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FORMATION OF STUDENTS 'SKILLS TO WORK WITH LEARNING MATERIALS

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ABSTRACT

The article explores the pedagogical possibilities of developing students' skills in working with learning tasks on the basis of analytical-synthetic processing of educational information in the form of text, images, numbers, creating imitations, interpreting educational materials.

KEYWORDS:- Teaching material, international assessment programs, information, information sources, textbook, imitation, interpretation, life activities, and competence.

INTRODUCTION

The formation and development of basic and scientific competencies of students based on the harmonization of the level of mastery of educational materials with the international assessment programs TIMSS (Trends in International Mathematics and Science Study), PISA (The Program for International Student Assessment) is of great importance today.

Tasks of academic disciplines:

- The formation of a person with the knowledge and skills to apply the modeling and predictive information necessary to make informed decisions in the context of life activities in society;

- Expediency, practicality, diagnosis and evaluation of the consequences of knowledge in all areas of activity to ensure sustainable development, the formation of a person capable of working together;

- To form a person who can apply mathematical concepts and strategic approaches to help consider and solve the problems and challenges facing science at the national and global levels;

- To form a person who can use their mathematical knowledge and risk concepts to process and apply the information they encounter every day, and thus make wise decisions for the benefit of themselves and others in all areas of life;

- To form a person with a positive attitude to education in order to be able to think independently.

Increasing the didactic potential of teaching science on the basis of gradual orientation of students to algorithmic information exchange activities will increase their activity in the

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educational process. Training to work with information sources is done step by step. It involves searching for, storing, interpreting necessary information from sources, processing them if necessary, using them, placing them in appropriate sources, and creating imitations.

A number of scientific studies have been conducted on the role of teaching materials and their role in improving the quality and effectiveness of education. It includes system, experience of creative activity, and system of relations" [3; 19-p.]. Also, the learning material is specially structured and structured information that requires students to master [1; 12-p.]. Learning materials are a source of information and they are "adapted" for students to master [5; 16-p.];

The main source of teaching materials is textbooks. In the research work, as well as in the scientific literature, textbooks have been singled out as the most important source for students to learn to work with information (teaching materials). For example, textbooks are cited as the main source in the education of "information consumption culture" in the educational process [4; 112-p.].

In order for students to understand the importance of learning materials during life activities, it is important to pay attention to visually in the selection or preparation of learning materials based on their vitality and the effectiveness of the materials presented based on images. This is because, no matter how important the learning material is, the students 'attention is not stable, the students' memories are more visual-figurative in nature, and the learning materials require visual representation.

Understanding the content of information is the basis for the effective use of information provided as educational material. Students' conscious mastery of the content and function of information allows them to use it appropriately in life activities [2, p. 84].

Educational disciplines that contain abstract materials should be based on the existing knowledge of children in the introduction of abstract concepts in a clear and material way. One of the important aspects that help learners master the learning materials is that they are armed with fundamental knowledge. The creation of their fundamental information base is based on the constant provision of the educational process with new information and the creation of independent information resources by students:

1) Provide constant new information. If the learning process is in the form of research, teachers should be provided with additional information to guide students to the concept they are looking for. Activating information opens up new ways to solve a problem and lays the groundwork for the creation of new ideas

2) Creating independent information resources by learners. Lessons in which learners participate independently teach them to analyze, synthesize, evaluate, remember, understand, and apply information, and to interpret information based on research, discovery, and understanding of the meaning of information.

Also, the sequence of presentation of learning materials should include a transition from clear life materials, to visual representations, abstract concepts, and problems. That is, a series of 1) vivid, 2) pictorial, and 3) abstract materials is used to cover the topics. This is especially important when cracking complex topics. This approach serves to master clear and abstract concepts. It involves the transition from concrete life materials, to pictorial representations, to abstract concepts and problems.

In Phase 1, learners use vital objects to model problems. At this stage, learners use vital objects to model problems. The teacher introduces the

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concepts into the learners 'speech based on assignments that allow the children to be practically engaged in solving a problem. In doing so, each abstract concept is introduced through practical practical assignments and life examples. For example, when introducing concepts related to arithmetic operations, it is advisable to first demonstrate the algorithm for performing these operations using some objects.

Phase 2 is the pictorial phase. Here, visual representations of vital objects are used in problem modeling. This stage teaches children to make connections between abstract pictures or models (diagrams, drawings, etc.) that represent only the life objects they have seen. Building or drawing a model makes it easier for children to understand complex abstract concepts. Simply put, it helps learners visualize assignments and make them easier to complete.

Stage 3 is the abstract stage, in which children use abstract symbols to model problems. Learners do not move on to this stage unless they demonstrate a solid understanding of the life and visual stages of the problem. The abstract stage involves the teacher introducing abstract concepts (e.g., mathematical symbols). For example, the representation of numbers in numbers (symbols) and so on. Or learners are introduced to a symbolic level of understanding using only numbers, symbols, and mathematical symbols (e.g., +, -, x, ÷) to indicate addition, subtraction, or division.

Thus, it is important that learners establish strong mental connections between real-life, figurative, and abstract stages when completing tasks. This helps learners understand the connection between learning materials and information needed for life activities.

Tasks are identified in stages on the basis of the selection of educational materials in terms of gaining theoretical knowledge and understanding of the content of the basic concepts necessary for students to master educational information, activating the culture of information consumption in students and ensuring their successful adaptation in an informed society.

The development of students' competence to work with educational information in the field of science is a complex process that requires reliance on basic concepts of science, including the content of science. Basic concepts serve to reveal the essence of precision, that is, specific events, objects. Introduction of basic concepts of science, interpretation through educational information, teaching to find common connections between concepts, teaching on the basis of integration of the studied concepts with the previously studied concepts:

- To determine the basic concepts of science;

- On the basis of training to distinguish and interpret the basic concepts of science from the acquired educational information system.

To determine the effectiveness of the process, it is advisable to use the following tasks:

- Tasks to determine the knowledge of students on the concepts of science;

- Tasks to determine the ability of students to apply their knowledge of scientific concepts in individual cases and examples and problem solving;

- Tasks to determine the skills and abilities of students to independently apply their knowledge of scientific concepts.

CONCLUSION

In conclusion, the most basic information in the educational process is provided through training materials. It is therefore the most important source of information in the development of learners 'information processing competencies. Ensuring that students master their knowledge

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of academic subjects at the level of requirements of international educational standards, requires the development of students' competence in working with information on the basis of analytical and synthetic processing of educational information, creation of imitations, interpretation of educational materials.

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