



## KEY ISSUES OF TEACHING INFORMATICS AND INFORMATION TECHNOLOGIES IN THE 5TH GRADE

Himmatov Elmurod Hayitovich

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

### ABSTRACT

In recent decades, the mass production of personal computers and the rapid development of the Internet have significantly accelerated the formation of society in developed countries. The main resource in the information society is information, based on having information about various processes and events, any activity can be built efficiently and optimally. In the information society, a large part of the population is busy in the field of information processing or uses information and communication technologies in their daily activities.[1]

**KEYWORDS:** Informatics, elementary school, information, information literacy.

### INTRODUCTION

To live and work in the information society, it is necessary to acquire knowledge and skills in the field of information culture, that is, information technologies, as well as to be aware of legal and ethical standards in this field.[1]

Informatization of society required the informatization of education, which is its main component. In the first stage, the school subject is "Informatics". The intensive development of computer science as a science and as a practical activity of many people affects the setting of goals, the formation of the content of the school subject, its place among others, and the stages of its study.[2]

### MAIN PART

Informatization of society and modern professions make high demands on intelligence. Information technology tools can be taken directly from the workplace at the same time. In the preparation of children, it is necessary to develop the ability to think logically for life in the modern information society. Analyzing and synthesizing (separating the structure of an object, determining relationships), understanding the principles of object organization, creating new schemes, structures helps to develop information literacy.[2]

Informatics is a general education subject and should be approached from a systemic perspective, which is determined by the specific characteristics and tasks of secondary education. The difficulty of accepting computer science as a science is that the problems in it are related to the sciences of physics, mathematics, and astronomy, and computer science is interdisciplinary.

Today, children should not only know about the existence of a computer, they should not only have an idea about it, but also freely work with it, know how to use this technology. Informatics is not about objects or processes, but about the methods, tools and technologies of their automation, creation and operation.

This subject provides not only its in-depth study, but also practical application of knowledge and skills for modernization of one's knowledge and optimization of the acquired knowledge. In informatics classes, ideas of systematic perception of the world, reformation of the general connection of phenomena in nature and social spheres are developed. Its level is mainly determined by the ability to quickly process information and make decisions based on it, which requires additional opportunities for students. And teachers are required to know how to use all new methods and educational tools.[3]

The content of school computer science must meet the development level of the science and the requirements of society to a certain extent.

The development of computing technology, first of all personal computers and the rapid updating of their software, has spread to all areas of human activity.

This, in turn, shows the need to train and retrain specialists who are able to deliver computer science to children perfectly, who are able to teach with high-quality information technologies. The emergence of new computer technologies also has a significant impact on the expansion of educational topics within computer science education. Computer technology is developing so fast that education is always one step behind. [3]

In particular, according to the final conclusions of committees such as ACM and Computer Science, a number of topics were considered important in the teaching of computer science, taking into account the technical changes made in recent years. Informatics is increasingly affecting the processes of further development of society. They are becoming the factors that determine the general potential of society and its development prospects. Informatization of society is the most important component of modern civilization. Informatics is becoming the main technically fundamental science of information and information processes in nature and society. From now on, the general educational and practical importance of the school informatics course will continue to grow. This course has great humanitarian potential. It is important in preparing the young generation for effective work in the information society.[3]

Modernization of general education and tasks of primary education

Modernization of primary education includes changes in its organization. In order to provide a completely individual approach to the student, the educational space, as well as changes in the teaching content, provides greater integration of subjects. One of them is the development of important priorities (main powers) of the modernization strategy.[2]

At the current stage of the development of society, "intellectual professions" are emerging.

Growing information flows and high-tech industry require not only specialists, but also specialists. A basic educational level capable of moving from one type of comprehensive activity to another is communication skills.[4]

When using information and communication technologies in education, the student will have the opportunity to hear, see, and think independently based on what he sees. In the educational process, there are certain conditions for organizing classes in interactive ways using information communication technologies. Therefore, the effective use of information and communication educational technologies is one of the most urgent tasks to create the theoretical and practical foundations of pedagogical skills and the process of their formation in accordance with the current requirements. As can be seen from the tasks listed above, it is necessary to train students of educational institutions to use technologies aimed at independent learning and to constantly increase their activity. Organization of the educational

process using computer technologies and information and communication tools in the educational process has a positive effect on educational efficiency.[3]

Materials and methods. iSpring, the Power Point program is the most convenient for the teachers of secondary schools in accordance with the qualification requirements for informatics and information technologies of general education, secondary and secondary special, vocational educational institutions set by the state educational standards. Stages of learning computer science. One of the main tasks of the computer science teacher is to attract the attention of 5th grade students to teaching using media technologies in connection with the formation of basic competencies defined in the state educational standard.

In particular, in the conditions of today's pandemic and globalization, it is impossible not to admit that the role and opportunities of media technologies in the information environment of society have increased several times. Of course, the demand of the time shows that it is important from the pedagogical point of view.[5]

Current issues of teaching "Informatics and information technologies":

1. Knowledge of basic programs: To teach students to know basic programs, such as working with Microsoft Word and Excel.
2. Teaching how to use the Internet: To teach students how to use the Internet, search and find information.
3. Providing knowledge in the field of security: teaching students about Internet security rules, personal information protection, and important security measures for accessing the site.
4. Programming Basics: Teaching students basic programming languages, such as writing simple programs using Scratch or Python.
5. Correcting multimedia elements: Teaching students to correct, edit, and collaborate on quality photos, videos, and texts that interest them.

Current issues of teaching "Informatics and information technologies" are of critical importance for the development of the educational process. It is important to provide students with 21st century technologies and prepare them to use them in information acquisition, analysis, and educational processes.

These issues include:

1. Literature and technology connection: To teach students to coordinate information by connecting technology with scientific information and using them in educational processes.
2. Creativity and creation: To teach students creativity and creation through informatics and information technologies, to allow them to be successful in expressing and implementing ideas through technological means.
3. Journey into the middle of distance learning: Integrating computing, online learning and distance learning, providing students with global information and teaching them to work collaboratively.
4. Safety and Ethics: Teaching students to use technology safely, protecting personal information and developing ethical concepts is important.
5. Problem Solving: Learning how to apply technology to problem solving and learning how to find solutions, for example by creating and using algorithms.

These issues are considered as key additional areas in preparing students for the latest technological developments.

## CONCLUSION

In conclusion, solving the current issues in teaching informatics and information technologies to 5th graders requires a balanced approach. It is important to combine engaging activities, match content to their cognitive abilities, and create a supportive learning environment. Continuous professional development of teachers and cooperation with parents plays an important role in ensuring a holistic and effective education in this rapidly developing field.

## REFERENCES

1. <https://kpfu.ru/portal/docs/F1411409519/2013.Aktualnye.voprosy.metodiki.prepodavaniya.informatiki.doc>
2. ИНФОРМАТИСС ТЕАЧИНГ ТЕЧНИҚУЭ АТ ЭЛЕМЕНТАРЙ ...  
[ҳттпс://www.идпублисатионс.орг/вп-сонтент/уплоадс/2020/03/Фулл-Папер-ИНФОРМАТИСС-ТЕАЧИНГ-ТЕЧНИҚУЭ-АТ-ЭЛЕМЕНТАРЙ-СЧООЛ-ОФ-ТХЕ-РЕПУБЛИС-ОФ-УЗБЕКИСТАН.пдф](https://www.идпублисатионс.орг/вп-сонтент/уплоадс/2020/03/Фулл-Папер-ИНФОРМАТИСС-ТЕАЧИНГ-ТЕЧНИҚУЭ-АТ-ЭЛЕМЕНТАРЙ-СЧООЛ-ОФ-ТХЕ-РЕПУБЛИС-ОФ-УЗБЕКИСТАН.пдф)
3. [ҳттпс://научнийимпульс.ру/индекс.пхп/ни/артисле/download/3689/2654/2642](https://научнийимпульс.ру/индекс.пхп/ни/артисле/download/3689/2654/2642)
4. Таилаков Н.И. Проблемс оф теачинг сомпутер ссионсэ ин лифелонг эдусатион // Материалс оф тхе републисан ссионтифис-прастисал сонференсэ «Астуал проблемс оф лифелонг эдусатион». –Т.: УзНИИИПН. Май 11-12, 2004 — Page 34-36.
5. ФОРМАТИОН ОФ СКИЛЛС ОФ УСИНГ МЕДИАТЕЧНОЛОГИЭС ИН ПУПИЛС  
<https://cyberleninka.ru/article/n/formation-of-skills-of-using-mediatechnologies-in-pupils>
6. Арипов М.М., ЮлдашевЗх.Кх., ЮлдашевУ.Ю. Он тхе проблемс оф лифелонг леарнинг ин сомпутер ссионсэ // Информатион Течнологиес ин Эдусатион. Материалс оф тхе ссионтифис-прастисал сонференсэ. –Т.: СПУ, 2000, Б. 19-20.
7. Болтаев Б. эт ал. Фундаменталс оф Информатисс анд Сомпутер Энгинеэринг. Тхтбоок фор Граде 5 –Т.: «Теачер», 2006.
8. Камалитдинова Д. Информатисс. Тхтбоок фор граде 5. Ундер тхе генерал эдиторшип оф Профессор Н.И. Таилаков. –Ташкент: «Теачер», 2012.
9. Горячев А. В., Меншикова А. А. Метходс оф теачинг информатион ин тхе класс (градес 1-4). Лестуре Но. 1-6 // Сомпутер Ссионсэ. 2004. Но. 41.
10. Иванова А.Ю. Прастисал моделинг. Сомпутер эхперимент. Метходисал инструстионс фор тхе теачер: Тхтбоок. алловансэ. — Томск: Вол. стате Университй оф Сонтрол Сйстемс анд Радиоэлектронисс, 2005.

