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## Pedagogical Consolidation of Pupil-Athletes' Knowledge of Humanities

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**Abstract**: There appears to be the need to consolidate pupilathletes' knowledge of humanities (Ukrainian History, English, Ukrainian, Ukrainian literature), which greatly affect their emotional and value attitude towards the surrounding world, promote active life position and widen outlook, develop reading, linguistic and speech culture, enhance understanding of life meaning through the assimilation of ideals, universal values, norms of morality and patterns in behaviour culture. The research aims to disclose the impact of the developed system of assignments on the consolidation of knowledge of humanities in pupil-athletes in the process of training. The pedagogical experiment was conducted in Ukrainian comprehensive schools (142 participants in the experimental group and 150 participants in the control group). The diagnostic toolset includes questionnaires for identifying cognitive interest of pupils in humanities, questionnaires for teachers and parents, tests for identifying abilities to observe, concentrate attention, memorize and apply the content of educational material, tests for studying types of memory, methods of adolescents' selfassessment, methods of unfinished sentences, notes, reading diaries, compositions. Thus, the indicator of creative nature in acquiring knowledge of humanities has increased (+ 19,1%) in the experimental group. Analyzing the results from the experiment, one can conclude that the designed system of assignments aimed at consolidating pupil-athletes' knowledge of humanities has contributed to increasing the levels of their overall performance, responsibility and discipline.

**Keywords:** the learning process, a system of assignments, school, teachers, educational material.

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#### Introduction

The assignment is efficient if the objective complexity of its content has been correctly defined and it is memorizable. The gradual complication of assignments and their diversity contribute to transferring pupils from reproductive to productive levels of knowledge acquisition and allow avoiding homogeneity of the learning process. Developing age-specific assignments contributes to activating internal forces and capabilities embodied in human nature at a particular age. A thorough acquisition of educational material requires that assignments should correspond to the links of the acquisition process.

The outlined problem was studied by psychologists and educators who associated consolidated knowledge with a theory of memory (Bezliudnyi, Kravchenko, Maksymchuk, Mishchenko, & Maksymchuk, 2019; Bocharova, 2007; Byvalkevych, Yefremova, & Hryshchenko 2020; Gerasymova et al., 2019; Komogorova, 2011a; 2011b; 2011c; Koziuk, Hayda, Dluhopolskyi, & Kozlovskyi, 2020; Kozlovskyi, 2010, Kaletnik, Zabolotnyi, & Kozlovskyi, 2011; Sebalo & Teslenko, 2020); educational activities and learner autonomy (Danilov, 1960; Galperin, 1965; Kabanova-Meller, 1981; Behas et al., 2019); cognitive activity and interest (Lozova & Trotsko, 2002; Markova, Matis, & Orlov, 1990); knowledge monitoring and assessment; solving educational problems (Talyzina, 1975; Bakhmat et al., 2019; Maksymchuk, 2010; Maksymchuk et al., 2018; Melnyk et al., 2019).

In school practice, some attempts were made to consolidate knowledge of pupils in primary and middle school while teaching physical and mathematical subjects, humanities and natural sciences through the use of supporting structural and logical schemes (Blech, 2007); expert systems (Antonchenko, 2001), creative assignments (Kazantseva, 2001).

Nevertheless, the problem of consolidating pupil-athletes' knowledge of humanities has not been properly studied. The results of the pilot study show that 32.8% of fifth graders and 45.5% of sixth graders (among 323 pupils interviewed) did not manage to complete English assignments since they were unable to reproduce their residual knowledge. The educational material on History was poorly memorized by 44.5% of fifth graders and 31.5% of sixth graders. The same situation was observed during the lessons of Ukrainian language and literature. Consequently, pupil-athletes' acquisition of consolidated knowledge has not been properly ensured.

In some researches (Markova, Matis, & Orlov, 1990; Sheremet, Leniv, Loboda, & Maksymchuk, 2019), the ways of motivating pupils include preparing an interesting and real-life educational material and presenting it

visually, creating a favourable moral and psychological atmosphere in class and providing pupils with the opportunity to solve multilevel assignments. All these aspects have formed the basis for developing the system of assignments.

The system's aim and objectives are to provide pupil-athletes with consolidated knowledge of humanities during the learning process, develop their positive attitude towards them, activate cognitive processes (memory, thinking, attention), facilitate perception, comprehension, consolidation and application of knowledge based on prevailing types of memory (visual, auditory, motor).

The research hypothesis assumes that pupil-athletes' knowledge of humanities can be consolidated if the system of educational tasks as a unity of goals, objectives, ways of motivating athletes and requirements for indepth knowledge of humanities, sets of education tasks with a gradual increase in complexity, aimed at memorizing, storing and applying educational material based on the dominant types of pupils' memory realized in the lesson according to its didactic goals, are developed and implemented in the educational process.

The research aims to disclose the impact of the developed system of assignments on the consolidation of knowledge of humanities in pupil-athletes in the process of training.

#### Material & methods

**Research methods** include the following: *theoretical methods* – an analysis of scientific literature to compare, systematize and generalize different views on the problem under study and define the conceptual and categorical framework; an analysis and a study of legal and educational-and-methodical documentation on the organization of the educational process in comprehensive schools; *empirical methods* – questionnaires, surveys, tests, pedagogical observations, conversations, interviews, independent work, analyses of pupils' educational products, observations to identify the level of pupils' readiness for consolidating knowledge of humanities at the beginning and at the end of the pedagogical experience; the pedagogical experiment to verify the effectiveness of the developed system of educational tasks and exercises aimed at consolidating knowledge of humanities during the educational process in the main school; *methods of mathematical statistics* – both the quantitative and qualitative analysis of empirical data.

The research specifies some assignments taking into account prevailing types of pupils' memory. Assignments, which include perceiving and

comprehending educational material, aim to enhance pupils' understanding of linguistic and speech phenomena, historical events, expressive means, statements, dialogues, monologues, texts, communicative phenomena through consideration, listening, reading and observation of these processes, phenomena and objects.

Assignments, which include consolidating and applying knowledge, require that grammatical constructions, dates, events, figures, terms, concepts, linguistic and speech means, means of artistic expression, phonetic, morphological and punctuation rules should be repeatedly comprehended and reproduced in memory of pupil-athletes. Those pupils who have prevailing auditory memory can effectively consolidate and apply educational material due to assignments, which include analyzing, supplementing communication comparing, disseminating, situations, dialogues, texts, genres, styles, linguistic phenomena and grammatical constructions, livelihoods in different cultures. Using assignments, which include emphasizing, selecting, clarifying and justifying the above-mentioned phenomena, processes and objects, allows pupils with prevailing visual memory to better acquire educational material. Assignments, which include searching and verifying causal relationships between historical events, identifying correspondences and opposites in sentences and phrases, completing synonymous lines and drawing up plans to paragraphs, contribute to comprehending and reproducing educational material by pupils with prevailing motor memory.

Multiple-choice tests, open-ended questions, gap-fill exercises (dates, surnames, grammatical constructions, speech and communicative phenomena, words, phrases), essays (analyzing actions of literary characters, lives of historical figures, etc.), reviews can consolidate pupils' knowledge of humanities through *control* and *self-control*.

Assignments are implemented in class according to its didactic aim through the content of humanities, techniques, methods and forms.

The pedagogical experiment was conducted in Ukrainian comprehensive schools. The system of assignments aimed at consolidating pupil-athletes' knowledge of humanities was implemented in the experimental group (142 participants) and the control group (150 participants). The process of conducting this research adheres to relevant ethical rules. First of all, all ethical requirements were considered before the implementation of this research. Next, the authors of the research obtained approval from the ethical committee of the university. After that, the respondents were informed about both the goals and objectives of the research and were interviewed. Moreover, they were assured that the

participation in the research was voluntary, and they were entitled to quit it at any time so that they should not feel under pressure.

At the ascertaining stage of pedagogical experiment, a diagnostic toolset was defined in order to find out the initial state based on specified criteria with corresponding indicators in levels of pupil-athletes' readiness to consolidate knowledge of humanities (motivational: the nature of pupils' cognitive interest in humanities, as well as their striving to consolidate and apply knowledge of humanities; cognitive: unity, depth, efficiency of humanities knowledge and the nature of their acquisition – creative, reconstructive, reproductive; operational and activity-based: general abilities (to highlight the main points and justify them), intellectual abilities (to analyze, synthesize, compare, generalize) and mental abilities (to memorize, realize, observe, concentrate attention, reproduce the studied material), which contribute to consolidating knowledge; reflective and evaluative: well-developed abilities to carry out self-control while performing assignments, adequate self-esteem).

The diagnostic toolset includes the questionnaire, titled "Identifying Cognitive Interest of Pupils in Humanities", the questionnaire for teachers and parents, titled "Finding the Reasons Preventing Pupils from Having Consolidated Knowledge of Humanities", a test to identify their abilities to observe, concentrate attention, memorize and reproduce the content of educational material (Bocharova, 2007), a test to study types of memory (Bocharova, 2007), the "Self-Esteem of Adolescents" methodology (Kazantseva, 2001), the method of unfinished sentences, notes, reading diaries, compositions.

At the formative stage, pupil-athletes were motivated towards consolidating their knowledge. The answers of 63 respondents prove that teachers can effectively consolidate pupils' knowledge of humanities provided that educational material is thought-provoking, understandable and memorizable, can be visually presented and associated with real life (46.0% of respondents); classroom atmosphere is positive and psychologically favourable, since pupils like to perform assignments, when they are encouraged by their teachers, especially pupils with learning difficulties, when they can feel peer support and their recognition, when they are not afraid of making mistakes and obtaining poor grades (30.2% of respondents); pupils can choose activities and solve multilevel assignments (23.8% of respondents). Those pupils, who felt the joy of their success, showed interest, confidence in their abilities, willingness to try themselves in new and more complex assignments, to consolidate their knowledge.

While preparing for lessons, teachers specified the aim, content of multilevel assignments taking into account types of memory, compiled relevant educational material according to the topic of the lesson, structured it in charts, tables and schemes to facilitate memorization, selected presentations, maps, photographs of literary characters, portraits of writers, films, video clips about the places of interest in Ukraine and abroad, as well as techniques, methods and forms for activating thinking, memory, attention.

Real-life assignments have enhanced pupils' comprehension of their practical significance and motivated them towards active and efficient work in class. For instance, the first English lesson in the fifth grade is devoted to healthy nutrition. Accordingly, pupils were offered to discuss the following situation: "Name words and expressions in your native language that you will need to ask your mother to go to the store and buy necessary food to cook dinner". Solving this situation required them to use English vocabulary and translate properly.

Those pupils who have prevailing visual memory were offered to consider and observe linguistic and speech phenomena, historical events, expressive means, portraits, photos, historical maps, so that they might facilitate their perception and comprehension of educational material. Assignments, which include listening to linguistic and speech, historical, cultural dialogues, monologues, statements, communicative phenomena, were effective for pupils with prevailing auditory memory. Those pupils who have prevailing motor memory facilitated their perception and comprehension due to reading dialogical, monological, cultural and historical statements, texts. Solving these tasks encouraged them to find new knowledge and consolidate the existing one.

Also pupils dealt with multiple-choice tests and games, such as "Find a Mistake", "Bring Order", "Five-Minute Rule", "Be Attentive"; role-playing games "Reviewer", "Why-Guy", which developed the abilities to observe, concentrate attention, memorize the main points, justify their opinions and positions.

Independent reading activities contributed to consolidating pupils' knowledge, too. Thus, some fifth graders were offered to read a text about Trypillya and perform differentiated assignments to develop all types of memory in History class. To develop visual memory, pupils needed to reveal the main idea of the text and draw what they had read. Developing motor memory, pupils noted indicator words, through which they could reproduce educational material and make a plan of what they had read. Training auditory memory, pupils retold each other what they had read. In this way,

pupils' memory reflected historical reality and the knowledge of educational material was consolidated.

When pupils performed assignments aimed at comparing, classifying, inventing analogies, defining and explaining causal relationships, expressing evaluative judgments, searching and creating based on types of memory, they developed their skills of critical thinking, analysis, synthesis, ideological and universal values, moral norms and valuable attitude towards themselves, the surrounding world, nurtured the feelings of humanism, humanity, respect and the ability to listen to other opinions. "Flower of Difficulty" and "My Capabilities" quizzes, "Self-Service Shop", "The Smartest" and "I Can" competitions, "Who's More?" brainstorming turned out to be rather effective. During these activities, pupils structured and systematized educational material and drew conclusions.

The processes of consolidating, applying and orienting pupils' attention to significant moments of activities took place during training based on prevailing types of memory. It involved the systematic performance of differentiated assignments with insufficient and incorrect data that did not match the existing analogues. Also, pupils were offered to find mistakes, justify some points and define the main idea. Pupils with prevailing visual memory underlined grammatical mistakes in sentences, found opposites, conjugated verbs and identified main and minor parts of the sentence. Pupils with prevailing auditory memory asked questions based on works, texts and dialogues they had read, rephrased sentences with newly learned words, chose the correct form of the verb, explained its usage, retold historical events in the correct sequence. Pupils with prevailing motor memory completed the sentences with correct forms of the verb, found and corrected mistakes, filled in the gaps, reproduced the sentences, etc. Homework was seen as one of the ways to consolidate knowledge.

During humanities lessons, pupils who have different levels of knowledge and memory types were involved in pair and group activities, so that they might share their experience and fruitfully communicate with each other. Such an approach to organizing educational activities of pupils has contributed to the neutralization of intense psychological atmosphere while performing assignments.

Monitoring pupils' knowledge, teachers offered them to perform some gap-fill assignments, matching exercises, multiple-choice tests, to answer some direct questions and find and correct mistakes. Ongoing monitoring involved tests, card assignments, oral questioning, etc. Thematic and final monitoring was conducted in written form (test papers with variants). Pupils had the opportunity to check their progress using peer dictations, signal

cards or independently with the help of a textbook. In such a way pupils managed to improve their attention so that they might find mistakes and correct them, work and analyze their work, justify their actions.

It must be noted that the transition from reproductive to the productive level of knowledge acquisition took place gradually due to the complication of logically interrelated content of assignments and the transition to independent forms of educational activities with minimal supervision, which also consolidated pupils' knowledge.

#### Results

The effectiveness of the pedagogical experiment based on the specified criteria and indicators has been verified at *its formative stage*. The obtained data confirm the hypothesis of the research on pedagogical consolidation of pupil-athletes' knowledge of humanities, whose reliability has been verified using mathematical statistics.

The implemented system of assignments has positively influenced the consolidation of pupil-athletes' knowledge of humanities, as evidenced by the dynamics in levels of EG pupils' readiness to consolidate knowledge (see Table 1).

**Table 1**. Results from research and experimental activities (increase in %)

	Groups	
Criteria, indicators in levels (nature) of	EG	CG
pupils' readiness to consolidate knowledge of	142 partici-	150 partici-
humanities	pants	pants
1	2	3
Motivational criterion:		
> the nature of showing cognitive interest in		
humanities		
• stable;	+18,4	+4,0
• situational;	+1,5	-2,0
• rare;	-19,0	-2,0
➤ the nature of showing a willingness to consolidate and apply knowledge of humanities (individual reading, participation in Olympiads, etc.):		
• stable;	+10,4	+2,7
• situational;	+6,3	+1,4
• rare.	-16,7	-4,0
Cognitive criterion:		

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quality of acquired knowledge (humanities):		
• unity of acquired knowledge (pupils can reproduce concepts, terms, grammatical rules, chronological events provided for by humanities curriculum, understand logical links between new and existing knowledge);	+11,2	+2,9
• depth of acquired knowledge (pupils can identify significant links between knowledge of history, Ukrainian and foreign languages, literature);	+12,1	+4,0
• efficiency in applying knowledge (pupils can apply acquired knowledge of humanities in new situations, self-study activities);	+14,8	+6,1
the nature of acquiring knowledge (humanities)		
• creative (pupils can perceive the problem, realize assignment conditions, plan how to independently perform the assignment, constantly carry out self-control, independently apply knowledge of humanities under the new conditions, demonstrate prevailing involuntary memorization of educational material);	+19,1	+2,9
• reconstructive (pupils can perceive assignments that are part of the general problem, comprehend assignment conditions, update knowledge of the ways how to solve such assignments, independently solve part of the problem, carry out self-control, apply new knowledge with supervision, demonstrate prevailing involuntary memorization of educational material);	+14,2	+4,0
• reproductive (pupils reproduce knowledge of humanities and the ways how to work with samples, experience difficulties in applying knowledge of humanities under the new conditions, demonstrate arbitrary or involuntary memorization of educational material).  Operational and activity-based criterion (levels	-10,3	-3,9
of pupils' general, intellectual and mental abilities, which ensure consolidation of knowledge (humanities)):		
• creative (pupils can correctly and fully	+21,2	+2,8

reproduce concepts, terms, grammatical rules, chronological events over the given time, identify the main idea of the text, justify their opinions with accurate examples, compile tables to generalize acquired knowledge, compare the use of grammatical rules in different languages, focus on the main events, patterns in linguistic and grammatical constructions, independently find minor mistakes and adjust answers);  • reconstructive (pupils can reproduce concepts, terms, grammatical rules, chronological events under the new conditions (with minor mistakes, which can be corrected under supervision), identify the main idea of the text (under supervision), justify their opinions with few examples, compile tables to generalize acquired knowledge (based on the teacher's instructions), occasionally apply grammar rules to different languages, partly focus on the main events, patterns in linguistic and grammatical constructions, occasionally find mistakes and correct them);	+13,4	+3,0
• reproductive (pupils cannot correctly and fully reproduce concepts, terms, grammatical rules, chronological events, independently identify the main idea of the text, justify their opinions with examples, compile tables to generalize acquired knowledge without samples, independently apply grammar rules to different languages, focus on the main events, patterns in linguistic and grammatical constructions, independently find mistakes and correct them without supervision).	-6,4	-2,5
Reflective and evaluative criterion:		
developed skills of self-control:		
• pupils carry out self-control constantly and independently;	+21,6	+5,0
pupils carry out self-control occasionally;	+10,0	-9,0
• pupils carry out self-control only when reminded by the teacher;	-19,3	-4,0
> self-esteem adequacy:		
• adequate;	+20,1	+4,6

• high;	-11,2	-3,9
• low	-15,4	-2,0

#### Discussion

There is no agreement among researchers on the definition of "pupils' consolidated knowledge". Therefore, they interpret this category as: *a principle* requiring that knowledge, abilities and skills acquired by pupils during the learning process and stored in memory for a long time can be reproduced at any time and used in different situations (Galperin, 1965; Lozova & Trotsko, 2002; Talyzina, 1975); *a process* that transforms objective social experience into personal achievement; *results* of educational and cognitive activities (Bocharova, 2007; Kazantseva, 2001; Zinchenko, 1996); *quality* of pupils' acquired knowledge (Zorina, 1976; Kraevskiy, 2003; Lerner, 1978).

This research defines the concept of pupils' consolidated knowledge is defined as comprehension and memorization of educational material based on activation of mental processes (memory, thinking, attention), through which structuration and systematization of educational information, its reproduction and application to educational activities take place.

The research also confirms the views of certain scholars (Ilin, 1973; Krutetskiy, 1976; Halaidiuk et al., 2018; Sitovskyi et al., 2019) that adolescence is, on the one hand, favourable for mastering humanities due to active development of verbal and logical and arbitrary memory, formal and abstract thinking, attention, imagination, independence, reading, monologic and dialogic speech, as well as emotional perception of educational material, which increases interest in new information, and on the other hand, is problematic, since the imbalance between psychological and social maturity of adolescents, physiological and psychological changes negatively influence the process of consolidating knowledge. Given the above, this process should be pedagogically supported.

Taking into account relevant scientific views (Novikova, 2003; Yevsieieva, 2006), the authors have developed, theoretically justified and experimentally verified the system of assignments, which share the aim, objectives, ways of motivating pupil-athletes and requirements for consolidated knowledge of humanities, some assignments with varying levels of complexity aimed at memorizing, preserving and reproducing educational material based on prevailing types of pupils' memory and implemented in class in accordance with its didactic aim.

The scientific value of the obtained results is as follows: the system of educational tasks as a unity of goals, objectives, ways of

motivating pupils in the main school and requirements for in-depth knowledge of humanities, sets of education tasks with a gradual increase in complexity, aimed at memorizing, storing and applying educational material based on the dominant types of pupils' memory realized in the lesson according to its didactic goals, has been developed, scientifically justified and experimentally verified; the concept of "pupils' consolidated knowledge" as awareness and memorization of educational material based on the activation of their mental processes (memory, thinking, attention) which enable the structurization and systematization of educational information and its use in educational activities, the concept of "educational task" different in content and types of independent educational work with a gradual increase in complexity, aimed at memorizing, storing and applying educational material based on the dominant types of pupils' memory realized in the lesson according to its didactic goals and during homework, have been specified and clarified; the criteria (motivational, cognitive, operational and activity-based, reflective and evaluative) with appropriate indicators of levels of pupils' readiness for consolidating knowledge of humanities have been determined; the tools, methods and forms of consolidating pupils' knowledge have been further developed.

The practical value of the obtained results lies in the development, theoretical justification, experimental verification of the system of educational tasks, which can be introduced in the educational process of comprehensive schools to consolidate athletes' knowledge of humanities, and presentation of the educational-and-methodical textbook.

The conducted research does not disclose all aspects of the raised problem. The means, methods and forms for consolidating knowledge of pupils of all ages, as well as pedagogical conditions for preparing teachers to consolidate knowledge in school should be further studied.

#### Conclusions

The analysis of psychological-pedagogical literature proves that knowledge determines individual identity, behaviour and character, serves as social and professional protection and helps to adapt to life circumstances. The knowledge of humanities reveals potential capabilities of the individual, positively influences the cultivation of moral and ethical personality traits and changes the individual's attitude to oneself and others from the standpoint of humanism and humanity.

It is proved that knowledge promotes the uniqueness of personality, behaviour and character, serves as social and professional protection, assists in adapting to life circumstances. In particular, knowledge of humanities reveals the individual's potential, positively affects the development of moral and ethical personal qualities, changes the individual's attitude towards the self and other people from the standpoint of humanism and humanity.

Taking into account the results from monitoring pupil-athletes' knowledge, it is found that today not all of them have consolidated knowledge. Therefore, the modern school must rethink all factors of secondary education, in particular consolidating pupils' knowledge. It was noted that in didactics the concept of "pupils' consolidated knowledge" is considered as a principle requiring that knowledge, abilities and skills acquired by pupils during the learning process and stored in memory for a long time can be reproduced at any time and used in different situations; a process that transforms objective social experience into personal achievement; results of educational and cognitive activities; quality of pupils' acquired knowledge.

The concept of "pupils' consolidated knowledge" is defined as comprehension and memorization of educational material based on activization of mental processes (memory, thinking, attention), through which structuration and systematization of educational information, its reproduction and application to educational activities take place.

The knowledge of humanities is defined as a set of information on the man in the context of spiritual, intellectual, cultural, moral and social activities, existence, culture, norms of morality, language, welfare, rights and duties through the prism of concepts, views, judgements, theories, law, ideas. It is proved that this knowledge contributes to acquiring moral and ethical norms, developing value orientations and personal qualities, obtaining valuable knowledge of human nature, enhancing cognitive processes, exploring one's inner world and, therefore, nurturing the "real human being" feeling.

It is stated that adolescence is, on the one hand, favourable for mastering humanities due to intellectual and mental transformations, which are inherent in this age, and, on the other hand, is problematic, since the imbalance between psychological and social maturity of adolescents, physiological and psychological changes negatively influence the process of consolidating knowledge. Thus, this process should be pedagogically supported.

The authors have justified theoretically and verified experimentally the system of assignments, which share the aim, objectives, ways of motivating pupil-athletes and requirements for consolidated knowledge of humanities, some assignments with varying levels of complexity aimed at memorizing,

preserving and reproducing educational material based on prevailing types of pupils' memory and implemented in the classroom in accordance with its didactic aim.

It is experimentally verified that implementing the system of assignments aimed at consolidating pupil-athletes' knowledge of humanities greatly influences the process of mastering consolidated knowledge. Thus, the indicator of creative nature in acquiring knowledge of humanities has increased (+ 19,1%) in the experimental group. Pupils expanded and deepened their knowledge of humanities, most of them began to use acquired knowledge in new situations, highlight the main points, justify, analyze, synthesize, generalize, associate, apply and reproduce oral and written knowledge in practice, focus on the main events, patterns in linguistic and grammatical phenomena, independently find minor mistakes and adjust answers, carry out self-control.

Analyzing the results from the experiment, one can conclude that the designed system of assignments aimed at consolidating pupil-athletes' knowledge of humanities has contributed to increasing the levels of overall student performance, their responsibility and discipline.

### Acknowledgement

The pedagogical experiment was conducted at the premises of secondary schools in Ukraine (Kyiv, Izmail, Vinnytsia, Kharkiv, Lviv, Mariupol). The experimental group involved 142 respondents and the control group 150 respondents. All co-authors participated in the collection of experimental data and their processing in the cities of residence. A system of educational tasks was implemented. It was aimed at ensuring the strength of student athletes' knowledge of humanities. The authors were equally involved in the development and implementation of this system in schools at the place of residence. Inter-university conferences were held with the participation of all authors to test the innovative system of training student athletes.

#### References

Antonchenko, M. O. (2001). Ekspertni systemy yak zasib formuvannya yakisnykh znan uchniv 7-8 klasiv z predmetiv pryrodnychoho tsyklu [Expert systems as a means of developing in seventh- and eighth-graders quality knowledge of natural sciences]. (Abstract of PhD thesis). H. Skovoroda Kharkiv State Pedagogical University, Kharkiv. http://irbis-nbuv.gov.ua/cgi-bin/irbis\_nbuv/cgiirbis\_64.exe?C21COM=S&I21DBN=ARD&P21DBN=&S21FMT=JwU\_B&S21ALL=%28%3C.%3EU%3D%D0%91.%D1%8

- 0\$%3C.%3E%29&Z21ID=&S21SRW=dz&S21SRD=&S21STN=1&S21 REF=10&S21CNR=20
- Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., Martynets, L., Uchytel, I., Solovyov, V., Manzhos, E., Sheian, M., Alieksieiev, 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. http://efsupit.ro/images/stories/august2019/Art%20192.pdf
- Behas, L., Maksymchuk, B., Babii, I., Tsymbal-Slatvinska, S., Golub, N., Golub, V., Chepka, O., Lemeshchuk, M., Dychok, M., Nikitenko, A., Sarancha, I., & Maksymchuk, I. (2019). The influence of tempo rhythmic organization of speech during gaming and theatrical activities on correction of stammering in children. *Journal of Physical Education and Sport*, 19(4), 1333–1340. https://www.efsupit.ro/images/stories/august2019/Art%20193.pdf
- 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. <a href="http://efsupit.ro/images/stories/septembrie2019/Art%20230.pdf">http://efsupit.ro/images/stories/septembrie2019/Art%20230.pdf</a>
- Blech, H. O. (2007). Dydaktychni umovy zabezpechennya yakosti znan z pryrodoznavstva u rozumovo vidstalykh uchniv [Didactic conditions for ensuring mentally challenged pupils' quality knowledge of natural sciences]. (Abstract of PhD thesis). The Institute for Special Pedagogy of the Academy of Pedagogical Sciences of Ukraine, Kyiv. http://www.irbis-nbuv.gov.ua/cgi-bin/irbis\_nbuv/cgiirbis\_64.exe?Z21ID=&I21DBN=REF&P21DBN=RE F&S21STN=1&S21REF=10&S21FMT=fullwebr&C21COM=S&S21CNR =20&S21P01=0&S21P02=0&S21P03=A=&S21COLORTERMS=1&S21 STR=%D0%91%D0%BB%D0%B5%D1%87%20%D0%93\$
- Bocharova, S. P. (2007). *Psikhologiya i pamyat: teoriya i praktika dlya obucheniya i rahoty* [Psychology and memory: theory and practice for teaching and working]. Kharkiv: The Centre for Humanities. https://www.yakaboo.ua/psihologija-pamjati-1537869.html
- Byvalkevych, L., Yefremova, O., & Hryshchenko, S. (2020). Developing technical creativity in future engineering educators. *Revista Romaneasca pentru Educatie Multidimensionala*, 12(1), 162–175. https://doi.org/10.18662/rrem/206
- Danilov, M. A. (1960). *Protsess obucheniya v sovetskoy shkol*e [The learning process in Soviet school]. Moscow: Uchpedgiz. http://elib.gnpbu.ru/textpage/download/html/?bookhl=&book=danilov\_protsess-obucheniya--shkole\_1960

- Galperin, P. Y. (1965). Osnovnyye rezultaty issledovaniy po probleme "formirovaniye umstvennykh deystviy i ponyatiy" [The research findings on the problem of developing mental actions and concepts]. (Postdoctoral thesis). Moscow State University, Moscow. http://psy-science-council.ru/dissertaions/arkhiv-dissertatsiy/detail.php?dissertaion=2137
- 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.

  <a href="http://lumenpublishing.com/journals/index.php/rrem/article/view/1604/pdf">http://lumenpublishing.com/journals/index.php/rrem/article/view/1604/pdf</a>
- 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. <a href="http://efsupit.ro/images/stories/decembrie2018/Art%20344.pdf">http://efsupit.ro/images/stories/decembrie2018/Art%20344.pdf</a>
- Kabanova-Meller, E. N. (1981). *Uchebnaya deyatelnost i razvivayushcheye obucheniye* [Educational activity and development education]. Moscow: Pedagogy. https://www.twirpx.com/file/361165/
- Kaletnik, G. M., Zabolotnyi, G. M., & Kozlovskyi, S. V. (2011). Innovatsiyni modeli upravlinnya ctratehichnym ekonomichnym potentsialom cuchasnykh ekonomichnykh system [Innovative models of management in strategic economic potential modern economic systems]. *Aktualni problemy ekonomiky* [Actual Problems of Economics], *4(118)*, 3–11. http://socrates.vsau.org/repository/card.php?lang=uk&id=24702
- Kazantseva, I. (2001). Tvorcha diyalnist yak zasib formuvannya mitsnosti znan shkolyariv [Creative activity as a means of developing pupils' consolidated knowledge]. Ridna shkola [Native School], 2, 26–28. http://www.library.univ.kiev.ua/ukr/elcat/new/detail.php3?doc\_id=6068 7
- Komogorova, M. I. (2011a). Mitsnist zasvoyennya znan shkolyariv yak dydaktychnyy pryntsyp navchannya [Consolidated knowledge of pupils as a didactic principle in education]. *Zbirnyk naukovykh prats Berdyanskoho derzhavnoho pedahohichnoho universytetu (Pedahohichni nauky)* [The Collection of Scientific Works in Berdiansk State Pedagogical University (Pedagogical Sciences)[, 2, 128–133. http://sites.znu.edu.ua/interactiv.edu.lab//Stattidoubl/Terno-SRCT.pdf
- Komogorova, M. I. (2011b). Zmistova kharakterystyka humanitarnykh znan [The content overview of humanities knowledge]. *Pedahohika formuvannya tvorchoyi osobystosti u vyshchiy i zahalnoosvitniy shkolakh* [Pedagogy for Developing

- Creative Personality in Higher and Secondary Education], *15(68)*, 140–143. http://pedagogy-journal.kpu.zp.ua/archive/2011/15/26.pdf
- Komogorova, M. I. (2011c). Systema trenuvalnykh zavdan ta vprav, yaka zabezpechuye mitsnist znan u protsesi navchannya pidlitkiv [The system of assignments and exercises that ensure consolidated knowledge while teaching adolescents]. *Pedahohika formuvannya tvorchoyi osobystosti u vyshchiy i zahalnoosvitniy shkolakh* [Pedagogy for Developing Creative Personality in Higher and Secondary Education], 14(67), 171–175. http://www.pedagogy-journal.kpu.zp.ua/archive/2011/14/29.pdf
- Koziuk, V., Hayda, Y., Dluhopolskyi, O., & Kozlovskyi, S. (2020). Ecological performance: ethnic fragmentation versus governance quality and sustainable development. *Problemy ekorozwoju Problems of sustainable development*, 15(1), 53–64. http://ekorozwoj.pol.lublin.pl/no29/h.pdf.
- Kozlovskyi, S. V. (2010). Ekonomichna polityka yak bazovyy element mekhanizmu upravlinnya faktoramy rozvytku suchasnykh ekonomichnykh system [Economic policy as a basic element for the mechanism of managing development factors in contemporary economic systems]. *Aktualni problemy ekonomiky* [Actual Problems of Economics], 1(103), 13–20. https://www.researchgate.net/publication/240522058\_Governance\_of\_early\_childhood\_education\_and\_care\_recent\_developments\_in\_OECD\_countries
- Kraevskiy, V. V. (2003). Obshchiye osnovy pedagogiki [General principles of pedagogy]. Moscow: Academy. http://www.pavelobraztsov.narod.ru/pos/pos15.pdf
- Krutetskiy, V. A. (1976). *Psikhologiya obucheniya i vospitaniya shkolnikov* [Psychology of learning and education of schoolchildren]. Moscow: Enlightenment. http://www.libex.ru/detail/book360799.html
- Lerner, I. Y. (1978). *Kachestva znaniy uchashchikhsya. Kakimi oni dolzhny byt?* [Qualities of pupils' knowledge. What should it be like?]. Moscow: Knowledge. https://www.twirpx.com/file/382162/
- Lozova, V. I., & Trotsko, H. V. (2002). *Teoretychni osnovy vykhovannya i navchannya* [Theoretical foundations of education]. (2nd ed.). Kharkiv: OVS. https://www.twirpx.com/file/1313889/
- Maksymchuk, B. A. (2010). Pidhotovka maybutnoho vchytelya pochatkovykh klasiv do fizychnoho vykhovannya [Training future primary school teacher for physical education]. Vinnytsia:

  Planer. https://scholar.google.com.ua/citations?user=PNKFmLsAAAAJ&hl=uk
- Maksymchuk, I., Maksymchuk, B., Frytsiuk, V., Matviichuk, T., Demchenko, I., Babii, I., Tsymbal-Slatvinska, S., Nikitenko, A., Bilan, V., Sitovskyi, 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. http://efsupit.ro/images/stories/iunie2018/Art%20119.pdf
- Markova, A. K., Matis, T. A., & Orlov, A. B. (1990). Formirovaniye motivatsii ucheniya [Enhancing motivation for learning]. Moscow: Enlightenment. https://www.twirpx.com/file/493619/
- Novikova, L. M. (2003). Formuvannya ekonomichnykh znan uchniv profilnykh klasiv v umovakh dovuzivskoyi pidhotovky [Developing pupils' economic knowledge in specialized classes under the conditions of pre-university training]. (PhD thesis). H. Skovoroda Kharkiv State Pedagogical University, Kharkiv. http://www.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%9D%D0%BE%D0%B2%D1%96%D0%BA%D0%BE%D0%B2%D0%B2%D0%BA%D0%BE%D0%B
- Sebalo, L., & Teslenko, T. (2020). Future teacher training for self-education activity in physical education at elementary school. *Revista Romaneasca pentru Educatie Multidimensionala*, 12(1), 105–119. http://lumenpublishing.com/journals/index.php/rrem/article/view/2314/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. https://journal.iitta.gov.ua/index.php/itlt/article/view/2561
- Sitovskyi, 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. http://repository.ldufk.edu.ua/handle/34606048/23502
- Talyzina, N. F. (1975). *Upravleniye protsessom usvoyeniya znaniy* [Managing knowledge acquisition]. Moscow: MGU. http://childpsy.ru/lib/books/id/8538.php
- Yevsieieva, O. V. (2006). Systema navchalnykh zavdan yak zasib formuvannya vmin piznavalnoyi diyalnosti u studentiv pryrodnychykh fakultetiv [System of educational tasks as a means of developing cognitive skills in natural sciences pupils]. (PhD thesis). The Institute for Pedagogy of the Academy of Pedagogical Sciences of Ukraine, Kyiv. http://www.disslib.org/systema-navchalnykh-zavdan-jak-zasib-formuvannja-vmin-piznavalnoyi-dialnosti-u.html
- Zinchenko, P. I. (1996). *Neproizvolnoye zapominaniye* [Involuntary memorization]. Moscow: Institute for Practical Psychology.

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http://lib.mgppu.ru/opacunicode/app/webroot/index.php?url=/notices/index/IdNotice:14298/Source:default

Zorina, L. Ya. (1976). *Sistemnost – kachestvo znaniy* [Systematicity as the quality of knowledge]. Moscow: Knowledge.

http://lib.mgppu.ru/opacunicode/app/webroot/index.php?url=/notices/index/IdNotice:17206/Source:default