

# Future Teacher Training for Self-Education Activity in Physical Education at Elementary School

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**Abstract:** Today, there is a growing need for specialists who are capable of creativity and constant self-study, which realizes teachers' need for development. The research aims to direct future teachers' activities to self-development and self-improvement of professional competencies in physical education through self-study. The control group consisted of 49 respondents, namely third and fourth-year students; the experimental group consisted of 52 respondents who expressed their desire to be trained for the specialized course "Self-study activities in physical education of a future teacher in elementary school". The determination of training levels for self-development activities was carried out using a questionnaire. The training level of the control group increased up to 49.6%, which corresponds to the average level, and the experimental group – up to 80.1%, which corresponds to the high training level at the end of the experiment. The modern organizational forms of future teachers' educational activity are defined and characterized. The particular place among them is occupied by the project method, the case study and portfolio. Considerable advantages of the noted forms of future teachers' activity are skills and competence which they obtain to plan and predict; to use a variety of sources and media, in particular, ICT; to find and to develop independently educational material; to analyze, compare information and facts, argue their opinions; to be responsible, make decisions.

**Keywords:** *special course; topics of classes; motivation; lectures; university training.*

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## Introduction

The problem of teachers' professional skills and their formation as future specialists takes place through self-study precisely. Their preparation for self-study at a high methodological level, preparation for life in the broadest sense are one of the most important tasks and problems of the modern university. Self-study encourages teachers to be active, which is aimed at forming precisely those qualities of the person that are not well developed.

The analysis of scientific literature on the problem of preparing future teachers for self-study in physical education in elementary school shows that despite the significant results of the scientific research carried out by Ukrainian and foreign researchers and practitioners of the higher pedagogical education system, there is no holistic synthesis of the foundation of scientific approaches to self-study activity in the context of competent approach. The subsequent preparation of future teachers for self-study gives reason to argue that this type of pedagogical activity is a complex and purposeful process and requires teachers to possess an appropriate system of knowledge, skills and competencies, the application of which requires taking into account the requirements of system-active approach in psycho-pedagogical and methodical works of researchers and practitioners (Barsukov, 1982; Buriak, 2002; Protasova, 2002; Uznadze, 2004).

The modern vision of self-study is based on the shift of emphasis from education to self-study. Taking into account different approaches to the content of self-study activities and their structure, the authors consider self-study as a part of future teachers' professional competency.

By the term "self-study" of future teachers, the authors mean personal-managed activity in higher pedagogical educational institutions and beyond, which provides for public and professional self-awareness, preparedness and ability to acquire knowledge, skills and competency in the professional industry in particular, to gain the experience of building an individual educational trajectory for successful social and professional adaptation and action in the context of lifelong education.

Preparedness is considered as a complex of knowledge acquired by personality, skills, qualities, acquired abilities which promote future expert successfully to carry out self-study. On this basis, "future teachers' preparation for self-study in physical education" is to develop and improve the necessary mental processes, conditions and qualities, taking into account the peculiarities of their professional and self-study activities. As a process, it is seen as a purposeful work in the formation of psychological preparedness

(focus, desire) to engage in self-study. Its main result is “preparedness” of a future specialist who is based on his or her motives, aspirations, requirements and ambitions and is formed based on the system of knowledge, skills, personal qualities and available experience of self-study. From this point of view, the problems of training future teachers for self-study in physical education in elementary school were considered by researchers only partially.

The analysis of the current conditions of preparing future teachers for self-study in physical education in elementary school revealed several shortcomings that exist in the process of their preparation: occasional local renewal of knowledge as opposed to constant, systemically ordered; a lack of awareness among future teachers of the need for self-study and a lack of link between theory and practice; absence of optimal relationship between frontal, individual and group forms of work; mechanical transfer of other people’s experience into their work; inability to find non-standard solutions based on the results of self-acquired knowledge.

There is also the multidimensional problem, which covers the issues of educational and methodological, technical, psychological, organizational pedagogical support of a future teachers’ self-study: authoritarian management of the educational process in higher pedagogical educational institution, which does not motivate students but imposes its methods and methods of work, without taking into account opinions and views of future specialists; a low interest of individual students in profession and professional growth; inadequate (overestimated or understated) self-evaluation of available capabilities, abilities of future teachers.

Even though the problem under study is rather multi-faceted and science-oriented, the problem of training future teachers for self-study remains poorly understood. Its relevance lies in the development of future teachers’ capacity for self-study, as well as the possibility of resolving certain contradictions between the objective importance of using information and knowledge in professional activities of teachers and their inability to change and engage in constant professional development; the growing social demands for training modern teachers and their real capacity for practical self-study and self-improvement; the need for competency-oriented development of future teachers and the lack of effective models for training them for self-study.

The results of the analysis of psychological-pedagogical, methodological literature and state of formation of future teachers’ preparedness for self-study show the need to find, develop and introduce a particular methodology for forming competencies of self-study, which can

maximize the training quality of future teachers for self-study in physical education in elementary school.

### **Material and methods**

The experimental verification of the submitted formation structure of the investigated phenomenon was carried out based on the introduction of the author's specialized course "Self-study activities in physical education of a future teacher in elementary school" and the specially organized system of study, which guided students to self-study. It must be noted that 101 respondents (students from pedagogical universities) were recruited to participating in the experiment at the formative stage. The control group (CG) consisted of 49 respondents, third and fourth-year students, who expressed a desire to work independently with recommended references, sources and a developed specialized course; the experimental group (EG) consisted of 52 respondents who expressed their desire to be trained for the specialized course "Self-study activities in physical education of a future teacher in elementary school". The introduction of the specialized course programme (45 academic hours) took place at Drahomanov National Pedagogical University (Kyiv), where the formative stage of the experiment was carried out.

In order to select the control and experimental groups, a questionnaire of students from the above-mentioned educational institutions, namely future teachers, was conducted regarding their intentions and desire to participate in the experiment in forming preparedness to self-study within the framework of the specialized course "Self-study activities in physical education of a future teacher in elementary school" and for the corresponding educational and methodological materials.

The purpose of the training discipline is to train students for self-study; to direct the activities of future teachers towards self-development and self-improvement of professional competencies through self-study.

The tasks of the specialized course are the following: 1. To be able to ensure future teachers' motivation towards professional self-development and self-improvement through conscious independent cognitive activity. 2. To familiarize future teachers with the technology of self-study in the industry of physical education. 3. To teach future teachers to self-diagnose the level of self-study. 4. To promote the development of future teachers' self-study needs in physical education. 5. To determine students' training level for self-study. 6. To promote the development of future teachers' self-

study skills in physical education and their self-reflection. 7. To define specific requirements for students regarding self-study.

This specialized course provides for the performance of two functions: motivational (intensifying the need for self-study); instrumental (providing a listener with knowledge, skills and technologies of preparation for self-study). The authors have analyzed many literary sources to create the specialized course (Baikova, 2002; Bukhlova, 2003; Buriak, 2002; Eisenberg, 1986; Gerasymova et al., 2019; Kodzhaspirova, 1994; Melnyk et al., 2019; Pavlyutenkov & Kryzhko, 2006; Piekhota et al., 2001; Ridkous, 2013; Sebalo, 2010; Sebalo, 2015; Sergienko, 2014; Sheremet et al., 2019; Yahodnikova, 2012; Yudakova, 2019; Zhorova et al., 2012).

This is predetermined by the fact that the problem of preparation for self-study in physical education is an important and promising direction in the training of future specialists, which is aimed at revealing the potential of every student. The authors' study of this problem will contribute to activating the thinking process of students by directly involving them in the classes, where theoretical knowledge is established, cognitive activity, independence develop, which will allow them to be better oriented in the continuous change of pedagogical reality, will stimulate their self-development, which lays the foundation of professional development.

The control and evaluation of students' achievements are carried out during practical and seminar classes for carrying out independent works (group and individual), abstracts, writing pedagogical essays, creating their portfolio of a future teacher, protecting the creative project. The assessment draws attention to situations, tasks, identification of conditions and factors that positively affect the preparedness for self-study, novelty and originality of approaches, independence of thinking, use of different sources of information.

During the formative stage of the experiment, an input diagnosis was carried out, which was carried out by self-evaluation of the training level for self-study by third and fourth-year students following the generalized components of the questionnaire (informative, organizational-injunctive, organizational-control), and comparison of group indicators according to the developed questionnaire. For this purpose, a survey was conducted of students, namely future teachers, according to the questionnaire, which included 21 questions on such three blocks as informative, organizational-injunctive and control-evaluation. The process of conducting this research has taken into account relevant ethical rules. First, all ethical requirements were considered before the implementation of this research. Next, the authors obtained approval from the ethical committee of the university.

Then, the respondents were informed about the goals and objectives of the research and were interviewed. Most importantly, they were assured that the participation in the research was voluntary, and they were entitled to leave it at any time so that they should not feel under pressure.

Therefore, with the help of the developed questionnaire, the training level of respondents for self-study activity in physical education was diagnosed based on the evaluation itself in the control (CG) and experimental (EG) groups. At the same time, the students had to determine their training level by ranking the corresponding position in the questionnaire (from 1 to 9 points).

Self-study preparedness levels were determined using the questionnaire, where respondents' responses were divided into a low level (L)=0-40%; an average level (A)=40-75%; a high level (H)=75-100%.

The analysis of the obtained results at the beginning and end of the formative stage of the experiment in control (CG) and experimental (EG) groups was carried out by converting absolute values relative to the formula (1):

$$X_i = \frac{X_i^{abs}}{X_{max}} \quad (1),$$

where  $X_i$  - relative value of i-indicator;  $X_i^{abs}$  - absolute value of i-indicator;  $X_{max}$  - maximum possible value of i-indicator.

As the number of students – future teachers in CG and EG have different absolute values, comparison can be carried out only in relative values. The value at the beginning and end of the forming experiment in CG and EG is obtained as the arithmetic mean of all questions ( $\bar{X}$ ) to the formula (2):

$$\bar{X} = \frac{\sum X_i}{n}, \quad (2),$$

where  $\bar{X}$  – the average value of characteristic;  $X_i$  – individual variants of characteristic; n – the number of questionnaire/test questions;  $\Sigma$  – the sign of the amount.

The value of the changes at the beginning and end of the formative experiment in CG and EG was obtained by comparing their relative values to the formula:

$$X_i^{VC} = X_i^{end} - X_i^{beg}, \quad (3),$$

where  $X_i^{VC}$  – the value of changes i-index at the end of the experiment;  
 $X_i^{end}$  – the value of  $i$ -index at the end of the experiment;  $X_i^{beg}$  – the value of  $i$ -index at the beginning of the experiment.

In order to determine the formation levels of the meaning component of future teachers' preparation at the beginning of the experiment, the comparison of the obtained data of the control and experimental groups was carried out.

## Results

Analysis of the results of the formative experiment (see Fig. 1.) testified that preparation for self-study activity in physical education in the CG was found in 41.5% of students, and in the EG in 45.4% at the beginning of the experiment, which amounted to the average level.

At the end of the experiment in the CG, the training level increased up to 49.6%, which corresponds to the average level and in the EG – to 80.1%, which corresponds to the high level of preparation. Dynamics of changes between training levels for self-study activity in the EG is higher by 30.6% than in the CG.

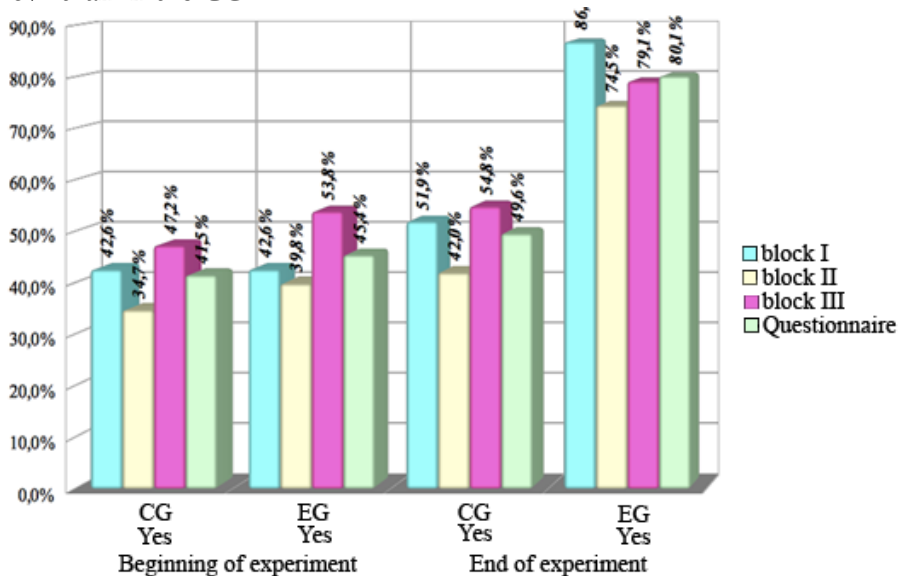


Fig. 1. Dynamics of changes after the results of the experiment at the beginning and end of the forming experiment in CG and EG

The obtained results by Fischer's angular conversion method were also confirmed. So, the obtained value ( $\varphi^* = 4,123$  and more  $\varphi^* > 2,31$ ), which indicates significant differences in groups, and therefore confirms that significant positive changes have taken place as a result of the pedagogical experiment.

The analysis of changes in blocks related to the training of future teachers in elementary school for self-study shows the following: regarding the informative block at the beginning of the experiment, the readiness for self-study was at an average level in CG and EG; at the end of the experiment, it reached a high level in the EG and an average level in CG; regarding the organizational-injunctive block at the beginning of the experiment, such readiness was on the verge of low and average levels in CG and at an average level in EG; at the end of the experiment, it reached an average level in CG and a high level in EG; regarding the control-evaluation block, the readiness for self-study was at an average level in CG and EG at the beginning of the experiment; it reached an average level in CG and a high level in EG at the end of the experiment.

On average, the results of the experiment indicate that CG has experienced positive changes within an average level due to self-study of relevant educational material provided by the teacher. It must be noted that EG demonstrates the shift from an average to a high level of readiness for self-study as a result of mastering the specialized course and creating the necessary organizational and pedagogical conditions in higher education institutions.

## Discussion

The paper proves that self-study is a part of future teachers' professional competency. Therefore, the training of future teachers for self-study includes developing and improving psychological and mental processes, conditions and qualities of the individual, taking into account the characteristics of professional and self-study activities, which result in the enhancement of the quality of training future teachers for self-study. *It can be confirmed by the development of the individual's conscious motivation towards self-study; a well-developed ability to engage in self-study, adjust his or her professional activities following the results of self-study and determine its directions, taking into account the practical needs of professional activities.*

The analysis of theoretical bases of future specialists' preparation for self-study activity in physical education provides an opportunity to argue



that it is self-study that is a link that creates opportunities for continuing education and professional improvement of pedagogical workers. The research by K. Platonov (1986) was confirmed, which considers personality as a dynamic system, which consists of several interlinked components, which interact is changing, developing closely and continuously. To understand the essence of self-study activity of future teachers, the activity theory of A. Leontiev (1979) was used. The research was based on the structure of activity proposed by A. Leontiev (1979) (activity – action – operation – psychophysiological functions) and relationships with the structure of the motivational sphere (motive – aim – condition), where individual attention is paid to the analysis of human consciousness. Based on the necessary provisions of the theory of personality K. Platonov (1986) and the activity theory of A. Leontiev (1979), the authors have a proposed structure of self-study activity of a future teacher, which includes four spheres: professional, general cultural, personal, socio-practical. It was proved that from the point of view of an active approach, self-study activities in physical education manifest themselves in the actions that constitute its mechanism. On this basis, one of the main elements of the developed structure was the psycho-pedagogical mechanism of self-study activity, which is a set of actions, appropriate means, methods and conditions, which determine both possibility and efficiency of self-study activity, and has two sides of manifestation external – self-government and internal – self-regulation. Set of self-study actions which provide functioning psychology and pedagogical to the mechanism of self-study activity were grouped depending on the roles played by them and from their direction: orientation; planning; implementation (realization); control; evaluation and characterized from the perspective of the outside and inside of their manifestation.

The main recommendations include: taking into account in the content, forms and methods of study the need to develop skills of self-study of students in physical education and gradually increasing the part of independent work; a balanced combination of theory and practice in the content of study, lecture and practical classes, determination of volumes, position of audit independent work, planning of progress and control of the performance of independent and self-study work of students also affected the efficiency and quality of results of the experiment; providing the necessary quantity of specialised educational and methodological literature of the new generation, including electronic publications which should contain topics for independent and self-study work of students and question for self-control; development and implementation of new training computer

programs, automated training and control systems; broad access to ICT and high-speed Internet in classrooms, libraries, dormitories; creation of information banks of the best pedagogical practices, which can be used by future specialists to perform practical tasks, independent and scientific work and self-study activities; strengthening individual teacher advice, e-communication and student advice; creating of friendly atmosphere of cooperation and mutual assistance in training groups; restructuring of traditional forms of training, extensive use of interactive and problematic forms of training.

## Conclusions

The paper proves that the need to find, develop and implement a particular technology for developing the experience of self-study, which can improve the quality of training future teachers for professional activities, depends on students' understanding of the role of self-study in the modern educational environment and educational process; ability to choose the means for developing self-study competency in the system of teachers' professional competency and be responsible for their self-study activities and constant professional development. The paper defines and theoretically justifies the structure of future teachers' activities in elementary school. It consists of the following components: the sphere of self-study activities (professional, cultural, personal, socially practical); the psycho-pedagogical mechanism of self-study activities (a set of actions, appropriate means, methods and conditions which determine both the opportunity itself and the effectiveness of self-study activities), which includes external (self-management) and internal (self-regulation) parties; a functional content of self-study activities (widening an outlook; developing a professional focus on acquiring diversity and social maturity; stimulating the ability to change, cultivating competitiveness), forms of interaction and focusing of self-study activities (the educational process in higher education institutions; teacher placement; independent work; the acquisition and sharing of experience; an external environment (contacts, communication, Internet, media, family). The paper also elaborates, theoretically justifies and experimentally verifies the model of training future teachers for self-study, which includes the target, informative, organizational-injunctive and control-evaluation blocks. The basic principles of future teachers' self-study activities in elementary school are as follows: purposefulness, continuity, integration, consistency and variability. The authors have improved the content and technological

support of the educational process aimed at training future teachers for self-study in higher education institutions.

The practical value of the obtained results lies in the development and implementation of the developed model in the educational process in higher education institutions in order to focus the training of future teachers on self-study, which can be used to improve the content of educational courses, organizational forms and methods of training for self-study as a systemic component of competency-oriented development; the development of criteria and levels of readiness for self-study; the determination of organizational and pedagogical conditions and elaboration of methodical recommendations for the training of future teachers for self-study, which can be used in the development and implementation of the system of monitoring the quality of higher education, certification of teaching staff and modernization of the educational process in higher education institutions.

The paper singles out the organizational and pedagogical conditions for the realization of the model for training future teachers for self-study, which underpin practical recommendations for the implementation of the model for training future teachers for self-study. The organizational and pedagogical conditions for the implementation of the model's target block are aimed at ensuring the subjectivity of the activity, which is reflected by the psycho-pedagogical mechanism of future specialists' self-study. The conditions for the implementation of the model's informative block are the following: the combination of theory and practice, the consistency of classroom and independent work of students; the organization of students' work in and out of the classroom based on interactive teaching methods; the provision of the necessary methodological materials and access to information and communication technologies; the control over the organization and progress of independent work. The organizational and pedagogical conditions for the implementation of the model's organizational-injunctive block are as follows: the availability of highly qualified teaching staff; the combination of individualization and differentiation of training; a democratic type of relations between teaching staff and students; constant professional development of teaching staff in higher education institutions; financial, technical, methodological and informational support of the educational process; the promotion of students' independent work; the autonomisation of the educational process. The organizational and pedagogical conditions for the implementation of the model's control-evaluation block lie in the presence of the system of monitoring self-study progress, the creation of a system of monitoring self-

study activities and the promotion of individual work with future professionals, their subject-subject pedagogical support.

The main training element of future teachers for self-study activity is the educational process at higher pedagogical educational institutions. As a result of the analysis of contents, forms and methods of study, it was defined that the primary forms of the organization of study (lectures, practical training, student teaching and independent work of students) have to be directed to form future teachers' knowledge, self-study skills and self-development which are the components of their professional competency.

The paper shows that the primary forms of the educational process in higher education institutions are classes, individual tasks, independent work, practical training, assessment. Possibilities of motivation and encouragement of future teachers towards self-study, activation of the mechanism of self-study activity and the direction of independent and self-study work of students are formed at realization of the main functions of lecture (educational, upbringing, developing, organizing, motivating, hedonistic). The potential for practical training for future teachers for self-study in physical education can be realized under the following conditions: group classes in the course of study, focus on motivating students towards self-study; the subject sphere activation of the student's personality, provision of advice in the organization of self-study and promotion of student autonomy. The pedagogical practice of future teachers in combination with educational disciplines should help to determine the directions and prospects of professional formation of a future specialist and his or her professional development in the future; stimulate adequate professional self-assessment, form needs, skills of self-study activity. It proves that the independent work of future teachers is a necessary component of the educational process underpinning further self-study activities and ensuring their professional ability.

Future teachers' independent work in physical education in elementary school acts as a necessary component of the educational process and, at the same time as a substitute for their subsequent self-study activities. Modern organizational forms of future teacher's educational activity are definitely and described, which include a large part of independent work and encourage future teachers to engage in self-study. A special place among them is occupied by the project method, the case study, and portfolio. Considerable advantages of the noted forms of activity of future teachers are skills and competency they obtain, namely, to plan and predict activity in physical education and its results; to use a variety of sources and media, in particular, ICT; to find and develop independently physical education

educational material; to analyze, compare information and facts, argue their opinions; to be responsible, make decisions.

The competency development of future teachers focuses the educational process on future teachers' preparation for self-study, which is a more prominent means of ensuring the quality of future specialists' training, contributing to their competency development, strengthening of cognitive activity, expansion of professional and general cultural world view, development of necessary qualities, professional adaptation and acquisition of experience.

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## References

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- Baikova L. A. (2002). *Pedagogical skills and pedagogical technologies* (3<sup>rd</sup> ed.). Russia, Saint-Petersburg: KARO.
- Barsukov, I. G. (1982). *Propaedeutic of self-study in future teacher's preparation*. Russia, Chelyabinsk: Chelyabinsk State Pedagogical University.
- Bukhlova, N. V. (2003). *Organization of pupils' self-study activity*. Ukraine, Kharkiv: Osnova.
- Buriak, V. (2002). Conditions and means of students' self-study. *Higher Education*, 6, 18–29.
- Eisenberg, A. Y. (1986). *Self-study: history, theory and modern problems*. Russia, Moscow: Higher Education.
- Gerasymova, I., Maksymchuk, B., Bilozero, 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.
- Kodzhaspirova, G. M. (1994). *Teacher's culture of professional self-study*. Russia, Moscow: Science.
- Leontiev, A. N. (1979). *Kategorija dejatelnosti v sovremennoj psihologii*. Retrieved from <http://www.culturedialogue.org/drupal/ru/node/1891>.
- Melnyk, N., Bidiuk, N., Kalenskyi, A., Maksymchuk, B., Bakhmat, N., Matviienko, O. ... Maksymchuk, I. (2019). Models and organizational characteristics of preschool teachers' professional training in some EU countries and Ukraine. *Zbornik Instituta za Pedagoska Istrazivanja*, 51 (1), 46–93. DOI: 10.2298/ZIP1901046M

- Pavlyutenkov, Y. M., & Kryzhko, V. V. (2006). *Organization of methodical work*. Ukraine, Kharkiv: Osnova.
- Piekhota, O. M., Kiktenko, A. Z., & Lubarska, O. M. (2001). *Educational technologies*. Ukraine, Kyiv: A. S. K.
- Platonov, K. K. (1986). *Structure and personality development*. Russia, Moscow: Science.
- Protasova, N. G. (2002). Methodological foundations for the development and improvement of the system of postgraduate education of specialists. *Postgraduate Education in Ukraine*, 2, 7–10.
- Ridkous, O. V. (2013). Teacher's preparation for self-development activity as a component of his or her professional development. *Tavriyskyi Journal of Education*, 2, 94–101.
- Sebalo, L. I. (2015). The structure of self-education of future primary school teachers. *Science and Education a New Dimension. Pedagogy and Psychology*, 3 (26) 50, 59–63. Retrieved from [https://seanewdim.com/uploads/3/4/5/1/34511564/sebalo\\_l.\\_the\\_structure\\_of\\_self-education\\_of\\_future\\_primary\\_school\\_teachers.pdf](https://seanewdim.com/uploads/3/4/5/1/34511564/sebalo_l._the_structure_of_self-education_of_future_primary_school_teachers.pdf)
- Sebalo, L. I. (2010). Independent work of future primary school teachers as an organic constituent of educational process. *Science and education*, 256–258. Retrieved from [https://scienceandeducation.pdpu.edu.ua/doc/2010/10\\_2010/57.pdf](https://scienceandeducation.pdpu.edu.ua/doc/2010/10_2010/57.pdf)
- Sergienko, O. M. (2014). Formation of the culture of self-study activity in students in the process of professional training. *Journal of Mariupol State University*, 7, 136–139. Retrieved from [http://visnyk-culturology.mdu.in.ua/en/nomer\\_7.pdf](http://visnyk-culturology.mdu.in.ua/en/nomer_7.pdf)
- 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.
- Uznadze, D. N. (2004). *General psychology*. Russia, Saint-Petersburg: Peter.
- Yahodnikova, V. V. (2012). *Case study as a form of interactive training of future specialists*. Retrieved from [http://www.rusnauka.com/1\\_NIO\\_2008/Pedagogica/25496.doc.htm](http://www.rusnauka.com/1_NIO_2008/Pedagogica/25496.doc.htm).

Yudakova, S. V. (2010). *Vocational and pedagogical self-study*. Russia, Vladimir: Vladimir State University of Humanities.

Zhorova, I. Y., Kuzmych, T. O., & Nazarenko, L. M. (2012). *Self-study of the teacher as a condition to increase his professional competence. Methodological recommendations*. Ukraine, Kherson: RIPO.