

**COMPREHENSIVE PEDAGOGICAL DIAGNOSIS
OF THE QUALITY OF THE TRAINING OF FUTURE TEACHERS**

Savchenko Larysa¹
Savchenko Karyna²

DOI: http://dx.doi.org/10.30525/978-9934-571-26-8_17

Abstract. The study of the problem of the complex pedagogical diagnosis of quality of preparation of future teachers of labor studies and technologies. On results the questionnaire of teachers and students, analysis of educational documentation and row of publications from the investigated problem, and also own supervisions, it is found out, that on the modern stage many models of organization of pedagogical diagnostics are offered; verification takes place with the use of different scales of evaluation, criteria and going near the calculation of rating of students; the methodical providing failing on issue of organization of diagnostic control from pedagogical disciplines in the conditions of higher pedagogical school; tasks of professionally-pedagogical orientation in the complexes of control tasks and tasks for the independent working; methodical advices for working of educational information and implementation of diagnostic tasks students. The all-round comprehension of results of success of students, id est level of quality of knowledge of students, relation of them to the courses of professionally-subject orientation and display of the personal interest to the studies on establishment and to forming the stages of experiment, induced to the conclusion that the use of reasonable methodologies of diagnostic control strengthened interest and improved attitude of students toward studies, and also assisted the increase of level of quality of knowledge, and thus, internals of pedagogical education. Thus, preparation of future teachers of labor studies and technologies to pedagogical diagnostics of quality of education is a process, during that comprehend, optimize studies, care of objective analysis of educational results, control, verification, evaluation, accumulations of statistical data, their reflection, study a dynamics,

¹ Doctor of Pedagogical Sciences, Assistant Professor, Kryvyi Rih State Pedagogical University, Ukraine

² Candidate of Pedagogical Sciences, Senior Lecturer, Kryvyi Rih State Pedagogical University, Ukraine

tendencies, prognoses in relation to further development of events. The analysis of pedagogical theories devoted to the problem of the quality of education confirms the constant increase in the number of scientific facts and key concepts that mark this process and reflect its essence, deepen their content. Clarification of the content of the main concepts and categories, which nominated investigated phenomena, their ratio has allowed fixing the presence of various scientific-theoretical and methodological approaches to their interpretation. The concept of “quality of education” applies to the designation of the results of learning, upbringing and development of the individual as the ultimate goal and product of the educational process. The quality of education in the broadest sense is the result and the process of functioning of the educational system, which shows the effectiveness of the actions of the participants in the educational process with regard to the implementation of goals, conditions, social and educational standards, capable of meeting consumers, their requirements and the actual needs of society.

In the narrow sense, the quality of education manifests itself as an integrated set of properties that characterizes the adaptability of education to the realization of the social goal of the formation and development of personality in aspects of its teaching, parenting, mental and physical capabilities. Tasks of the article in the first place: to define methodological support for the problem of the organization of diagnostics of pedagogical disciplines in the conditions of higher pedagogical school; the second task is to determine the professionally-pedagogical orientation in complex control tasks and tasks for self-study; the third task tips for the study of educational information and perform diagnostic tasks.

1. Introduction

The world pedagogical thought is in search of new priorities in education being at the present stage of development of society, marked by globalization processes, operating of information technology. The quality of the education becomes the main benchmark in determining the credibility and competitiveness of educational institutions on regional, national levels and international arena. The analysis of the scientific literature of the preparation of future teachers of vocational training institutions to the professional activity and the content of the syllabus shows that this problem is not adequately addressed in the context of their professional preparation to the

Comprehensive pedagogical diagnosis of the quality of the training of future...

pedagogic diagnostics of the quality of students' education, which caused a number of contradictions between: the challenges of modernization of higher education, aimed at improving the quality and existing system of preparation of future teachers of vocational training in higher pedagogical institutions; the need to overcome the fragmentation and inconsistency of some scientific data in the national pedagogy about the nature, structure and functioning of the pedagogical diagnostics of the quality of education and the negative attitude of teachers to use it in practical activities with the students of vocational educational institutions.

The analysis of the recent researches and publications (A. Binet, Bitinas) of the nature of pedagogical diagnostics, its history and development regarding (O. Andriyenko, A. Belkin) the quality control of the professional-pedagogical preparation of future teacher and lecturer (I. Podlasie, N. Rosenberg, D. Chernilevskiy, C. Sandrock, A. Shatalov).

The purpose of the monograph. The study of the problem of the comprehensive pedagogical diagnostics of the quality of the training of future teachers of vocational training in the field of "food technology" and "services". According to the results of the survey of teachers and students, the analysis of educational documentation and several publications on the studied issue, as well as my own observations, it appears that at the present stage many models of the organization of pedagogical diagnostics are offered; the validation is done using different scales of evaluation, criteria and approaches to the calculation of the students' rating; the methodological support for the problem of the organization of the diagnostics of the pedagogical disciplines in the conditions of higher pedagogical school is not enough; tasks of professional-pedagogical orientation in complex control tasks and tasks for self-study; methodological advice for the development of educational information and perform diagnostic tasks.

2. Study of methodological approaches to the training of future specialists

The National Education Development Strategy in Ukraine for the period up to 2021 and other state documents, the tasks and vectors of education reform are related to the establishment of a system for evaluating its quality, systematic monitoring and analysis of the state of actual educational problems and their solution. In order to ensure the quality of education, the material, financial, human resources and scientific resources of the society

are directed, it becomes the basis for evaluation by the state and the public of educational services, guaranteeing the access of citizens to obtaining a thorough and publicly-requested education.

Under these conditions, the quality of higher pedagogical education has become the principle and the main criterion for the effectiveness of the modern system of training pedagogical personnel. In the most widespread sense, pedagogical diagnosis is a set of methods of control and evaluation aimed at identifying the effectiveness of solving the tasks of the educational process, differentiating the learners, as well as improving the curricula and pedagogical methods for further optimization of the educational process. It is important that pedagogical diagnostics does not replace teaching aids, but helps to identify the conditions, achievements and disadvantages of their use in the organization of this process, outline ways to increase its efficiency and improve the activities of teachers in accordance with the stated goal.

Note that pedagogical diagnosis is a specific type of diagnosis that has features that are distinct from psychological and sociological diagnostics, as well as from the diagnostics used in scientific research.

For pedagogical diagnostics is characterized by the presence of inherent only her functions and principles; special structure and a number of specific stages. Pedagogical diagnostics is a system of methods, procedures, methods, methods for clarifying the circumstances, conditions and factors of the functioning of pedagogical processes, studying their effectiveness and results regarding the measures that are envisaged or happen. By its intended purpose pedagogical diagnostics determines a method of recognition of a state of a certain object or system by means of the rapid registration of its essential parameters and the subsequent relation to a certain diagnostic category in order to make a prediction of the actions, behavior or development of the subject to diagnosis in the desired direction.

In its content pedagogical diagnostics – this is an analytical cut and evaluation of the state of the pedagogical phenomenon according to the statistical data in accordance with certain, predetermined parameters. In this regard, the diagnosis of the results of the professional activity of the teacher involves the knowledge and ability to use parametric data characterizing the state of these results at different levels of implementation.

The analysis of pedagogical theories devoted to the problem of the quality of education confirms the constant increase in the number of scientific

Comprehensive pedagogical diagnosis of the quality of the training of future...

facts and key concepts that mark this process and reflect its essence, deepen their content. Clarification of the content of the main concepts and categories, which nominated investigated phenomena, their ratio made it possible to fix the presence of various scientific-theoretical and methodological approaches to their interpretation. The concept of “quality of education” applies to the designation of the results of learning, upbringing and development of the individual as the ultimate goal and product of the educational process. The quality of education in the broadest sense is the result and the process of functioning of the educational system, which shows the effectiveness of the actions of the participants in the educational process with regard to the implementation of goals, conditions, social and educational standards, capable of meeting consumers, their requirements and the actual needs of society. In the narrow sense, the quality of education manifests itself as an integrated set of properties that characterizes the adaptability of education to the realization of the social goal of the formation and development of personality in aspects of its teaching, parenting, mental and physical capabilities.

It is proved that the study of the effectiveness of training future teachers for pedagogical diagnosis should be carried out in accordance with the laws of dialectics and principles of consciousness, personality and activity. The practical cut of the methodological basis of the study of the training of future teachers for pedagogical diagnostics of the quality of education includes: axiological (the value of education and its results as universal value), systemic (a set of tools for managing the process of teacher training to meet the educational services of society), competence (professional level of development of the personality of the future teacher and his readiness to perform the tasks of professional activity) and personality-activity (goals of educational activities of future teachers, knowledge, skills, learning skills, which determine the implementation of their personality in their professional activities) approaches.

In the context of the study of the training of future teachers for pedagogical diagnostics of the quality of education, the axiological approach is aimed at identifying value benchmarks and ideological positions, according to which they are able to isolate the parameters of the achieved learning outcomes and upbringing of students, the criteria for their evaluation and forecasting with a view to their further improvement. Such value orientations reflect the semantic core of preparation for pedagogical diagnostics of

the quality of education as the ultimate product of student socialization in the system of professional training and pedagogical activity.

Competency approach reveals the essence of social requirements regarding the final results of the professional training of the future teacher, his general and pedagogical erudition, and pedagogical skills in accordance with the state standards recognized in the society for the recognition of higher and general secondary education recognized in the society. According to its purpose in the study, it was used to outline the content of the process of professional training of future teachers for pedagogical diagnostics of the quality of students' education in the framework of current curricula and nomenclature of normative educational disciplines. Pedagogical diagnostics in line with the competence approach is considered as a complex system of internal mental states and personality traits of the future teacher, which ensures his ability to diagnose the results of his own professional activity and the activities of his colleagues through a variety of methods in the educational process of the school. From the point of view of the competence approach, the preparation of the future teacher for pedagogical diagnostics of the quality of education is considered as a multi-faceted phenomenon, which depends on the professional basic knowledge and skills, value orientations, motives of the future teacher's activity, understanding of themselves and the world around, the style of relationships with people, general culture, ability before developing its educational potential.

Personality-activity approach in the study of the training of future teachers for pedagogical diagnostics of the quality of education characterizes the actions of each student in this process as a source of their own activity, which largely determines the learning outcomes. The analysis of the personality of the future teacher as a subject of educational activity with individual cognitive and professional motives and needs, special cognitive strategies (analytical, spatial-synthetic, verbal) of comprehension of educational material, experience of pedagogical activity and their consideration in the educational process is the key to the success of his professional training, in general, and to pedagogical diagnostics of the quality of education of students, in particular.

From the point of view of the system approach, vocational and pedagogical training of future teachers for pedagogical diagnostics is considered as an open, dynamic socially oriented system, functioning of which is provided by appropriate pedagogical subsystems (content, forms, methods,

Comprehensive pedagogical diagnosis of the quality of the training of future...

means of learning), the integral interaction of which is aimed at achieving the intended result. The professional training of future teachers for pedagogical diagnostics of the quality of education is a systemic multidimensional phenomenon that determines the cognitive activity of its subjects, their self-development and self-organization, which in the future determine the results of professional-pedagogical activity, which is mastered in higher education.

Recently, in connection with the modernization of higher education, there are significant changes in the content and methodology of preparing a future teacher, which intensifies the problem of identifying the potential of teaching and special disciplines in the preparation of the future teacher of technology and drawing to pedagogical diagnostics of the quality of education.

It is proved that in pedagogical diagnostics it is important not only to fix the result, but also to construct the dynamics of its change. Diagnosis and assessment of the effectiveness of the teacher includes: a comprehensive study of the individual; self-analysis of own activity; analysis of the effectiveness of the educational process as a cumulative result of many teachers.

The qualitative and quantitative indicator of evaluation of the results of pedagogical activity is to achieve the desired result. It is a norm or a state educational standard that serves as a prerequisite and the basis for diagnosis in education, since it compares actual results with them, after which the evaluation and correction are carried out.

The effectiveness of the professional and pedagogical activity of the future teacher of technology and drawing is to a certain extent determined by his ability to correlate his conceptual position regarding the teaching of students with a certain model of the organization of the educational process, the ability to correlate the selected learning technologies with the age-old characteristics of students, taking into account their interests during the design of the content of each lesson; the ability to diagnose and monitor the quality of the students' learning tasks, and to simulate, on this basis, the likely development of their creative abilities in technological activities.

Preparation of future technology teachers and drawing for pedagogical diagnostics of quality of education is considered as a holistic educational process aimed at forming the system of knowledge, skills and skills necessary for the students to identify the achievements of pupils in a secondary school in the formation of skills and skills in a particular type of labor edu-

cation. The concrete result of mastering the methods and methods of diagnosing, monitoring and evaluating the results is manifested in the formation of a professionally directed creative personality of the future teacher, his psychological willingness and practical preparedness for the implementation of pedagogical diagnostics of the quality of students' education.

Preparedness of students for pedagogical diagnostics of the quality of education of students is a complex personal formation, which shows the effectiveness of their professional preparation for pedagogical activities in higher education, the degree of orientation in the requirements for the quality of teaching students in a school on a certain subject in accordance with current state standards, theoretical knowledge of pedagogical diagnostics of this quality, practical skills to solve diagnostic tasks, to evaluate the results of work, to control the quality of students' activity, to forecast and project pull out the results of your own professional activities and other teachers.

The preparation of the future teacher of technology and drawing to the pedagogical diagnostics of the quality of education of students may turn into a personal formation provided that the process of vocational and pedagogical training is organized as an independent cognitive activity of students, during which each of them during the whole study systematically and consistently acquires the experience of the decision diagnostic tasks that are constantly complicated. At the same time, an important component of preparation is awareness and mastering of the tools of pedagogical diagnostics by the teacher of the quality of education of students.

In scientific studies of diagnosing the quality of education of subjects of the educational process, various methods are classified in three groups: empirical, theoretical and mathematical-statistical. Among the modern methods of pedagogical diagnosis of the quality of education, the most appropriate are the following: test control (integrated system, which is a subsystem of pedagogical control, an organic part of the educational process in general); monitoring control (a complex of repeated repeating control procedures in the given time parameters in order to find out the trends and deviations in the results obtained and make adjustments in the adoption of management decisions); expert control with the involvement of professional experts (dean's office, administration, accreditation) for assessing the effectiveness of educational processes.

It is concluded that control over the quality achieved in the educational process of the results is an integral part of pedagogical diagnostics, which

Comprehensive pedagogical diagnosis of the quality of the training of future...

covers the theoretical determination of diagnostic parameters; visual and practical substantive demonstration of the results of the diagnosis; Instrumental control of planned control (with the help of a computer, practical control, self-control, tests and tests, “portfolio”, analysis of products, scaling, rating, pair comparison, etc.)

The diagnostic function of teacher control based on the results of the educational process involves a systematic analysis of the final training products, obtaining objective and reliable information about the reasons for the students' failure in the educational activity. This allows to correct not only the actual content of teacher's teaching activity, but also the system of control, evaluation and quality management of education that he uses.

3. Study the problem of complex pedagogical diagnostics of future professionals in vocational education

From the analyzed training plans for students' training at the technological and pedagogical departments of higher educational institutions of Ukraine, it became clear that there are significant differences in the number of hours allocated to normative disciplines within the framework of professional and practical training of future technology teachers and drawing. It is established that according to the content of educational programs their vocational training does not foresee purposeful training of pedagogical diagnostics of the quality of students' education. As a result, according to the results of the survey, it was found that 55% of teachers, and 36% of graduate students do not understand the essence of the concept of “quality of education”, “pedagogical diagnosis” or identify them with the concepts of “assessment”, “analysis”, “control”. At the same time, they do not consider it advisable to use pedagogical diagnostics in the professional activity of the teacher in the educational process of the school. The lack of methodological developments in pedagogical diagnostics of the quality of education of students from educational subjects “Theory and Technique of Technological Education” and “Methodology of teaching drawings” were indicated by 81% of practicing teachers and graduate students; the inability to apply the latest information technologies in the pedagogical diagnosis of the quality of education of students is noted by 69% of the teachers and students questioned.

The following structural components have been identified for assessing the degree of preparedness of future technology teachers and the drawing

of the quality of the students' education: motivational (attitude to professional activity, activity in mastering the knowledge on pedagogical diagnostics of the quality of education, the desire to constantly increase the level of professional and diagnostic preparation, professional knowledge in the field of the subject, attitude towards the implementation of pedagogical diagnostics of the quality of education); operational-activity (mastering of knowledge about goals and methods of pedagogical diagnostics, ways of evaluating academic achievements of students by units of educational information; ability to design future results of educational activity on a subject and analyze results), creative (presence of creative abilities of future technology teachers and drawing on professional training, mastering of skills of pedagogical improvisation) and diagnostic (ability to identify and analyze difficulties of students, search of optimal ways of using pedagogical results diagnostics objectification of its results in diagnostic conclusions, recommendations and prognostic models of professional development activities to improve the quality of education of students).

On the basis of isolated structural components, criteria and indicators of the preparedness of future technology teachers and the drawing for pedagogical diagnostics of the quality of education are developed: value-orientation (the presence of interest in the profession of technology teacher and drawing; positive attitude to the constant implementation of pedagogical diagnostics of the quality of education; the desire to deepen their knowledge of techniques pedagogical diagnostics of education quality); imperative-setting (awareness of the methods of pedagogical diagnostics of the quality of education of students from the subject, the ability to select and apply diagnostic methods of quality education of students in the field of technology and drawing; ability to predict, project future design and technical activities of students and analyze their results); constructive (ability to develop abstracts of lessons from labor studies; independently develop diagnostic tasks for identifying the quality of students' education in technology and drawing; in the ability to assess the quality of technological education of students according to certain criteria).

As a result of the qualifying phase, the level of preparedness of future technology teachers and drawing to pedagogical diagnostics of quality of education was revealed: high, satisfactory and low. It turned out that most of the students were at a satisfactory level (52.08%). At the low level of preparedness for pedagogical diagnostics 34.42% of graduate students were found; high – 13.50%.

Comprehensive pedagogical diagnosis of the quality of the training of future...

Thus, the analysis of the results of the search experiment showed that the training of future technology teachers and drawing to pedagogical diagnostics of the quality of education in the educational process of the higher pedagogical school needs to improve the content of learning, finding more effective forms and methods for its awareness.

The developed model of preparation of future teachers of technologies and drawing for pedagogical diagnostics of the quality of education was carried out preparatory-cognitive, practical-constructive, analytical, technological, reflexive-evaluation stages; pedagogical conditions, content components and methods of their implementation.

The existence of a unified system of criteria and indicators of pedagogical diagnostics of the quality of education in the methodology for implementing the model of training future technology teachers and drawing provided reproduction in the content of individual sections and topics of normative academic disciplines “General Pedagogy”, “School of Science”, “Methodology of technological education”, “Artwork” information that reveals the essence of the manifestation of the quality of education of students in technology and drawing. For the selection and discussion with students of the system of criteria and indicators of the quality of education of students, the state standards of general secondary education, the data of age psychology, requirements of school programs were used. According to the requirements of the second pedagogical condition (interaction of innovative, productive, informational and communicative, interactive methods and technologies) implementation of all stages of the proposed model was carried out using various forms of organization of the educational process in which the traditional classroom and independent work stud Entities were supplemented or completely replaced by innovations. So, lectures were conducted using multimedia support (lectures-visualization, problem presentations); seminars (interdisciplinary, gaming) took place in disputes, conferences or organizational-activity games using an interactive multimedia board; Laboratory and practical classes provided for step-by-step development, discussion and protection of students of multimedia educational projects, reflexive analysis of products of activity. Independent work of students contained individual research tasks, which included the preparation of information projects, the development and selection of various tests for students, schemes for monitoring and analysis of lessons; preparation of

presentations on the results of pedagogical diagnosis of achievements of pupils, their various ratings and self-evaluation.

Students gain experience of independent professional and pedagogical activity in developing pedagogical diagnostics of quality of education of students, which was the third pedagogical condition, took place in the process of pedagogical practice. For this purpose, in the program of pedagogical practice, it was included the task of preparing students for the detailed description of individual students, groups or class as a whole according to the criteria and indicators important for the quality of their training in technology and drawing. In particular, the compilation of such a characteristic required the ability to test students from the peculiarities of their thinking (logical, figurative, spatial), imagination and attention, ability to creativity, aesthetic perception, and others like that.

In the modern educational system of Ukraine the scientific level of testing (test development, testing, processing, presentation, pedagogical analysis of the results and their interpretation) is not consistent with international standards in this area. In the libraries of the universities there is not enough literature that reflects the current state of the global theory and the practice of educational measurement. Today, in the pedagogical universities of Ukraine the systematic work of preparation and retraining of personnel, who are capable to develop and use the educational tests in educational-professional programs of preparation of future teachers of vocational training in many fields is not organized, there are no training courses of the educational assessment, the didactic testology or of the educational qualimetry. The pedagogical diagnostics of the education quality of professional training of future teachers of vocational training in the field of “food technology” and “services” includes examination, observation and analysis of the learning process, provides an opportunity to obtain and use information on the adequacy of pedagogical technologies, forms, methods and tools; to improve the learning process.

The quality of students' education is influenced by the level and quality of students, the quality of educational standards, the quality of education, contents of curricula and programmes, the quality of the educational process and scientific-methodical maintenance of pedagogical competence and pedagogical skills of the teaching staff, logistics, morale and psychological climate, etc.

The pedagogical diagnostics is a process during which the analysis of the learning process is happen, the providing of the objective determination

Comprehensive pedagogical diagnosis of the quality of the training of future...

of its results, the monitoring, the review, the evaluation, the accumulation of statistical data, their analysis, the identification of the dynamics, the trends, the forecasting of further improvement in the quality of education.

The pedagogical diagnosis is an important factor of organizational forms that affect the quality of education in the training of students in higher education. The complex pedagogical diagnostics of the quality of the training of future teachers of technologies was based on the system studies, which were implemented at the university:

- the carrying out of the large-scale teaching experiments to identify the parameters of the learning process of students and formation on this basis of the strategies of the quality management system of educational process;
- the study of the nature of the formation of residual knowledge and development of methods of integrated monitoring of quality residual knowledge as one of the most important indicators of the quality of the educational process in general;
- the formation of the bank of the diagnostic tasks of the core subjects, the development of diagnostic technologies;
- the creation of the information technology of a continuous system-complex diagnostics of the quality of the training of future teachers.

The results of complex pedagogical diagnostics of the training of future teachers of technology in 2015 – 2017 is presented in Fig. 1.

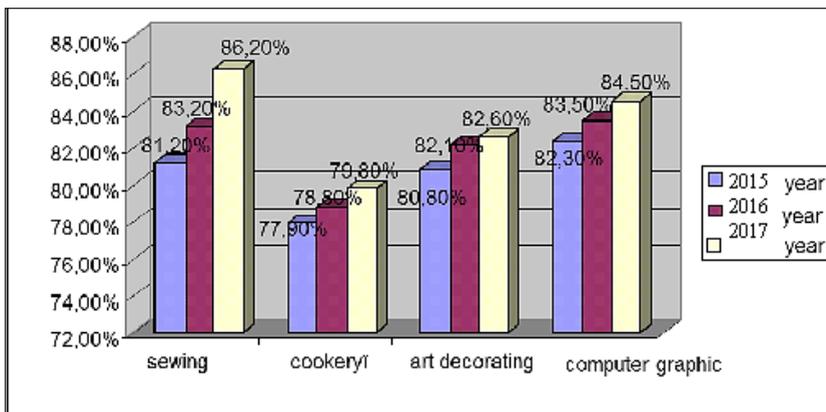


Fig. 1. The average index of the quality of the training of future teachers

The average index of the quality of the training has gradually changed in the course of the year. These results are related to the fact that in 2015, the traditional aspects of the diagnostics of the quality of the knowledge of students are applied. In 2016 – 2017 years in the educational process, in addition to the described types of control, a portfolio of students, individual-group work, technology web quest, group work, simulations etc are introduced.

The repeated questioning was done to determine the significance of the use of diagnostic techniques in the learning process and the levels were differentiated: high, medium, low. The results of the study according the criterion “The importance of the use of the diagnostic techniques in the learning process” at the ascertaining and the forming stages of the experiment are mapped in the table. 1.

It is summarized that the parameters have changed in the control and experimental groups by comparing the results of studies according the criterion “The importance of the use of the diagnostic techniques in the learning process”.

Table 1

**The comparative table of the results according the criterion
“The importance of the use of the pedagogical diagnostics
in the learning process”**

Levels	The ascertaining stage		The forming stage	
	The control group	The experimental group	The control group	The experimental group
	%	%	%	%
High	16	15	16	38
Medium	42	38	16	54
Low	42	47	34	8

In the control group there is a marked increase in the number of students with average level (8 %), decreasing with low (6 %), and the number of respondents with a high level remained unchanged. In the experimental group the number of students with high (23 %) and secondary (16 %) levels increased, with low (39 %) level decreased, but these figures are significantly higher than in the control group, which gives reason to believe the experimental work is efficient and effective.

Comprehensive pedagogical diagnosis of the quality of the training of future...

The experimental method, which includes: the first – the preparatory-cognitive stage, was foreseen to provide the future teachers with knowledge, skills and skills in pedagogical diagnostics of the quality of education; practical and constructive – directed and intensified the students on the positive attitude and use of the system of pedagogical diagnostics of the quality of education of students, stimulated the development of the need for the study of the theory of pedagogical diagnostics; analytical – tracking the causes of weak links (problems); analysis and systematization of received information, development of recommendations and proposals for further correction of work, preparation of conclusions; technological – correction by means of introduction of technologies, feedback, selection of methods of pedagogical diagnosis of quality of education; Reflective and evaluation – students' training on their own to develop innovative methods of pedagogical diagnostics of the quality of education of students on the development of self-assessment of their preparation for the implementation of pedagogical diagnostics in modern school

The developed method of the diagnostic control of the students' knowledge was embedded at the stage of the formative experiment in the experimental group, but the control group continued to study according to the traditional method. After the experiment, the control pedagogical diagnostics with using the same research methods as during the ascertaining experiment.

The smart tasks were specially designed that related to the diagnostic methods should be constructed in such a way that during their implementation the intellectual skills will be used: analysis, synthesis, distillation, comparison, classification and generalization. With their help, students penetrate into the problem that confronts them, they describe the properties of the components affected by the issue, pick a solution to the problems. The process of the solving intellectual tasks consists of several steps: the analysis of the conditions of the problem, the search a solution plan, the solution, the validation and investigation, the analysis of the fulfilled work.

The variety of conditions was used, here is an example:

Situation 1. You are the head of the methodical bloc. You need to re-pack the department according to the staff schedule after the reorganization. The task is to describe which path you would choose and why:

a) Undertake the work themselves, examine all the lists and personal files of the teachers, submit your project at the meeting of the bloc;

- b) Offer to resolve this issue to the personnel office, because that's its job;
- c) In order to avoid conflicts, suggest to express the wishes of all interested parties, establish a commission of the acquisition of a new bloc;
- d) Ask the teachers to submit their proposals concerning the composition of the bloc.

Situation 2. You have recently started to work as a teacher of technology, having come to this position from another school. Not everybody has known you personally yet. Walking down the hallway during the class you see three high school students who are talking about something animatedly and do not pay attention to you. Returning 20 minutes later, you see the same picture. The task is to tell us how you will behave:

- a) You will stop, make it clear to students that you are a new teacher of technology, you will say that their conversation is too long and it's time to go to the class;
- b) You will ask who their direct teacher of technology is;
- c) You will first ask about the conversation, then introduce yourself and ask whether there are any claims to the teacher of technology, then offer to go in the workshops for the class;
- g) First of all you will ask how they study, what they don't like at the technology classes, you will take these students into consideration.

Situation 3. There is a list of 24 qualities below, which the teachers must have in varying degrees to solve any problems that interfere with normal teaching activities: persistence, endurance, freedom, sociability, diligence, variability, sensitivity, knowledge of their capabilities, respect for family traditions, ability to imagine, arrogance, skill, thrift, self-discipline, resourcefulness, initiative, purposefulness, persistence, ability to listen, sincerity, independence, erudition, the desire for success, efficiency. The task is to form the teaching staff. The methodical instructions are: you should give a prepared list of qualities to all students and ask each to choose five qualities which, in their opinion, are essential for solving problems that interfere with the normal work of the teaching staff. Each student will be able to do it using the method of pair wise comparisons.

4. Conclusion

According to the results of the final section of the training of future technology teachers and the drawing for the pedagogical diagnosis of the quality of education of students, positive qualitative changes were identified in the

Comprehensive pedagogical diagnosis of the quality of the training of future...

formation of the preparedness of future technology teachers and drawing to pedagogical diagnostics of the quality of education. The number of students of the experimental group, which showed high level of preparedness, grew by 8.54%, satisfactory – by 8.33%, at the low – it decreased by 16.87%.

Pedagogical diagnostics is a process in which an analysis of the learning process is carried out, an objective definition of its results, control, verification, evaluation, accumulation of statistical data, their analysis, revealing of dynamics, tendencies, forecasting of further improvement of educational quality.

A comprehensive understanding of the results of student performance, i.e. the quality level of students' knowledge, their attitude towards the vocational subject nature and interest in learning at the ascertaining and forming stages of the experiment, led to the conclusion that the use of reasonable methods of diagnostics increased interest and improved attitude of the students to the learning, and also contributed to the increase in the level of quality of knowledge, and consequently, the quality of teacher education. Thus, the preparation of future teachers of vocational training in the field of “food technology” and “services” to the pedagogical diagnostics of the quality of education is a process in which comprehend, optimize learning, care about the objective analysis of educational outcomes, the monitoring, inspection, evaluation, accumulation of statistical data, reflection, and study the dynamics, trends, predictions about future developments. Further his work we see the development of gaming diagnostic situations.

References:

1. Bespalko V.P. (2006) Parameters and crater for diagnostical purposes. *School technologies*, No. 1, p. 118-128.
2. Bodnar A. (2010) Innovative technologies in the form of a monitoring and evaluation activity. *School number 1*, p. 5-6.
3. Viktorov V.G. (2004) Certification and accreditation of educational institutions in the quality management system. *Multiversum. Philosophical Almanac*. K.: Center of spiritual culture, No. 43, R. 23.
4. Podlasie I.P. (1998) Diagnostics and expertise of the pedagogical project: [textbook], K.: Ukraine, 343 p.
5. Bloom B.S., Madaus, G.F. & Hasting, J.T. (1971) Handbook on Formative and Summative Evaluation of Student Learning. – N.Y.: McGraw-Hill.
6. Carol Taylor Fitz-Gibbon. (1996) Monitoring Education: Indicators, Quality and Effectiveness / Taylor Fitz – Gibbon Carol. – Cassel, 259 p.
7. UniTest System – software for computer testing automation [Electronic resource]: Web page. – Access mode: <http://sight2k.com/rus/unitest/>