

Pedagogical conditions for the formation of innovative abilities in students of pedagogical specialties

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Abstract: The purpose of this article is to analyze innovative abilities as one of the main professional qualities, which allows students to carry out professional activity effectively in terms of the creation and implementation of pedagogical innovations. Innovative abilities of students are proved professional skills, which are an important aspect during active self-development and lay the foundation for the introspection and reflection, motivate to achieve success, effective information communicativeness and readiness for the perception, generation and creative implementation of pedagogical innovations in professional activity. The paper studies pedagogical conditions that facilitate the effective formation of innovative abilities in students: the creation of a reflexive environment, the promotion of professional self-development, the development of students' motivation to achieve success in professional activity and effective information communicativeness, the development of students' creative potential during their study in higher educational institutions. The authors developed a model of the formation of innovative abilities.

Key words: *Students' innovative abilities; Model of the formation of students' innovative abilities; Pedagogical conditions of the formation of students' innovative abilities; Pedagogical specialty*

1. Introduction

The modern innovative state policy is notable for significant changes, primarily in education. A qualitatively new stage is observed in the development of the single educational space. This stage is focused on the training of highly qualified specialists, who are capable of professional growth under the informatization of society and the implementation of advanced innovative technologies.

Teachers with a professional qualification level that meets the requirements, set forth in regulatory documents on innovative professional activity, are in demand. Students need to have a deeper understanding of the activity, principles and methods of training, education and the formation of the students' personality. They should positively accept the transformations at the professional level and actively implement innovative projects at this stage. In this regard, it is necessary to study the reorientation of the pedagogical system in accordance with the criterion, with a view to effectively reproducing the pedagogical aspects, familiarizing students with science, education and advanced technologies, preserving the continuity of

generations at the innovative stage, and developing education.

The focus of the educational policy on the training of students for professional activity in an innovative environment demands a transformation of the development of students' abilities into a continuous process of professional self-development and self-improvement by means of implementation of individual and collective creative activity during the solution of actual practical professional tasks. Therefore, the formation of innovative abilities in students, who are carrying out researches on the implementation of innovations in professional activities, is becoming more relevant.

The analytical works by Fomenko, J. E. (2010), Ishanov, P., Bekmambetova, Z.(2013), Rogers, C. (1990), Schantz, E. A. (2012), Johnson, M., Cowin, L. S., Wilson, I. and Young, H. (2012), Guilford, J. P. (1967), Sakenov, D. Zh, Kushnir Y.V. (2012), Kleshcheva, N.A., Shtager, Y.V. (2011), Zhaparova, B. M., Tleulesova, A. Sh., Sarsenbayeva, B. G., Baygozhina, Zh. M., Aytpayeva, Zh. Zh., Sakenov, D. Zh. (2013), Kleshcheva, N. A., Petruk, G. V. (2011) show that in modern pedagogical science, the multidimensional analysis is carried out in the innovative processes of education. The ideas of the following scientists are important for a proper understanding of the essence of the phenomenon of a student's innovative abilities: Fomenko, J. E.

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(2010), Rogers, C. (1990), Johnson, M., Cowin, L. S., Wilson, I. and Young, H. (2012), Guilford, J. P. (1967), Kleshcheva, N.A., Shtager, Y.V. (2011), etc. The distinguishing of individual semantic components of innovative abilities and attempts to unite them into a complete structure created modern approaches to the definition of innovative pedagogics fundamentals in general, and innovative abilities in particular.

In general, the conducted study confirms that the creative personality of a pedagogue is notable for a wide range of innovative qualities. Three groups can be distinguished among the crucial qualities of a specialist's creative personality:

1. The qualities that characterize the person's general activity (activity, vigor, perseverance, initiative, determination, purposefulness, enthusiasm, independence, willpower, dedication, optimism, confidence, sustainable interest, etc.);
2. The qualities that characterize the attitude to activity (responsibility, discipline, working efficiency, diligence, seriousness, objectivity, "can-do" spirit, organization, productivity, power of observation, creative attitude, etc.);
3. Intellectual qualities (breadth of thought, critical thinking, logical thinking, depth of thought, intelligence, level of knowledge, erudition, intuition, educability, etc.).

The professional training of future teachers for innovative activities should be performed by appropriate educational methods and knowledge-based educational technologies:

- New active educational methods, technologies, and equipment;
- Comprehensive intensification of the learning process, in particular, by shifting focus to the students' independent work;
- Individualized forms of learning;
- Best educational programs;
- Problem-oriented interdisciplinary approach to the study of natural and engineering sciences.

An innovative environment assumes a sustainable development of the innovative and educational activity by integrating education, science, international cooperation, and social partnership with enterprises and organizations.

The analysis of scientific works by Fomenko, J. E. (2010), Ishanov, P., Bekmambetova, Z. (2013), Rogers, C. (1990), Schantz, EA. (2012), Johnson, M., Cowin, LS., Wilson, I. and Young, H (2012), Guilford, J. P. (1967), Sakenov, D. Zh., Kushnir Y. V (2012), Kleshcheva, N. A., Shtager, Y.V. (2011), Zhaparova, B. M., Tleulesova, A. Sh., Sarsenbayeva, B. G., Baygozhina, Zh. M., Aytpayeva, Zh. Zh., Sakenov, D. Zh. (2013), Kleshcheva, N. A., Petruk, G. V. (2011) showed a present lack of consensus regarding the phenomenon of a person's innovative abilities. There is also a lack of a comprehensive and exhaustive definition and a conventional structure of the innovative abilities of a pedagogical expert. The possibilities of forming the studied phenomenon during educational process of higher educational institutions are not determined fully.

The study of A. Furko provides a historical survey and confirms the assumption that students, who participate in the educational process, are able to maintain a higher level of motivation for learning, have fewer problems during learning, demonstrate a higher attendance rate, and have a higher level of dignity [Furco and Root, 2010]. G.-J. Hwang confirms that educational styles significantly affect the motivation for learning and its efficiency [Hwang et al., 2012]. O. Ku's study was based on a scientific research project that analyzed the effect of educational math games on the students' achievements and confidence. In particular, the study discovered that if students had low confidence in their mathematical abilities, it caused difficulties in learning mathematical concepts [Ku et al., 2014].

The analysis of studies shows that modern educational technologies positively affect the results of learning mathematics. Therefore, it is necessary to develop a systems approach to the application of information technologies, with a view to improving the efficiency and quality of the educational process and its results at all levels of education, based on the integration of ICT and pedagogy, which will meet all the expectations of the modern society on its way to the new stage of development – the Global knowledge society [Zhang et al., 2015].

The study of S. Robson, K. Wall and R. Lofthouse presents a methodology developed by members of the Research Center for Teaching and Learning (RCfLAT) to collaborate with university teaching colleagues to produce theoretically- and pedagogically-based case studies of innovations in teaching and learning [Robson and Wall, 2013]. The obtained data indicate that participation in the project helps form the skill of open perception of innovative concepts in pedagogues.

Members of another experiment were students from three university faculties and a number of service units. The obtained results indicated that effective social contact with peers, combined with personal motivation and involvement in the educational process, helps participants reassess their knowledge and abilities, as well as pedagogical skills (Hammersley, 2010).

The purpose of D. Goodwin's study was to compare the teaching and learning paradigm of a set of teachers with the constructivist paradigm that provides the foundation for the teacher evaluation instrument with which they will be evaluated in the 2014-2015 school year. The qualitative study was conducted utilizing the Content Analysis process to extract the answer to the research question from the open-ended responses of the teachers to questions concerning the characteristics of the constructivist paradigm of teaching and learning [Goodwin, 2014].

C. Kivunja emphasizes the importance of developing critical thinking and the ability to solve the problems of effective communication, cooperation, creative work, and innovation. The paper stresses the importance of a substantiated pedagogical move from teaching the traditional core

skills of literacy and numeracy to include these additional themes and skills of the 21st century.

Innovation skills are proven a complex structural phenomenon that includes the value-conceptual, motivational, behavioral, activity, and creative components.

Therefore, the main idea of an educational institution's innovative development is the creation of a holistic universal educational process that implements the idea of developing a child's individuality, his interests, aptitudes and abilities on the one hand, and meets the requirements of the society regarding early profiling on the other hand.

In this respect, the researcher analyzes the issues of a new learning paradigm by discussing the career and life skills of students – future pedagogues (Kivunja, 2015).

The study of M. Turcsányi-Szabó stresses that modern universities try to develop in future teachers a sustainable innovation of competencies in digital literacy and modern teaching/learning methodologies that are required for the improvement of the level and quality of future work and education throughout life (Turcsányi-Szabó, 2015).

By comparing the opinions of the abovementioned researchers (Robson, 2013; Hammersley, 2010; Goodwin, 2014; Kivunja, 2015; Turcsányi-Szabó, 2015) on the studied problem, the authors of this paper conclude that most teachers in pedagogic higher educational institutions, irrespective of their experience, have difficulties implementing educational innovations. At the same time, in terms of the nature of teachers' effect on the development of students' innovation abilities, researchers share the opinion that it is necessary to distinguish objective and subjective conditions (Hammersley, 2010; Goodwin, 2014). According to the researchers, objective conditions, which ensure the functioning of the pedagogical system, include the legal framework of the educational sphere and media. They are one of the reasons that encourage the creative and innovative expression of participants. Meanwhile, subjective conditions, which affect the innovative functioning and development of the pedagogical system, primarily reflect the creative potential of all pedagogical activity members (teachers and students), the level of coordination of their actions, and the level of personal importance of target priorities (Kivunja, 2015; Turcsányi-Szabó, 2015).

M.M. Potashnik grouped innovations by four areas. They are based on the development of a new educational content, the development of new methods, techniques, means, methodologies, technologies, and systems of education, upbringing and development of children, the creation of new models of educational institutions and their complexes, and the creation of new optimal mechanisms of management that match the subjects of managerial structures and systems (Managing the development of a school, 1995).

In terms of the effect object specificity, the authors distinguish general and specific conditions that facilitate the functioning and development of the pedagogical system.

General conditions include social, economic, cultural, national, geographic, and other conditions. Specific conditions include the peculiarities of the sociodemographic differentiation of students, the location of the educational institution, the finances of the educational institution, the equipment of the learning process, and the educational capacity of the environment.

Literature survey shows that the educational environment can help develop motivation and involvement of students in the learning process (Eseryel et al., 2013; Kleshcheva and Shtager, 2007; Zhang et al., 2015).

Under modern conditions, academic mobility as a component of formation of the unified European educational space becomes a necessary and inevitable process and factor of the sustainability of Russian higher educational institutions. This is confirmed by the fact that academic exchange became an integral part of higher educational institutions' activity. Therefore, the problem of forming innovative abilities in modern specialists, who search for ways of implementing innovations in professional activity, becomes more relevant. The following hypothesis was set forth: innovative abilities are among the main personal and professional components that allow future pedagogues to perform their professional activity efficiently.

Based on the positions of humanistic and self-development pedagogy, the authors take into account the set of pedagogical conditions, which includes the organization of a holistic humanism-oriented personality of the future teacher in a multicultural environment. The developed set of pedagogical conditions allows arbitrarily distinguishing three stages of formation of students' innovative abilities: emotional and evaluative, reflexive and investigative, and transformational.

The authors proceed from the fact that the emotional experience of students during study at a higher educational institution is characterized by a wide range of emotional reactions of varying modality: from despair, suffering, confusion, and indifference to confidence, delight, and insight. The role of the teacher is to detect this or that emotional reaction of students in time and help them realize and verbalize their experiences. In the authors' opinion, this is how the innovative training of future pedagogues is implemented, since it allows forming reflexive and investigative skills of students and helps develop skills of reflexive and educational activity, when a student actually accepts the "rules of the game" and searches for effective paths of life activity in a sociocultural environment.

The move to the third, activity and transformational, stage is characterized by a new level of the student's activity. The innovative ideas and approaches that emerge at this stage have a high

motivational status. The interpersonal relationship between the teacher and the student is distinguished not only by information exchange, but also by the exchange of value and moral potential. Based on the new value-conceptual relationships, students discover prospects of making their own free and responsible choice of the content, methods, and forms of education.

In innovative education, the teaching content of this or that discipline is determined, based on the available material, developed in the joint activity of the teacher and students, with the use of training elements. This teaching method is called innovative training (Dobrynina, 2010).

The problem of motivation of a student's learning activity is analyzed in terms of the personal meaning of future professional activity. Therefore, the professional activity of a future specialist should be focused on innovations, which makes the motivational component of a student's learning activity more important.

The next condition for the formation of students' readiness for innovative professional activity is their development of creative potential and innovative abilities. Reflection is a crucial and necessary component in the structure of innovative activity.

The formation and development of reflexive skills, in terms of innovative activity, is primarily ensured by the mastering of general scientific methods of cognition by a learning subject. In the researchers' opinion, the most important ones among them are the ability to observe, compare, classify, and, ultimately, master the systems approach.

The next condition for students' preparation for innovative professional activity is the mastery of the innovative activity experience during learning. Classes that include technologies of learning design play an important role in this process.

The readiness of a future pedagogue for innovative activity can have several levels. In scientific literature, the level of a future teacher's readiness for innovative activity is understood as the level of the student's mastery of professional knowledge and skills, aimed at completing innovative tasks under changing conditions.

Nevertheless, nowadays a certain contradiction exists between the demand for teachers that are ready to implement innovations during the performance of professional duties and the insufficient readiness of pedagogical conditions that facilitate the successful formation of innovative abilities in students during their study at higher educational institutions.

The problem of the research consists in the definition of pedagogical conditions for the formation of students' innovative abilities. Taking into account the insufficient theoretical study of the problem and its practical importance, the purpose of this research is to reveal and prove theoretically and experimentally the efficiency of pedagogical conditions for the formation of students' innovative abilities.

2. Research context

The essence of the phenomenon of students' innovative abilities is determined by professional abilities of a future expert, who is in the middle of an active self-development process, and has the ability of introspection, reflection, motivation to achieve success, effective information communicativeness, and high for the perception, generation and creative implementation of pedagogical innovations in professional activity.

The following criteria for the level of formation of innovative abilities in future teachers are determined: substantial, motivational, and activity.

The indicators of the formation of innovative abilities are self-development and reflection, motivation to achieve success and professional information communicativeness, and creative activity.

Three levels of the formation of students' innovative abilities were distinguished during this research: high, average and low.

The high level of formation of students' innovative abilities has the following characteristic: readiness for active participation in innovative processes at the present stage of educational development, continuous enrichment of professional knowledge, and constant control over one's results of professional activity.

The average level is characterized by an incomplete formation of students' innovative abilities and an uneven development of components. The ability to analyze the intrinsic characteristics of innovative processes in education and to choose the most effective ways of their implementation in professional activity is demonstrated at the average level. However, observations note unstable motivation to achieve success and the focus of the personality on the procedural aspect of creative activity.

The low level of formation of innovative abilities corresponds to a state when individual components are activated not by the student's internal need, but by external requirements. Poor functioning of individual components deforms the structure of innovative abilities. The characteristic signs of a low level of formation of students' innovative abilities are fragmentary knowledge of innovative processes in education, an unconscious choice of ways of professional self-realization, disinterest in self-improvement and self-development, avoidance of creativity during work on an activity product. The pedagogical conditions that promote the effective formation of innovative abilities in students were defined.

The teacher has the right to organize the learning activity with account for the individual peculiarities of students, to organize a creative environment in class by using interactive teaching methods: business games, brainstorming, discussions, work in groups, and didactic games.

The learning process should include technologies that activate the cognitive and creative activity. The

organization of interactive learning assumes the creation of problem situations (see Fig. 1).

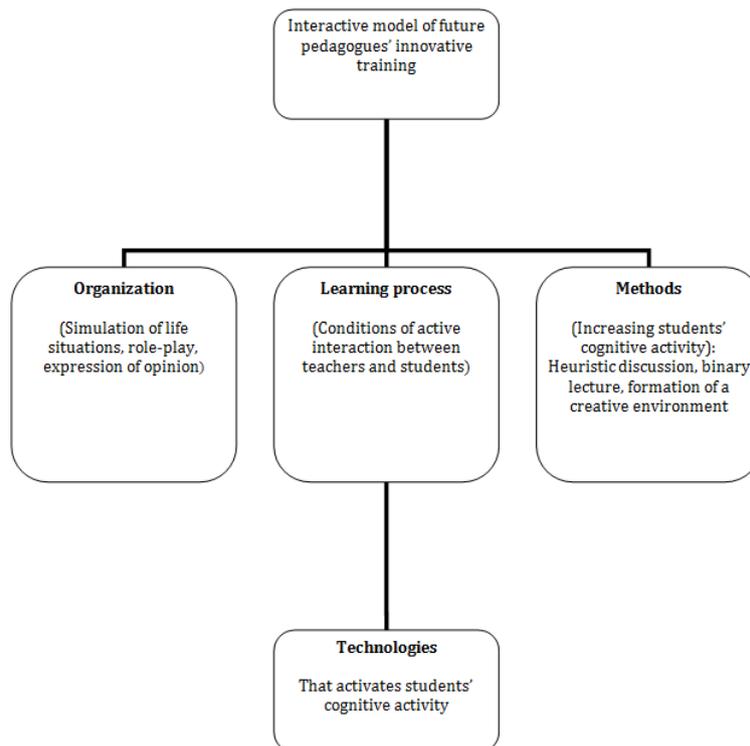


Fig. 1: Model of innovative abilities formation in students and interactive model of future pedagogues' innovative education

The interactive model of future pedagogues' innovative education shows special forms of cognitive activity organization and has a specific objective of creating favorable and comfortable learning conditions.

The organization of interactive learning assumes the simulation of life situation, role-play, expression of opinion regarding this or that problem, the ability to reason demonstratively, and collectively solve issues, based on the analysis of circumstances and the respective situation.

The essence of interactive learning is to have the learning process take place under the conditions of constant active interaction between teachers and students (collective, group, collaborative learning), where the teacher and the student are considered equal and equally important subjects of learning.

During interactive learning, students learn to be democratic, communicate with fellow students, think critically, respect their colleagues' opinion, and make reasonable decisions.

The search for ways to improve the methodological training of future teachers brings one to the importance of using techniques that help form skills of organizing active innovative communication between teachers and students. Active learning assumes the use of a system of methods and techniques, primarily aimed at a conscientious, willful, and purposeful performance of brainwork, necessary for mastering knowledge, abilities and skills, and at the formation of a creative potential and the ability to think critically, rather than at the conveyance of ready knowledge to students with subsequent memorization and replication.

The use of heuristic discussion elements in an efficient method that improves the students' cognitive activity. For example, a topical lecture, during which, the innovative approach to learning is implemented by solving problem situations and indicating ways and means of their solution.

The next type of lecture is the binary lecture, when the material is presented in the form of dialog between two teachers (scientist and practical person). The lecturer should pay much attention to familiarizing students with the peculiarities of perception and understanding of the material by concentrating the students' attention, activating their thinking, applying quick reading techniques and the methods of forming writing skills, and organizing productive communication.

The main criteria of the interactive learning model is the possibility of an informal discussion between the teacher and the student during the free presentation of the material, a smaller number of lectures and a greater number of seminars, the student's creative initiative, and the presence of individual tasks that require coordinated efforts on both the student's and the teacher's part.

3. Research methods

During the research, the authors organized a pedagogical experiment, the objectives whereof included the study of the preparation of future pedagogues for the formation of interest in innovative pedagogical activity in students.

The conditions of the pedagogical experiment and the accomplishment of the abovementioned objectives required appropriate experimental sites

and respondents. In order to improve its substantiation and achieve greater result veracity, the representativeness of the experimental and control group selection was ensured. The effectiveness of experimental developments was determined during the formative stage of the pedagogical experiment, preceded by the exploratory and summative stages.

During the explorative stage of the experiment, the authors studied the state of the problem of preparing future teachers for the formation of the innovative culture of a future teacher in higher educational institutions.

During the summative stage of the experiment, the authors conducted the initial test of the training level of future teachers. The summative experiment discovered insufficient work of higher educational institutions for the preparation of future teachers for innovative activity. Under this research, the authors applied a series of methods, such as questionnaire, expert assessment, discussion, polling, interview, and test, which included test questions and open-ended questions. In addition, the authors conducted a sociological poll of students of pedagogical specialties, which included questions that allowed determining their level of preparedness for innovative activity.

At the beginning of the experimental work, the authors conducted a psychological analysis of the studied pedagogical phenomena, which determined the specifics of its manifestation, with a view to determining the sensitive field experiment. The empirical and experimental research field is the educational process of students, majoring in "Pedagogy and methodology of primary education". 63 students participated in the experiment.

Based on the determined levels of the development of innovative abilities in future elementary school teachers, it was possible to determine the changes over time in the formation of the studied phenomenon, in order to compare the results of the control and experimental groups indicators by means of the following set of research methods: questionnaire for determining the students' level of knowledge of the innovative educational processes, pedagogical innovations and innovative abilities; a student's diagnostics ability for self-development and overcoming obstacles during pedagogical activity; diagnostics of self-development, professional and pedagogical levels; subjective reflection (diagnostics of the self-esteem level); verbal diagnostics of an individual's self-assessment; diagnostics of personal creativity; diagnostics of a person's social creativity; self-assessment of creative potential; methods of diagnostics of students' educational motivation.

In order to implement the selected pedagogical conditions, aimed at developing students' innovative abilities during the learning process at higher educational institutions, the authors developed a special course "Formation of innovative abilities of future elementary school teachers" and a textbook "Development of innovative abilities of future

teachers", as well as assignments for group educational and research projects, presentations, role-playing games, and psycho-pedagogical exercises on the subject of the special course.

The increase in the level of self-development, reflection, motivation to succeed, effective informational communicativeness, creativity and capacity for creative activities was accomplished by means of theoretical and practical study of the problem, set forth in class, by formulation and solution of practical tasks, as well as the use of diagnostic materials. Students were performing their creative activities individually, in groups or collectively, working on professionally relevant tasks and problems, developing research projects with their subsequent assessment during discussions, and solving relevant problems, inherent in innovative pedagogy.

The training course "Formation of innovative abilities of future elementary school teachers" resulted in the implementation of the educational and research project by students, including the psychological and pedagogical analysis and creation of an innovative practice-oriented model of solution of a professionally significant problem.

The reliability of the obtained results was determined by the parametric methods with the help of the correlation analysis, the analysis of variance and the establishment of the validation criterion of t-Student. The significance of the obtained results is determined by the validation indicator of the margin and confirmed at $p < 0.05$.

4. Results and discussion

The results of the study are presented in Table 1. The comparative analysis allowed establishing a direct dependence of the efficiency of the formation of innovative abilities in a student on the successful implementation of the set of pedagogical conditions.

The analysis of testing results at the final stage of experiment revealed an improvement in the level of formation of innovative abilities. For example, the substantial criterion improved in the experimental group by 4 times (in the control group - by 1.15 times), the motivational criterion improved in experimental group by 4.4 times (in the control group - by 1.46), the activity criterion improved in experimental group by 3 times (in the control group - by 1.2 times).

The changes over time indicate that control group (CG) and the experimental group (EG) at the beginning and at the end of experiment reached 4.7% and 39%, respectively (Fig. 2).

The experiment confirmed the efficiency of the formation of innovative abilities in future teachers with the implementation of the students' innovative abilities formation model with the following pedagogical conditions that promote an effective formation of innovative abilities in students:

- Creation of a reflexive environment that encourages professional self-development;

- Development in students of motivation for achieving success in professional activity and effective information communicativeness;
- Development of students' creative potential during education.

Thus, the comparative analysis established direct dependence of the formation of students' innovative abilities and pedagogical conditions on the successful implementation of the students' innovative abilities formation model.

Table 1: Results summary, reflecting innovative abilities in students at the beginning and at the end of the experiment

Criteria	Indicators	Prior to the experiment, %			At the end of the experiment, %		
		Levels	Control group	Experimental group	Levels	Control group	Experimental group
1	2	3	4	5	6	7	8
Content	Self-development	High	17.3	13.9	High	22.2	44.4
		Medium	33.8	33.3	Medium	35.6	50
		Low	48.9	52.8	Low	42.2	5.6
	Reflection	High	23.3	19.5	High	32.2	44.2
		Medium	39.4	30.6	Medium	38.8	38.8
		Low	37.3	49.9	Low	29	17
Motivation	Motivation to achieve success	High	14.4	11.1	High	20.0	61.1
		Medium	36.8	33.3	Medium	38.8	33.3
		Low	48.8	55.6	Low	41.2	5.6
	Effective informative communicativeness	High	14.4	16.6	High	22.4	61.1
		Medium	34.4	27.8	Medium	38.8	33.3
		Low	51.2	55.6	Low	38.8	5.6
Activity	Creativity	High	20	22.3	High	24.4	62.6
		Medium	53.4	44.4	Medium	56.6	32.3
		Low	26.6	33.3	Low	19	5.1
	Creative abilities	High	17.7	16.6	High	21.1	55.5
		Medium	52.3	50	Medium	55.5	33.4
		Low	30.0	33.4	Low	23.4	11.1

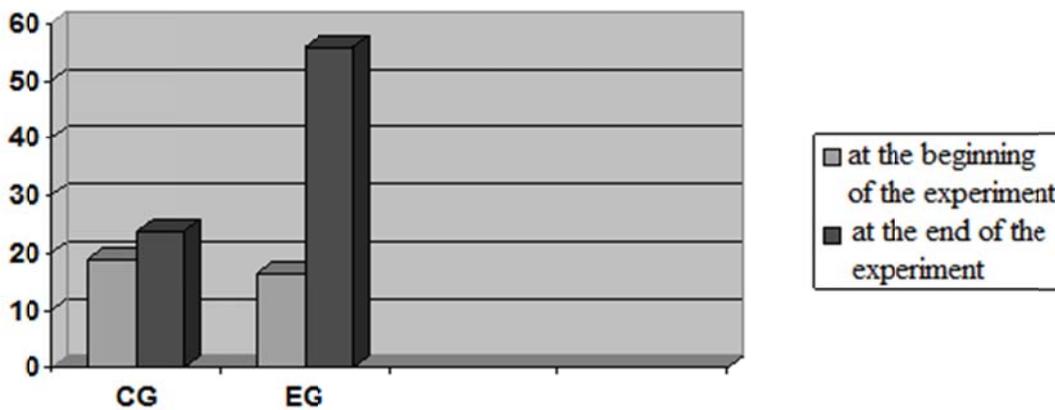


Fig. 2: Results of the development of innovative abilities of CG and EG students at the beginning and at the end of experiment

The results of the conducted study substantiated the relevance of the studied problem, the need for developing a model of the preparation of future teachers for innovative professional activity, the development of a special elective course for students of higher educational institutions, the determination of its content, and the discovery of possibilities of applying in this process modern pedagogical technologies, with a view to developing the competence of future teachers in the issues related to the formation of innovative competencies and abilities.

The generalized data of the sociological poll showed that 71.2% of future teachers assess their preparation for innovative activity as insufficient in the theoretical aspect, and 73.5% - in the practical aspect. The critical self-assessment of future teachers is confirmed by the results, obtained during their performance of tasks for determining the level

of creative pedagogical knowledge and skills of organizing the learning process.

For example, more than 36% of polled students could not fully explain the essence of such concepts as "innovative activity", "creative activity", "teacher's reflexive activity", etc. 70% of respondents had an incomplete understanding of the methods of forming the creative consciousness of students. Furthermore, during their pedagogical practice, 80% of students regularly had troubles in finding the necessary methodological recommendations for the organization of students' creative activity.

The conducted study allowed drawing the following conclusions. Firstly, the analysis of the studied problem showed that future teachers of comprehensive schools are so far insufficiently focused on the formation of innovative activity and the development of a creative personality of students during learning. Therefore, there is need for a special

training of teachers for this type of pedagogical activity. Secondly, the study substantiated the possibilities of the students' reflexive activity during the formation of a future teacher's innovative thinking.

Therefore, the authors recommend using innovative technologies during the training of future teachers, primarily personality-oriented teachers, which implies a differentiated approach to learning, with account for the students' level of intellectual development, their makings and abilities in this subject.

Students with a high level of innovative abilities demonstrate substantial knowledge and ideas of the learning process peculiarities. Furthermore, the authors observe the presence of a sustainable motivation for intercultural interaction, generalization of experience, the ability of unbiased acceptance of other people's opinions, the ability to avoid conflicts, high social activity in a multicultural environment, and a creative approach to solving the problems of intercultural interaction. At this stage, students are capable of predicting the course and results of intercultural communication. They demonstrate their conscious readiness for intercultural dialog, and are able to determine and establish any intercultural contacts, based on goal setting and prediction.

The following issues, related to this problem, remain unsolved:

- The problem of the criteria of students' readiness for innovative professional activity, which include personal and activity components (in particular, personal criteria determine the level of formation of value orientations and motives of innovative activity, as well as the level of professionally important qualities that allow performing innovative professional activity);
- The state of students' readiness for innovative professional activity (special personal state that implies a motivational and value-oriented attitude to professional activity, the mastery of effective ways and means of achieving creative goals, and the ability to perform creative work and reflection);
- The active professional position of future teachers, which encourages innovative activity and improves its productiveness (the readiness for innovative activity as an internal force that forms an innovative position);
- The pedagogical conditions that improve the effectiveness of the developed model of the formation of students' interest in innovative activity in an innovative educational environment include the development of special courses, aimed at forming comprehensive pedagogical knowledge of the teacher's creative activity;
- The formation of professional self-consciousness of future teachers, the methodological mechanism whereof is the initiation of the reflexive position;
- The involvement of future teachers in the solutions of problematic situational tasks and the

exposure of students to the optimal environment for independent pedagogical activity.

Thus, it is necessary to formulate the main requirements to the innovative learning process, from the perspective of the development of future teachers' creative thinking:

- Stimulation of professional intuition;
- Formation of confidence in one's strength;
- Application of the problem method of teaching;
- Teaching special heuristic techniques of solving various problems;
- Cooperation with the teacher during research work.

The conducted study found that educational programs insufficiently reflect the modern requirements that match the goals of forming innovative activity. The preparation of future teachers to the formation of an innovative consciousness should be a task-oriented development of their competence in matters related to the organization of this area of pedagogical activity, i.e. the mastery of a system of certain professional knowledge, abilities, and skills for accomplishing the set goals and developing motivation for constant improvement of their level.

5. Conclusion

The results of the conducted study can be implemented in accordance with the requirements of the modern society, university graduates, and expert who are aware of the innovative transformations that occur in all spheres of production, as well as the tendencies of modernization of the state educational policy and the emerging demand for creative and innovative teachers.

The concept of students' innovative abilities is defined as professional skills of a future expert who is capable of introspection and reflection, motivation to achieve success, effective informative communicativeness and readiness for the perception, generation and creative implementation of pedagogical innovations in professional activity.

The structural elements of students' innovative abilities are the substantial, motivational and activity components.

The indicators of the level of formation of students' innovative abilities are self-development, reflection, motivation to achieve success, effective informative communicativeness, and creative activity.

There are three levels of students' innovative abilities formation.

The pedagogical conditions, promoting effective formation of innovative abilities in students:

- Create a reflexive environment and facilitate professional self-development;
- Develop motivation to achieve success in professional activity and effective information communicativeness;
- Develop the creative potential during study.

The efficiency of the developed students' innovative abilities formation model was experimentally proved.

It was experimentally established that the implementation of the developed model of innovative abilities formation in students in the educational process of higher educational institution intensifies the formation of innovative abilities when the suggested set of pedagogical conditions is observed.

The study resulted in the conclusion regarding the need for a comprehensive approach to the solution of the problem of forming students' innovative potential and in the suggestion of criteria for assessing the stages of its formation, which reflect the gradual and targeted process of students' acquisition of innovative knowledge, abilities and experience, and their development of innovative thinking and skills.

The experiment showed that the formation of students' innovative potential was a staged multilevel process. It was established that the students' innovative potential can be defined as an integral personal trait, which embodies the set of knowledge, abilities and attitudes, applied during learning and practical work, as well as the possibilities of their use in learning and future professional activity.

The successful motivation of a future teacher's innovative activity is facilitated by certain pedagogical conditions, the most important whereof, in the authors' opinion, is the student's need for development and personality self-development. This need can be satisfied once the appropriate managerial tasks are accomplished:

- The formation of the future teacher's problem consciousness;
- The creation of a system of advanced innovative learning;
- Informing students of new possibilities of using pedagogical technologies during the implementation of innovations;
- The development of a future teacher's creativity and critical thinking;
- Constant maintenance of a future teacher's professional motivation and self-actualization.

Further study prospects consist in the determination of the main tendencies and possible ways of improving students' potential in the field of innovative activity, which is an essential component of professional training.

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