



ISSUES OF IMPROVING TEACHING OF INFORMATION LESSONS TO STUDENTS IN GENERAL SECONDARY SCHOOLS

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Qaraxonova Lobarxon Musaxonovna

Scientific Research Institute Of Pedagogical Sciences Of Uzbekistan, Head Of Department, P.F.F.D. (Phd)
Senior Researcher, Uzbekistan

Ximmatov Elmurod Xayitovich

Scientific Research Institute Of Pedagogical Sciences Of Uzbekistan Named After T.N.Kori Niazi,
Uzbekistan

ABSTRACT

This article presents thoughts and opinions on the formation of knowledge and skills of pupils in the grade of 5-7 computer science classes.

KEYWORDS

Informatics, computer programs, integrated knowledge, information culture.

INTRODUCTION

Due to the fact that fundamental changes are taking place in all areas of our republic today, the public education system faces to the tasks related to the implementation of educational goals by modernizing the content of subjects. The study of "Informatics and IT" in the model of modern schools of a new type, corresponding to the social development of modern society, includes teaching from the 5th grade in general education schools.

Nowadays, it is difficult to imagine human activity without computer technology. Computers make work easier, save time and distance, browse, write, store information and open a wide way to communicate with the whole world through the Internet. Today, computers are used to create artwork, compose music, and create movies.

The leading idea that should be implemented in the methodology of teaching computer science is the idea



of developing education, stimulating interest in knowledge activities, developing skills to acquire new knowledge based on previously acquired knowledge and skills.

The most important aspect of this methodology is the orientation of the pupils to the careful analysis and introspection of his actions and behavior, which should contribute not only to the development of logical and operational thinking, but also to the formation of a developed creative personality of the student.

How to start teaching computer science? The fact is that even today's modern schoolchild has enough information about the computer world. A schoolchild's vocabulary includes files, disks, diskettes, and he or she knows very well how to place a mouse on a computer screen, how to move it and perform a certain task with it. It is better if the adults in the family use the computer appropriately. Otherwise, the pupil has a stereotype: computers are toys.

Our task here is to make a normal, correct attitude towards the computer the most important component of forming the pupil's personality. For example, if a pupil learns how to draw in a graphic editor or create text and graphic compositions in the Microsoft Word with the help of word processor, to create cartoons using Power Point, in this case working with a computer becomes an interesting creative process for him.

Computer games create a different perception of the world in pupils. In this regard, there are many useful development factors that have passed the medical and pedagogical examination:

1. Whether we like it or not, computer skills are essential for students. Therefore, the task of informatics in the elementary grades of general secondary schools is first of all to guide the student correctly.

2. The use of computers in computer classes is the main need of students.

3. Pupils, as a rule, already have certain ideas about computers and computer programs.

Teacher's task is first of all to systematize the knowledge formed by pupils and connect them with the basic concepts of computer science.

In the 5th grade of general education schools, it is very important to form the opinion that the computer is not a game machine and a travel tool, but a problem solving tool through virtual games. This pedagogical system takes into account the goals, tasks, content and features of teaching computer science in the 5th-6th grades.

In the process of teaching pupils, the lesson can be effective if informatics is used to explain specific tasks, that is:

- a) its use optimizes the teacher's activity;
- b) the use of color, graphics, sound, and modern video equipment allows pupils to analyze the difference between the situation and the environment while developing their creative and cognitive abilities;
- v) informatics allows to increase the pupil's interest in knowledge.

The educational and logical skills necessary for pupils to acquire them, taking into account the integrated knowledge system and the specific features of the subject, are as follows:

- ability to observe;
- ability to emphasize the main thing;
- the ability to find connections and relationships;
- the ability to determine the main content;
- systematization ability;



- ability to identify and explain concepts.

: For the development of information culture, thinking and relevant mental activities in pupils:

- analysis;
- synthesis;
- comparison;
- abstraction;
- generalization;
- ability to work with concepts:
- finding signs;
- to conclude;
- classification;
- knowledge of drawing an analogy, etc. is required.

In order to develop a pupil's cognitive interest in science, his speech activity, general and special abilities, he should have the following qualities:

- independence;
- cooperation;
- creative power.

In this case, the conceptual foundations of teaching are based not on the subject logic of the educational process, but on the logic of activities that have a personal meaning for the pupil and increase his interest in learning.

A comprehensive approach to the development of educational projects helps the student to develop his basic physiological and mental functions in a balanced manner. The development of pupils' basic knowledge of computer science is ensured by their wide application in various situations.

Teaching informatics at school opens up new opportunities for the development of students'

creative abilities and an important pedagogical problem. In a traditional lesson, teachers offer different games to students. However, it becomes difficult to involve all students in games and control their actions. Using didactic games on the computer helps to overcome these difficulties. Computer software taught in elementary computer science helps pupils at the introductory level. Teachers are divided into several areas of using computers in the classroom:

- formation of basic computer user skills;
- creating a learning environment;
- formation of conscious reading and calculation skills;
- use of computer tasks in educational work.

Using Computer provides a number of advantages for both the teacher and the pupil.

For the teacher:

- saving time for preparing for the lesson;
- improving the organization of the lesson (handouts are always in sufficient quantity, they cannot be thrown away, lost, crushed, etc.);
- monitor each pupil's actions while working with the computer;
- the ability to edit the material presented to the reader at any time;
- possibility to join students in group activities in pairs or threes.

For the pupil:

- each student can work independently at the optimal speed for him;
- pupil's actions are performed, he clearly sees the process and the result of his work;
- As a result, interest in work increases.



- Working in micro-teams: since there are usually more students in a classroom than computers, it is often necessary to form groups of students.

Thus, the first feature of teaching computer science in elementary grades is to support the curriculum.

The second feature of teaching computer science in grades 5-6 is a change in the type of activity due to the fact that students do not have the opportunity to focus on one exercise for a long time. This problem can be solved with the help of oral work in computer science class. It takes a lot of time, because at this time it is possible and necessary to devote time to prepare students for computer work, develop their attention, test their knowledge and skills, and develop logical and algorithmic thinking.

The third characteristic is concern about the health of students (informatics classes are held in the computer classroom). Lessons include strictly defined work on the computer. In particular, in the 5th grade - 20 minutes, in the 6th and 7th grades - 25 minutes, in the 8th-9th grades - 30 minutes (in accordance with sanitary and hygienic requirements and norms). In addition, in each lesson in elementary grades, we give minutes of physical education, they monitor the condition of the eyes, neck and hand muscles, and the spine. These activities are also conducted in the form of games and are very popular among students.

The use of computer tasks is one of the components of the educational process, and teachers use them when necessary:

- which topics should be "supported" for computer tasks and which didactic tasks;
- what software tools should be used to create and perform computer tasks;
- what computer skills should be developed in pupils;

- what are the best computer lessons;
- how to organize computer lessons.

We divide the use of computer tasks into the following stages:

1. Choosing a topic or a specific part of it.
2. Analysis of content related to the selected part of educational activity and its teaching methods to justify the need for computer lessons.
3. Designing a set of tasks for computer classes.
4. Selection of software for task development.
5. Development of computer tasks using the program.
6. Checking, testing and editing the developed computer tasks.
7. Develop a topic for the teacher and instructions for the pupil.

Methodical and didactic provision of the educational process.

Pupils should be given computer lessons along with regular lessons, where computers can be used to solve specific tasks of the lesson so that the student can better understand the lesson, feel the subject of the lesson and prove himself creatively. In each computer science lesson, as a rule, in addition to the tasks of the combined subject, the tasks of the computer science course are also solved.

Computer science pupils should know the following.

- technical safety rules for working with a computer;
- concepts of "information", "computer", "program", "menu", "desktop", "mouse", "text or graphic editor";
- input devices are keyboard and mouse;
- basic text editor tools;



- basic tools of the graphic editor.
- students should have access to the following computers:
- use of alphabetic and numerical key blocks;
- use of mouse manipulator;
- working with opening and closing commands of the file menu;
- create and edit simple graphics and text images using the tools menu.

• The following generally accepted didactic principles are used in teaching technology:

- scientificity;
- compliance;
- conscious mastering;
- availability of training.

• Teaching is done through multiple levels of complexity.

• Taking into account the pupil's age characteristics, teaching activities are carried out by the following means:

- appearance;
- strength and systematic knowledge;
- individual approach;
- collective education;
- the relationship between theory and practice;
- educational efficiency;
- management forms in the assimilation process.

Various forms of control are used to determine the effectiveness of teaching, generalize and systematize knowledge and skills in a subject or department:

assignments, independent and practical work, control work, tests.

An independent work or test includes tasks that summarize the material on the topic studied.

After learning the theory, there will be an oral or written quiz.

It is recommended to perform creative works on topics that demonstrate the ability of pupils to apply the knowledge they have acquired in new situations.

For example, the result of mastering the text and graphic editor can be the completion of the creative work "Write a letter to a friend". The following task can be offered for such creative work:

Among the main problems facing the computer science teacher, the following can be distinguished:

- constantly updating the computer science course with new materials;
- further improvement of science teaching methodology.

Learning outcomes are supported by pupil achievement tracking data.

For many years, the main goal of teaching informatics in elementary grades was to give pupils the ability to write, read, and understand the virtual world around them. The teaching of informatics in the general secondary education system has created a new situation for the above situation, because the primary class has to fulfill the functions of the integrated secondary education system.

In the 5th-7th grades, the main focus in teaching informatics should be on computer writing, editing, reading and formation of educational activities, from teaching to pupils development.



The emergence of modern information technologies introduces a new element into education, especially propaedeutic computing. Knowing the basics of "informatics and information technologies", the ability to use a computer is necessary for every pupil.

While playing on the computer, the pupil, in addition to his own will, learns the most typical forms of working with the machine, develops the skills of using a personal computer. If the game is naturally included in the learning process, then learning computer literacy will help to improve the quality of education.

The basis of all modern approaches to the educational process is that the development of the pupil - mental processes and the development of his personality characteristics is the result of his active personal activity.

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