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FORMATION OF GRAPHIC COMPETENCE STUDENTS HAVE

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KEYWORDS

Flexibility of thinking, the development of new types of technologies, ways of professional activity, increased motivation

ABSTRACT

Graphic competence includes the totality and willingness to apply knowledge, skills and personal qualities for successful geometric modeling, as well as graphic design of machines and mechanisms.

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The goals and objectives of the course "Descriptive Geometry, Engineering and Computer Graphics" is to teach students to read and execute drawings correctly and technically competently. When studying the course, students come into contact with real material objects, starting from individual parts and ending with nodes, machines, develop techniques and skills of imaging on the plane of three-dimensional technical forms, have the opportunity to judge the shape of a part, a machine node based on images in drawings made in rectangular and axonometric projections.

In a modern technical university, the study of "Descriptive geometry, engineering and computer graphics" is the only training course that gives a geometric education to a future engineer and develops his professional competencies in the learning process. Today, many school graduates have a low level of spatial thinking development.

The reduction and modification of the course "Drawing" has led to the fact that first-year students cannot solve such tasks that previously did not cause difficulties. The main "problems" include the tasks of constructing views in compliance with the lines of projection connection, constructing a point by coordinates, dividing a circle into five or six parts, even the types of lines cause difficulty for some students.

As mentioned above, graphic disciplines should contribute to the formation of students' graphic and professional competence, the basics of knowledge and skills necessary for the successful development of successive technical disciplines studied in subsequent semesters (theory of machines and mechanisms, machine parts, special disciplines in the implementation of course and diploma projects)

Graphic competence includes the totality and willingness to apply knowledge, skills and personal qualities for successful geometric modeling, as well as graphic design of machines and mechanisms. Our task is to prepare students at any level of their training in graphic disciplines. As noted in [1-4], in addition to academic knowledge, it is necessary to draw the attention of students, especially future agricultural engineers, to those analogues that we can observe in the environment, and to those artifacts that man obtained by borrowing from nature. Such additional tasks and laboratory work, which were carried out [2-5], not only increase interest in studying the discipline, but also develop independent thinking among future specialists, which, ultimately, is the most important thing in training a specialist who will solve modern engineering problems.

The study of graphic disciplines forms the intellectual sphere of an engineer and his readiness for professional activity.

Based on the above, it is possible to determine the main tasks of forming the graphic competence of future specialists [6-8]:

– flexibility of thinking,
– the ability to generate new ideas,
– rapid restructuring of consciousness,
– mastering new types of technologies and methods of professional activity.

These qualities of future agricultural specialists can be provided due to the development of spatial imagination, which is determined not only by the ability to produce original images, but also by the quality and speed of intellectual processes, the ability to quickly and correctly find solutions to tasks. A person who is sensitive to changes in nature is able to see the goal from afar, as he has more developed imaginative and spatial thinking, as well as, very importantly, aesthetic taste.

It should be noted that for the formation of graphic competence among students, if they have certain abilities, positive motivation to learn graphics, an important role is played by the controlled independent work of students. The mind and desire of the student, his abilities are manifested in the relatively independent acquisition of knowledge, solving new tasks for him, in transferring this knowledge to a new situation.

The main tasks that need to be solved in solving this problem [7-9]:

– organization of independent work of the student;

– selection of different level tasks;

– increasing motivation to acquire new knowledge in the discipline; stimulating the conscious need for independent work; conducting a systematic assessment of student achievements;

– implementation of adjustments for further actions with the help of teachers.

Such methods of working with students are used by teachers in the course of lectures, practical and laboratory classes. It should be noted that the department carries out regular and effective work to attract students to research work, to participate in Olympiads and conferences. The role of a teacher in the study of graphic disciplines is also very important. The effectiveness of classes is determined to a large extent by the teacher's skill, his influence on students, and the quality of his preparation for classes. He needs a deep knowledge of the scientific foundations of drawing, wide familiarity with the special literature on the subject, knowledge of standards.

The teacher should know the history of graphics development and be aware of the latest achievements. All this will make it possible to feel confident in the audience, to deeply cover the theory of the subject, to find interesting and convincing examples as close as possible to future professional activity. Even the teacher's speech and the ability to briefly and logically express their thoughts not only contributes to a better perception of educational material, the assimilation of special concepts and professional terms, but also serves as a model for students, which is extremely relevant nowadays.

Thus, it should be noted that a whole range of professional, organizational and personal components is the key to effective activity in the formation of graphic competence among students, and, in particular, students of agro-industrial profile.

References.

1. Садикова Г. «Начертательной геометрии и инженерная графика» Т.2003 г.
2. Розов С.В. Сборник задач по черчению М. 1960 г.

3. Хоронов Р. курс «Начертательная геометрии» Т. 1974 г.

5. Галенюк Г. А. Лабораторная работа «Геометрический анализ окружающей среды» как средство формирования творческой личности агроинженера / Г. А. Галенюк // Формирование творческой личности инженера в процессе графической подготовки : мат-лы Республ. научно-практич. конференции. – Витебск, 2008. – С. 40–41.

6. Федорова М. Модель организации внеаудиторной самостоятельной работы / М. Федорова // Высшее образование в России. – 2007. – № 10. –С. 88–90.

7. Alidjanov, J. F., Khudaybergenov, U. A., Ayubov, B. A., Pilatz, A., Mohr, S., Münst, J. C., ... & Wagenlehner, F. M. (2021). Linguistic and clinical validation of the acute cystitis symptom score in German-speaking Swiss women with acute cystitis. International Urogynecology Journal, 32(12), 3275-3286.

8. Ataullaevich, A. F., Mekhammadkabirhanovich, B. M., Khalilovich, M. D., Ataullaevich, K. U., & Samukdjanovich, K. S. (2018). Factors influencing the choice of a method for treating patients with urethral stricture. European science review, (9-10-2), 203-206.

9. Якубова, А. Б., & Палванова, У. Б. Проблемы здоровья связанные с экологией среди населения Приаралья мақола Научно-медицинский журнал “Авиценна” Выпуск № 13. Кемерово 2017г, 12-15.

10. Азада, Б. Я., & Умида, Б. П. (2017). ПРОБЛЕМЫ ЗДОРОВЬЯ СВЯЗАННЫЕ С ЭКОЛОГИЕЙ СРЕДИ НАСЕЛЕНИЯ ПРАРАЛЬЯ. Авиценна, (13), 12-14.

11. Асадова, Г. А. (2021). Обоснование комплекса мер по преодолению бесплодия у женщин с использованием методов вспомогательных репродуктивных технологий. Интернаука, (24-1), 44-45.

12. Асадова, Г. А. (2021). Актуальные проблемы бесплодия у женщин. In Recent Scientific Investigation (pp. 15-19).

13. Расулова, Н. Ф., Саттарова, З. Р., & Мирдадаева, Д. Д. (2022). ИЗУЧЕНИЯ ОСОБЕННОСТИ ЗДОРОВЬЕ СОХРАНЯЮЩЕГО ПОВЕДЕНИЯ И САМООЦЕНКА ЗДОРОВЬЯ СТУДЕНЧЕСКОЙ МОЛОДЕЖИ. ноябрь-декабрь, 105.

14. Назарова, С. К., Эшдавлатов, Б. М., Асадова, Г. А., & Искандарова, В. В. (2021). Экстрагенитальные заболевания беременных. Журнал ВАК Новый день в медицине, 3(35), 176-182.