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"FIVE-STAGE" TECHNOLOGY OF TEACHING SPECIAL SUBJECTS IN THE PROFESSIONAL TRAINING OF STUDENTS WITH DISABILITIES

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Abstract:

Objective. Training of young people with disabilities in specialized colleges through the use of "five-stage" technology on the basis of an individual approach to special subjects.

Methods. Analysis of scientific and psychological-pedagogical sources, study of educational and normative documents, design, observation, interviews, surveys and tests, mathematical and statistical processing.

Result: In addition to independent study in the vocational training of young people with disabilities based on five-stage innovative technology, the focus is on the acquisition of personal skills and abilities necessary for the acquisition of specialization. Knowledge and skills are formed in the process of completing the task. It is based on the fact that students perform the given task individually or mutually, independently planning from the moment of implementation and working together to draw conclusions.

Conclusion. The use of innovative teaching technologies in the teaching of special subjects in specialized colleges has proven to improve the quality of education, as well as a significant development of individual learning activities of students.

Keywords: vocational, special subjects, learning objectives, education, five-step technology, innovation, individual, pair, teaching and learning, planning, implementation, inspection, assessment, students with disabilities.

Introduction.

According to the practice of advanced foreign countries, in order for students with disabilities to demonstrate their abilities and capabilities in vocational training and become a free citizen, it is important to find and implement in practice the best solutions to improve the quality and efficiency of the educational process in educational institutions, as well as improve the methods of education. In addition, it is necessary to create favorable and acceptable pedagogical conditions taking into account psychological and pedagogical characteristics for the development of personal qualities and professional qualities on the basis of an individual approach in their physical and mental perfection, effective use of innovative educational technologies in professional training, development of modern educational and methodological provision of appropriate training for the content of education, improve the content of educational materials. Based on this need, it is necessary to improve the methods of teaching special subjects in specialized colleges, develop modern didactic tools, expand access to e-learning resources and develop teaching aids.

One of the important tasks in the vocational training of students with disabilities is the widespread use of modern educational technologies and scientific achievements in teaching, their introduction into the educational process and the application of best practices of developed countries in the educational process. It is important to educate young people with disabilities, to implement an individual approach to vocational training, the widespread introduction of innovative educational technologies in the educational process.

Methods.

The process of teaching special subjects in specialized colleges using innovative educational technologies based on an individual approach should be designed to ensure guaranteed achievement of the planned results. [1]

It was recommended that the teaching process in specialized colleges be conducted in the form of individual and pair work. The individual form of work helps to individualize the learning process and activate students. In this case, students independently perform assignments or practical work related to work. The following opportunities are created in the application of this form of training in the educational process:

- comparison of practical work performed or products and samples performed as a result of assignments related to labor activity;
- independently plan assignments or practical work;
- Independent search and collection of important information by students;
- retraining and repetition;
- self-assessment.

Today, the topics (motives) of self-activation, self-creativity, self-knowledge and creativity play an important role in the activities of innovative opportunities teachers. This provides an opportunity to shape the creativity of the teacher’s personality.

Results.

An important condition for innovation is to create a new state of communication. A new state of communication is the teacher's ability to create his own position of independence, a new attitude to the world, to pedagogical science, to himself. The teacher is not wrapped up in his or her own perspectives, he or she opens up and perfects through the rich forms of pedagogical experience. In such situations, the teacher's way of thinking, mental culture changes, emotional feelings develop.

A change in the pattern of communication between teacher and student is one of the conditions for innovative activity.

New relationships, as in the tradition, must be free of elements such as coercion, submission to judgment. They should be built in the form of peer cooperation, mutual management, mutual assistance. The most important feature of their relationship is the creative collaboration between teacher and student. [2]

Innovative activity is explained by the following main features:

• conscious analysis of professional activity;
• critical approach to norms;
• readiness for professional news;
• have a creative attitude to the world;
• Realize their potential, integrate their lifestyle and aspirations into their professional activities.

In this way, the teacher acts as the author, producer, researcher, user and promoter of new pedagogical technologies, theories and concepts.

Discussion.

Innovative educational technologies are activities aimed at the effective organization of the interrelated activities of the learner and the teacher in order to achieve the learning objectives set in the teaching of special subjects. [3]

We have developed and put into practice "five-stage" innovative educational technology, which is highly effective in conducting practical training in special disciplines in specialized colleges.

"Five-stage" technology is the ability of students to work individually, in pairs or in small groups for a specified period of time, to perform work activities (product and sample preparation, practical work related to any professional activity) on a given practical task. In this technology, learners are involved in the processes of planning, execution, self-examination, drawing conclusions, and evaluating results. Assignments are completed individually or in pairs, while small group work is a coordinated outcome of students' collaborative activities. [4] Assignments should serve the study, apply theoretical knowledge to practice, be able to create opportunities for Independent Planning, Organization and implementation of work by students.

In the "Five-stage" technology, the execution of the task is carried out in the following stages:

1. Understand the task. At this stage, the teacher provides samples, diagrams, technical drawings; description of project assignments; instructions and guidelines; materials on learning objectives should be prepared. The teacher engages the students in fully understanding and comprehending and analyzing the task. They then set up the work stages in the implementation of the project.

2. Planning. At this stage, students complete the work plan independently. The plan provides information on the stages of the work, ie the technological sequence of execution and the time allotted for them, the necessary equipment and tools, samples of raw materials or

products, and safety measures. Students discuss with the teacher the problems encountered during the planning stage.

3. Implementation. Students complete the task independently based on the work plan. The teacher monitors the work process and records the intermediate results in the "Control" notebook.

Students complete the assignment within the allotted time. They ask the teacher for help if they have any problems or difficulties while doing the work. Students should be able to apply the knowledge and skills they have learned at this stage in a new situation.

4. Check. Students check the results of their work on their own. For example, they can evaluate work results based on quality criteria.

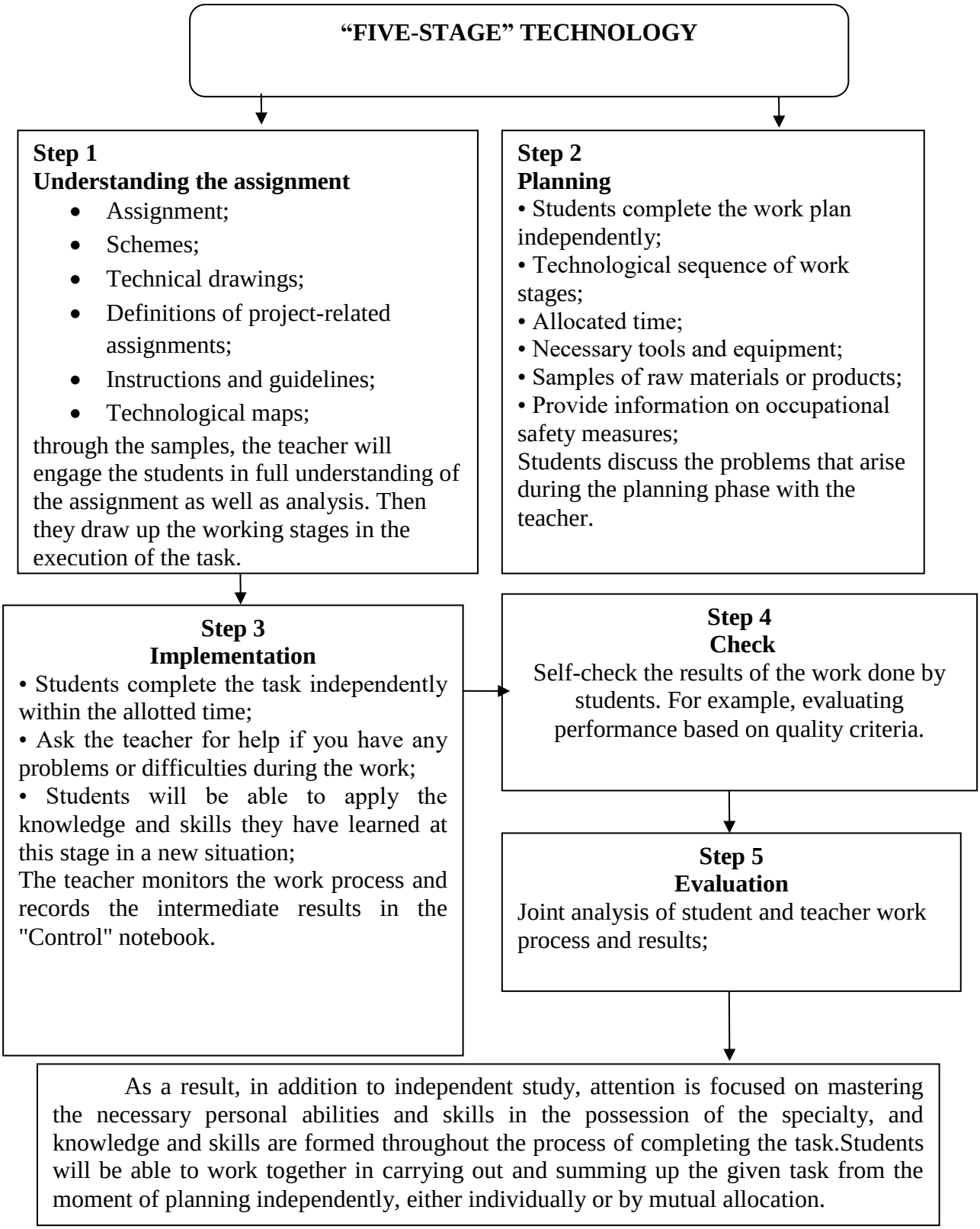
5. Evaluation. The student and the teacher analyze the work process and results together.

The use of 5-step technology focuses on students' independent learning. In addition to independent study, the focus is on the acquisition of the personal skills and abilities required in the acquisition of the specialty, and the acquisition of the knowledge and skills necessary to complete the task. Students work together to implement and draw conclusions from the time they are independently planned as a project team by sharing tasks in completing a given task. The teacher monitors and systematically manages the learning process. The following documents are used to record all stages of the project and to compare the project work: assignment (diagrams, working drawings, samples); definition of assignments; instructions; information on learning objectives; instructions on the order of work and distribution of tasks; evaluation sheet; control protocols; list of tools and equipment, measuring instruments, raw materials and auxiliary materials.

“Five-stage” technology is presented in the technological map of practical tasks for students with disabilities.

Conclusion.

The use of innovative teaching technologies in the teaching of special subjects in specialized colleges has led to an increase in the quality of education, as well as a significant development of individual learning activities of students. It is based on the fact that students perform the given task individually or mutually, independently planning from the moment of implementation and working together to draw conclusions.



Picture.1. The project of organization of practical training on the basis of "Five-stage" technology

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DIGITAL SIGNAL PROCESSING WITH POLYNOMIAL AND DOBESHI WAVLETS

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Abstract:

Objective. This article is devoted to rebuilt for an important fragmentary of wavelet models of Biomedical Signal Processing. These models were built using Haar's fragmentary-unchanged wavelets as well as Doubechi wavelets. The Haar's fragmentary-unchanged wavelets models has a high accuracy for Biomedical signals on digital work, and this provides doctors for making any useful decisions about the partients diseases. For example, the first signal of Gastroenterology experimental information was took, and there were built on the basis of this information the of fragmentary-unchanged and Doubechi wavelet models and evaluated their errors. It is known that modification of signals using fragmentary wavelets results in formation of orthonormal wavelets, due to there will be sharp increase in errors along the signal graph, thus in order to reduce errors Doubechi wavelets were used and achieved the goal.

Methods. Doubechi wavelets, conversion wavelets, digital processing error, relative error.

Results. To conclude, it is possible to present that, in the process of digital signals Doubechi wavelets are able to make good results.

Conclusion. In matters of image recognition from wavelets, during the processing and synthesis of various signals, such as speech, in the analysis of various images in nature (color of the retina, radiography of the kidney, studying the surface properties of crystals and nanoobjects, satellite images of clouds or planetary surfaces, etc. can be used in the study of the properties of vortex fields and in other cases.

Keywords: The Haar's wavelets, the Haar's fragmentary-unchanged wavelets, orthonormal wavelets, the scaling function,mother wavelets.

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