EXPERIMENTAL STUDY OF THE HEALTH PRESERVATION COMPETENCY OF THE FUTURE PRIMARY SCHOOL TEACHER

EXPERIMENTAL RESEARCH OF HEALTH-SAVING COMPETENCE OF PROSPECTIVE PRIMARY SCHOOL TEACHER

Abstract. The article deals with the program of experimental work; the results of the recording and forming stages are analyzed; the effectiveness of the model of future teacher training for the creation of health preservation environment at primary school and the pedagogical conditions for its implementation are determined and experimentally verified; the results of the experimental study are interpreted.

In the process of recording stage of experimental work it was found out that a number of disciplines of teacher training of the above mentioned direction have considerable potential for the formation of indices of his health preservation competency. Diagnostic part of the experiment has shown the lack of efficiency of the traditional organization of educational activities at the higher educational establishment in this direction.

The stage-by-stage program of experimental verification of the model of the future teacher's training for creating a health-preservation environment at primary school and pedagogical conditions for its implementation, which provided organizational and inductive, cognitive and activity, practical and general stages, were developed and implemented.

At all the stages, the system of educational, preventive-educative, diagnostic-correctional and ergonomic-infrastructure directions of the high school environment
construction was implemented, which ensured the formation of the components of the health preservation competency of future teachers in the experimental groups.

At the final stage of work for thorough interpretation of the experiment results, a comparison of the results of evaluation the formation of health preservation competency of students in control and experimental groups was made.

**Keywords:** primary school, health preservation environment, health-saving competence, pedagogical conditions.

**Introduction.** In accordance with the tasks of scientific research, the aim of the formation stage of the experiment had been realized. It was grounded in the experimental verification of the developed model’s effectiveness of prospective teacher training to create a health-saving environment of the primary school and the pedagogical conditions for its implementation. The formation stage of the experiment was conducted on the basis of the departments of prospective primary school teachers training in experimental higher education institutions.

Similar to the diagnostic part of the experiment ascertaining phase, we enrolled 321 students of the departments of prospective primary schools teacher training in experimental higher education institutions. Control groups consisted of 159 students and experimental groups was 162 students in the field of training 6.010102 Primary education. 24 teachers took part in the implementation of the pedagogical conditions of the study process. Being sophomores they began an experimental work in the second semester.

**Research.** Let us introduce a program of experimental verification of the effectiveness of the developed model of prospective primary school teacher training to create health-saving environment and pedagogical conditions for its implementation. From the standpoint of the substantiated methodological approaches (systemic, activity, competence, environmental and defined principles of scientific knowledge, general-didactic, specific) to the training of prospective primary school teacher for the creation of health-saving environment, the content and procedure of experimental work had been developed.

The program included three stages, which reproduced the logic of implementation of the developed model and the pedagogical conditions for its implementation: organizational and inductive, cognitive and activity, practical and generalization. The organizational and inductive stage of experimental work envisaged the formation of positive motivation and elementary knowledge of students on the creation of a health-saving environment of the primary school. The cognitive and activity stage was aimed at consolidating the positive motivation of students and assimilating the solid knowledge and skills of prospective teachers in order to create health-saving environment for primary school. At the practical and
generalization stage it was envisaged to systematize and deepen the knowledge and skills of students to create health-saving environment for primary school, to introduce them into the practical experience of prospective teachers and to control the effectiveness of training.

The resource support of experimental work on the basis of the substantiated methodological approaches, principles and stages of implementation of the developed model had been determined.

The main content of the experimental work at the organizational and inductive stage was realized in the process of teaching the following disciplines: "Physical Culture", "Fundamentals of Valeology" (in some experimental institutions of higher education – "Fundamentals of Medical Knowledge and Children's Health Care"), "Didactics", "Theory and Methodology of Education", and extra-curricular forms of physical culture and health activities of students (classes in sports sections) and tutoring.

The main content of experimental work at the cognitive and activity stage was realized in the process of teaching methods of teaching in the educational branch "Health and Physical Culture" – educational disciplines "Methodology of Teaching Health Fundamentals", "Physical Culture with the Teaching Method"; extra-curricular forms of physical culture and health activities of students (classes in sports sections) and tutoring (start-up project "Video Lectures for Health-Saving").

At the practical and generalization stage, the main resource for the provision of experimental work was the interdisciplinary course "Fundamentals of Creating Health-Saving Environment for Primary School", pedagogical practice of students, physical education and recreation activities (classes in sports sections).

The forms and methods of experimental work have been determined on the substantiated basis of the experimental verification of the model of prospective teacher training for the creation of health-saving environment of the primary school.

At the organizational and inductive stage of the experimental work, it was planned to use traditional and innovative forms of educational activity, in particular: lectures and practical classes based on the introduction of interactive teaching methods; block hours of a tutor in order to implement a program for the formation of productive coping strategies for prospective primary school teachers; classes in sports sections on the basis of health-saving monitoring, etc. Among selected traditional and innovative methods of interaction, we highlight the most effective methods of interactive learning at this stage ("Work in groups", "Aquarium", "Two-four - together", "Map of ideas / concepts", "Analysis of specific situations", educational and role-playing games, etc.), as well as training, practical-oriented pauses, information and discussion conversations, etc.
The cognitive-testing stage had been provided for the use of traditional and innovative forms of educational activity, in particular: lecture forms for presentation of educational material (binary lecture, lecture-visualization, controlled lecture, lecture with pauses, etc.); lectures and practical classes based on the introduction of empirical learning models (L. Joplin, K. Möllander); startup project "Video Lectures for Health-Saving "; hours of tutor; classes in sports sections on the basis of health-saving monitoring, etc. Among the innovative methods of interaction, it is planned to use methods of interactive learning ("Working in pairs", "Two - four -together", "Aquarium", "Round table", "Analysis of specific situations", "Changing position", "Microphone", "Unfinished sentence", etc.), training methods of interaction (training "Time management for students"), etc.

At the practical-generalization stage of the experimental work, it was envisaged to hold lectures and practical classes based on the model of empirical study by D. Kolb; infrastructure monitoring; occupations in sports sections on the basis of the third stage of health-saving monitoring, etc. The method of conducting lectures included the following forms: a lecture with planned errors, a lecture with pauses, problem lecture, a lecture on the model of empirical studies, etc. Among selected traditional and innovative methods of interaction, we highlight the most effective methods of interactive learning at this stage ("Discussion of the problem in the general circle", "Teaching-I study," "Work in pairs, "Role-play", etc.).

Experimental checking of the model of the prospective teacher's training for the creation of health-saving environment in primary school provided the implementation of certain pedagogical conditions. The logic of their implementation was determined by the methodology of experimental work and the objectives of its stages. Therefore, the pedagogical condition is the formation of a positive motivation of students to create health-saving environment of primary school on the basis of the choice of productive coping strategies. It was implemented at the organizational and inductive stage as an effective way of forming the motivation of the prospective teachers to the investigated activity. The pedagogical condition is systematization and deepening of knowledge and skills of the teachers, which provide the creation of health-saving environment of primary school, based on the integration of educational courses and the introduction of empirical learning systems, was the basis of experimental work in the cognitive-activity and the practical-generalization phase. Having substantiated the importance of designing a practice-oriented health-saving environment of higher education institutions, which provides the optimal combination of forms, methods and means of educational, professional and physical culture and health activities of students, this pedagogical condition has been implemented at all stages of experimental work.

According to the definite result of the training of the prospective teacher for the creation of health-saving environment in primary school and a theoretically
grounded model of the investigated process, the result of experimental work is the following: the formed health-saving competence of the future primary school teacher.

Before the beginning of the experimental work, conversations were held with the teachers who provided assistance in carrying out the research tasks. The results of the ascertaining phase of the experiment were discussed. They were informed about the methods of realization of theoretically grounded conditions of the simulated process. The methodical materials had been provided, which in the future became the basis of the practical adviser "Creation of a health-saving environment of primary school".

In more detail, we present the course of the formation stage of the experiment in accordance with the stages of experimental verification of the model of prospective teacher training for creation of health-saving environment of the primary school and the pedagogical conditions for its implementation. Formation of the motivation of the prospective teachers to create health-saving environment at the primary school at the organizational and inductive stage occurred during the introduction of an improved system of training sessions, hours of tutoring, physical culture and recreation activities.

In order to form prospective teachers’ motivation and the choice of productive coping strategies of behaviour, together with the group tutors, a study was conducted on students’ physical and social well-being, as well as on existing foreign methods of diagnosing coping strategies for exiting difficult life and educational-professional situations (screening methodology of coping mechanisms diagnosed by E. Hayme in the adaptation of L. Wasserman). The most common coping strategies of student’s behaviour in cognitive, emotional and behavioural spheres were determined.

Having considered the conducted diagnosis and the research conclusions, the author stated that coping resources and coping strategies are the result of lessons learned, and consistent and methodically competent training of adaptive coping behaviour skills. It includes the formation of appropriate coping resources and coping strategies, and is an effective direction of primary psychological and pedagogical prevention of personality behaviour. We have developed a program of preventive actions of students in order to form productive copying strategies for future behaviour in situations of intellectual testing and stress caused by events in professional training. The result of the implementation of such a program was seen after students had generalized a block of their own productive coping strategies, which corresponded to psychological peculiarities, and the developed skills of their manifestation.

The efficiency of a coping strategy is conditioned by the development of arbitrary regulation skills. It is understood as a complex process that functions as a
unity of two levels. On the one hand, this is the direct control of the personality of the behavioural act at all stages of its deployment; on the other hand, it is the act of self-control and will. We have directed our actions towards the formation of positive habits or behavioural skills in situations that may be caused by educational or health-saving activities.

Students were asked to put into their own blocks the following productive coping strategies: "problem solving", "social support search", "self-motivation", "information search", "compliance with the chosen action plan", etc., and the formation of their skills application has begun. The development of practical examples of actions in difficult educational and professional situations and intellectual tests was carried out on the basis of analysis and situations-playing, training techniques and role-playing games.

Particular attention was paid to the strategy of "social support search", because it is an active behavioural strategy, in which a person is asked for help and support to the environment (families, friends, and meaningful people) for the effective solution of the problem. Work was carried out on the necessity of using this coping strategy in training; the confidence of teachers and tutors as equal subjects of interaction was formed. At the same time, we stated the need to have teachers mastered the skills of psychological and pedagogical support, which is carried out in the environment of institutions of higher education through the means of open dialogue and cooperation on the basis of subject-subjectivity.

Since the scientists attribute the person's motivation to success and overcome difficulties and stress, individual work was aimed at forming the motives of readiness for future professional activity and its component – the creation of a health-saving environment of the primary school and the need for success achievement in it. Such experimental work was an integral part of the implementation of the prophylactic and educational direction of creation a practice-oriented health-saving environment of higher education institutions. Regarding the implementation of the educational direction it is indicated that we have improved the curricula and the content of the subjects, which were under the experimental work. The aim was also to form positive motivation and elementary knowledge of students about creating a health-saving environment of primary school.

Practice-oriented pauses were initiated during the "Physical Culture" courses. They were used to motivate students to lead a healthy lifestyle and strive for its formation among junior pupils and other subjects of educational interaction in primary school; as well as the mastery of knowledge on the basic concepts of health-saving pedagogy, etc. The development of personal and professional qualities of the prospective teacher was laid in the basis of cooperative forms of physical culture and health interaction. Constant creation and "reinforcement" of the situation of success in the implementation of physical exercises provided students'
orientation to improve their own health-saving experience. Health-saving technologies (providing motor activity, vitaminy, and healthy nutrition) and health (tempering, gymnastics), etc. have been widespread used.

In order to test the model of the prospective primary school teacher's training to create a health-saving environment of the primary school, the content and methods of teaching certain topics of such disciplines as "Didactics" and "Theory and Methodology of Education" were improved. The key task of the implemented changes is the formation of a cognitive interest in the process of creating the environment in primary school.

In the process of studying the discipline "Theory and Methodology of Education", the content of such topics as "Basic directions of education", "Forms and methods of education", "Organization of tutor's work in primary school", etc., is developed, on the basis of expanding information about the peculiarities of educational interaction with health-saving effect.

A new theme "Organization of the primary school educational environment based on the idea of polysubjectivity and health-saving" was introduced. It formed the students' understanding of the process of creating the environment at primary school as a joint active polysubject activity of the participants of educational interaction at the initial stage of education. Practical lessons on this topic took place in the form of presenting their own developments of educational activities involving students, parents of interested persons, conducted with the aim of creating a health-saving environment.

The topics of micro researches as individual educational-research tasks on the analysed pedagogical disciplines are expanded on the basis of inclusion of topics aimed at mastering students' knowledge on the basic notions of health-saving pedagogy and pedagogical design, in particular on the forms, methods and means of designing the environment of the initial stage of education. The educational course "Fundamentals of Valeology" (in some institutions of higher education under experiment - "Fundamentals of medical knowledge and children's health care") played a special role in students' motivation to create a health-saving environment of primary school and mastering the basics of health-saving pedagogy.

Since all the topics of this discipline and their contents are directed at the realization of the tasks of our research, according to the determined ways of improving the research process, we have modernized the ways of organizing the practical part of the course on the basis of the use of methods that have a practical orientation and are based on interaction of all participants in the educational environment. In order to implement the diagnostic and correctional direction of creating a practice-oriented health-saving environment of higher education establishments, a health-saving monitoring was carried out during "Physical Culture" course. It included: diagnosing the health status of students of
experimental groups (methodology "Determining the degree of health" Ya. Vainbaum; the level of development of their physical qualities (according to T. Krutsevyч, H. Bezverkhnia); satisfaction or dissatisfaction with their bodies; awareness of treatment and prevention measures and involvement to physical training. In order to correct the motivation and health-saving experience the students had been involved in the sports and recreation activities: athletics competitions, rector’s cup for mini-football, sports events on World Health Day at the university, etc.

Thus, the implementation of the tasks of the organizational and inductive stage of experimental work contributed to the formation of positive motivation of students to create a health-saving environment of primary school. It also ensured the development of indicators of motivational and personal components of the health-saving competence of prospective primary school teachers. The development of cognitive interest in the implementation of health-saving idea in primary school initiated the formation of the students' need for mastering the knowledge and skills necessary for constructing the environmental interaction "teacher - student - parents" on the basis of health-saving.

The cognitive-activity stage of experimental work included consolidating the positive motivation of students and assimilating the solid knowledge and skills of prospective teachers in order to create a health-saving environment of primary school. It was carried out on the basis of their systematization and deepening, integration of educational courses and the introduction of systems of empirical learning. We have improved the forms and methods of organizing educational interaction in the teaching process of the disciplines "Methodology of teaching the fundamentals of health" and "Physical culture with the teaching methodology".

Modern lecture forms for the presentation of educational material were used: binary lecture, lecture-visualization, leded lecture, and lecture with pauses. In the process of organizing the practical part of the course, we have changed the cycle of mastering the knowledge and skills of students on issues that have been subjected to individual study. The model of empirical study of K. Mellander was introduced.

It is important to note that during the application of this educational model, students were actively engaged in setting questions. By solving tasks, they assumed responsibility for the result that was not always predictable. The lecturer, as an instructor, must be ready to provide support to students, orient them to acquire the necessary knowledge for solving the task, and also create psychological comfort of interaction in order to fully open their capabilities.

In order to introduce a practical orientation of student learning in the process of teaching the course "Physical Culture and Methodology", we have improved the methods for presenting the lecture material and developed plans for practical classes based on the application of the model of empirical study by L. Joplin. The cycle of
work at lectures and practical classes was constructed according to the following algorithm: focusing → action → support → feedback → poll. Such an organization in the educational process ensured the continuous activity of students, motivated perception of the educational material, the formation of practical skills and skills of future health-saving activities.

Let's imagine the following solutions to the problem and implementation of the form of interaction between the subjects of higher education institutions environment (teachers, tutors, trainers, students, etc.) at this stage of experimental work with a view to constructing a practice-oriented health-saving environment of higher education institutions. Thus, the implementation of the ergonomic-infrastructure direction of the design of the environment included: systematic monitoring of compliance with the sanitary and hygienic conditions of educational process organization in higher education institutions; creation of psychological comfort of educational activity on the basis of mastering of alternative ways of organizing mental labour, self-reflection, time-management; improvement of the sports equipment base of the institution, etc.

In order to solve the tasks of the diagnostic and correctional direction of creating a practice-oriented health-saving environment of higher education institutions, a second stage of the health monitoring of students' experimental groups during the section sessions on different sports was conducted. Similarly to the first stage, it predicted: diagnosing the health status of students of experimental groups, the level of their physical qualities development, satisfaction or dissatisfaction with their body; determination of attraction to physical culture and health activity inside and outside the educational institution. After its completion, individual correction cards have been developed and work has been organized to stimulate their implementation and conduct joint control by students. The practice of conducting sports and recreational activities with the purpose of forming motivation and value systems for the development of the skills of physical culture and recreation activities have been continued. Students took part in the University traditional sports competition in Athletics, the Open University Volleyball competition, etc. These measures provided optimum motor activity of students, since physical education classes for students of this course are not provided for by the program of vocational training.

The prophylactic and educational direction of creating a practice-oriented health-saving environment of higher education institutions as a condition for implementing a model for a prospective teacher training for the research activity was implemented in the process of classroom teaching activities, non-auditory sectional sport courses, in terms of interaction with the tutor of the group, and in the process of individual work with future educators.
A startup project "Video Lectures for Health-Saving" was an innovative form of experimental work, provided by means of educational work of the researcher and the tutor in experimental groups. The main goal of the start-up project implementation is to strengthen students' motivation to lead a healthy lifestyle, to realize the importance of organizing the process of preserving and enhancing the participants' health in the future environmental interaction "teacher-student-parent" and initiating the integration of knowledge on health-saving pedagogy.

Each video lecture (once a month during the sixth semester of the training of the prospective primary school teachers) was modelled on the basis of the optimal combination of visual perception of information and its active discussion on the use of interactive methods: "Two - four - together", "Aquarium", "Round Table", "Situation Analysis", "Changing Position", "Microphone", "Unfinished Sentence", etc., and in the final lesson – the use of such method as the "Discussion in the Style of Television Show".

At the practical and generalization stages, an advanced system of forms and methods of teaching an integrated special course, pedagogical practice and classes in sports sections was implemented in order to systematize and deepen the knowledge, skills of students to create a health-saving environment of primary school, and introduce them into the practical experience of the prospective teachers. During the development of the interdisciplinary course "Fundamentals of Creating Health-Saving Environment in the Primary School" it was clarified that the practice of introducing special courses in most of the experimental groups is known, which, on the one hand, facilitated the preparation of students to get acquainted with the elective course, and on the other – complicated the selection of forms and methods of work for the purpose of effective improvement of the system of professional training. In accordance with the program of experimental work, the system of empirical studies of D. Kolb was defined as the basis for its implementation.

The thematic plan of the special course was developed in accordance with the substantiated scientific foundations of the creation of a health-saving environment in primary school and presented in the following activities: classroom work (lectures, practical classes); extra-curricular work (independent and individual work). The program of the special course is calculated for only 36 hours, including 8 hours – lectures, 10 hours – practical classes, 8 hours – independent and 10 hours – individual work. The comprehensive goal of the implementation of the developed special course is represented by four blocks (inductive, informational, methodical, reflexive), which correlates with the components of the health-saving competence of the prospective primary school teachers.

The peculiarity of the special course grounds on the students' systematization and generalization of knowledge and skills of creating a health-saving environment of primary school. It was carried out on the basis of the practice-oriented activity of
interaction subjects, which was combined with simultaneous (dual) practical implementation in the primary school system during the pedagogical practice. In the process of the lecture course, the forms of lectures that provide active interaction of subjects in the educational process were used: lecture with planned errors, lecture with pauses, problem lecture, and lecture on the model of empirical study.

Practical classes that have been transformed in the context of the implementation of the cycle of empirical studies by the model of D. Kolb deserve particular attention. Such organization of work provided a constant motivation of students to the educational process "through experience", the step-by-step formation of practical skills to create a health-saving environment of primary school: educational, diagnostic, hygienic, inclusive, spatial and created psychological and comfortable conditions for the reflection of educational and professional activities.

The developed and implemented interdisciplinary special course as a generalizing form of prospective teachers for the creation of a health-saving environment in primary school also envisaged the fulfilment of tasks for independent work. It had to be implemented during the pedagogical practice and the individual educational-research task: "My experience in creating a health-saving environment in primary school" in form of portfolio.

Such comprehensive work on the introduction of an interdisciplinary course and advanced forms of work in practice contributed to the implementation of the preventive-educational and educational directions for the creation of a practice-oriented health-saving environment of higher education institutions. Consequently, during the three stages of experimental work, the effectiveness of the model of future teacher training for the creation of a health-saving environment in the primary school in accordance with the developed program of the experiment has been checked. New ways of forming the motivation of students and their constructive actions on the basis of the choice of productive coping strategies have been tested. We improved forms, methods and ways of the prospective primary school teachers training to create a health-saving environment based on the integration of educational courses and introduction of empirical education system. Educational, preventive-educational, diagnostic-correction and ergonomic-infrastructure directions for the design of a practice-oriented health-saving environment of higher education institutions, which ensured the optimal combination of forms, methods and means of educational-professional and physical education and health activities of students have been implemented.

Discussion. Let’s consider the results of determining the level of health-saving competence development among the prospective primary school teachers in experimental higher education institutions.

Diagnostics of the motivational component of the health-saving competence among students in control and experimental groups were performed using the
following research techniques: professional motivation research (K. Zemphir, modified by A. Rean); "Value Orientations" technique (M. Rokich); modified scale to assess motivation for professional and health saving activities by A. Karelin; diagnostics of motivation for success in personality by T. Ehlers; appropriate surveys. The research findings were enforced with the results of pedagogical observation.

The comparison of health saving competence formation among students in control and experimental groups according to the incentive and motivational criterion demonstrates the differences in competence indicators. Thus, according to this criterion the reproductive level of the competence was identified in 16.1 % of students in the experimental group (EG), whereas in the control group (CG), this level stands at 23.9%. Partially exploratory level was found in 30.2% of students in the EG and in 41.5 % of students in the CG; productive – in 35.2% of students in the EG and 23.3 % of students in the CG; professional and creative – in 18.5% of students in the EG and in 11.3 % of students in the CG.

The most significant changes among the EG students were recorded according to the following indicators: the formation of interest and positive attitudes both to primary school teacher profession and to such its component as health saving activities in the "teacher – student – parents" liaison mechanism; motivation to acquire health-saving technologies and their practical use at primary school. At the same time changes in motivation among students in the CG were mainly connected with professional activities, rather than with its health-saving component.

Diagnostic of the indicators of the cognitive component of health-saving competence among students in the control and experimental groups according to the epistemological and information criterion has also confirmed our assumption about the effectiveness of the experiment. The research was conducted with the help of the following tools: questionnaire to check awareness of the basic concepts of health-saving pedagogy; test to determine the level of students’ knowledge about health; test to determine the prospective teachers’ awareness of the content, directions, forms, methods and technology of creating a health-saving environment at primary schools.

The posttest in the experimental groups demonstrated systemic level of knowledge about the implementation of the main directions of the teaching activities aiming at creating health-saving environment in the "teacher – student – parents" system, knowledge of forms, methods, technologies and tools for creating health-saving environment at primary schools. The effectiveness of the training is reflected in the results of the tests. The following distribution of levels was gained among students of the EG: professional and creative level - 17.3%, productive level - 22.6 %, partially exploratory level - 40.1%, reproductive level - 21.0%. The respective levels among students of the CG were distributed as follows: professional
and creative level - 10.7%, productive level - 22.0 %, partially exploratory level - 42.1%, reproductive level - 22.5%. It should be noted that the abovementioned knowledge was mainly focused on physical, mental, spiritual and social health of primary school students together with the factors influencing its preservation, as well as on the methods of the health status and health-saving competence diagnosis among those involved in the educational process.

The development of the activity component of the prospective teachers’ health-saving competence was measured on the basis of a set of tasks according to certain groups of skills, namely educational, instructional, diagnostic, inclusive and spacial.

According to the activity-based criterion, 14.2% of respondents in the EG and 6.9% of respondents in the CG were found to have a professional and creative level of the competence. Productive level was obtained by 31.5% of students in the EG and 22.1% of students in the CG. The rates for partially exploratory level were 34.1% and 42.1% for the EG and CG respectively. Reproductive level was observed in 20.4% of EG and in 28.9% of respondents in the CG (Table 3.13).

Analysis of the diagnostic results according to the activity-based criterion demonstrates the influence of experimental training on the emergence of the competence under investigation. These results were distinctly significant in all the components, which can be considered quite a positive matter due to the fact that the previously performed activities were entirely practice-oriented.

It’s worth noting that students in the experimental groups demonstrated a significantly better level of inclusive, spatial and diagnostic skills than students in the control groups. This fact can be attributed to the lack of impact on their development if compared with the traditional way to organize the professional training of prospective primary school teachers.

Diagnostics of the motivational component of the health saving competence among students in control and experimental groups was performed using the following research techniques: "Health Attitude Index" method (S. Deryabo, V. Yasvin) (for 2nd year students only); "My Actions Regarding My Own Health Care" questionnaire; diagnostics of the pedagogical reflection level (according to A. Kalashnikova); diagnostics of personal self-regulation (according to A. Shostroma’s questionnaire), diagnostics and questionnaire of personality and professionally relevant qualities; pedagogical observation.

Fig. 1. presents a graphic comparison of test results in control and experimental groups according to reflexive and health-saving criterion during the ascertaining and after the formation stages of the experiment.
Fig. 1. Dynamics of health-saving competence development among students in control and experimental groups according to the reflexive and health-saving criterion

Analysis of the research data proved the successful realization of the tasks set for experimental work, the formation of orientation of students for a healthy lifestyle and the ability to improve their own healthcare-saving experience, the development of their personal and professional qualities. Significant changes have occurred in the indicators of cognitive and activity components of health-saving competence among students of experimental groups. However, the effectiveness of forming processes is different. Students of the experimental group were distributed as follows: reproductive level - 16.1%, partially exploratory level - 30.2%, productive level - 35.2%, professional and creative level - 18.5%. The control group students showed the following results: reproductive level - 24.5%, partially exploratory level - 40.9%, productive level - 23.3%, professional and creative level - 11.3%. These results prove that training to create a health-saving environment was more effective in experimental groups.

Table 1 shows changes in rates of health-saving competence development in prospective primary school teachers according to the results of ascertaining and formation stages of experiment.

<table>
<thead>
<tr>
<th>Level</th>
<th>Control Groups (CG)</th>
<th>Experimental Groups (EG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td></td>
<td>Qty</td>
<td>%</td>
</tr>
<tr>
<td>High</td>
<td>6</td>
<td>3,8</td>
</tr>
<tr>
<td>Sufficient</td>
<td>19</td>
<td>11,9</td>
</tr>
<tr>
<td>Average</td>
<td>66</td>
<td>41,5</td>
</tr>
<tr>
<td>Low</td>
<td>68</td>
<td>42,8</td>
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Therefore, the analysis of the presented data shows that changes took place according to all indicators of health-saving competence development among students both in the control and experimental groups, but its significance is distinctly different, which is confirmed by quantitative and qualitative indicators.

The posttest among students in experimental groups demonstrated not only a conscious intention to create a health-saving environment, but what is more important a professionally sufficient ability to introduce appropriate health-saving interaction into primary school practices. Whereas students in control groups recognized the acquisition of knowledge on creation of a health-saving environment as the main result of the training.

Quantitative and qualitative comparative analysis of the results of the forming stage of the experiment makes it possible to draw a conclusion about the positive dynamics in the development of the competence under consideration among the students in experimental groups. Thus, professional and creative level of the competence development was found in 18.5% of students. The respective results for productive level made up 35.2% of participants. Both figures proved the students’ ability to create a health-saving environment at high and sufficient levels.

References:


