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SOME MODELS OF ORGANIZING AND MANAGING THE EDUCATIONAL PROCESS IN PROFESSIONAL EDUCATION ORGANIZATIONS (ON THE EXAMPLE OF GERMANY AND JAPAN)

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Annotation: The importance of educational processes in Japan and Germany, including organization and management, the integration of science and industry, the practical significance of vocational education organizations, and some models in the education systems of these countries are explored.

Key words: educational processes in Japan and Germany, organization and management, integration of science and industry, model.

KASB-HUNAR TA'LIMI TASHKILOTLARIDA TA'LIM-TARBIYA JARAYONLARINI TASHKIL ETISH VA BOSHQARISHNING AYRIM MODELLARI (GERMANIYA VA YAPONIYA MISOLIDA)

Annotatsiya: Yaponiya va Germaniya davlatlaridagi ta'lim-tarbiya jarayonlarining ahamiyati, tashkil etish va boshqaruv, fan va ishlab chiqarish integratsiyasi, kasb-hunar ta'limi tashkilotlarining amaliy ahamiyati, ushbu davlatlar ta'lim tizimidagi ayrim modellar yoritilgan.

Kalit so'zlar: Yaponiya va Germaniya davlatlaridagi ta'lim-tarbiya jarayonlari, tashkil etish va boshqaruv, fan va ishlab chiqarish integratsiyasi, model.

НЕКОТОРЫЕ МОДЕЛИ ОРГАНИЗАЦИИ И УПРАВЛЕНИЯ ОБРАЗОВАТЕЛЬНЫМ ПРОЦЕССОМ В ОРГАНИЗАЦИЯХ ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ (НА ПРИМЕРЕ ГЕРМАНИИ И ЯПОНИИ)

Аннотация: Раскрывается значение образовательных процессов в Японии и Германии, организация и управление, интеграция науки и производства, практическое значение организаций профессионального образования, а также некоторые модели в системе образования этих стран.

Ключевые слова: образовательные процессы в Японии и Германии, организация и управление, интеграция науки и производства, модель.

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Introduction

In today's conditions of development of science and technology, one of the priority tasks in our country is to increase the quality and efficiency of educational processes, improve their organization and management mechanisms, study, analyze, assimilate and introduce into the education system the experience of foreign countries with developed education [1].

Research methodology

Japan and Germany are among the countries with developed education. In this regard, we studied and analyzed the experience of professional educational organizations in these countries in organizing and managing educational processes. The importance of educational processes in Japan and Germany, organization and management, integration of science and production, practical significance of vocational education organizations, and some models in the education system of these countries are highlighted.

Analysis and results

Based on the results of our research, we conclude that modeling is one of the methods for improving the procedures for planning and controlling education in educational organizations, which in turn increases the quality and efficiency of education. In this context, we consider modeling as "the process of creating models of elements or systems that represent in a more practical way the structural and dynamic aspects of the process (system) under study". One of the main methods used to improve the efficiency of educational processes is modeling of the pedagogical system. The development of a highly successful pedagogical model helps teachers improve their ability to manage their activities, while at the same time involving students in the learning process [8, 1714-1721 b].

The use of educational modeling is based mainly on scientific ideas. In order to increase the effectiveness of educational procedures, A.V. Korzhuyev and O.E. Baksansky define modeling as "the production of subjectively useful models of reality" [12, 51–65 p]. According to Yu.I. Tarski, modeling "ensures that many internal and external aspects are taken into account in the study of the educational system" [13, 22–29 p], making it one of the main technologies of systematic analysis.

Before using pedagogical modeling effectively, leaders and teachers need to be familiar with various pedagogical models, their content, and their foundations. In particular, "V.A. Testov discusses two types of educational models: "hard" and "soft" models. The term "hard model" refers to an approach to education that emphasizes the use of strict rules and regulations. In contrast, the "soft approach" provides education tailored to each student and encourages them to manage their own learning" [14].

O.Ch. Koziev and Sh.R. Ubaydullaeva "Modeling as a mechanism for improving the quality of

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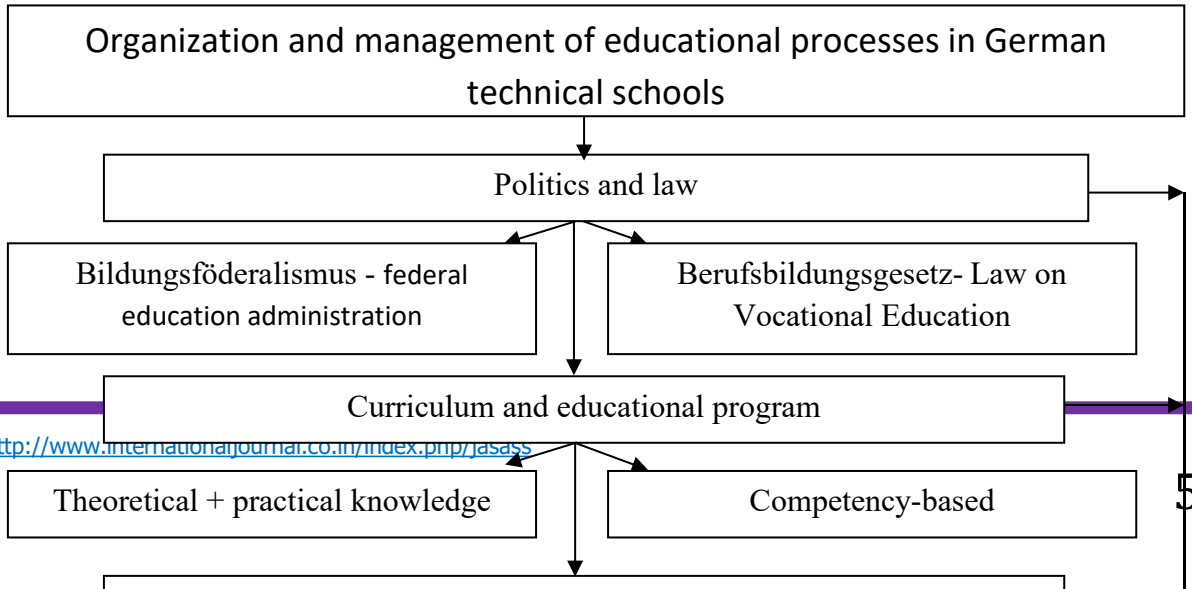
education" [6, 1183-1189 b].

An innovative model of organization and management of educational processes is necessary to improve the quality of education by improving the mechanisms used by educational organizations to organize and manage these processes. This model should be primarily focused on optimizing the interaction and processes between teachers and students. The goal of innovative modeling is to improve educational outcomes by creating and using new strategies for managing educational processes. Below are discussed several models of approaches used by German and Japanese professional educational organizations to organize and monitor their respective educational processes.

Model of organization and management of educational processes in German vocational education institutions (Figure 1). "Vocational and technical education plays an important role in Germany, as great attention is paid to training a skilled workforce for the economy"[7]. "Vocational education institutions (Berufsschule - Vocational school (educational institution with work-based learning, Fachschule - Specialized school or technical college, Berufsfachschule - Vocational school (full-time, practical training)) follow clear policies and standards for regulating, organizing and managing educational processes" [10, 145-156 b].
The main components of the model for organizing and managing educational processes in German vocational education institutions are: Educational policy and legislation; Curriculum and training program; Organizational management; Assessment and quality control; Introduction of innovations and technologies.
Educational policy and legislation. "Within the framework of the principle of Bildungsföderalismus, each state develops its own educational policy, but there are federal standards for vocational education [10, 145-156 b]. Special laws and standards for vocational education institutions, for example, the Berufsbildungsgesetz (BBiG), ensure the regulation of the educational process [10, 147-149 b].
Curriculum and educational program. Curriculum is a set of subjects, topics, goals, methods, and assessment criteria taught in the educational process. The curricula of professional educational organizations combine theoretical knowledge and practical training, the curricula are competency-based and aimed at developing the professional skills of students [10, 150-153 b]. Internships and internships are organized in cooperation with industrial enterprises.
Scheme of a model for organizing and managing educational processes in German technical schools



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Picture 1. Scheme of the model of organization and management of educational processes in German technical schools

Organizational management. The management of vocational education organizations organizes the educational process and cooperates with teachers and industry representatives. There are team management (team management is a management activity aimed at achieving a common goal by planning, coordinating, controlling and motivating the work of team members.) and quality assurance systems (Qualitätsmanagement). In vocational education, Qualitätsmanagement is a system for planning, controlling and continuously improving the quality of the educational process.

"The main directions of Qualitätsmanagement in vocational education:

1. Quality of curricula – the content of the course should correspond to the requirements of the time and the needs of the labor market.
2. Quality of teachers – teachers should be qualified, able to use modern teaching methods.
3. Quality of practice – training practices in production (practice) should be close to real working conditions.
4. Student results – knowledge, skills and professional competencies are regularly assessed.
5. Continuous improvement – learning processes are improved based on the experience gained" [5, 33–36 b].

The individualized support system of the educational process is actively working.

Also, the importance of "team management" in vocational education is very great, because it ensures effective cooperation between teachers, students and production partners. Through team management, responsibilities are correctly distributed in the educational process, problems are solved together, and innovations are introduced faster. This approach develops teamwork, exchange of ideas and decision-making skills in students. As a result, team management not only makes management within a vocational education organization effective, but also forms a culture of teamwork necessary for future professional activities. Components of team management:

- leadership – guiding the team, inspiring, solving problems;
- communication (communication) – clear, open and effective communication is the heart of the team;
- distribution of tasks – assigning each person work that matches their strengths;
- motivation – encouraging and inspiring team members to work;
- conflict management – resolving conflicts in a timely manner and preventing negative situations;

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- process and results control – checking the quality of work, monitoring compliance with the plan [9, 52–55 b].

“Assessment and quality control. Students' knowledge is constantly assessed, including competency-based assessment and practical skills tests. There are internal and external quality control institutions” [10, 154–156 b].

Introduction of innovations and technologies. “Digital learning tools and innovative teaching methods, such as virtual laboratories and interactive learning platforms, are being widely used” [2, 5–12 p.].

In Germany, vocational education institutions use a predominantly practice-oriented, quality- and technology-based management system to organize and control educational activities.

We studied the teaching processes in Japanese vocational education institutions, including a practical-innovative management model that includes systematic analysis, concepts, management methods, and performance indicators.

One of the main components of Japan's economic and technological success has been the country's technical and vocational education system. Within this system, there is a seamless integration of production, upbringing, and education [11, 29-37 b].

The idea of the integrated practical-innovative management model is to combine theory, practice and innovation into a single framework for managing the educational process in vocational education institutions. According to production requirements, “the main goal of this approach is to train innovative, technically competent and socially conscious specialists” [3,147-187 b].

Training employees in accordance with industry requirements, forming creativity and social responsibility, combining education and upbringing in an atmosphere of invention are all goals of this model in Japanese vocational education institutions. You can see the basis of the model in Table 1 below.

Practical-innovative management mechanisms that integrate educational processes in Japanese vocational education institutions (colleges and vocational education institutions):

- 1. “Dual (dual) education system – theory in an educational organization, practice in a factory or company” [4, 29–41 p].

- 2. ““KOSEN” model (National Institute of Technology) – 60% practical training in the curriculum” [4, 29–41 p].

- 3. ““Industry–Academia Collaboration” – technical schools plan education in collaboration with industrial enterprises” [11, 1–12 p].

- 4. “Kaizen” management – improving quality through small daily updates.

- 5. “Digital monitoring system – analyzing student results using artificial intelligence” [3, 147-187 p].

- The principles of pedagogical management of educational processes in Japanese professional “educational organizations (colleges and vocational education organizations) are as follows:

- Kaizen - continuous improvement - continuous improvement of lessons, practices, management;

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- Gemba (learning on the spot) - students gain experience at a real production site;
- Han-sei (analysis of their own activities) - students learn from their mistakes;
- Jishu-sei (independence) - students are taught to plan their own learning process;
- Kyoiku to gijutsu no yuugou - the harmony of education and technology" [11, 29–37 p.].

Component	**Main content**	**Practical example**
Educational component	Theoretical knowledge, technical sciences, engineering fundamentals	STEM, robotics, programming courses
Practical component	Production practice, dual education system	3–6 months of internships at enterprises
Innovative component	Introduction of new technologies, startups	Student projects, technoparks
Educational component	Hard work, teamwork, discipline, honesty	"Senpai–kohai" system (senior-junior relationships)
Management component	Integration between educational institution, production and society	"Kosen–industry collaboration" projects

Table 1.

Japan "the model is practically applied in the following four areas in vocational education organizations:

- training centers in enterprises - vocational education organizations are integrated with large companies (Toyota, Hitachi, Toshiba);
- startup incubators - conditions are created for students to develop their own ideas;
- ethics and upbringing lessons - along with technical knowledge, work culture, teamwork, national values are taught;
- STEAM laboratories - science, technology, engineering, art and mathematics are taught together" [11, 1–12 b].

The effectiveness indicators of this model are reflected in Table 2 below.

Table 2

Direction	Result
Professional competence	95% of graduates find jobs in manufacturing.
Innovative activity	Hundreds of students launch startups or patents every year.
Effectiveness of education	Students are disciplined, have a strong team spirit.

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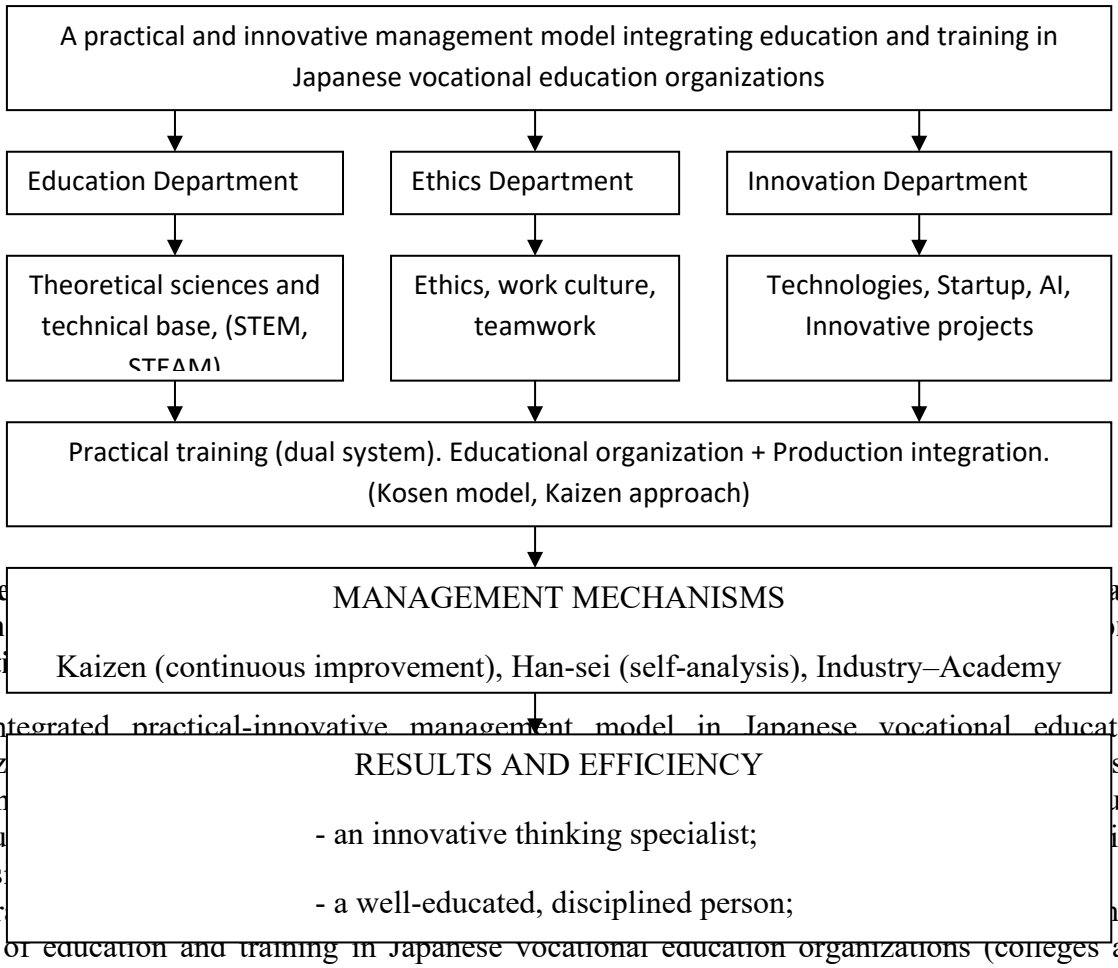
Social integration	Vocational education institutions have become the center of the local economy.
Global competitiveness	Graduates are working in international technology companies.

These results confirm the sustainability and innovative efficiency of the education system of Japanese vocational education institutions.



Picture[illegible]**and training**[illegible]**nal educati**[illegible]

The integrated practical-innovative management model in Japanese vocational education organiz[illegible]s a mechan[illegible]ures continu[illegible]ion, profess[illegible]
The gr[illegible]ent model of education and training in Japanese vocational education organizations (colleges and vocational education organizations)" is shown above. (Picture 2).

The content of the links in the "Integrated practical-innovative management model of education and training in Japanese vocational education organizations (colleges and vocational education organizations)":

1. Education, upbringing and innovation are the three main pillars.

2. All of them are integrated in practical education (dual system).

3. Management mechanisms – Kaizen, Han-sei, industry–academy cooperation are implemented.

4. "The ultimate goal is to train innovative, morally competent and competitive personnel" [11,

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1–12 b].

Conclusion

The education system of foreign countries with developed education, educational and training processes, their organization and management, integration of science and production, the specific characteristics of the personality of managers and teachers, the requirements for their activities, the study of models of organization and management, their mastery of their positive aspects and, based on our national mentality, their implementation in practice, is of great importance in implementing the third renaissance and training personnel with competitive, qualified, high intellectual potential and high moral qualities and qualities.

REFERENCES USED:

1. Law of the Republic of Uzbekistan No. 637 "On Education", approved on September 23, 2020

2. Bundesministerium für Bildung und Forschung (BMBF). DigitalPakt Schule – Bericht zur Umsetzung 2021. Berlin: BMBF. – pp. 5–12.

3. Horai T., Terada M. . Technical and vocational education trends and issues in Japan. In Trends and Issues in Technical and Vocational Education. 2021. pp.

4. Iwamoto T. The details of the bill of the establishment of colleges of technology and the problems of “dual school systems.” The Japanese Journal of Curriculum Studies, 19, 2010. pp.

5. KMK. Qualitätsmanagement im beruflichen Bildungswesen. Kultusministerkonferenz Dokumentation Nr. 222, Bonn, 2018. – pp. 33–36., 33–36 b

6. Kuziyev O.Ch. Factors for the development of professional information modeling skills of technical students. Oriental renaissance: Innovative, educational, natural and social sciences. 2022. 1183-1189 p.

7. Nodirov J.M., Shodmanov Q.O. Comparative analysis of the experiences of foreign countries in organizing and managing the educational process in vocational educational institutions (on the example of Japan). Economics and Society, No. 6 (109), 2023. 13

8. Odilzhanova G.I., Shodmanov Q.O., Nodirov J.M. The importance of modeling in the organization and management of educational processes in educational organizations // Scientific reports of the Kokand State Pedagogical Institute ISSN:3930-3958. №4 2025. 1714-1721 p

9. Schulz W., Richter T. Teammanagement in der beruflichen Bildung: Strategien und Praxisbeispiele. Springer Verlag, Berlin. 2020. – pp. 52–55

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205

Volume 15 Issue 12, December 2025

Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

10. The Education System in the Federal Republic of Germany 2019/2020 A description of the responsibilities, s truc tures and development s in education poli cy for the exchange of information in Europe.KMK. 2019. pp 150-153, 145-156 b

11. Khasanova G.Kh. Main features of the vocational education systems of Uzbekistan, Japan and South Korea //Journal of Modern Education.– Tashkent, 2018. No. 3.

12. 12. Korzhuev A.V., Baksansky O.E. Pedagogical research in modern scientific discourse // Pedagogy and education. 2014. No. 4. P. 51–65

13. Tarsky Yu. I. Methodology of modeling in the context of the study of educational systems. Modeling of socio-pedagogical systems, 2004. – P. 22–29

14. Testov V.A. "Hard" and "Soft" Learning Models. [Electronic resource]: electronic data. – Moscow: Scientific Digital Library Portalus.ru, 2007