are directed at providing young people with the opportunity to be engaged in physical activity. Strategies of pupil's physical training magnification must be integrated at the family level, level of public organizations, besides important gender differences should be taken into account (Justin B. Moore and others, 2010).

We notice, that native researchers (Bezkorovaina L., 2006; Deminska L., 2012; Kondratska H., 2008; Pavliuk Ye., 2017; Samsutina N., 2011; Chepeliuk A., 2015) find the ways of improving the physical training system for children and described it in such a way: unity of formation of physical training knowledge and rational mode of motion activity; system of scientific knowledge about physical training and practical ways of activity at this sphere; health value and practice of physical training, health and sport work with schoolchildren; formation of scientific outlook on cultural, historical traditions of physical training system and its unity with a general human culture; mastering the basis of personal physical development and education of value marks on physical and spiritual development; healthy lifestyle and formation of necessity and motives to regular physical training exercises; formation of humanism, joy and communicational experience, development of volitional and ethic qualities; realization of intellectual and socially psychological tasks that in general make up a cultural vector of physical training process.

We consider that the concept of development of pedagogical education should take into account the demands of Modern Ukrainian School concerning the organization of physical education content on different stages of studying and training, thorough studying of schoolchildren's needs.

Important to know, that the process of training of future physical training and sport

specialists depends on such directions of physical training development as informationally motivational, inductively formational, wellness preparatory, educationally constructive (Kondratska H., 2008).

Educational investigations in sphere of physical training have an interdisciplinary character and we tried to show an educational process of formation of competence of future physical training and sport specialists on its basis.

The **aim of the article** is to define a place of upbringing as a part of formation of competence of future physical training and sport specialists.

Main tasks of the investigation:

1. To show the concept of educology in training of specialist in physical training and sport.
2. To describe the place of educology in formation of competence of future physical training and sport specialists
3. Check the level of formation of competence of future physical training and sport specialists.

Methodology

At the experiment took part 230 students of Drohobych State Pedagogical University Ivan Franko. All the respondents were divided into two groups: experimental and control. In experimental group (EG) were 120 students, in control group (CG) – 130). A method of V. Bespal'ko and I. Lerner was used in defining the levels of formation of competence in future physical training teachers. In addition, to define the level of formation of professional competence of future physical training and sports specialists we used the tests: "test of 20 judgments" - for defining of perception, evaluation and experiencing of personal achievements, technique of studying the need of achievements (ac. to Y. M. Orlov), technique WAM (wellbeing, activity, mood), test of impulse measurement – to control ability; trainings: training-session on self assessment, training-session for determining the need of formation of psychological a pedagogical competence, training-session for realizing personal features and capabilities. We pointed out the following indicators to define the level of competence: formation of flexible thinking of studying physical training exercises, formation of skills of spare time organization, improving ability of self-organization, setting for a positive mood and well-being, learning self-guessing and relaxation, learning self-promotion and achievement of the purpose. The peculiarities of these indicators were described with the help of expert assessments.

Results

Traditional system of education reviews an organic entry of new teacher's generation in difficult and variable field of changeable needs of educational work in modern school. To our mind, there is a necessity to consider the place of educology in formation of competence of future physical training and sport specialists, which can be implemented through an effective combination of directions of its development, requests and needs of new generation.

HEIs are responsible for training new generation of teachers, content and level of qualification of which are adequate to innovations occurring the field of physical training and educational activities.

There are a lot of contradictions between social requests of high-skilled teachers, who can analyze the educational process, produce pedagogical ideas, model a process of physical training on basis of professional values, creative abilities, professional activity and pedagogical reflection and insufficient level of formation of professional competence and pedagogical skills, in need of solving problems and non-standard tasks, realize formed

competences, show readiness for innovational pedagogical activity on the basis of concept of development of physical training and sport and traditional system of future teachers training, tendencies of Secondary Education on the implementation of new methods and technology of teaching and insufficient awareness of students about the influence of physical training exercises on livelihood of every person.

At the beginning of our experiment we discovered main problems of students (Physical Training and Health Institute at course of studying Professional skills), connecting with the level of assimilation of professional competencies.

The task of educationally practical complex of the mentioned process is defining main competencies of future specialist on the basis of conducting pedagogical practice in different periods of high school, selected forms and methods that will be offered to students for their professional development; methodical recommendations for training and practical complex of future specialists to improve the level of formation competences in the process of teaching and pedagogical practice.

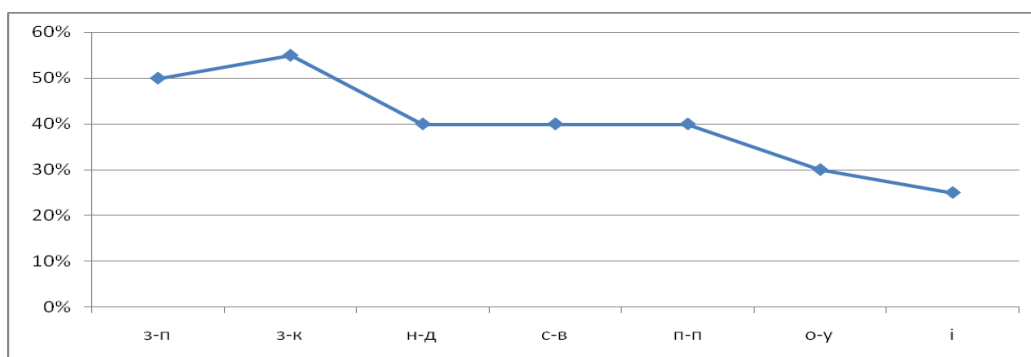
Level of formation of professional competences of students before implementation of the developed training practical complex is presented in the table 1, pictures 1, 2, 3.

Table 1

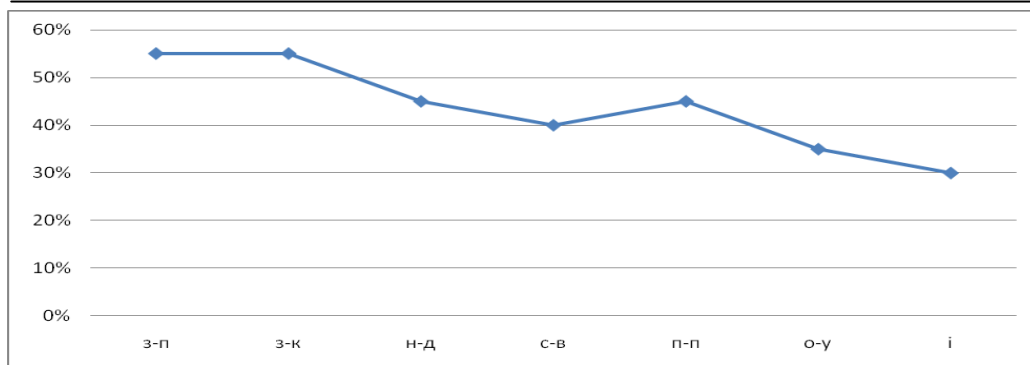
The level of competence development among students of control and experimental group at the initial stage of the survey

competence	CG	EG
Generally professional	50%	55%
Generally cultural	55%	55%
Scientific investigational	40%	45%
Socially educational	40%	40%
Psychologically pedagogical	40%	45%
Organizationally managerial	30%	35%
Instrumental	25%	30%

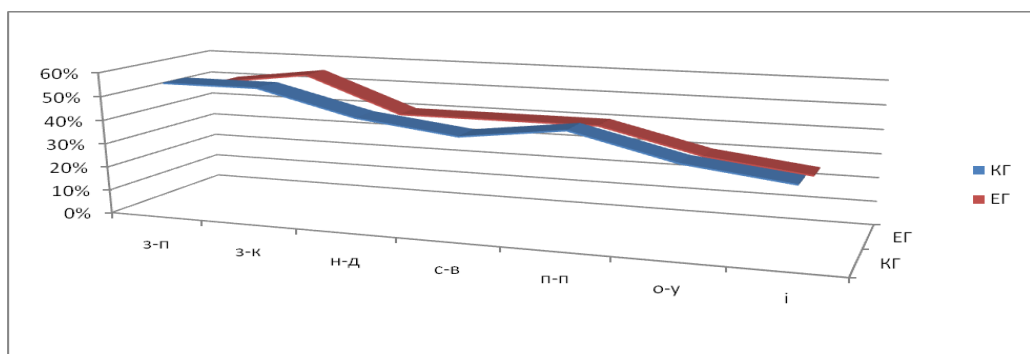
As we may see according to the level of formation of professional competences such as: generally cultural, generally professional, psychologically pedagogical, social-educational, instrumental, scientific-investigational, organizationally managerial in future physical training and sport specialist on lessons of discipline "Professional skill" almost all the students have low level of formation of organizationally managerial and instrumental competences.



Picture 1. Indicators of competence level in the control group at the first stage of the survey



Picture 2. Indicators of competence level in the experimental group at the first stage of the survey



Picture 3. Comparative indicators of competence level in the control and experimental group at the first stage of the survey

In order to arise the competence in this discipline we maintained a purposeful work with solving tests that gave an opportunity to check the formation of professional competences ("test of 20 judgments" - for defining of perception, evaluation and experiencing of personal achievements, technique of studying a need of achievement (ac. To Y. Orlov), technique WAM (wellbeing, activity, mood), test of impulse measurement - control ability; trainings: training-session on self-assessment, training-session for determining the need of formation of psychological a pedagogical competence, training-session for realizing personal features and capabilities.

After the work of formation of professional competence we conducted the second stage of the survey on the same criteria, which were used during pedagogical practice. Criteria of work assessment of future physical training and sport specialist is given in table 2.

Table 2

Assessment criteria of work of future physical training and sport specialist

	Criteria of teacher’s work assessment	Points
1.	Formation of skill of motion activity and physical development	25-20
2.	Formation of skill of spare time organization	20-15
3.	Improving of self-organizational skill	10-15
4.	Tune in to positive mood and wellbeing	5-15
5.	Learning self-suggestion and relaxation	5-10
6.	Learning self-promotion and goal achieving	0-10

For solving of asked question we propose the combination of theoretical

knowledge with the formation of skills on pedagogical practice according to the scheme described in the table 3.

Table 3

Kind of activity	Criteria of assessment
1 course – acquainting practice at school (2-3 weeks)	Discipline “Introduction to specialty”
2 course – practice at elementary school	Discipline “Theory and practice of physical training”
3 course – practice at secondary school	Discipline “Professional skill”
4 course – I semester practice at high school	Discipline “Theory and practice of physical training”
4 course – II semester practice according to future profession	Discipline “Professional skill”

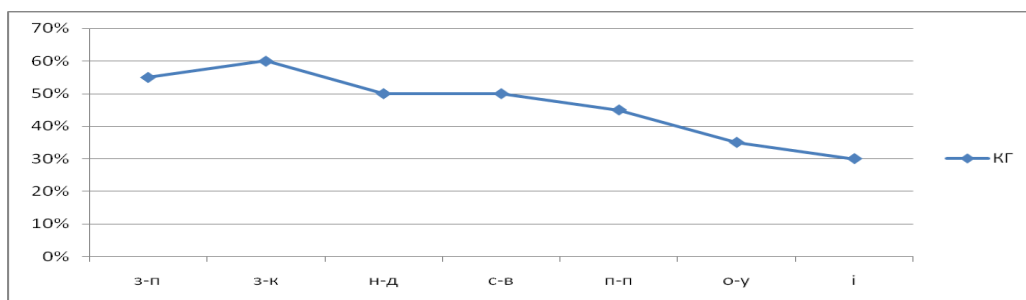
The combination of such forms of studying: lectures, seminars, practical classes and pedagogical practice enabled students to study the conditions of school, needs and requests of pupils and the way of their realization. This approach deepens understanding and assimilation of knowledge for the implementation of physical education in general secondary school students.

As shown in Table 4, pictures 4, 5, 6 at the final stage of the survey, the level of competencies of future specialists in physical training and sports has changed for the better.

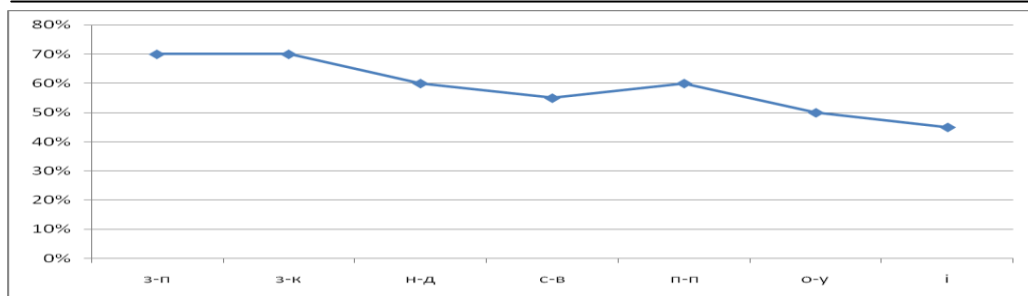
Table 4

Level of competence development among students of control and experimental groups at the final stage of the survey

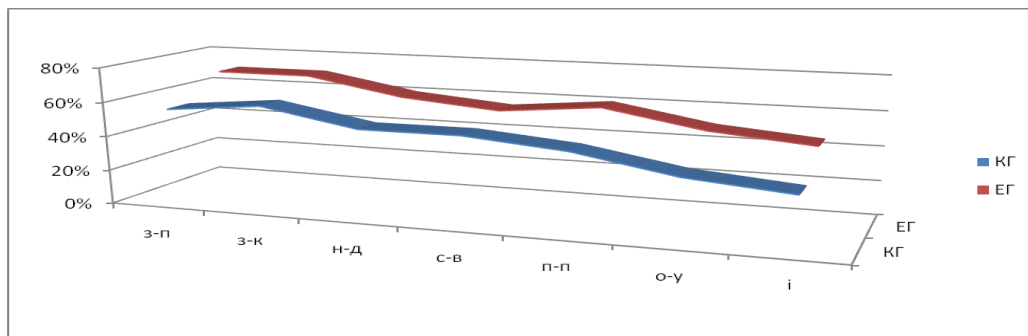
competence	CG	EG
Generally professional	55%	70%
Generally cultural	60%	70%
Scientific investigational	50%	60%
Socially educational	50%	55%
Psychologically pedagogical	45%	60%
Organizational managerial	35%	50%
Instrumental	30%	45%



Picture 4. Indicators of level of competence in control group at the second stage of the survey



Picture 5. Indicators of competence level in experimental group at the second stage of the survey



Picture 6. Comparative indicators in control and experimental groups at the second stage of the survey

So, we get such results: generally professional, generally cultural, psychologically pedagogical, organizationally managing and instrumental competence of students in control group has raised on 5%, socially educational, scientific investigational competence on 10% and the students of experimental group have got better results: generally professional, generally cultural, socially educational, scientific investigational, psychologically pedagogical, organizationally managing and instrumental competence on the final stage has raised on 15-20%.

Discussion

In order to identify the level of formation of professional competencies was developed an educational and practical complex which should be mastered by future specialists in physical training and sports while studying at a higher education institution.

The educational discipline "Professional Skill" (designed for 5 credits) 150 hours spent on auditorium and independent work. At the same time, changes were made to the lecture material, where professional situations were solved with the help of active participation of students in role-playing and situational games; the level of the formation of flexible thinking during the course of pedagogical practice was checked (sporting holidays, motivation of school students for exercises, trainings with students, participation in group work).

In addition to the above-mentioned activities, students participated in trainings, master classes, writing essays and abstracts, with which they spoke at the cathedral seminars and regional conferences of each semester to deepen and consolidate the skills and abilities of certain types of knowledge.

This approach creates an innovational educational environment in HEI, the integrative character of which will ensure qualitative training of graduates for vocational

and pedagogical activities aimed at forming the basics of physical training education and harmonious development among the pupils.

Main ways of improving professional skills of future physical training and sports specialist is using the scientific principle, which provides education on the basis of modern achievements of pedagogics, psychology, physical training methods, innovational pedagogical experience, persistent implementation of recommendations of scientific organization of pedagogical work in practice.

There used the newest achievements in physical training sphere for formation of logics not only of inductive, but also deductive education, because in elementary school during assimilation of simply movements in different sport arts it's necessary to lead abstractions which allow to understand a concrete tasks of physical training for school children on different stages of development. Also, it's better to avoid abstractions which cannot describe the necessity and advantages of school course "Physical training" in formation of life safety of children at the society.

We used the principle of organization of work according to the professional orientation which grounded on regular basis: effectiveness and quality of education is checking, conforming and directing by practice, practice is a criteria of Truth, source of perceptual activity and sphere of using educational results, the educational environment organized in a proper way during the studying in HEI, contribute professional training of future physical training and sports specialists.

The principle of connection of theory and practice which increases the quality of training students had realized; the better productive work and vocational guidance of students is organized, the more successful is adaptation to the conditions of modern physical training and educational environment will be; the higher the level of competence of students during the pedagogical practices in school lessons, the more effective knowledge is left to the students; the more students acquire knowledge in their nodal moments interact with life, are used in practice for the transformation of surrounding processes and phenomena, the higher the consciousness of learning and the interest in future professional activities.

The practice of realization the principle of connection of education and life gives an opportunity to study the requirements of society for the school subject "Physical training": socially historical practice of formation of physical training at school; the mechanism of necessity for exercises; dialectical connection of theory with practice; modern technologies, progressive methods of training physical exercises; connection of physical training exercises with human life.

The aim of the process of formation of personality of the student is engagement to work and activity and is determined by the content, forms, types and direction; the effectiveness of life connection with education, theory with practice depends on the content of physical training, the organization of educational process in higher education institutions and use of forms and methods of training, time for professional training.

Thus, development, processing and implementation on practice of Higher education institutions of educationally practical complex, modernization and improvement of methods and technologies, using author's methods of assessing the professional competences of future specialists in physical training and sports allowed to determine the objective structure and content of training in order to ensure the professional orientation of the educational process and achieve a high level of professional competence to the requirements of modern social order.

Conclusions

1. The content of educology increases the role of physical training education and gives the opportunity to use synergetic approach in shaping the competence of future

teachers of physical training.

2. The formation of professional and pedagogical competences for future specialist in physical training and sport has an advanced mechanism for designing and creating a positive psychological climate, an atmosphere of partnership, a collaborative productive activity, and the interaction of teachers and students; the development of the reflection of students and teachers regarding their readiness for the implementation of modern concepts and innovative technologies of teaching, organizing and implementing an effective educational process in higher educational institutions.

3. Offered complex allows to form the high level of professional competence and gives an opportunity to follow the dynamics of formation in the professional training of future physical training specialists.

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ОСВІТОЛОГІЯ ЯК ОСНОВНА СКЛАДОВА У ФОРМУВАННІ ПРОФЕСІЙНИХ КОМПЕТЕНТНОСТЕЙ МАЙБУТНІХ ФАХІВЦІВ ФІЗИЧНОЇ КУЛЬТУРИ ТА СПОРТУ

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Анотація. Основою дослідження є освітологія, як синергетика, яка навчає зворотному зв'язку, вивчає не тільки процес стабілізації, але й механізми розвитку фізичного виховання. Шляхи підготовки фізичного виховання спортсменів, такі як єдність формування знань у фізичному тренуванні та раціональний режим рухової активності; система наукових знань фізичного виховання та практичні способи діяльності у цій сфері; формування наукового світогляду людини та єдності з загальнонародською культурою; навички формування потреб і мотивів (інтересів) для занять фізичними вправами.

У статті досліджується вплив освітології на професійні навички майбутнього вчителя фізичного виховання та діагностика рівня формування компетентності у навчанні студентів напряму підготовки 014. Середня освіта (Фізична культура). Вивчення завдання полягає у визначенні змісту освітології у підготовці фахівців фізичного виховання та спорту; показати місце освітології у формуванні компетенції майбутніх фахівців з фізичного виховання та спорту; перевірити вплив освітології на формування компетентності майбутніх фахівців фізичного виховання та спорту. В експерименті взяли участь 230 студентів, розділені на 2 групи: експериментальні та контрольні. На підставі визначення рівня професійної майстерності майбутнього вчителя фізичного виховання формується рівень професійної компетентності. Своєрідність цих показників визначалася методом експертних оцінок. За результатами порівняння початкового та заключного етапів експерименту було визначено, що високий рівень професійної компетентності сформувався майже у 50% студентів експериментальної групи, а низький - в меншій частині з них. Показники рівня сформованості професійної компетентності учнів контрольної групи, в яких експериментальний метод не використовувався, залишились практично на

одному рівні. Дослідження визначає основні компетенції у професійній підготовці майбутніх учителів фізичної культури для взаємодії з сучасним шкільним середовищем: загалом професійні, загальнокультурні, соціально-освітні, науково-дослідні, психолого-педагогічні, організаційні управлінські, інструментальні, що дають можливість стежити за динамікою їх формування.

Ключові слова: фізична культура; виховання; компетентність; професійна майстерність; студент.

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