# AN EVALUATION OF THE USE OF THE ISCED MODEL IN THE EDUCATION SECTOR OF UZBEKISTAN AS A CHARACTERISTICS OF THE EDUCATION SYSTEM OF EUROPEAN COUNTRIES

**By**

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**ABSTRACT**.

*This article analyzes the educational system of European countries and its peculiarities. European education is distinguished from the education of other regions by a phased system, inclusive education, a creative approach and modern technologies. Specific aspects of the educational system of countries such as Finland, Germany, France and the United Kingdom are also explored, highlighting the importance of the Bologna Process and the credit system. In addition, there are contemporary trends in improving the quality of education, including digital education, lifelong learning, and environmental education. It serves to explore the advantages of the European education system and the possibilities of its application in our country as well.*

**KEYWORDS: ISCED Model, Education Sector, Uzbekistan, Education System, European Countries.**

## INTRODUCTION

Amazingly, the education systems of European countries are recognized for their structured approach, innovation, and inclusivity. A key characteristic of these systems is the implementation of the International Standard Classification of Education (ISCED) model, which ensures a standardized framework for education at different levels. This article explores the distinctive features of European education, including the Bologna Process, credit-module system, digital education, and STEAM- based learning, highlighting their significance in fostering quality education. Additionally, it examines how these elements can be effectively integrated into Uzbekistan's education sector to enhance its modernization and global competitiveness.

In recent years, the scale of reforms carried out in the field of education in our country has become the main goal of our policy. Based on this, a number of laws, decrees and resolutions are being adopted to develop the education sector and regulate relations in this system.

In particular, the Resolution of the President of the Republic of Uzbekistan No. PQ-3931 dated 05.09. 2018 "On measures to introduce new principles of management in the public education system" stipulates the improvement of new state educational standards and curricula of general secondary education, as well as the gradual introduction of STEAM (science, technology, engineering and mathematics) methods into practice. In order to determine the

priority areas of systemic reform of higher education in the Republic of Uzbekistan, to raise the process of training highly qualified personnel within dependent thinking to a qualitatively new level, to modernize higher education, to develop the social sphere and economic sectors based on advanced educational technologies, the Decree of the President of the Republic of Uzbekistan No. PF-5847 dated 08.10.2019 "On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030" serves as a prelude new reforms in this area.

The Law of the Republic of Uzbekistan No. ZRQ-637 dated 23.09.2020 "On Education" regulates relations in the field of education. The law establishes rules for dual education, which is aimed at obtaining the necessary knowledge, qualifications and skills by students, the theoretical part of which is carried out on the basis of an educational organization, and the practical part is carried out at the student's workplace. In addition, the law includes provisions on inclusive education, according to which inclusive education is aimed at ensuring equal opportunities for all students to receive education in educational organizations, taking into account the diversity of individual educational needs and individual capabilities. This law provides for the introduction of integrated education based on the requirements of world standards and the broad scope of regulation of relations in the field of education, as well as the effective use of the experience of developed countries of the world, studying them. In many developed European countries, the education system is being formed as a result of long-term historical development and modernization processes. Today, the education system of the European Union (EU) and other European countries is distinguished from the education system of other regions by its high quality, innovative approach and focus on human capital development. In this article, we will briefly analyze the main features, differences and modern trends of the European education system.

In Europe, education, like ours, usually consists of the following stages:

1. Preschool education

2. Primary education

3. Secondary education

4. Vocational and higher education

A teach stage, the educational process is organized in accordance with the age, abilities and individual needs of students. In many European countries, primary and secondary education are free and compulsory. For example, in countries such as Germany, Sweden, Finland, public schools are free for all children, and they provide an opportunity to receive quality education. Many higher education institutions in Europe use a single credit system (ECTS – European Credit Transfer and Accumulation System) as part of the Bologna process. This makes it easier for students to study in other countries and have their credits recognized. It is worth noting that many universities in Uzbekistan also use this system today. Another important aspect of the European education system is the development of independent thinking among students. Lessons are interesting and attractive due to the fact that they are based on interactive methods, practical exercises, project work and research activities. In almost all European countries, inclusive education has been actively introduced, and special programs have been developed for children with disabilities or special needs. For example, in Denmark and Finland, each child is taught on the basis of an individual approach. STEAM education (Science, Technology,

Engineering, Arts, and Mathematics) in Europe has experienced significant growth and development in recent years. The STEAM approach is an innovative and integrated way of teaching in many areas, helping students master modern knowledge in various subjects. This education system includes not only the fields of science and technology, but also art and design, which allows for the development of creative thinking. In STEAM education, we can find answers to the important questions “what, where, why and for whom does it work? ” We can see that teachers, school leaders, educational consultants, administrators and policymakers in any European country have a high responsibility to produce innovative practical products and resources for training and support.

As evidence of this, let's look at the specific features of the education system of a number of countries. Finnish education is considered one of the most advanced education systems in the world. There is no pressure on students, there is little homework; teachers have a high reputation in society and are well paid; there is a strong focus on equality among students. As we actively explore STEAM fields, we become familiar with the multifaceted sets of competencies that form the basis of Finnish education, such as learning to think and learn; self-care and daily life; cultural competence, interaction and expression; multi-literacy; work-life competences and entrepreneurship. It includes issues such as encouraging teachers to work effectively with each other, self-manage, and take responsibility for their own learning.

In Germany, the dual education system is more widely used. The German education system operates on the basis of a dual system, that is, theoretical knowledge and practice are carried out in parallel. Vocational education is strongly developed, and students have the opportunity to gain practical experience in their field.

The French education system has a strict academic approach and high standards. There are specialized lyceums and baccalaureate exams, and students undergo high intellectual training. The UK is based on more independent and interactive education. In the UK, educational institutions are independent, and each school has the right to develop its own program. In universities, students are guided to independent learning, and open discussions are held in seminars. In today's European education system, we can see modern trends and future prospects. First of all, the widespread introduction of digital educational technologies on a large scale; their further development using online platforms, artificial intelligence and virtual laboratories; in many European countries, continuous education programs such as "Life-long Learning" have been developed to update people's knowledge. Environmental issues and climate change are being introduced into curricula, preparing the younger generation for sustainable development. Now let’s look at the main organizational models of primary and secondary education. We can distinguish three main organizational models of primary and upper secondary education (International Standard Classification of Education – ISCED levels 1 and 2). These levels of education are part of compulsory education in all European education systems. From the beginning to the end of compulsory education, all students follow a single structured education that provides general education, that is, a common curriculum. After successfully completing primary education (ISCED level 1), all students move on to lower secondary education (ISCED level 2), which follows the same common core curriculum. Secondary education is organized in a differentiated manner. After successfully completing primary education, students follow specific educational paths or specific types of education that begin at the beginning or middle of upper secondary education. At the end of their studies, they receive various certificates.

The most representative educational programmes in each education system in Europe include:

- Early childhood education and care provided in publicly subsidised and accredited centres for pre-school children;
- Primary and secondary education programmes;
- Post-secondary non-tertiary programmes;
- Basic programmes in higher education institutions.

Education is intended only for learners with a low level of formal education or a low level of basic skills. It also includes courses that allow learners to return to school or to acquire additional qualifications that are part of basic education programmes. These courses are usually integrated into programmes that provide competence-based qualifications at secondary level or that provide access to higher education (i.e. post-secondary higher education). These are:

- Provision of special education outside general education for children and young people with special educational needs;
- Higher-level doctorates, as well as specialized studies in regulated professions such as medicine and architecture.

Full-time compulsory education refers to a period of full-time education that is compulsory for all students. This period is regulated by law and is often determined by the age of the students. Full-time compulsory education is usually provided in formal institutions, such as schools. However, in some education systems, some compulsory education programmes may combine courses in an educational institution and part-time work. In such cases, students are assessed on the work they do in both settings (in the workplace and in an educational institution). In some countries, under certain conditions, compulsory education may be provided at home.

Compulsory part-time education can take two forms: before or after full-time compulsory education.

- Before: early childhood education and care programs of 250 hours or less per year;
- After: students are required to participate in additional training in an educational institution or on the job until a certain age.

Optional additional year: part of an educational program that is not mandatory for completing a period or level of education, but may be necessary for entry to a higher education level or for moving on to another educational path.

The International Standard Classification of Education (ISCED) is a suitable tool for compiling education statistics at the international level. It includes two cross-classifying variables: general, vocational, pre-vocational, and education levels and fields with complementary dimensions of education and labor market. Empirically, ISCED assumes that there are several criteria that help to classify educational programs into educational levels. Depending on the level and type of education concerned, there is a need to create a hierarchical system between the main and auxiliary criteria (typical entry qualifications, minimum entry requirements, minimum age, staff qualifications, etc.). ISCED 0: Early childhood education, generally designed with a holistic approach to support children's early cognitive, physical, social and emotional development and to introduce young children to organised learning outside the family context. ISCED 0 refers to early childhood programmes with an educational component.

ISCED 1: Programmes at the primary education level are generally designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy) and to provide a solid foundation for learning and understanding key areas of knowledge, personal and social development in preparation for full secondary education. Age is usually the only entry requirement at this level. The usual or statutory age of entry is usually not less than 5 years or more than 7 years. This level usually lasts six years, although its duration can range from four to seven years. ISCED 2: programmes at upper secondary level are generally designed to build on the learning outcomes of ISCED level 1. Students enter

ISCED level 2 usually between the ages of 10 and 13 (most commonly 12).

ISCED 3: programmes at upper secondary level are generally designed to provide a pathway to higher education, either to complete secondary education or to prepare for employment, or both. Students enter this level usually between the ages of 14 and 16.

ISCED 4: post-secondary higher education builds on secondary education and provides preparation for entry into the labour market, as well as for higher education. ISCED level 4 or post-secondary higher education programmes are generally designed to provide individuals who have completed ISCED level 3 with the necessary non-tertiary qualifications to enable them to progress to higher education or to gain employment if their ISCED level 3 qualifications do not provide such access. Completion of an ISCED level 3 programme is required for entry to ISCED level 4 programmes.

ISCED 5: Short-term higher education programmes are often designed to provide participants with vocational knowledge, skills and qualifications. They are usually practically-based, occupation- specific and prepare students for entry into the labour market. However, these programmes may also provide access to other higher education programmes. Entry to ISCED level 5 programmes requires successful completion of ISCED level 3 or 4 with access to higher education.

ISCED 6: Bachelor or equivalent level programmes are often designed to provide participants with intermediate academic or professional knowledge, skills and qualifications, leading to a first degree or equivalent qualification. Access to these programmes usually require successful completion of an ISCED 3 or 4 programme with access to higher education. Access maybe based on a subject selection or on grades achieved at ISCED levels 3 and 4. In addition, participation in and successful completion of entrance examinations may be required. Access to or progression to ISCED level 6 is sometimes possible after successful completion of ISCED level 5.

ISCED 7: Master or equivalent level programmes are often designed to provide participants with advanced academic professional knowledge, skills and qualifications, leading to a second degree or equivalent qualification. Typically, programmes at this level are theoretically based, but may also include practical components and may be informed by contemporary research and advanced professional practice. They are traditionally offered by universities and other higher education institutions.

Entry to ISCED level 7 programmes leading to a second or subsequent degree usually requires successful completion of an ISCED level 6 or 7 programme. Entryto longerprogrammes leading to a first-degree equivalent to a Master's degree requires successful completion of an ISCED level 3 or 4 programme with access to higher education. Entry to such programmes may be

subject-based and maybe based on grades achieved at ISCED levels3 and 4. In addition, participation in and successful completion of entrance examinations may be required.

In summary, the education systems of European countries are among the most effective in the world, characterized by high-quality education, academic freedom, creativity and an inclusive approach.We believe that applying this differentiated, multi-stage and leveled system in our country and learning from best practices will help improve the quality and efficiency of education.

## METHODOLOGY

This study employs a comparative analysis method to examine the education systems of European countries and their application of the ISCED model. The research is based on a review of legislative documents, policy papers, and academic sources related to education reforms in Europe and Uzbekistan. Key aspects such as the Bologna Process, credit-module system, inclusive education, and STEAM approaches are analyzed. Additionally, a document analysis of Uzbekistan's education policies is conducted to assess the feasibility of adopting European educational models. The study focuses on identifying best practices and potential implementation strategies suitable for Uzbekistan's education sector.

## RESULTS AND DISCUSSION

The analysis reveals that European education systems emphasize structured learning pathways, inclusive education, and innovative teaching methods. The Bologna Process and ECTS credit system facilitate academic mobility, while STEAM education and digital learning enhance student engagement and practical skills. Countries like Finland, Germany, France, and the UK demonstrate effective educational models that balance theory and practice, fostering critical thinking and lifelong learning. In Uzbekistan, ongoing education reforms align with global trends, yet challenges remain in fully integrating interactive learning, inclusive education, and dual education systems. Adopting European best practices, particularly in curriculum modernization and teacher training, could significantly improve the quality and effectiveness of the education system in Uzbekistan.

## CONCLUSION

The study highlights the strengths of European education systems, including structured progression, inclusive education, digital learning, and the Bologna Process, which ensure quality and accessibility. Uzbekistan has made significant strides in modernizing its education sector, but further integration of interactive teaching methods, STEAM education, and dual education models is needed to enhance efficiency. By adopting European best practices and aligning with international education standards, Uzbekistan can further develop a competitive, innovation-driven education system that meets the demands of the modern global landscape.

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