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ПІДГОТОВКА ВЧИТЕЛІВ ТЕХНОЛОГІЙ ЗАБЕЗПЕЧЕННЯ БЕЗПЕКИ ЖИТТЄДІЯЛЬНОСТІ УЧНІВ

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У статті з'ясовано, що одним з основних завдань, які стоять перед системою підготовки вчителів трудового навчання, є отримання здобувачами вищої освіти професійних знань й умінь забезпечення не лише якісного, а й безпечного навчання. Останнє набуває особливого значення у зв'язку зі зростанням травматизму серед учнів, тому у закладі вищої освіти необхідна цілеспрямована, методично обґрунтована система формування та вдосконалення компетентності безпеки життєдіяльності, яка містить: знання шкільних програм з трудового навчання та технологій, креслення, організаційних форм навчання і матеріального забезпечення навчальних предметів з позиції безпеки учнів; вміння забезпечувати безпечну організацію і виконання навчальної роботи у шкільних майстернях, міжшкільних навчально-виробничих комбінатах, складати необхідну нормативну документацію для проведення занять; знання психолого-фізіологічних основ формування безпечних умінь, методів навчання і вміння використовувати ці знання у практичній роботі вчителя; вміння безпечного проведення суспільно-корисної та продуктивної праці учнів, позакласної та позашкільної роботи; вміння вивчати і використовувати у своїй роботі відповідний досвід інших учителів-предметників; відомості щодо забезпечення власної безпеки у процесі навчання в університеті.

Запропоновано до змісту навчальної дисципліни «Безпекознавство» в педагогічному університеті включити: коротку характеристику небезпек, що трапляються під час навчання і в довготривалій перспективі; вміння аналізувати небезпеки й оцінювати можливий ризик; знання методів, принципів і засобів забезпечення техніки безпеки; вміння запобігати негативним наслідкам небезпек і надавати першу допомогу постраждалим; володіння питаннями безпеки для технологічних процесів і трудових навичок, згідно з навчальною програмою. Ці завдання вирішують три блоки взаємопов'язаних аспектів: визначення можливих небезпек; вивчення профілактичних заходів захисту від них; навчання методів боротьби з реальними небезпечними і шкідливими факторами.

Ключові слова: *безпекознавство, професійно-педагогічна підготовка, вчитель трудового навчання та технологій, безпека життєдіяльності, профілактика травматизму.*

Formulation of the problem. One of the main tasks facing the system of vocational teacher education is to ensure that students acquire professional knowledge and skills that will ensure not only quality but also safe learning. The latter is especially important in light of the growing number of injuries among pupils (Baliuk, 2010).

However, it should be borne in mind that life safety skills are simultaneously general educational skills that relate to all subjects studied. It is known that they are formed extremely slowly, in many cases not even reaching the level required by pupils' learning activities. Therefore, higher education institutions need a purposeful, methodologically sound system for their formation and improvement (Dolia, 2012).

As a result of our research, it has been found that special professional and pedagogical training for students of the Faculty of Technology and Design in life safety should include:

– knowledge of school programs in labor training and technology, drawing, organizational forms of education, and material support of academic subjects from the point of view of pupils' safety;

– ability to ensure the safe organization and implementation of educational work in school workshops, interschool training, and production facilities, to draw up the necessary regulatory documentation for conducting classes;

– knowledge of the psychological and physiological foundations of the formation of safe skills, teaching methods, and the ability to use this knowledge in the practical work of the teacher;

– ability to safely conduct socially useful and productive work of students, extracurricular and extracurricular activities;

– ability to study and use the relevant experience of other subject teachers in their work;

– information on ensuring personal safety while studying at the university.

The specific training of the future teacher of labor training and technology includes:

– a brief description of the hazards that occur during training and in the long term;

– ability to analyze hazards and assess possible risks;

– knowledge of methods, principles, and means of ensuring safety;

– ability to prevent negative consequences of hazards and provide first aid to victims;

– mastery of safety issues for technological processes and labor skills in accordance with the curriculum (Steshenko, 2004).

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The content of the course «Safety Studies» at the Pedagogical University contains developed curricula and syllabi that solve three blocks of interrelated tasks: identifying possible hazards; studying preventive measures to protect against them; and teaching methods of dealing with real dangerous and harmful factors (Tytarenko, 2017).

These tasks form a single cognitive and methodological scheme for all categories of pupils. They are continuous in time (within a school, higher education institution, postgraduate institute, etc.) to teach safe living and working conditions (*Zdoroviazberihaiuchi tekhnolohii u …)*. Depending on the purpose, age, and educational level of pupils, each of the three blocks is filled with specific content and implemented with the help of adequate methodological and scientific means.

The subject of study at a pedagogical university should be the activity of a pupil, a young person in all its manifestations and forms, such as work, creativity, sports, life, recreation, games, etc. The object is to ensure security (Antonova, 2016). To this end, we have developed activities to teach pupils the fundamentals of life safety. The following main tasks are envisaged in this regard:

– reduce injuries by studying, analyzing, and eliminating the causes of injuries;

– creating conditions that prevent the negative impact of certain factors on the child's body, and on this basis, reducing the incidence of diseases among students;

– mastering the techniques of safe activities in education, leisure, and everyday life.

In the version of the continuous multi-level system of teaching pupils the fundamentals of life safety developed by us, we can distinguish three interrelated stages covering the period from preschool to graduation from secondary school:

1. The initial stage includes the period of a child's stay in kindergarten and studying in primary school. The necessary knowledge and skills are formed through inclusion in-game and educational situations that contribute to the development of correct decisions in everyday life, in the playground, in the playroom, in the pool, in the forest, on the street, etc. Targeted classes are conducted by the preschool teacher / primary school teacher approximately several times a year in accordance with the change of season.

2. The main (basic) stage covers the period of study in grades 5-9 and is implemented during class hours once during the school month according to the relevant program, which takes into

account the specifics of changes in the life of pupils of a certain age and is carried out through targeted training in the basics of life safety within the subject «Labor Training», which must be supplemented with certain new information.

3. The special stage corresponds to the training of pupils in grades 10-11 and involves the further development of life safety skills, taking into account the specifics of the chosen profession or area of labor training in an interschool training and production facility, school, or at work.

When teaching life safety at school and home, children and adolescents must learn to overcome dangerous situations that may arise in life and ensure the prevention of accidents, i.e., it is one of the methods of preventing childhood injuries.

A questionnaire survey of teachers has been conducted to determine the place, content, forms, and methods of teaching the basics of life safety in the education system (Deminska, 2011). Its results have shown that 49,3% of the respondents believe that the purpose of teaching safety is to reduce injuries (industrial, school, road, and domestic); 37,7% see it as preserving the lives and health of children; 13% are aware that pupils should be provided with a minimum of knowledge, skills, and abilities in safety studies.

We propose to differentiate the content of life safety education depending on the age and gender of pupils. Analyzing the answers, systematizing and summarizing them, we have come to the following conclusion: educators identify a set of issues that should be part of the training:

– safety in the classroom (especially in Labor Training, Physical Education, Physics, Chemistry, Computer Science and ICT);

– the safety of pupils during extracurricular activities (work in the agricultural sector, hiking in the native land, excursions, technical clubs, after-school programs, etc;)

– ensuring children's safety in everyday life (knowledge of traffic rules, fire safety basics, safety when handling household electrical appliances, gas stoves, and water heating units, knowledge of medicinal herbs, poisonous and dangerous substances, plants and animals, rules of behavior near water bodies);

– instilling skills in handling primary fire extinguishing equipment;

– methods of providing first aid to victims in various life situations (electric shock, heat stroke, burns, fainting, frostbite, wounds, fractures).

The summarization and analysis of the propositions confirmed our hypothesis about the necessity of introducing the fundamentals of safe behavior into the school practice of teaching pupils and forming of necessary skills and competencies (Volynskyi, 2011).

Different opinions have been also expressed regarding the need to identify specific individuals for the practical implementation of life safety education. 53% of respondents believe it is possible to involve classroom teachers in this work after appropriate training, and 47% (mostly subject teachers) believe that it is necessary to train specialists with appropriate additional special training for schools. In our opinion, one of the types of such specialists is a teacher of labor training and technology (Kobernyk, 2016).

To conduct experimental and practical work on solving the tasks set, the Department of Production and Information Technologies and Life Safety of Poltava V.G. Korolenko National Pedagogical University developed and implemented a sub-flow of future labor training teachers in the field of safety studies, as well as all students of the university's faculties. The content, scope of training, and its sequence were determined; a curriculum and textbook, laboratory, and practical work were developed; the material and technical base were created, and the teaching and learning materials, information, and training programs for computers, business, and organizational games were prepared.

Lecturers of the Department of Production and Information Technologies and Life Safety at the Pedagogical University created a life safety classroom. Its main areas of work are as follows:

– ensuring the implementation of the «Safety Studies» curriculum for students, performing laboratory and practical work;

– organizational and methodological support for conducting briefings and exercises on life safety;

– promotion of healthy and safe working conditions and methods of performing various types of work provided for in the curricula of pedagogical universities;

– providing methodological assistance to students during their internships;

– concentration of training and visual aids, reference, technical and methodological literature necessary for mastering knowledge on occupational safety;

– organizing thematic scientific and educational conferences, seminars, and exhibitions, informing about new achievements in the field of improving working conditions and safety;

– summarizing, analyzing, and disseminating best practices in the prevention of injuries and micro-traumas in the educational process;

– providing organizational and methodological assistance to schools, interschool training and production facilities, and other educational institutions in setting up occupational safety rooms and corners;

– assisting the university management in organizing activities aimed at ensuring safe learning conditions for students, and coordinating appropriate organizational and methodological assistance to teachers.

Conclusion. Thus, the study and use of life safety skills necessarily involve practical application, in the process of which they are mastered, consolidated, and enriched by experience. These skills should reflect not only scientific achievements and practical experience but also injury statistics. Mastering them is possible when students develop such techniques as observing the state of their workplace and tools, correctly planning the sequence of practical actions, and constantly monitoring their activities in terms of safety. At the same time, the highest level of life safety skills of future teachers of various specialties, especially labor education teachers, can be considered the manifestation of a creative approach to their work based on the correct organization of their work and workplace, rationalization of working methods from the standpoint of improving their safety and designing devices that improve work safety.

Providing individual and group counseling and methodological assistance to educational workers;

Assisting the university management in organizing activities aimed at ensuring safe learning conditions for students, and coordinating appropriate organizational and methodological assistance to teachers.

ЛІТЕРАТУРА

Антонова, О. Є., Поліщук, Н. М. (2016). *Підготовка вчителя до розвитку здоров'язбережувальної компетентності*. Житомир: Полісся. Взято з http://eprints.zu.edu.ua/id/eprint/21748

Балюк, В. І. (2010). Здоровий спосіб життя – важливий чинник виховання особистості. *Класному керівнику. Усе для роботи,* 12, 6-8.

Демінська, Л. О. (2011). Аналіз змісту й умов використання здоров'язбережувальних технологій у системі загальноосвітніх шкіл. *Педагогіка, психологія та медико-біологічні проблеми фізичного виховання і спорту*, 11, 23-26.

Доля, Т. (2012). Формування здорового способу життя школярів як актуальне завдання професійної діяльності вчителя. В кн. Н. С. Побірченко (Ред.), *Проблеми підготовки сучасного вчителя*: зб. наук. праць Уманського держ. пед. ун-ту імені Павла Тичини (Вип. 5, ч. 1, с. 26-34). Умань: ПП Жовтий О.О.

Колонькова, О., Литовченко, О. (Упоряд.). (2009). *Здоров'язберігаючі технології у навчальному закладі*. Київ: Шк. світ.

Стешенко, В. В. (2004). *Теоретико-методичні засади фахової підготовки майбутнього вчителя трудового навчання в умовах ступеневої освіти*. Слов'янськ: СДПУ.

Титаренко, В. М. (2017). Здоров'язбережувальна компетентність – один із чинників підготовки гіхучителів трудового навчання. В кн. *Формування здоров'язбережувальних компетентностей сучасної молоді: реалії та перспективи*: зб. наук. праць Всеукр. наук.-практ. конф., присвяченої Всесвітньому Дню цивільної оборони та Всесвітньому Дню охорони праці (с. 323-326). Полтава: ПНПУ імені В. Г. Короленка.

REFERENCES

Antonova, O. I. (2016). *Pidhotovka vchytelia do rozvytku zdoroviazberezhuvalnoi kompetentnosti [Preparing a teacher for the development of health-saving competence]*. Zhytomyr: Vyd-vo ZhDU im. I. Franka. Retrieved from http://eprints.zu.edu.ua/id/eprint/21748 [in Ukrainian].

Baliuk, V. I. (2010). Zdorovyi sposib zhyttia – vazhlyvyi chynnyk vykhovannia osobystosti [A healthy lifestyle – important factor in the education of a personality]. *Klasnomu kerivnyku. Use dlia roboty [For the class teacher. Everything for work]*, 12, 6-8 [in Ukrainian].

Deminska, L. O. (2011). Analiz zmistu y umov vykorystannia zdoroviazberezhuvalnykh tekhnolohii u systemi zahalnoosvitnikh shkil [Analysis of the content and conditions for the use of health-saving technologies in the system of secondary schools]. *Pedahohika, psykholohiia ta medyko-biolohichni problemy fizychnoho vykhovannia i sportu [Pedagogy, psychology and medical and biological problems of physical education and sports]*, 11, 23-26 [in Ukrainian].

Dolia, T. (2012). Formuvannia zdorovoho sposobu zhyttia shkoliariv yak aktualne zavdannia profesiinoi diialnosti vchytelia [Formation of a healthy lifestyle of schoolchildren as an urgent task of teacher's professional activity]. In *Problemy pidhotovky suchasnoho vchytelia [Problems of modern teacher training]*: zb. nauk, prats Umanskoho derzh. ped. un-tu imeni Pavla Tychyny (Is. 5, p. 1, pp. 26-34). Uman: PP Zhovtyi O.O. [in Ukrainian].

Kolonkova, O., & Lytovchenko, O. (Comps.). (2009). *Zdoroviazberihaiuchi tekhnolohii u navchalnomu zakladi [Health-saving technologies in an educational institution]*. Kyiv: Shk. svit [in Ukrainian].

Steshenko, V. V. (2004). *Teoretyko-metodychni zasady fakhovoi pidhotovky maibutnoho vchytelia trudovoho navchannia v umovakh stupenevoi osvity [Theoretical and Methodological Bases of Professional Training of Future Labor Education Teachers in the Conditions of Degree Education]*. Sloviansk: SDPU [in Ukrainian].

Tytarenko, V. M. (2017). Zdoroviazberezhuvalna kompetentnist – odyn iz chynnykiv pidhotovky hikhuchyteliv trudovoho navchannia [Health-saving competence is one of the factors in the training of labor education teachers]. In *Formuvannia zdoroviazberezhuvalnykh kompetentostei suchasnoi molodi*: *realii ta perspektyvy [Formation of health-saving competencies of modern youth: realities and prospects]*: zb. nauk, prats Vseukr. nauk.-prakt. zh., prysviachenoi Vsesvitnomu Dniu tsyvilnoi oborony ta Vsesvitnomu Dniu okhorony pratsi (pp. 323-326). Poltava: PNPU [in Ukrainian].

TRAINING OF TEACHERS OF LIFE SAFETY TECHNOLOGIES FOR STUDENTS

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The article reveals that one of the main tasks facing the system of training labor training teachers is to provide higher education students with professional knowledge and skills to ensure not only quality but also safe training. The latter is of particular importance due to the growing number of injuries among students, so a higher education institution needs a targeted, methodologically sound system for the formation and improvement of life safety competence, which includes: knowledge of school curricula for labor training and technology, drawing, organizational forms of education and material support of academic subjects from the point of view of student safety; ability to ensure the safe organization and implementation of educational work in school workshops, interschool training and production facilities, to draw up the necessary regulatory documentation for conducting classes; knowledge of the psychological and physiological foundations of the formation of safe skills, teaching methods and the ability to use this knowledge in the teacher's practical work; ability to safely conduct socially useful and productive work of students, extracurricular and extracurricular activities; ability to study and use in their work the relevant experience of other

subject teachers; information on ensuring their own safety in the process of studying at the university.

It is proposed that the content of the course on safety studies at a pedagogical university should include: a brief description of the hazards that occur during training and in the long term; the ability to analyze hazards and assess possible risks; knowledge of methods, principles and means of ensuring safety; the ability to prevent the negative consequences of hazards and provide first aid to victims; knowledge of safety issues for technological processes and labor skills, according to the curriculum. These tasks are solved by three blocks of interrelated aspects: identifying possible hazards; studying preventive measures to protect against them; and learning methods to deal with real hazards and harmful factors.

Keywords: *safety studies, vocational training, teacher of labor education and technology, life safety, injury prevention.*

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