

## THE ROLE OF INTERACTIVE TASKS IN INCREASING COGNITIVE INTEREST IN LESSONS

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**Abstract:** Computer science interactive tasks can be used to develop cognitive interest in children through the use of interactive tasks. Schoolchildren's cognitive interest can be increased by using interactive tasks created using the LearningApps service in computer classes. The problem of developing cognitive interest is also specific to courses in informatics, which are directly related to the use and application of computer technologies. As students complete computer-assisted interactive tasks, they need to be able to provide feedback and correct their actions. As an example of the use of interactive tasks, the topics of the seventh grade computer science course were chosen as the first year of learning the science that creates the theoretical foundations of knowledge.

**Key words:** computer science, cognitive interest, interactivity, interactive tasks, LearningApps.

The study demonstrated the effectiveness of a series of interactive computer science tasks developed using the LearningApps service. In the experimental group, the number of students who did not show initiative and independence in the process of completing tasks, lost interest in them when faced with difficulties, and showed negative emotions - disappointment, nervousness, etc., decreased. At the same time, the percentage of students who showed more independence in completing the task and finding a way to complete it to the end increased, which indicates that students are interested in this activity and strive to find ways to solve the problem. It also became known that the number of children who show perseverance and tenacity in achieving results and feel satisfaction, joy and pride in their achievements is increasing. The problem of formation and development of interest in learning among schoolchildren has been studied by researchers for many years, but despite this, it still remains one of the most urgent and complex psychological and pedagogical problems.

A variety of forms and methods is an important aspect of teaching any academic subject and is the basis for the development of cognitive interest. And in computer science classes, it takes on an additional meaning, because the most modern and currently available teaching tools can be used elsewhere, if not in computer science classes.

One of the effective pedagogical tools is the use of tasks created with the help of interactive educational technologies, for example, the LearningApps resource. Based on Web 2.0 technology, this resource is used to support learning and teaching through interactive modules.

The importance of developing cognitive interest in students in modern educational conditions is undeniable. Organization of interactive education [4], interactive pedagogical interaction and use of interactive interface play an important role in this. Researchers are trying to evaluate the impact of different tools and methods on the effectiveness of computer science education: peer and programmed learning, robotics elements [2], augmented reality tools and QR code integration [1], etc. in one line, there are evidences about the effectiveness of using interactive tasks based on factor analysis and Bayesian network evaluation [5] in the process of teaching computer science.

At the same time, the use of interactive tasks as a means of developing cognitive interest in the teaching of computer science has been little studied. Cognitive interest is an integral formation of a person with a complex structure, including individual mental processes (intellectual, emotional, regulatory), as well as objective and subjective connections of a person with the world expressed in relationships. We can talk about conditions in which schoolchildren's cognitive interest is formed, developed and strengthened based on past experience, special research, and modern practice.

First, it is a maximum reliance on the active mental activity of the student. The basis for the development of the student's cognitive abilities and opportunities, real knowledge interest is solving cognitive problems, active research, creating assumptions, reasoning, mental tension, inconsistency of judgments, the conflict of different positions that you need to understand yourself. , to make a decision, to take a certain point of view. Secondly, the formation of cognitive interests and personality in general is the construction of the educational process at the optimal level of the child's development. Deepening and strengthening of a person's cognitive interest is ensured by systematically and optimally improving the cognitive activity of teaching, its methods and skills.

The process of developing students' cognitive interest in the teaching of informatics and information technologies goes through the following stages:

1) students are working on a computer for the first time, which interests them as an unfamiliar thing that opens completely new possibilities. Along with curiosity,

students have fear. Therefore, at this stage, schoolchildren should be given the most basic computer skills;

2) students have basic computer skills, so they are interested not only in doing activities, but also in showing others what they have learned. At this stage, it is necessary to explain to schoolchildren that the computer still has many different possibilities;

3) students work confidently on a computer and have basic knowledge. Now it is necessary to pay attention to different ways of organizing classes, to increase the level of complexity of performed tasks, to put problems before students;

4) familiarization with additional computer capabilities, applications, programming. Thanks to new knowledge, skills and abilities, children will have the opportunity to create complex and interesting works, engage in design and research activities, be creative, and implement their ideas. This allows you to participate in various conferences, contests, etc.

The advantages of interactive educational materials over traditional materials are obvious: ease of use, creativity, the ability to use different types of files (audio, video, graphics, etc.), as well as different types of tasks. All this helps to develop students' interest, cognitive activity and, at the same time, ICT competence.

A teacher's use of digital learning resources is consistent with the learning process: each type and type of resource used has its own place and need for learning. Interactive services such as LearningApps help to organize student team work, create individual trajectories for learning study modules, and create your own bank of didactic materials. This allows organizing and diversifying educational activities taking into account the individual characteristics of students, which ultimately leads to the development of cognitive interest and increased educational efficiency.

Further perspectives of research may be related to expanding the scope of using interactive tasks in classes of other subjects and age groups of schoolchildren.

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