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Teaching Informatics and Information Technologies in Foreign Countries Education System (Comparative Analysis). Role and Importance of International Experience

Key words: *international experience, informatics and information technology, computer science, interactive method, technology, education, IT, multimedia.*

Annotation: *In our country, a large-scale work is being carried out in the education system. Studying foreign experience in the field of education is important. An important role is played by studying the experience of developed foreign countries when implementing information and communication technologies in the education system.*

The 21st Century has entered the age of information technology and today it has become an important part of the life, communication tool and component of the life of people, nations and nationalities living on our planet. At the moment, it is difficult to imagine our life without computer and information technology. Rapid development of information and telecommunication technologies has made it possible to access information quickly and easily on different sources. State institutions, businesses and individuals have begun to create and maintain information electronically. Thanks to these technologies, it's easy to save information and it's easy to transmit it over the network. The IT industry consists of computers, communication systems, data warehouses, knowledge warehouses and related activities.

Public information is understood to be the use of information as a wealth of the community, which promotes economic development, the development of science and technology, the process of democratization and intellectualization of the society (1).

At the same time, the rapid development of countries in the world depends on information technology, and society's informatization agenda is a serious issue. Paying special attention to the fact that the existing educational institutions of our country are equipped with necessary computer equipment and electronic teaching aids are defined in the Laws "On Informatization", "On Relations", and the current national program the current problems are present in (2). Effective use of modern information technologies helps to increase the quality of education of students, improve their content, establish education at the modern level, increase the effectiveness of teaching in educational institutions, and introduce new pedagogical and information technologies the introduction of interactive methods and tools. Therefore, prior to the work of the teachers of the computer science of the Republic of Uzbekistan, the following tasks are of the utmost importance: increase the role and importance of science in the formation and development of students' independent learning, learning abilities; organization and carrying out of trainings on modern pedagogical technologies; use of methods and forms aimed at

enhancing the level of students' self-esteem; Effective use of modern information technologies in the educational process. In our country, a large-scale work is being carried out in the education system. Studying foreign experience in the field of education is important. The role of the country in the development of the education system, the study of the experience of the developed countries in the introduction of information and communication technologies in education, the role of Uzbekistan in the presentation of the "Uzbek model" to foreign countries is immense. Experiences gained in teaching the future generations are important. Education In order to further improve the teaching of informatics and information technology, we have to do the following.

Acquaintance and analysis of didactic and methodological literature on the topic under study (ie studying the topic of the topic);

• Analysis of the international experience of the theory and teaching methods "Informatics and information technologies";

• Effective organization of classroom lessons on "Computer Science and Information Technologies" in the professional colleges based on international experience;

In the field of "Information and IT" in education, based on international experience, the exchange of international experience facilitates the further increase of quality of education, equates the knowledge, skills and qualifications of pupils to the international experience. the formation of the

Education of the Republic of Uzbekistan in the field of informatics and information technology has been studied in the scientific and methodological works of scientists of the Republic A. Sattorov, A. Abdukodirov, U.Sh. Begimkulov, R.R. Bogiev, A. Pardayev, R. Hamdamov, N. Taylakov and others. A. Sattorov Textbook for academic lyceums and professional colleges "Informatics and information technologies" T-2011, R. Ishmuhamedov, A. Abdukodirov, A. Pardayev "Innovative technologies (practical recommendations for pedagogical staff of educational institutions", UY. Yuldashev, RR.Bokiev, FM. Zakirova "Methodology of teaching informatics", LV. Galish, DM. Fayzullayeva, "Innovative technologies in the system of secondary special and vocational education".

By further improving the theory and teaching methodology of the continuing education through the methods and methods learned from the international experience, we will be able to more intensively organize the lesson processes, introduce the results of international research into our national methodology, and advance the teaching of "Computer Science and IT" our use of foreign methods can be practically used. In foreign countries, mainly computer science, information science and information technology. Looking at the education system of foreign countries, informatics begins with the stages of primary education (primary school or elementary school) after preschool education. While research has shown that education systems in foreign countries are somewhat different, they are similar to the one in which the structure of the educational process is structured. As we live in the current informative era, each country pays a great attention to this area of education primarily for the timely and immediate development of its development. Because processes in all areas are directly linked to computer and its networks and information exchange. Therefore, the attention to this field of education

in the foreign countries' educational system is very large and, naturally, the outcome. In the education system of India, the science begins in the following stages (Figure 1). In the Elementary Education System of India, the science curriculum is fundamentally different from ours. If science begins with grade 5, then this science begins with the 4th grade.

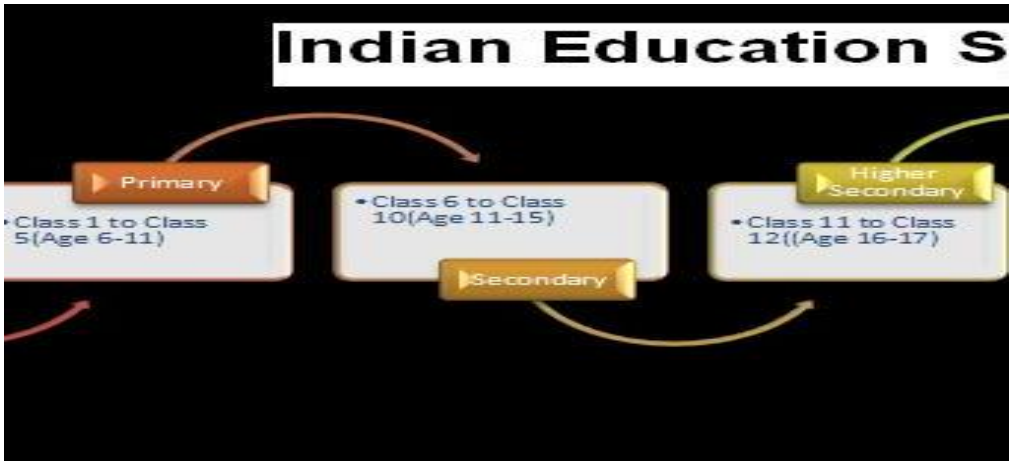

Figure 1 The transitional phase of the science of Indian science in India

At the higher education level of foreign countries, each student chooses a number of additional subjects in his / her chosen field and continues to study on these subjects on a fee basis. Therefore, the schemes you see below show the teaching stages of the subjects of computer science and computer science prior to the beginning of the educational process of foreign countries. In Germany, up to the highest level (from 10 to 16 years old):

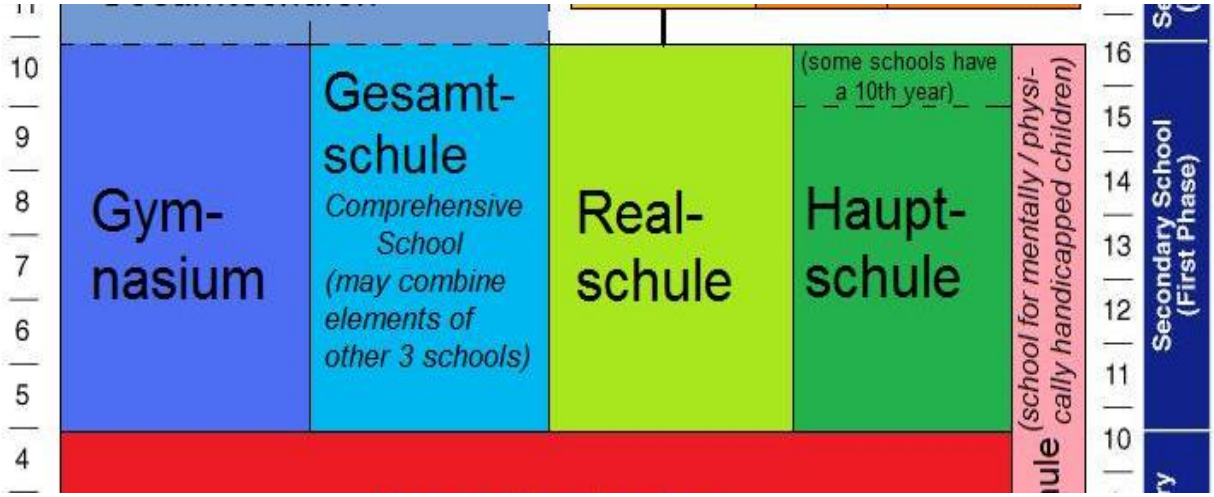

Figure 1 Steps from 10 to 16 years

Looking at the mid-stage of the educational system of the preceding foreign countries, including the German state, the following picture looks like:

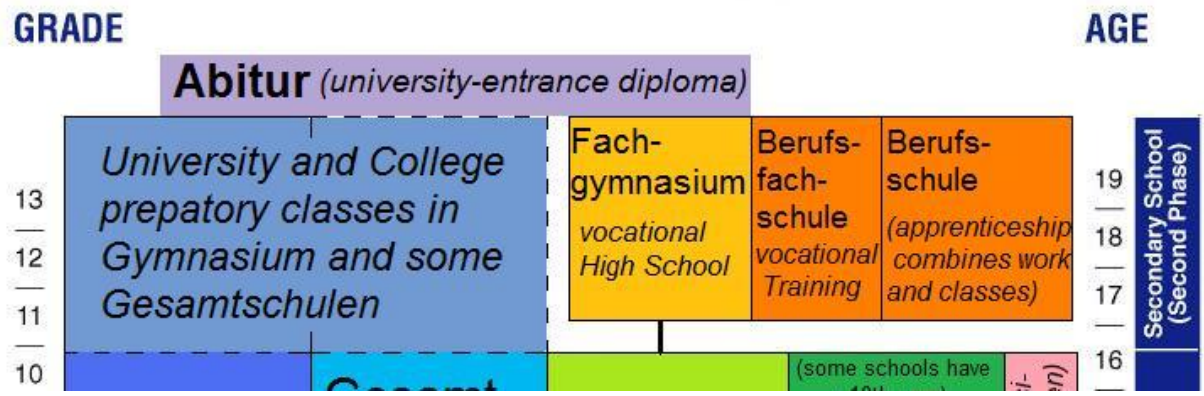

Figure 1.14 The average age group

Our college students' age ranges from 16 to 17 years. Therefore, we will consider the stage of the education system that covers this age range. Accordingly, our vocational colleges are at the core vocational training level of the selected countries in the secondary education system of secondary education. At this stage, they are trained in specialized gymnasiums, high schools or private colleges.

The algorithm, which is one of the main concepts of informatics, was originally developed and promoted by al-Khwarizmi by thousands of years ago, but nowadays theoretically from Western countries in the US, Germany and Switzerland, and in the East, Japan, Korea, China and India and, in practical terms, are developing at a very high pace. But Juraj Hromkovich, director of the Swiss Institute of Information Technology, Tyurix's Information Technology, notes that the didactics of informatics in Germany and Switzerland are rapidly developing in theory and in practice. It is noteworthy that, based on the research by the Professor Khromovic School, Gymnasium students have been trained in programming for 10 lessons per academic hours, and now they are included in the educational process at the gymnasium (Prof. Khromkovic "Introduction to Programming"). Practical training in these countries is a bit different from ours. They focus mostly on the student's independent work. In doing so, they strengthen their internal motivation for learning at school. It would be more appropriate to consider these variables when preparing a practical lesson.

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