

Methodology of a pedagogical experiment on the formation of readiness for teamwork of future teachers of higher educational institutions

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Abstract. The paper provides an analysis of the results of the experimental examination of pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork. The main stages of the experiment, namely, statement of the problem, formative and assessment, are described; the criteria for the formation of readiness of future teachers of higher education institutions for teamwork are specified: motivational-value, cognitive, activity-functional, communicative, personal, as well as their relevant indicators. It is noted that the formation of readiness of future teachers of higher education institutions for teamwork is assessed on a three-level scale: low, medium and high levels. The effectiveness of the suggested pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork was confirmed.

1 Introduction

Problem statement. At the present stage of development of the education system in Ukraine, future teachers of higher education institutions must have certain competencies that will ensure their effective functioning in the modern world. Among them, an adequate assessment of specific situations, quick adaptation to new conditions, an effective response to changes in the external environment, a high quality interpretation of information coming from society and the like are of special significance. However, most educational and scientific programmes do not provide for a high level of formation of these competencies. Typically, existing programmes envisage the possibility of future teachers of higher education institutions participating in team projects, mastering project technologies at a high level, but do not contribute to the development or improvement of specific teamwork skills, which are characterized by mobility in adapting to new conditions.

In connection with the above, of particular relevance is the problem of improving the professional training of future teachers of higher education institutions through instilling in them a thorough knowledge of the basics of team interaction ; the search for new constructive ideas to solve the problem of forecasting the development of student groups, the identification and solution of complex tasks and practical problems that arise in the process of team interaction, while applying innovative educational technologies.

It is such specialists who have to “quickly adapt to a new team and perform their part of the work at the team’s pace; establish a constructive dialogue with almost any person; reasonably convince colleagues of the correctness of the proposed solution; admit their mistakes and accept the point of view of another person; delegate authority; both manage and obey, depending on

the task assigned to the team; curb personal ambitions and help colleagues; manage their emotions and detach themselves from their likes and dislikes” [1].

Analysis of recent research and publications. Numerous studies are presented in the modern scientific literature, which create the basis for the formation of readiness of future teachers of higher education institutions for teamwork, in particular the following: various aspects of the formation of readiness for teamwork, namely: V. Zhuravlov [2] (psychological readiness of directors based on teamwork), M. Karpova [3] (readiness of future paediatricians for teamwork), A. Malysheva [4] (readiness of bilingual students for teamwork), Y. Mikhailova and A. Hitman [5] (readiness for teamwork when learning a foreign language), V. Okuneva [6] (teamwork competency of students), L. Savva, A. Hasanenکو and K. Shakhmaieva [7] (readiness of students of technical universities for teamwork).

However, given all the theoretical and practical significance and importance of these studies, it should be noted that the problem of the formation of readiness of future teachers of higher education institutions for teamwork within the framework of master’s degree programmes in the field of professional pedagogy has not been given enough attention.

Therefore, the formation of readiness of future teachers of higher education institutions for teamwork has a decidedly problematic character as a result of the insufficient development of the theory and practice of team interaction within the education system in Ukraine and the contradictions between the need for training future teachers of higher education institutions who are good team players and the prevailing administrative and organizational methods of managing student groups; between the need to develop students’ teams, students’ teamwork skills and the insufficient development of this theme within pedagogical science, the inadequate

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practical application of techniques as well as the inadequacy of pedagogical conditions aimed at improving this process.

To date, the success of the educational process in higher education institutions depends not only on the professionalism of teachers of higher education institutions, but also on the joint efforts of all participants of the educational process. This idea is corroborated by the words of R. Mukha that the result of an assignment is achieved in a much better way when the teacher and the students interact with each other, rather than act individually, since each person can make his or her personal contribution to a particular process to the best advantage [8].

Considering the fact that teamwork is important for academic, organizational and career success, it is necessary to instil teamwork skills in future teachers of higher education institutions. Therefore, the special introduction of pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork within the framework of master's degree programmes is relevant and expedient.

Given the above, **the aim of the paper** is to present a theoretical analysis and experimental examination of pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork within the framework of master's degree programmes.

2 Readiness of future teachers of higher education institutions for teamwork: content-component analysis

Before embarking on the analysis of the results of the experimental study of the problem, we consider it necessary to clarify the concepts of "teamwork", "readiness for teamwork" and "readiness of teachers of higher education institutions for teamwork", which we employ in this study.

As for the essence of such a phenomenon as "teamwork", it should be noted that it is a process of collaborative work among groups of people to achieve a goal and "means that people try to collaborate, taking advantage of their individual skills and providing constructive feedback, despite any personal conflict between them" [9]. The main goal of teamwork is to solve problem tasks by means of collective solution [4].

Consider the essence of the concept of "readiness for teamwork". Indeed, this phenomenon is considered by scientists as the familiarity with the methods of collaborative activity and the ability to apply knowledge to perform collaborative work in order to solve professional tasks (Y. Mikhailova and A. Hitman [5]); the integrative quality of an individual that is manifested in the collective activity and includes responsibility and harmonious cooperation in performing assigned tasks, self-control of role behaviour and strict compliance with the developed rules of team interaction (K. Shakhmaeva [10]). Therefore, readiness for teamwork entails certain competencies that allow team members to interact effectively in conditions of rapidly changing situations. It is important to note that "these skills are universal to a

certain extent, since they can be used in various areas of human life" [11].

Considering the above, it would be expedient to submit the author's definition of the concept "readiness of teachers of higher education institutions for teamwork". Thus, in our opinion, readiness of teachers of higher education institutions for teamwork is an integrative formation that represents the unity of a motivational-value attitude towards team interaction as part of the teacher's professional activity, a desire to expand and advance the knowledge of the team and its working principles, mastery of the methods and techniques of carrying out teamwork, a high level of communicative skills and emphasis on improving personal qualities that contribute to teamwork.

The specified type of readiness requires a detailed structural analysis, which entails consideration of the essence of each of its components. We have identified the components of the main phenomenon of the research, namely, readiness of teachers of higher education institutions for teamwork: motivational-value, cognitive, activity-functional, communicative and personal.

Let us analyze each of the components in more detail.

The rationale for *the motivational-value component* is based on the assertion that any human activity is caused by certain motives. The selected component envisages: the awareness of the benefits of personal significance of collaborative activities; readiness to bear the responsibility for decisions taken; awareness of the need for participation and personal understanding of what is taking place; awareness of one's individual abilities and personal strengths and weaknesses [5]; intrinsic motivation for teamwork, a conscious desire for self-realisation within a team, interest in teamwork.

The formation of readiness of future directors of higher education institutions for teamwork is regarded as the formation of personal motivational readiness of the latter for such activities, which reflect interests of individuals, the desire for teamwork and improvement of the knowledge and skills that ensure effective teamwork.

The *cognitive component* was put forward within the framework of readiness of teachers of higher education institutions for teamwork in accordance with "the theory of cognitive activity of individuals; provisions on the crucial role of theoretical knowledge in the field of development of individuals; patterns, principles and rules of acquisition of theoretical knowledge" [12]. Teachers of higher education institutions acquire knowledge of the problematics of teamwork. "Knowledge becomes a prerequisite for identifying and solving problems in accordance with personal needs and interests" [12]. Therefore, knowledge can be represented as information, an idea of the general principles of organization of teamwork in the educational process.

The implementation of this component is possible, in our opinion, through the analysis and understanding by future teachers of higher education institutions of the following concepts: "team", "team building", "team interaction", "teamwork", as well as through understanding the differences between individual work and teamwork.

The *activity-functional component* is a combination of skills that ensure effective teamwork. We will consider these types of skills as integrative personality traits, which are based on certain types of knowledge and manifested in effective teamwork abilities.

Taking into account the opinion of the researchers who were professionally engaged in problems of team interaction, we have identified the following skills that ensure effective teamwork: cooperation with team members, planning and performance of teamwork, familiarity with the methods of collaborative activities, readiness for dynamic teamwork, ability to perform one's duties, fulfil one's functions in a timely and efficient manner.

From our point of view, the *communicative component* of readiness of teachers of higher education institutions for teamwork requires the formation of communicative teamwork skills. The communicative component includes: adherence to communication etiquette, ability to resolve conflict situations, ability to negotiate, public speaking skills.

It is impossible to achieve a high level of readiness for teamwork without the formation of a *personal component*, which envisages appropriate personal qualities of teachers of higher education institutions. We have identified the following personal qualities in the content of this component:

- benevolence (a fundamental moral concept characterized by the willingness and ability of individuals to consciously do something good, which is primarily associated with the ability to rejoice and feel pity, respond to the feelings of others and keep the soul open [13]);
- tolerance (moral quality, which is expressed in the desire to achieve mutual understanding and coherence of diverse interests and views without applying any pressure, by means of explanation and persuasion [14]);
- social activity (integrative quality, which is expressed in independent, self-motivated, purposeful actions of individuals aimed at conscious interaction with the social environment and is carried out as part of the internal (mental) and external (practical) efforts to transform their “ego” and sociocultural environment in accordance with the interests of society [15]);
- stress resistance (the ability to overcome difficulties, keep one's emotions, exercise restraint and tact; a combination of all personal qualities of a particular individual, which allows a person to maintain self-control and working capacity in unfavourable environmental conditions, handling significant intellectual, volitional and emotional stress well without any harmful consequences for activities of other people and his/her own health [16]).

Summing up, we note that we have identified the components and criteria of the main subject of the study, namely, readiness of teachers of higher education institutions for teamwork: *motivational-value* (indicators: awareness of the value and overall goal of teamwork; focus on teamwork), *cognitive* (indicators: a combination of knowledge about the team, principles of its work, the person's role in the team), *activity-*

functional (indicators: cooperation with team members, planning and performance of teamwork, familiarity with the methods of collaborative activities, readiness for dynamic teamwork, ability to perform one's duties, fulfil one's functions in a timely and efficient manner), *communicative* (indicators: adherence to communication etiquette, ability to resolve conflict situations, ability to negotiate, public speaking skills) and *personal* (indicators: benevolence, tolerance, social activity, stress resistance).

3 Pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork: description and implementation

We have identified the following pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork: *topics on the theory and practice of organisation of teamwork are to be included in the study programmes of various disciplines; cooperative learning technologies are to be used in class; extracurricular activity programmes aimed at preparing future teachers of higher education institutions for teamwork are to be devised and implemented.*

The substantiation of pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork was carried out taking into account the following factors: strategic requirements of the modern higher education system; peculiarities of scientific and pedagogical activities and requirements for the professional level of readiness of teachers of higher education institutions; peculiarities of the professional training of future teachers of higher education institutions within the framework of master's degree programmes; types of teamwork skills; cognitive needs and interests of master's students in the field of team building; resource potential of higher education institutions.

We will explain in more detail the process of implementing pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork.

The first pedagogical condition is *to include topics on the theory and practice of organisation of teamwork in the study programmes of various disciplines*. This condition means that teachers should strive to direct the process of teaching academic disciplines towards the formation of readiness of master's students for teamwork while teaching each discipline under the educational and professional programme, namely “Higher Education Pedagogy”. This will allow master's students to gain their own teamwork experience in the educational process while studying in higher education institutions.

To this end, we have enriched the content of academic disciplines of a professional and practical character that relate to the normative and selective parts of the educational and professional programme “Pedagogy of Higher Education”, namely: “Pedagogy and Psychology of Higher Education”, “Personnel

Management. Conflict Management in Education”, “Innovative Technologies in Education”, “Professional and Pedagogical Communication”.

The enrichment of the content of academic disciplines was due to the expansion of the range of theoretical issues (Table 1).

Table 1. Improvements in the content of professional training of future teachers of higher education institutions

Academic discipline	Topics that enriched the content of the discipline
Pedagogy and Psychology of Higher Education	Teamwork efficiency
	Stages of team development
	Psychological aspects of teamwork in the educational process
	Peculiarities of team facilitation
Personnel Management. Conflict Management in Education	Leadership role in team building
	Team conflict and stress management
	Teamwork assessment
Innovative Technologies in Education	Cooperative learning technologies
	Facilitation technologies
Professional and Pedagogical Communication	Effective team communication
	Nonviolent team communication

As a result of the implementation of the first pedagogical condition, master's students should *know*: theoretical provisions for team building; concepts, principles and methods of effective teamwork; basic principles of team management; stages of team development and the basics of group dynamics; types and strategies of team interaction; the main differences between a team and a group; criteria for effective and ineffective teamwork; the role of teamwork for the successful leadership of teachers; content as well as the psychological basis for the formation of leadership within a team; ethical norms and rules of business communication in a team; *to be able to*: determine the relevant means and methods for team building; form students' teams; make plans regarding team development; create an incentive system for team members; coordinate the process of work implementation as well as team activities; create favourable conditions for teamwork; analyze the effectiveness and practicality of the use of team resources; analyze, evaluate and develop personal abilities in terms of effective teamwork; effectively manage conflict and stressful situations within a team; develop the basic qualities that are necessary for teamwork; understand and fulfil one's individual role in the team based on the objectives of its formation; perform effective communication within the team taking into account the rules of professional ethics and business etiquette.

Therefore, if future teachers of higher education institutions master knowledge and skills of the above

mentioned academic disciplines, that will become the basis for increasing the level of the formation of readiness for teamwork as well as for personal professional development of master's students.

In our opinion, another pedagogical condition that effectively contributes to the formation of readiness of future teachers of higher education institutions for teamwork is *the use of cooperative learning technologies*, which envisages organizing the work of master's students in small groups. According to S. Ratovska, studying in small groups plays an important role in higher education, as it has the following advantages: “the development of critical thinking and a number of additional skills: the ability to organize, negotiate, perform managerial functions, cooperate, resolve conflicts, manage one's own time; opportunities for social interaction between students as a means of sharing knowledge; pooling of knowledge and skills, moral support, motivation and responsibility among students, which reduces the fear of assessment” [17].

In characterizing and implementing the third pedagogical condition, we were guided by the principles of cooperative learning technology, suggested by N. Zaprudskiy [18], namely: beneficial interdependence of the participants, enhancing participants' face-to-face interaction; individual accountability (personal responsibility), social skills (teamwork skills), self-reflection or discussion of group work.

When implementing this pedagogical condition, the following methods were actively used in lectures and practical classes: training in achievement teams, Jigsaw, Jigsaw-2, “learning together”, structured contradiction, three-stage interviewing, enumeration of students, team support for individual learning, project method. Let us consider some of these methods.

Master's students were also involved in project work. The effectiveness of creating a system of educational projects aimed at the formation of readiness of future teachers of higher education institutions for teamwork has been proved in practical work with master's students. Thus, the project “Teamwork communication” (the training course “Professional Pedagogical Communication”) provided for the implementation of the following educational and methodological projects: a collection of situations for solving problems of interpersonal communication in the teamwork process within the “student-student”, “teacher-student” and “teacher-teacher” systems; a collection of exercises for the development of communicative skills; list of educational online resources on “Effective team communication”. The defence of the draft textbook “Readiness of teachers of higher education institutions for teamwork” became one of the stages in the study of the course “Pedagogy and Psychology of Higher Education”. Master's students presented in the appendices of their dissertations original technologies for the formation of readiness of future teachers of higher education institutions for teamwork, modern diagnostic methods and the like.

Another priority pedagogical condition is *the development and implementation of an extracurricular activity programme aimed at preparing future teachers*

of higher education institutions for teamwork. The development and implementation of the specially developed extracurricular activity programme in higher education institutions contribute to the formation of readiness of future teachers of higher education institutions for teamwork. The developed programme includes: the practical course “Effective team interaction”, which includes verbal and non-verbal methods of communication, professional and interpersonal communication; a seminar on training methods for teachers, Ph.D. and master’s students, entitled “Teamwork and communications”.

During the practical course “Effective team interaction”, master’s students had the opportunity “to comprehend the necessity for and value of the overall objectives as well as work towards the overall result; develop competencies for organising joint activities; understand the contribution of individuals to the team and the importance of achieving overall objectives; achieve mutual understanding and coherence among team members, emphasize the importance of flexibility; fulfil the potential of the team as a whole and each of its participants; master technologies of making joint decisions. The practical course included the following exercises: “Platform”, “Three”, “Bees, birds and snakes”, “Shipwreck”, “Newspaper that is shrinking”, “Law of harmony”, “Cheerful score”, “Building a circle”, “Speaking hands”, and also exercises that had to be performed in accordance with the model or instruction, exercises without a sample and detailed teacher’s instructions, etc.” [3].

The seminar on training methods for teachers, Ph.D. and master’s students “Teamwork and communications” focused on the interpersonal communication and development of skills that enable students to work in teams. The seminar covered the following issues: the power of diversity and its application in teamwork; providing and receiving constructive feedback; group dynamics and stages of team development; work on preventing conflicts and non-violent communication in teams; reflections on the teamwork experience; teamwork assessment.

The participants of the seminar had the opportunity to develop training activities that develop teamwork skills and abilities of students to provide and receive constructive feedback; evaluate teamwork development as well as cooperative and communicative skills; evaluate the effectiveness of training activities and make adjustments if necessary.

4 The results of the study

The coverage of the theoretical basis of the study and the substantiation of the pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork made it possible to directly approach the questions of empirical study of the problem with a description of the initial provisions of the experiment.

The experimental work was performed between 2015 and 2018. Three stages of scientific and pedagogical research were envisaged: research-theoretical, experimental and summarising-adjusting.

At the research-theoretical stage (2015), the analysis of the state of the problem of the research was carried out; the hypothesis, purpose and objectives were formulated; the theoretical basis of the process of the formation of readiness of future teachers of higher education institutions for teamwork was presented; experimental methods and the experimental research programme were determined; the quantitative and qualitative composition of the participants in the experiment was specified.

At the experimental stage (2016–2017), the main pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork were determined, the experimental examination of the proposed conditions and main activities was carried out, the dynamics of changes in the formation of readiness for teamwork of master’s students undertaking the educational-professional programme “Pedagogy of Higher Education”, specialty 011 “Educational and Pedagogical Sciences” were monitored.

At the summarising-adjusting stage (2018), the main provisions of the study were adjusted, the study materials were summarised and organised, the overall conclusions of the study were formulated, the prospects for further studies of this problem were determined.

A pedagogical experiment was conducted in order to solve the tasks of the research on the formation of readiness of future teachers of higher education institutions for teamwork. The purpose of the experiment was to examine the pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork.

Let us dwell in more detail on the methodology of conducting the pedagogical experiment, which included three stages of scientific and pedagogical research: statement of the problem, formative and assessment.

The pedagogical experiment was conducted under natural conditions within the educational process at Alfred Nobel University, Luhansk Taras Shevchenko National University, Classic Private University and Oles Honchar Dnipro National University. The study involved 109 students of master’s degree programmes who were studying on the educational and professional programme “Pedagogy of Higher Education”, specialty 011 “Educational and Pedagogical Sciences”. The following groups of respondents were selected: the experimental group (EXG), in which developed pedagogical conditions were implemented (56 students), and the evaluative group (EVG), in which students followed the standard curriculum (53 students). The pedagogical experiment included three stages: statement of the problem, formative and assessment.

At the stage of statement of the problem, it was planned to ascertain the actual state of the formation of readiness of future teachers of higher education institutions for teamwork, to determine the input and output data. A theoretical analysis of the literature on the problem of the research, observation of future teachers of higher education institutions in order to form an initial impression of their readiness for teamwork, testing, filling in questionnaires, conducting conversations and

psychological observation were the important methods at this stage.

The diagnostics of the level of readiness of future teachers of higher education institutions for teamwork made it necessary to formulate the criteria, indicators and a set of diagnostic methods that were to be used in the course of the experimental study. The theoretical study made it possible to determine that the formation of readiness for teamwork of future teachers of higher education institutions can be assessed at three levels (*low, medium and high*), and the level of formation can be determined by means of *motivational-value, cognitive, activity-functional, communicative and personal* criteria.

As a result, at the stage of statement of the problem, 64.15% of the master's students from the evaluative group showed a low level of formation of readiness for teamwork, 28.3% a medium level, and 7.55% a high level. In the experimental group, the situation was as follows: 66.07% of the master's students demonstrated a low level of the formation of readiness for teamwork, 25% a medium level, 8.93% a high level. We determined that there were no fundamental differences between the selected groups, and the main reason for such a result was lack of teamwork experience, internal obstacles in establishing contacts, lack of flexibility in interpersonal communication, etc.

The data obtained showed an insufficient level of formation of readiness for teamwork among future teachers of higher education institutions, confirmed the relevance of the conducted research and emphasized the necessity for it, substantiated and introduced into the educational process specially designed pedagogical conditions aimed at the effective formation of readiness of future teachers of higher education institutions for teamwork.

The *formative stage* of the experiment involved the implementation and practical examination of pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork. At this stage, a special system of actions for the formation of readiness of master's students for teamwork was introduced.

At the *assessment stage* of the research, an analysis and synthesis of the results of the experimental examination of the effectiveness of pedagogical conditions for the formation of readiness for teamwork of future teachers of higher education institutions was conducted, in particular, the dynamics of the levels of the formation of the category in question were determined. At this stage, the methods of qualitative and quantitative analysis of the results of the formative stage of the experiment were important.

In concluding the pedagogical experiment, we established the dynamics of the levels of the formation of readiness of master's students for teamwork within the studied groups (see Table 2 and Fig.1). Therefore, after the formative stage of the experiment had been conducted, it was found out that qualitative changes in the level of formation of readiness for teamwork of the master's students from the experimental group had taken place. In particular, 37.5% of master's students had

reached a high level and 51.79% a medium level. At the same time, the ratio of levels of readiness of the master's students in the evaluative group remained virtually unchanged: 13.64% of the future teachers of higher education institutions showed a high level of the formation of readiness for teamwork, and 36.36% showed a medium level.

Table 2. Comparative data of the stages of statement of the problem and assessment of the experiment (%)

Level	Master's students group			
	EVG (53)		EXG (56)	
	statement of the problem			
High	7.55	13.2	8.93	37.5
Medium	28.3	37.74	25	51.79
Low	64.15	49.06	66.07	10.71

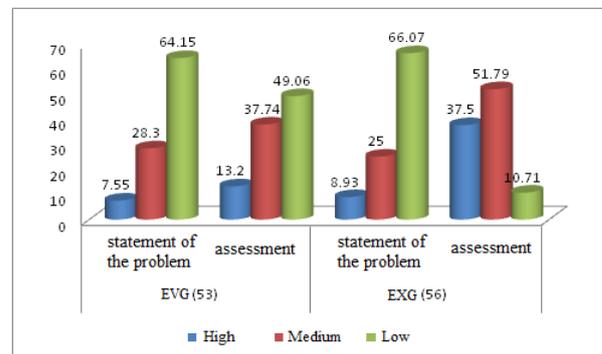


Fig.1. Comparative data of the stages of statement of the problem and assessment of the experiment

The statistical importance of the results obtained was examined and confirmed using the Pearson correlation coefficient to measure close relationship between the variables, which are measured on a scale of intervals or ratios.

5 Conclusions and prospects for further research

The results of the pedagogical experiment on the formation of readiness of future teachers of higher education institutions for teamwork were as follows:

1. The author's definition of the concept "the formation of readiness of teachers of higher education institutions for teamwork" is given as an integrative formation, a motivational-value attitude to team interaction in professional activities, a desire to expand and deepen knowledge about the team and the principles of its work, the mastery of teamwork methods and technologies, a high level of communicative skills and focus on improving personal qualities that contribute to teamwork.
2. The criteria of the formation of future teachers of higher education institutions for teamwork (motivational-value, cognitive, communicative, activity-functional, personal) have been developed,

the indicators and levels (low, medium, high) have been characterized.

3. The pedagogical conditions which contribute to the formation of readiness of future teachers of higher education institutions for teamwork have been identified, substantiated and experimentally examined. They include the following elements: addition of topics on the theory and practice of teamwork organisation to the study programmes of various disciplines; use in class of cooperative learning technologies; development and implementation of an extracurricular activity programme aimed at preparing future teachers of higher education institutions for teamwork.
4. The effectiveness of the pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork was determined: most of the master's students had a low level of formation of the indicated phenomenon at the stage of statement of the problem (EVG: 64.15%; EXG: 66.07%), the number of master's students in the experimental group who were at this level had decreased significantly by the assessment stage (10.71%), and the number of master's students in this group who were at a high level had increased (from 8.93% to 37.5%).
5. The results obtained from the formative stage of the pedagogical experiment indicate the effectiveness and practicality of the implementation of pedagogical conditions for the formation of readiness for teamwork of future teachers of higher education institutions.

Summarizing the results of the research, we have shown and proved the effectiveness of introducing pedagogical conditions for the formation of readiness of future teachers of higher education institutions for teamwork; these conditions allowed the selected master's students to increase their level of readiness.

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