MODERN PEDAGOGICAL TECHNOLOGIES IN DEVELOPING PROFESSIONAL QUALITIES OF FUTURE TEACHERS

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ABSTRACT

This article reveals topical issues on the use of modern pedagogical technologies in drawing lessons. And so it contains recommendations for reading drawings, checking students' knowledge, and increasing activity in the process of the lesson. The methods of using innovative technologies in drawing classes are highlighted.

Keywords: approach, theoretical material, future teacher, personal approach, methodological base, professional activity, educational process, active teaching method, student

Pedagogical scientists began to deal with the problem of formation of professional qualities in future teachers from the end of the 19th century. Therefore, it is worth noting that one of the important factors of success in pedagogical activity is the teacher's personal qualities. It is important to develop qualities such as goal-seeking, tenacity, hard work, humility, ingenuity, oratorical skills, and artistic skills in future teachers. One of the most important qualities of a teacher's personality is explained by his readiness for empathy, that is, he should very well understand the mental state of students, the need for empathy and social interaction.

Professional qualities are a set of spiritual, mental and physical qualities that are necessary and sufficient for a person to thoroughly study a profession and acquire professional skills, work effectively and climb the career ladder. Professional qualities are individual characteristics that allow a person to successfully study a specific profession and carry out professional activities. By introducing modern pedagogical technologies in the development of professional qualities in the educational process, it is necessary for the teacher to prepare himself for the newly created conditions. Mixing time with innovative technologies, relying on new technologies and rich experiences accumulated in our country, it is a requirement of the present time to work together on the creation of modern pedagogical technologies of our own.

Innovation - Latin novation - study, renewal, renewed view of something. Innovative - in English innovative - innovation, innovation - achieving new products and services as a result of mastering new processes by investing in innovation. Innovation is an innovation in technology, technologies, scientific achievements, application of advanced experiences, improvement of the quality of education in the educational system, use of advanced pedagogical technologies in teaching.

Technology - technique from the Greek techno - art, skill, mastery + logia - from the Greek logos - a component that means the meaning of compound words such as science, knowledge, study, for example, technology, psychology, etc.

As soon as the teacher notices that students are less active in taking the lesson, it is recommended to conduct one of the innovative methods for 4-5 minutes, depending on the type of lesson.

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The student's activity reflects the extent to which he uses his capabilities, goals are set. Therefore, the creative nature of pedagogical activity is one of its most important features. Pedagogical activity involves not only the explanation of the topic (knowledge, skills, methods of activity, etc.) from the teacher to the student, but also their joint growth and personal development. With this concept, not only the knowledge and skills of the teacher, but also their personal characteristics, interests, values, and characteristics specific to pedagogical activity, expand creative possibilities for the success of pedagogical activity.

A necessary component of the professional training of future teachers is moral and psychological training, which forms the professional and pedagogical direction of the future person. This type of teacher training is related to the development of value directions of future teachers, interest in the teaching profession, professional and personally important qualities.

More than a century ago, a list of personalized main qualities of a teacher was formed, which helps to successfully carry out professional activities. To form a model of a teacher, a person should have the following qualities: Observation, purposefulness, hard work, persistence, humility, public speaking skills, artistry.

Based on the logic of our research, we adopt a different point of view. "Professional qualities" can be understood as the permanent attitude of a person to his profession, himself, work, people, nature, things, and a certain system of motives, forms and methods of professional behavior in which these attitudes are implemented. In our opinion, the concept of "Professional qualities" combines internal and external conditions, includes the dialectic of subjectivization and objectification, determines the basis of the subject content of the motivation and regulation of the teacher's behavior. In addition to more than fifty identified personal qualities, a teacher must also have certain professional qualities. The complexity and versatility of the teacher's social functions offers a qualitatively new approach to the training of the future teacher. In recent years, several areas of teacher training have been identified:

-The role of the teacher in improving the state of the general education school at the current stage and the educational process.

- work and personality psychology of the teacher.

- increase the effectiveness of pedagogical work.

- professional training of the teacher in the system of higher pedagogical education, in which several aspects can be distinguished:

- problems of reconstruction of psychological-pedagogical training of pedagogues;

- formation of personal and professional qualities of the future teacher;
- professional and creative self-education of the teacher;

- studying the structure of pedagogical activity;

- development of content, methods and forms of theoretical and practical training of the future teacher;

- the future teacher should constantly work on himself through modern technologies;

The need to revise the old norms and standards makes modern researchers interested in traditional approaches to the professional training of future teachers.

Educational activities are conducted in modernly equipped classrooms: multimedia technology, designed for group organization, and students are required to work on their own work.

Lectures are held in a designated auditorium equipped with a computer, a multimedia projector, loudspeakers for sound amplification, and laboratory rooms. Practical training and group counseling will be held in the classroom, practical training will be in small groups, equipped with a computer (for the teacher) and multimedia, and a round table discussion will be planned.

Another important direction of development of pedagogical readiness and professional qualities of future teachers for teaching engineering sciences on the basis of computer design is modern approaches to construction, geometric modeling in automated design systems and organization of graphic data, construction documents methods of creating a geometric object and a geometric image in the process of automating the development and execution is a review.

Pedagogical training and development of professional qualities on the basis of computer design, training in the use of a flat graphic editor in the process of creating graphic and text information, construction in the process of automating the development and execution of construction documents in ALT, modern approaches to geometric modeling and the organization of graphic information, geometric objects and geometric more emphasis is placed on creating image models.

Particular attention is paid to the mastering of industrial interactive graphic systems, which are especially relevant for today's production, and their use in the teaching of engineering sciences.

Future teachers will be given knowledge on the following issues:

- the current state and development trends of computer graphics tools, their role and importance in engineering information systems and practical applications;

- methods and means of geometric modeling of technical objects with computer graphics tools;

- methods and means of automation of design-construction implementation and formalization;

The future teacher, after thoroughly studying the specialized subjects, can easily draw all the drawings on the computer using commands. The future teacher draws on the computer using the AutoCAD program, using the practical and operational programs and ready-made commands package of "Engineering computer graphics".

I. Drop-down menu window - located at the top of the screen.



1. "File" - menu for working with files;

2. "Edit" - the menu for editing parts of the graphic area on the "Windows" table;

3. "View" - a menu of screen control commands. Switching from sheet space to model space sets up the toolbars and other commands needed to control display parameters;

4. "Insert" - a menu for ensuring the placement of in-app and external objects in blocks;

5. "Format" - a menu of commands such as working with layers, controlling color and line types, text style and size, setting the style of multilines, unit of size, defining the borders of the drawing;

6. Menu of system management commands when using the "Service" screen. They are used to load commands such as setting drawing parameters and links using a dialog box;

7. "Drawing" - opens drawing commands;

8. "Dimensions" - opens commands for managing size indicators and setting them;

9. "Editing"-change drawing elements-opens commands for editing the drawing and entries in it;

10. "Window" - switches the information from file to file and opens them;

11. "Help" - opens a powerful hypertext notes system in English.

II. Standard toolbar. It will be located in the second line from the top of the screen.



- 1. "Creat" the command to open a new page when creating a new file button;
- 2. "Open" the button of the command to open an existing file;
- 3. "Save" the button of the command to save files in memory;
- 4. "Print" the button to print the drawing on paper;

5. "Preview" - a button for checking the position of the drawing in the drawing format before printing it on paper;

6. "Publication in DWF" - printing in DWF format;

7. "Cut" - button of the command to cut selected elements from the drawing to the "Windows" clipboard;

8. "Copy" - the button of the command to copy the selected elements to the "Windows" clipboard;

9.«Insert» - the button of the command to remove copies from the «Windows» clipboard;

10. "Copying properties" - copying of properties;

11. "Editor block" - edit blocks;

12. "Cancel" - the button to cancel the last action;

13. "Repeat" - the button for restoring the last canceled action;

14. "Panning in real time" - the button of the command to move the model space-drawing to a convenient place for the user;

- 15. "Zoom in real time" a button for simultaneously enlarging or reducing views;
- 16. "Zooming the frame" a frame for enlarging objects;

17. "Show previous" - show the previous one;

18. "Properties" - characteristics;

19. "Design Center" - design center;

20. "Window of tool palettes" - the window of the instrument palette;

- 21. "Binder Dispatcher" storage dispatcher;
- 22. "Market Set Manager" character set dispatcher;

23. "QuickCalc" - calculator;

24. "Help" - reference book;

III. Layers are created on the screen in the "Layers" - "Layers" tool panel.

IV. Using the "Properties" - "Object properties" panel, the color, type and thickness of the lines on the screen can be changed.



- 1- button for coloring the lines in the image;
- 2 the button of the command to type the lines in the image;
- 3 the button of the command to thicken the lines in the image.

Buttons for drawing, editing, linking, and scaling commands are arranged in columns on the left and right sides of the screen. They include: "Risovanie" - "Draw" panel commands, "Izmenit" - "Transform" panel commands, "Razmery" - "Dimensions" panel commands and "Privyazka obekta" - "Link object" » panel commands.

V. "Drawing" panel commands



- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
- 1. "Segment" the button of the section drawing command;
- 2. "Direct" button for drawing a straight line;
- 3. "Polyline" the button for drawing multiple lines;
- 4. "Polygon" the button of the polygon drawing command;
- 5. "Rectangle" the button for drawing a rectangle;
- 6. "Arc" button for drawing an arc;
- 7. "Circle" circle drawing command button;
- 8. "Cloud" command to draw a cloudy image;
- 9. "Spline" button for drawing a curve;
- 10. "Ellipse" the button for drawing an ellipse;
- 11. "Elliptic arc" the button for drawing an elliptical arc;
- 12. "Insert block" the button for placing a block;
- 13. "Create block" the button of the command to create a block;
- 14. "Dot" the button of the dot command;
- 15. "Hatching" the button of the command to cross section and cutting surfaces;
- 16. "Gradient" the button of the object coloring command;
- 17. "Area" the button of the command to open an area in a 3D object;
- 18. "Table" the button of the command to insert a table;
- 19. "Multiline" the button of the multi-line writing command.

After getting a solid grasp of these commands, let's take a look at a projection drawing as an example.

Using the AutoCAD program on the computer, finding the missing third projection of the model and constructing a right-angled isometric projection of the model in 2D and 3D formats. And if the dimensions given in the task are set, the image of the task will be created as shown in Figure 1.

First, center lines are crossed with axes of symmetry for each view of the drawing as if it were done on paper. The head (front), top and left views of the subject are performed sequentially. It is recommended to complete the rough version of the task first on paper, check its correctness with the

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teacher, and then perform it in 3D format on the computer. (Picture 2) Necessary cuts and cuts are made, and cut (trimmed) surfaces are drawn. It is converted to JPEG format and output to white paper. (picture 4)



Picture 2

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Picture 3



Picture 4

A modern teacher can fulfill the given tasks only if he/she not only has competence and competence, but also knows every requirement well.

Competence is the ability to use theoretical knowledge, practical skills and qualifications in solving practical and theoretical problems encountered in professional activities.

Competence (in Latin, capable, capable), the composition of competence includes, in addition to purely professional knowledge, skills and qualifications, initiative, the ability to work in a cooperative group, communicative ability, ability to realistically evaluate, logical thinking, the ability to sort and use information.

Summary

Thus, personality development is the main goal of pedagogical activity. That is why it is important for the teacher to use various creative methods to achieve this goal, it is important to be able to use game methods, innovative techniques, and computer technology. Therefore, creativity is one of the most natural forms of realizing the need for research. Creativity as an activity includes all its components: purpose, content, forms, methods and means. Creativity develops a person, which means he develops. A creative approach to activity affects all substructures of a person. The impact on the student is carried out mainly through the main object of pedagogical activity.

Therefore, a teacher should be ready to carry out not only delivery, inspiration, indoctrination, educational, educational, methodological, management, but also organizational work. The future teacher should always be ready for educational goals, training content, means of pedagogical interaction, organization of the educational process, educational subjects, and the result of pedagogical activity.

Thus, the structure of professional qualities includes knowledge, skills and qualifications, abilities, personal qualities of professional importance. In our opinion, a teacher's competence and skills are a set of professional qualities that he introduces in his pedagogical activity.

In accordance with the task of my research, first of all, we need to analyze the conceptual approaches to the formation and development of professional qualities of students of higher education institutions and its conceptual apparatus. Because it is possible to solve the problem of developing the professional qualities of students of higher educational institutions only by relying on them.

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