

SECTION 19. PEDAGOGY AND EDUCATION

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EDUCATIONAL TASKS AS A MEANS OF DEVELOPING STUDENT COMPETENCIES IN THE INTEGRATED COURSE "GETTING TO KNOW NATURE"

The design of the author's model curriculum of the course "Getting to know nature" for grades 5-6 was carried out on the basis of systemic, activity-based, research-based, personally oriented, and competency-based approaches [2]. Among the factors of forming the structure and content of the program, a prominent place belongs to developing the key competencies defined in the State Standard of Basic Secondary Education [1].

As for the cognitive component of the competencies, the author's course maintains a balance between methods of gaining knowledge (types of cognitive activity according to the source of information about nature) and acquiring knowledge by using a certain method of mastering it. That is, the emphasis is on how to obtain knowledge (from what sources, in what way) and how it can be applied. This approach contributes to developing students' ability to independently perform tasks by analyzing their own experience and capabilities, searching for necessary information, choosing resources (time, tools, participants), and determining the method of cognitive activity.

In our textbook "Getting to know nature. 5th grade", which implements the specified program, students' acquisition of the key competencies is ensured by the activity-dominant content [3]. It includes a system of tasks for organizing secondary students' educational activities in the assimilation of educational materials, and methodical reference points for teachers.

The competence potential of the integrated course "Getting to know nature" determines the need to develop students' ability to solve problems, evaluate opportunities, work with information about nature and use knowledge in specific situations. Taking into account the integrated character of each key competence (synergy of value, knowledge, activity components), the system of tasks in the textbook is aimed at gaining experience in solving various educational and extracurricular problems by students, in the process of which the competence components are integrated into a complete functional system.

Various educational tasks of the textbook provide an activity basis for developing the competencies. The use of simple tasks or questions, the answers to which require knowledge of factual information, is minimized in the textbook. There is only the first task of the rubric "You can do it", designed according to the principle of three facts. For example, "Name one sound phenomenon, two artificial sound sources, three natural sound sources", "Name one rock, two landforms, and three factors of terrain formation." Instead, the textbook quite often offers students tasks that encourage independent knowledge acquisition in the process of working with information sources.

Role-playing tasks involve interpreting the behavior or points of view of the characters depicted in a picture or mentioned in the task. This contributes to developing students' variability of thinking, the ability to understand the reasons for one's own actions and evaluate the actions of others. In the textbook, special attention is paid to the tasks for developing students' creative thinking, e.g., "Imagine the situation: your friends and you are going on a camping trip for a few days. Your duty is to provide the group with dishes. What material would you choose for the dishes? Explain your choice"; "What can you explore using the tools from the list: a test tube, stopwatch, ruler, magnifying glass, flask, scales, and binoculars?"

Using of the above-mentioned educational tasks in the integrated course "Getting to know nature" is aimed at developing student skills (cognitive, communication, practical, reflective, etc.), empathy, critical and creative thinking, and the ability to find different ways to solve the same problem. Students acquire qualities and experience necessary in everyday life, which proves the development of their competencies.

References:

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