

# Training of Future Teachers for the Formation of the Competence of Safe Life of the Younger Generation

Olena SAVCHUK<sup>1</sup>,  
Tetiana PETUKHOVA<sup>2</sup>,  
Iryna PETUKHOVA<sup>3</sup>

<sup>1</sup> South Ukrainian national pedagogical university named after K. D. Ushynsky, Odesa, Ukraine,

[Savchuk.Lena2012@mail.ru](mailto:Savchuk.Lena2012@mail.ru)

<sup>2</sup> South Ukrainian national pedagogical university named after K. D. Ushynsky, Odesa, Ukraine, [tetovanka@gmail.com](mailto:tetovanka@gmail.com)

<sup>3</sup> South Ukrainian national pedagogical university named after K. D. Ushynsky, Odesa, Ukraine, [ipetukhovaa@gmail.com](mailto:ipetukhovaa@gmail.com)

**Abstract:** The article highlights the new conditions of providing future teachers with targeted training to master the competence of safe life for children; the new aspects of the concept of "competence of a person's safe life" is determined, the structural components of the preparedness of future teachers for activities aimed at building a system of conscious actions and actions of the younger generation for self-preservation in all spheres of life are revealed. The purpose of the article is to reveal the need to optimize teacher training to safety aspects of their activities, determine the essence of the formation of competence of safe life of the participants in the educational process and experimentally test new pedagogical conditions of training future teachers to form the competence of safe life of children. To achieve this goal, general scientific methods of theoretical level were used: analysis of scientific literature on the safe existence of the individual, didactic modelling of educational conditions and forecasting of learning outcomes, as well as methods of empirical level: observation, interviews, questionnaires, testing, etc. The results of diagnosing the state of readiness of future teachers for the formation of safe competence in the life of the younger generation are presented. Purposeful work on the development of those indicators of readiness of future teachers to form the competence of safe living of the younger generation, which, according to the diagnosis, were underdeveloped (at low and medium levels), contributed to a significant improvement in EG compared to the results in CG. The international significance of the article is due to the new requirements for school safety in conditions of increased stress, hyperinformation, bullying and other destructive factors requiring scientific solutions. The authors propose a way to optimize educational conditions, which hypothetically should improve the above-mentioned competencies and become the basis for further improvement of life safety, educational and professional activities.

**Keywords:** *future teachers, competence of safe living, educational process, components, educational conditions, criteria, levels, readiness of students.*

**How to cite:** Savchuk, O., Petukhova, T., & Petukhova, I. (2021). Training of Future Teachers for the Formation of the Competence of Safe Life of the Younger Generation. *Revista Romaneasca pentru Educatie Multidimensionala*, 13(4), 43-59. <https://doi.org/10.18662/rrem/13.4/470>

## Introduction

Recently, we have witnessed the processes of reforming the education system, which are taking place not only in Ukraine but also in Western Europe, leading to the need to rethink the role of future teachers in the new century. In the field of national education there are socio-pedagogical changes associated with the introduction of new state educational standards, the transition to a new content and structure of education.

Pedagogical education is the foundation of the education system as a whole. The leading role in solving this problem belongs to the teacher, who is aware of the need for purposeful activities to save the lives and health of their students, able to effectively contribute to the formation of safe competence of the younger generation.

The future of our country depends on how and to what extent the teacher will be prepared to create safe conditions for the educational process, on the quality of his professional training in teaching students on life safety, civil protection, on the level of mastering the competence of safe living. Realization of the specified task is possible only on condition of preparation of the highly educated and competitive teacher who is capable to possess competences of safe life, to teach pupils to care of the health and health of surrounding people (Bakhmat et al., 2019; Bezliudnyi et al., 2019; Gerasymova et al., 2019; Halaidiuk et al., 2018; Maksymchuk et al., 2020; Maksymchuk et al., 2018; Melnyk et al., 2019; Nerubasska, & Maksymchuk, 2020; Onishchuk et al., 2020; Savchuk, & Steiner, 2017; Sheremet et al., 2019; Sitovskiy et al., 2019).

Theoretical and methodological aspects of professional training of teachers are reflected in the research of modern scientists, pedagogues and psychologists (Bekh, 2003; Kurliyand, 2005; Slastenin et al., 2002; Ziazyun et al., 2004). Issues of teaching life safety in higher education in post-Soviet countries are studied by such scientists as Lapin (2011), Yaroshevska (2004) and others.

Today, one of the tasks of the modern education system, according to the concept of the "New Ukrainian School", is to form in students a conscious attitude to their own lives and health, mastering the basics of a healthy lifestyle, life skills of safe and healthy behavior.

Life safety is a multifaceted category and covers the most important areas of human life, such as health, the environment, emergency safety, and so on. As a component of life competence it is not just a set of acquired

knowledge, but also a lifestyle, adequate behavior in various situations, in particular - and emergency and extreme.

Life safety training is designed to form in each child an active life position on their own lives and their own safety, the accumulation of knowledge, skills and abilities of safe behavior in everyday life, in the environment, etc.

There is a need of training future teachers for the safe activities of children who are able to quickly adapt to modern life situations, ensuring a proper standard of living. Unfortunately, traditional methods and forms of education do not ensure the effectiveness of professional training of future teachers of the school. Safe activity is not innate, its formation must be taught. This readiness of teachers will significantly increase the level of spiritual, moral and patriotic education, reduce human and material losses.

The competence of safe life consists in the ability and preparation of the individual for activities to preserve and strengthen his physical, mental, spiritual and social health and the health of others. Competence is based on knowledge and experience acquired during training and self-education, on life experience, values and skills. Competence is the ability to apply knowledge, skills, abilities and personal qualities to successful activities to maintain and promote health. Depending on the components, the competence of safe living includes the following life competencies: nutrition skills, physical activity skills, hygiene skills, work and rest (physical component of health); skills of effective communication, empathy, conflict resolution, skills of behavior in the face of threats; self-awareness and self-assessment, analysis of decision-making problems, definition of life goals and programs; self-control, stress management, motivation for success and willpower training.

The tendency to self-preservation includes: concern for one's physical and mental health, emotional state, psychological comfort, social status; ability to avoid stressful situations, negative influences of the social environment, destructive factors for health; ability to self-support, self-help and self-esteem among people (Kononko, 2004).

Based on the theoretical analysis, the formation of the competence of safe living is defined as an active pedagogical process aimed at gradually building a system of conscious actions and deeds of the younger generation to self-preservation in all spheres of life.

The result of training future teachers to form the competence of safe living of children is the readiness of students, which includes the child's ability to differentiate between "safe" and "dangerous", to realize the importance of safe living (own and other people). The child should know

the rules of safe stay at home, in a preschool institution, on the street, on the water, on ice, on the playground, sports grounds, to navigate the rules of behavior with unfamiliar objects and substances; fire and electrical safety; use of transport; understand the meaning of the main traffic signs and the like; know and be able to use the telephone number of the assistance service (fire, medical, police) be aware of whom to contact in a critical situation, possess the skills of safe behavior in conditions of aggressive behavior of peers or adults (Ministry of Education and Science, 2012).

Harvey (1997) considers the quality of education as a special process aimed at a positive result, improvement of the educational process; its compliance with the goals, which take into account the requests, requirements and expectations of consumers; the result of investments; transformations, changes that expand opportunities for students or are manifested in the development of new knowledge.

**The purpose of the article** is to reveal the need to prepare future teachers for the safe activities of children, ensuring a decent standard of living, determine the essence of the formation of the competence of safe living of the individual and experimentally test new modelled conditions of training future teachers to form the competence of safe living of children.

In this regard, the main aim of the article is to create and verify the effectiveness of the new favorable pedagogical conditions for the training of future teachers, focused on the prevention of possible emergencies, the organization and conduct of preventive work to ensure conditions for safe development, education and training of children; ensuring the systematic knowledge of children's safety, their active and responsible attitude to life, independence and flexibility of thinking, readiness to effectively address a variety of dangerous situations.

Accordingly, the research hypothesis is an assumption that after the introduction into the educational process (within the courses "Life Safety" and "Civil Protection"), the following three pedagogical conditions should increase

### **Current Aspects of Life Safety in Scientific Discourse Today**

Life safety at school has recently been exacerbated by higher rates of bullying and school violence, linked to hyperactivity, emotionality and hyperinformation. In this regard, an important aspect of life safety is the improvement of school curricula in terms of preventing violence and improving children's adaptation and socialization in a complex uncertain environment (Astor et al., 2005). These problems approximate the subject of

the school course on school safety with the acquisition of competence of safe life.

Sociological and experimental studies on safety issues in school environment show that such an environment determines the psychosocial function of the participants in the process and may be associated with risks to mental (rarely physical) health. Nijs et al. (2014) studied a population-based sample of US students (over 11,000 individuals) for the perception of potential risks in school. They used multiple logistic regression analyses to reveal the highest risk factor (8 out of 10 possible) among adolescent girls. This risk was psychosocial in nature and associated with negative expectations or difficulty adapting to conflict conditions (Nijs et al., 2014). Such studies prove that the joint stay of adolescents in artificially created educational conditions is a source of psychogenic danger and needs to be optimized by teachers and school administration. Also, these data change the stereotypes that life safety is concerned with maintaining physical health in the first place.

More than ten years ago, a new quantitative measure (Indicators of Preferences for School Safety (IPSS)) was developed. Its use in the IPSS Survey revealed the following four factors: education, control, surveillance, counselling (Booren, & Handy, 2009). These data can be used to fight bullying, which has recently become one of the leaders in psychogenic risk factors at school. It must be noted that safety strategies were studied and formed only from the point of view of teachers, psychologists, and social workers, while the student factor was ignored.

In Japan, holistic safety education is developing in line with the concept of sustainable development. Since 2011, the country has been implementing education for sustainable development, which solves problems, ranging from psychological discomfort to serious incidents in the school zones (Kitamura, 2014). The new strategy for teaching life safety and safety in education is to: a) develop and provide multiple programme support to educational entities; b) recognize road safety as a core issue of pupils' safety, around which one can form competencies for solving various safety issues; c) make education and security integral aspects of a young person's life. Such a strategy is closely correlated with flexibility, initiative, mobility, and other trendy educational phenomena.

Similar research conducted in Australia has shown that most primary school children cannot recognize potential risks. This is especially true of extracurricular risks, such as traffic safety, beach safety, behaviour in extreme conditions (Wilks et al., 2017, p. 283). The results of experiments conducted among children aged 11 to 12 years found that even one-day

courses (e.g., on beach safety) help children recognize potential risks, their markers and find ways to avoid them.

Similar trends (reforms, changes, integrated strategies, educational or individual programmes) in the optimization of safety competencies and educational activities are currently implemented in higher education institutions on all continents. Moreover, safety competencies as an element of the ability to live in a poly-dangerous rapidly changing world began to enter the top 5 key competencies of today (Watanabe et al., 2021).

Thus, educators today consider various problems of young people and the focus of the individual on health. Below are the most relevant for this research.

Life safety training is designed to form in each child an active life position on their own lives and their own safety, the accumulation of knowledge, skills and abilities of safe behavior in everyday life, in the environment and so on. Personal security must become a habit (Hill, 2018).

Understanding the importance of personal health culture through a set of worldviews, beliefs, life values, based on knowledge about health, which determines a conscious, responsible, valued attitude to health allows you to develop a safe type of personal existence (Mikheienko et al., 2017).

An important aspect of this area is the activity of teachers (primary level) of education, which involves the use in the educational process of educational technologies, the main function of which is to preserve health through the use of appropriate methods and tools for organizing the educational process (Borshchenko, 2017).

Given the changes taking place in the rapid and changing world around us - the importance of shaping the safe behavior of the individual is an urgent need of our time. Training of future teachers with the involvement of all participants in the educational process, according to the proposed programs, will provide a comprehensive approach to the security of educational space (Aizman & Lysova, 2016).

Therefore, there is no denying that the health of the individual depends on a large number of both external and internal factors, while the readiness of future teachers to form the competence of safe living is based on knowledge and experience gained during learning and self-education, life experience, values and personality skills and promotes of its self-preservation in all spheres of life.

Our experience, as well as other studies show a lack of competent professionals in the education system to solve these problems. Some studies rather demonstrate a certain intention to study this problem, while its relevance requires the constitution of a phenomenological space for the

training of future teachers to form the competence of safe living of the younger generation in modern conditions.

### **Three Pedagogical Conditions to Optimize Teacher Training to Form Competence of Safe Life in Children**

The discipline “Life Safety” and “Civil Protection” provides future professionals with theoretical and practical training in mastering the skills to create safe living and working conditions in both industrial and non-industrial areas, understanding the principles of harmonious personal development and sustainable development of society.

The professional training of the future teacher in the discipline "Life Safety and Civil Defense" is the student's ability to "safe behavior" and involves their own safety and, most importantly - the safety of students, which is willing to use basic methods of protection against possible consequences of accidents, disasters, natural disasters; ability to understand the essence and significance of information in the development of the modern information society, to be aware of the dangers and threats that arise in this process, to comply with the basic requirements of information security; be prepared to ensure the protection of life and health of students in the educational process and in extracurricular activities.

We have identified three components of the readiness of future teachers to form the competence of safe living: motivational, meaningful, activity.

The motivational component involves focusing on the process of forming safe behavior of children and designing goals and objectives for the training of future teachers. This component encourages students to master the knowledge and methods of diagnosing the type of adolescent behavior, the formation of safe behavior and organization of extracurricular activities, stimulates strong-willed efforts to overcome difficulties that arise during practice.

The content component identifies and characterizes the main tools, forms and methods of both teacher and student, aimed at more effective achievement of goals and objectives for the preparation of future teachers to form the competence of safe living. Among them: training games, business games, analysis and solution of specific situations, graphic tasks, research tasks, projects, etc.

The effective component is determined by the level of readiness of students to form the competence of safe living, which is manifested through the combination of the above components, namely: motivational and semantic.

Criteria have been identified to assess the levels of students' readiness to form the competence of safe living: *motivational and value* (self-assessment of one's own life, focus on health and life as a priority value, understanding the essence of the concept of "competence of safe life"); *cognitive* (systematic knowledge of the formation of the above competence, rules of conduct in various dangerous situations and their prevention, mastery of models of safe behavior (hazard identification, analysis of its level, decision-making on the algorithm and conscious actions to prevent or reduce it); *activity* (identification of potentially dangerous situations, improvement and creation of models of behavior taking into account own physical, psychological opportunities, experience, abilities and opportunities of change of living conditions).

The degree of certainty of each component in accordance with the selected criteria of readiness of future teachers to form the competence of safe living, we assessed at three levels: high, medium, low.

The implementation of the components of the model of training future teachers for the formation of the competence of the safe life of children was carried out thanks to the following pedagogical conditions: the formation of professionally significant knowledge, skills, and skills on life safety; conducting targeted methodological training of students on the formation of the competence of safe life; formed a culture of the future teacher's own safe behavior.

The first pedagogical condition was realized by acquainting students with different types of dangers, with the rules of conduct in various dangerous situations and most importantly - their prevention. Forms of work, both traditional - problem lectures and seminars, simulation and situational games, and special - the introduction of meaningful modules of life-supporting directions, tutorials (excursions, debates, "round tables", trainings, conferences, audio and video projects, disputes with health preservation, aesthetic, moral, ecological, intellectual information culture, scientific seminars of students on the problems of physical, spiritual, moral culture (Savchuk, 2015; 2016). Attention is paid to the education of the need for a healthy lifestyle, the idea of life and health as the highest value, the formation of skills for safe living; disclosure of the whole sphere of dangerous manifestations of social dangers, medical-biological and social health problems. Every year at the South Ukrainian National Pedagogical University named after Konstantin Ushinsky competitions are held among students of different faculties to protect environmental posters "The world through the eyes of today's youth", "Youth of the XXI century", etc. The purpose of this event is to reveal issues related to their own safety of life and



health of modern youth, to expand knowledge on environmental issues, the correct values of students to nature, its rational use and preservation.

The second pedagogical condition involved mastering the models of safe behavior, namely: the definition of danger, analysis of its level, decision-making on the algorithm of action and conscious action to prevent or reduce it. The use of audiovisual teaching aids with audiovisual support, viewing videos with an action plan to eliminate the consequences of the manifestation of the dangers caused by commenting was effective; watching TV shows, videos, interviews, working on tables, diagrams, posters (Savchuk, 2010). During the practical classes, students simulated and solved various problem situations of natural, man-made, socio-political, combined nature. Such work was carried out to acquire a certain "automatism" in actions during emergencies, when there is little time for reflection and logical elaboration of the situation and it is necessary to act using certain "patterns" embedded in the subconscious. This allowed on the basis of the acquired knowledge to conduct and analyze the occurrence of specific situations, find the causes of various hazards and practically determine the type of typical problems with a safer algorithm for solving a dangerous situation or phenomenon.

The third pedagogical condition provided for the improvement and creation of models of behavior taking into account their own physical, psychological capabilities, experience, skills and opportunities to change living conditions. At this stage, it was necessary to increase the general level of knowledge, practical skills and develop a system of views that lay the foundations for a responsible and effective attitude to health, the environment, nature and society. Involvement of students in scientific work and participation in competitions allowed to positively influence the work efficiency. It is in such conditions that safe competence of life is formed, a high level of which is determined by whether a person can creatively use modern methods and means of safety to ensure the protection of himself and others in everyday activities in emergency situations, to act in conditions that threaten life and health, as well as his own activities do not create danger both for yourself and for others.

Educational activities to form the competence of safe life allowed the participants of the educational process to improve the quality of knowledge, skills, interest and level of general culture of life safety (healthy lifestyle, self-defense and rescue, protection from dangerous factors caused by emergencies, providing pre-medical care, etc.). At this stage, the following events were held: a meeting of the Chief of Civil Defense, discussion of important issues of protection of life from dangers of various origins,

modern means of protection; exhibition of means of protection; practice of practical actions with means of individual and collective protection; demonstration of popular science and documentary films on the protection of the population from emergencies of various kinds; issue of stand newspapers on life safety and civil defense; brain rings; protection of ecological posters.

### **The Effectiveness of New Conditions for Teacher Training to Form Competence of Safe Life in Children**

In order to analyze the state of readiness of future teachers to form the competence of safe living of children, an empirical study in the form of the quasi-experiment was conducted: observational (observations); diagnostic (questionnaires, interviews, surveys, psychological and pedagogical testing); pedagogical experiment (ascertaining and forming).

1. In the empirical study, the test "Life-meaning orientations" (LMO) modified by Leontiev (2000) was used; questionnaire on a scale of 1 – Goals in life, questionnaire on a scale of 2 Life process; questionnaire for identifying motivation for success and fear of failure; testing (Methodology for diagnosing the level of moral and ethical responsibility; diagnosing the type of behavior in conflict situations, the method for determining the motivation of professional activity (Rean, 2004) in professional self-improvement; test "Motivation for success and fear of failure", as well as the author's questionnaire "Degree of problem solving in overcoming obstacles".

2. Diagnosing the level of preparedness of students for the formation of competence in safe living of children according to certain criteria, we conducted with 207 future teachers of natural sciences II-IV courses, which we divided into experimental group (EG) and control group (CG) within the quasi-experiment. The experimental group included 41 students of South Ukrainian National Pedagogical University named after K.D. Ushinsky and 60 students of Odessa National University named after I.I. Mechnikov, the control group - 38 students of the South Ukrainian National Pedagogical University named after K.D. Ushinsky and 68 students of ONU named after I.I. Mechnikov. The participants in the experiment were selected randomly and divided into conditionally control and experimental groups within the framework of implementing educational conditions and quasi-experimental verification of their effectiveness.

The previous section demonstrated the homogeneity of these groups on all criteria (activity, cognitive, motivational and value), which was the

basis for the conditional division of subjects into experimental and control groups.

The agreement criterion was used for mathematical processing of the obtained results  $\chi^2$ . Empirical value of the criterion  $\chi^2$  comparison of EG and CG at the ascertaining stage of the experiment is less critical, which indicates insignificant differences between these groups. Instead, the empirical value of the criterion for comparing EG and CG at the formative stage of the experiment is greater than the critical value. That is, the reliability of the differences in the characteristics of CG and EG after the experiment was 95%, which indicates the statistical significance of the results.

After the formative stage of the experiment, a second diagnosis was carried out. The summary results of the study at the constitutive and forming stages are presented in Table 1.

**Table 1.** *Summary indicators of the levels of readiness of future teachers to form the competence of safe living of children in EG and CG (in%)*

Source: Authors' own conception

Groups	Stages					
	Ascertaining			Forming		
	Low	Medium	High	Low	Medium	High
<b>EG</b>	51,5	37,6	10,9	24,4	56,1	19,5
<b>CG</b>	50,1	38,6	11,3	44,7	42,5	12,8

As can be seen from the Table 1, there is a significant difference in the levels of readiness of future teachers to form a safe competence of children's lives after the formative experiment. Thus, the EG students who participated in the study, as a result of the formative experiment, significantly increased the initial level of the above readiness.

At a high level of readiness of future teachers for the formation of the competence of the safe life of children was 19.5% of students (it was 10.9%), on an average - 56.1% of students (it was 37.6%) and at a low level - 24.4% of students, whereas before the start of the formative experiment, 51.5% of students were at this level.

Measurements in CG were made for all indicators, as during the observational experiment. Thus, a high level was found in 12.8% of students (it was 11.3%), a medium level - in 42.5% (it was 38.6%) and a low level was diagnosed in 44.7% of students (it was 50.1%).

In our opinion, qualitative changes in the levels of readiness of future teachers for the formation of safe competence of children's lives in EG are associated with targeted work on the implementation of certain pedagogical conditions: "formation of professionally significant knowledge, skills, life safety", purposeful methodical training of students on the formation of the competence of safe living ", " formed a culture of their own safe behavior of the future teacher ".

The readiness of future teachers to form safe competence in children's lives was the need to create favorable pedagogical conditions for preparing future teachers for safe activities of children, focused on preventing possible emergencies, organizing and conducting preventive work to ensure safe development, education and training of children; ensuring the systematic knowledge of children's safety, their active and responsible attitude to life, independence and flexibility of thinking, readiness to effectively address a variety of dangerous situations. EG students expanded their professionally significant knowledge on life safety, the ability and preparation for activities to preserve and strengthen their physical, mental, spiritual and social health and the health of others, the ability to quickly adapt to modern life situations, ensuring proper standard of living, consciously and decisively build a system of actions and deeds for self-preservation in all spheres of life.

Comparative analysis of the results of the ascertaining and formative stages of the experiment confirms the effectiveness of the introduction of pedagogical conditions for the training of future teachers to form a safe competence of children's lives, which is manifested in a significant increase in student readiness.

So, with 95% probability, it can be argued that the changes that have occurred in the levels of students' preparedness for the formation of the competence of safe life are reliable, statistically significant and occurred as a result of the introduction of pedagogical conditions for the preparation of future teachers for the formation of the competence of the safe life of children, which is proof of the experiment. These results confirm the validity of the hypothesis on the effectiveness of the implementation of the three justified educational conditions.

## Conclusions

Based on the analysis of the scientific literature, the essence of the concept of "competence of safe life of the individual" is defined, which consists in the ability and preparedness of the individual to maintain and strengthen their physical, mental, spiritual and social health and the health of others.

The structural components of students' readiness to form the competence of safe living of children are revealed: motivational, meaningful, activity. Criteria have been identified to assess the level of readiness of students: *motivational and value* (self-assessment of one's own life, focus on health and life as a priority value, understanding the essence of the concept of "competence of safe life"); *cognitive* (systematic knowledge of the formation of competence in safe living, rules of conduct in various dangerous situations and their prevention, mastering models of safe behavior (hazard identification, analysis of its level, decision-making on the algorithm and conscious action to prevent or reduce it); *activity* (identification of potentially dangerous situations, improvement and creation of models of behavior taking into account own physical, psychological opportunities, experience, abilities and opportunities of change of living conditions).

The diagnostics of the state of preparedness of future teachers for the formation of the competence of safe life of the younger generation has been carried out. The analysis of the obtained data made a conclusion that the purposeful work on the development of those indicators of preparedness of future teachers for the formation of the competence of safe life of the younger generation, which, according to the diagnostic data, were insufficiently developed (at low and medium levels), contributed to a significant improvement in the indicators in the EG in comparison with results in CG (see Table 1).

Comparative analysis of the results obtained at the ascertaining and final stages of the study showed positive changes in the levels of readiness of future teachers to form the competence of safe living of the younger generation.

We see promising areas of further research in the development of pedagogical technology for the formation of the competence of safe living in the process of gradual training of future teachers.

---

## References

---

- Aizman, R. I., & Lysova, N. F. (2016). Podgotovka magistriv po programme “bezopasnost obrazovatel'nogo prostranstva” [Teaching of masters on the program “safety of educational space”]. *Mezhdunarodnyy nauchno-issledovatel'skiy zhurnal* [International Research Journal], 4(46), 6–11. <https://doi.org/10.18454/IRJ.2016.46.012>
- Astor, R. A., Meyer, H. A., Benbenishty, R., Marachi, R., & Rosemond, M. (2005). School safety interventions: best practices and programs. *Children & Schools*, 27(1), 17–32. <https://doi.org/10.1093/cs/27.1.17>
- Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., Martynets, L., Uchytel, I., Solovyov, V., Manzhos, E., Sheian, M., Aliksieiev, O., Slyusarenko, N., Zhorova, I., & Maksymchuk, I. (2019). Designing cloud-oriented university environment in teacher training of future physical education teachers. *Journal of Physical Education and Sport*, 19(4), 1323–1332. <https://doi.org/10.7752/jpes.2019.s4192>
- Bekh, I. D. (2003) *Vykhovannya osobystosti* (T. 1-2) [Education of the person (Vol. 1-2)]. Lybid.
- Bezliudnyi, O., Kravchenko, O., Maksymchuk, B., Mishchenko, M., & Maksymchuk, I. (2019). Psycho-correction of burnout syndrome in sports educators. *Journal of Physical Education and Sport*, 19(3), 1585–1590. <https://doi.org/10.7752/jpes.2019.03230>
- Booren, L. M., & Handy, D. J. (2009). Students' perceptions of the importance of school safety strategies: an introduction to the IPSS survey. *Journal of School Violence*, 8(3), 233–250. <https://doi.org/10.1080/15388220902910672>
- Borshchenko, V. V. (2017). Future teachers' skills of organization and implementation of health saving activities at primary school. *Nauka i osvita* [Science and Education], 10, 58–65. <https://doi.org/10.24195/2414-4665-2017-10-7>
- Gerasymova, I., Maksymchuk, B., Bilozerova, M., Chernetska, Yu., Matviichuk, T., Solovyov, V., & Maksymchuk, I. (2019). Forming professional mobility in future agricultural specialists: the sociohistorical context. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 345–361. <https://doi.org/10.18662/rrem/195>
- Halaidiuk, M., Maksymchuk, B., Khurtenko, O., Zuma, I., Korytko, Z., Andrieieva, R., Strykalenko, Y., Zhosan, I., Syvokhop, Y., Shkola, O., Fomenko, O., & Maksymchuk, I. (2018). Teaching approaches in extracurricular physical activities for 12-14-year-old pupils under environmentally unfavourable conditions. *Journal of Physical Education and Sport*, 18(4), 2284–2291. <https://doi.org/10.7752/jpes.2018.04344>

- Harvey, L. (1997). External quality monitoring in the market place. *Tertiary Education and Management*, 3(1), 25–35. <https://doi.org/10.1007/BF02679365>
- Hill, R. H. Jr. (2018). Make safety a habit! *Journal of Chemical Health & Safety*, 25(2), 12–17. <https://doi.org/10.1016/j.jchas.2017.10.006>
- Kitamura, Y. (2014). The possibility of holistic safety education in Japan: from the perspective of education for sustainable development (ESD). *LATSS Research*, 38(1), 40–47. <https://doi.org/10.1016/j.iatssr.2014.05.004>
- Kononko, O. (2004). *Dytyna v kryzovomu sotsiumi: yak dytynu rozumity i vykbovuvaty* [The child in a crisis society: how to understand and educate the child]. Editorial Board “General Pedagogy Newspaper”. [http://irbis-nbuv.gov.ua/cgi-bin/irbis\\_nbuv/cgiirbis\\_64.exe?Z21ID=&I21DBN=EC&P21DBN=EC&S21STN=1&S21REF=10&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=0&S21P03=A=&S21COLORTERMS=1&S21STR=%D0%9A%D0%BE%D0%BD%D0%BE%D0%BD%D0%BA%D0%BE%20%D0%9E\\$](http://irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?Z21ID=&I21DBN=EC&P21DBN=EC&S21STN=1&S21REF=10&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=0&S21P03=A=&S21COLORTERMS=1&S21STR=%D0%9A%D0%BE%D0%BD%D0%BE%D0%BD%D0%BA%D0%BE%20%D0%9E$)
- Kurlyand, Z. N. (2005). *Stanovlennya pozytyvnoyi YA–kontseptsiji maybutnogo vchytehya* [Formation of a positive Ego-concept of the future teacher]. Southern Scientific Center of the National Academy of Pedagogical Sciences of Ukraine. [http://194.44.11.130/cgi-bin/irbis\\_nbuv/cgiirbis\\_64.exe?C21COM=S&I21DBN=EC&P21DBN=EC&S21FMT=Jwu\\_B&S21ALL=%28%3C.%3EA%3D%D0%9A%D1%83%D1%80%D0%BB%D1%8F%D0%BD%D0%B4%20%D0%97\\$%3C.%3E%29&FT\\_REQUEST=&FT\\_PREFIX=&Z21ID=&S21STN=1&S21REF=10&S21CNR=20](http://194.44.11.130/cgi-bin/irbis_nbuv/cgiirbis_64.exe?C21COM=S&I21DBN=EC&P21DBN=EC&S21FMT=Jwu_B&S21ALL=%28%3C.%3EA%3D%D0%9A%D1%83%D1%80%D0%BB%D1%8F%D0%BD%D0%B4%20%D0%97$%3C.%3E%29&FT_REQUEST=&FT_PREFIX=&Z21ID=&S21STN=1&S21REF=10&S21CNR=20)
- Lapin, V. M. (2011). *Bezpeka zhyttyediyalnosti hyudyny* [Safety of human life]. Znannya.
- Leontiev, D. A. (2000). *Test smyslozbiznennykh oriyentatsii* [Test of meaningful life orientations]. Politizdat.
- Maksymchuk, B., Matviichuk, T., Solovyov, V., Davydenko, H., Soichuk, R., Khurtenko, O., Groshovenko, O., Stepanchenko, N., Andriychuk, Y., Grygorenko, T., Duka, T., Pidlypniak, I., Gurevych, R., Kuzmenko, V., & Maksymchuk, I. (2020). Developing Healthcare Competency in Future Teachers. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 24–43. <https://doi.org/10.18662/rrem/12.3/307>
- Maksymchuk, I., Maksymchuk, B., Frytsiuk, V., Matviichuk, T., Demchenko, I., Babii, I., Tsymbal-Slatvinska, S., Nikitenko, A., Bilan, V., Sitovskiy, A., & Savchuk, I. (2018). Developing pedagogical mastery of future physical education teachers in higher education institutions. *Journal of Physical Education and Sport*, 18(2), 810–815. <https://doi.org/10.7752/jpes.2018.02119>

- Melnyk, N., Bidiuk, N., Kalenskyi, A., Maksymchuk, B., Bakhmat, N., Matviienko, O., Matviichuk, T., Solovyov, V., Golub, N., & Maksymchuk, I. (2019). Modely y orhanyzatsyone osobnye profesyonalne obuke vaspytacha u pojedynym zemľama Evropske Unyje y u Ukrajinny [Models and organizational characteristics of preschool teachers' professional training in some EU countries and Ukraine]. *Zbornik Instituta za pedagogska istrazivanja*, 51(1), 46–93. <https://doi.org/10.2298/ZIPI1901046M>
- Mikheienko, O., Kuksa, N., & Liannoi, M. (2017). Formation of health culture of students in terms of higher education. *Nauka i osvita* [Science and Education], 12, 42–52. <https://doi.org/10.24195/2414-4665-2017-12-6>
- Ministry of Education and Science. (2012, May 4). *Pro shkvalennya novoyi redaktsiyi Bazovoho komponenta doshkilnoyi osvity* [Decision on approval of the new edition of the Basic component of preschool education], 5/2-2. [http://zakon1.rada.gov.ua/laws/show/v\\_5-2736-12](http://zakon1.rada.gov.ua/laws/show/v_5-2736-12)
- Nerubasska, A., & Maksymchuk, B. (2020). The demarkation of creativity, talent and genius in humans: a systemic aspect. *Postmodern Openings*, 11(2), 240–255. <https://doi.org/10.18662/po/11.2/172>
- Nijs, M. M., Bun, C. J. E., Tempelaar, W. M., Wit, de N. J., Burger, H., Plevier, C. M., & Boks, M. P. M. (2014). Perceived school safety is strongly associated with adolescent mental health problems. *Community Mental Health Journal*, 50, 127–134. <https://doi.org/10.1007/s10597-013-9599-1>
- Onishchuk, I., Ikonnikova, M., Antonenko, T., Kharchenko, I., Shestakova, S., Kuzmenko, N., & Maksymchuk, B. (2020). Characteristics of Foreign Language Education in Foreign Countries and Ways of Applying Foreign Experience in Pedagogical Universities of Ukraine. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 44–65. <https://doi.org/10.18662/rrem/12.3/308>
- Rean, A. A. (2004). *Psikhologiya lichnosti. Sotsializatsiya, povedeniye, obsbcheniye* [Psychology of personality. Socialization, behavior, communication]. Prime-EUROZNAK.
- Savchuk, O. P. (2010). *Audiovizualna pidtrymka studentiv v protsesi navchannya u VNZ* [Audiovisual support of students in the process of studying in higher education institutions] [Unpublished doctoral thesis]. Pivdenoukrayynskoho natsionalnoho pedahohichnoho universytetu imeni K. D. Ushynskoho [South Ukrainian National Pedagogical University Named after K. D. Ushynsky].
- Savchuk, O. P. (2015). Culturological approach to the formation future teachers' personal safety. *Modern Tendencies in Pedagogical Education and Science of Ukraine and Israel: the Way to Integration*, 6, 328–333. <https://ps.journal.kspu.edu/index.php/ps/article/view/2189>



- Savchuk, O. P. (2016). *Formuvannya ekolobichnoyi kultury maybutnobo vchytehya na zanyattiyakh z bezpeky zhyttyedyialnosti ta tsyvilnoyi oborony* [Formation of ecological culture of the future teacher in occupations on life safety and civil defense]. *Materialy XV mizhnarodnoyi naukovo-praktychnoyi konferentsiyi "Bezpeka zhyttya i diyalnosti lyudyny – osvita, nauka, praktyka"* [Proceedings of the 15<sup>th</sup> International Scientific-Practical Conference "Human Life Safety and Activity – Education, Science, Practice"]. Tempo.
- Savchuk, O. P., & Steiner, T. V. (2017). Osoblyvosti profesiyno-pedahohichnoyi pidhotovky maybutnikh uchyteliv [Features of professional and pedagogical training of future teachers]. *News of Science and Education*, 4(4), 7-11. <https://www.elibrary.ru/item.asp?id=28871545>
- Sheremet, M., Leniv, Z., Loboda, V., & Maksymchuk, B. (2019). The development level of smart information criterion for specialists' readiness for inclusion implementation in education. *Information Technologies and Learning Tools*, 72, 273–285. <https://doi.org/10.33407/itlt.v72i4.2561>
- Sitovskiy, A., Maksymchuk, B., Kuzmenko, V., Nosko, Y., Korytko, Z., Bahinska, O., Marchenko, O., Nikolaienko, V., Matviichuk, T., Solovyov, V., Khurtenko, O., Slyusarenko, N., Zhorova, I., & Maksymchuk, I. (2019). Differentiated approach to physical education of adolescents with different speed of biological development (2019). *Journal of Physical Education and Sport*, 19(3), 1532–1543. <https://doi.org/10.7752/jpes.2019.s4192>
- Slastenin, V. A., Isayev, I. F., & Shiyanov, E. N. (2002). *Pedagogika* [Pedagogy]. Publishing Center "Academia".
- Watanabe, Y., Claus, S., Nakagawa, T., Yasunami, S., & Teshima, M. (2021). A study for the evaluation of a safety education program me for nursing students: discussions using the QSEN safety competencies. *Journal of Research in Nursing*, 26(1-2), 97–115. <https://doi.org/10.1177/1744987121994859>
- Wilks, J., Kanasa, H., Pendergast, D., & Clark, K. (2017). Beach safety education for primary school children. *International journal of injury control and safety promotion*, 24(3), 283–292. <https://doi.org/10.1080/17457300.2016.1170043>
- Yaroshevskaya, V. M. (2004). *Bezpeka zhyttyedyialnosti* [Safety of life]. Professional.
- Ziazyun, I., Kramushchenko, L., & Kryvonos, I. (2004). *Pedahohichna maisternist* [Pedagogical skills]. Vyshcha shkola.