



## WAYS TO IMPROVE THE OPTIONAL TRAINING IN SECONDARY SCHOOLS BASED ON INTERNATIONAL EXPERIENCE.

## Mullayeva Shahzodakhon

Asian University of Asian Technologies

Annotation. This article analyzes a system of optional training in mathematics on the basis of the experience of different countries. Approaches in the U.S., Japan, Finland, Russia and South Korea and the South Korean education system are studying and their peculiarities. Practical recommendations are made based on international experiments in Uzbekistan.

**Keywords:** Optional Experience, International Experience, Talented students, Stem, Olympic Preparation.

In modern education, it is one of the most important issues of raising the development of students' individual abilities and interest in sciences. With the optional exercises, it is possible to systematically organize this process. In particular, this approach to the developing analytical and analytical thinking, such as mathematics, plays an important role. In many countries, special attention will be paid to the deepened knowledge of students, preparing for the Olympiads and competitions.

- 1. The essence and responsibilities of formal training. The Optional Classes are exercises in addition to the main curriculum, according to the interests and desires of students. Their main tasks are:
  - provision of students with profitable education;
  - increase motivation for sciences;
  - identification and promotion of talented young people;
  - Development of practical and creative thinking;











- Preparation of Olympics, grants, competitions and projects.
- 2. The US experience

In the US, the optional exercises are conducted in various forms:

- Advanced Placement (AP) mathematics courses are taught at the college level.
- Sophisticated issues will be discussed through the Math Circles project.
- Special attention is paid to combination of mathematics through technology and engineering through STEM programs.

Through these approaches, students are taught to develop independent thinking and practical solutions.

3. The experience of Japan

Science clubs called "Buksassu" play in the Japanese education system play an important role. Mathematics clubs include the following activities:

- solution to the Olympics;
- algorithms and access to technologies;
- Mathematical modeling.

Pupils through personal training centers - \* through Jacui, students receive deep knowledge through the lesson.

4. Finland experience

Finland education is a world leader around the world. Optional exercises:

- implemented on the basis of individual plans of students;
- Teached on the basis of real life assignments;
- carried out through groups of groups, based approaches.











This approach is to analyze the ability of students to analyze problems and creative thinking skills.

5. The experience of Russia

Schools specializing in mathematics are widely developed in Russia. The Optional Executives will be conducted in the following forms:

- Physical and mathematics lyceums and boarding schools;
- Intensive courses through the Sirius Center;
- The Olympic training and "mugs".

Through this system, students are actively involved in international competitions.

6. South Korea's experience

In Korea, the faculty classes are carried out in intensive and result:

- active tutoring centers called "Hakwon";
- There is an opportunity to independently study mathematics through online platforms;
- Preparations for the Olympians are supported on the basis of special government programs.

But the negative aspect of this system is high pressure and overload.

7. Experience and prospects of Uzbekistan

In Uzbekistan, the faculty exercises are available at school and college level. However:

- Their methodological bases are not fully developed;
- modern technologies are not used enough;











- The stimulant of teachers is weak.

Therefore, it is necessary to analyze and integrate international experience.

In short, the international experience shows that the optional exercises is an important tool in the identification, identification and directing of students.In Uzbekistan, we prompt the following recommendations for the development of this system:

- Creation of a single methodical platform;
- Establishment of post-specialized centers;
- integration of digital technologies (ACADEMY, Geogebra) in the educational process;
  - Development of training courses for teachers;
  - Establishment of experimental classes on the basis of international grants.

## **References used:**

- 1. Sh.X.Mullayeva. Development of creative approaches in the Opportunities and education. «ОБРАЗОВАНИЕ, НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ»02.04.2025
- 2. Sh.X.Mullayeva. In organizational training technologies, the organization of faculty lessons, the use of modern information technologies. EduVision: Journal of Innovations in Pedagogy and Educational Advancements Volume 01, Issue 03, March, 2025
- 3. R.S. Usmonov. Zamonaviy ta'lim texnologiyalari. Toshkent, 2022.
- 4. A.K. Yoʻldoshev. *Matematika oʻqitish metodikasi*. Toshkent, 2021.
- 5. <u>www.geogebra.org</u> GeoGebra rasmiy platformasi.
- 6. D. Jonova. "Innovatsion dars metodlarining oʻquvchilarga ta'siri", *Pedagogika ilmi*, 2023.
- 7. Sh.X.Mullayeva. Intensive training technologies and social psychological











development of students. Modern education and development 01.04.2025

8. Sh.X.Mullayeva. Interaction of intensive educational methods: methods and recommendations to increase Psychological training and students 'motors' motivations. «Лучшие интеллектуальные исследования» 01.04.2025.