

**BASIC MODELS OF KNOWLEDGE REPRESENTATION AND
THEIR APPLICATIONS**

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Annotation. *This article analyzes the main models of knowledge presentation and their application. In connection with the development of educational methods and technologies, the importance of various models for the effective presentation of knowledge in the educational process is increasing. The article considers such models as traditional education, distance learning, blended learning (hybrid learning), experiential learning, constructivism, goal-oriented learning, project-based learning, and gamification. The article provides a comparative analysis of new approaches and methods in education, which are important in creating opportunities for students to acquire modern knowledge.*

Key words: *Knowledge presentation, model, learning process, educational methods, technologies, traditional education, distance learning, blended learning (hybrid learning), experience-based learning, constructionism, goal-oriented learning, project-based learning, gamification, comparative analysis, modern knowledge.*

Аннотация. *В данной статье анализируются основные модели представления знаний и их применение. В связи с развитием образовательных методов и технологий возрастает значимость различных моделей для эффективного представления знаний в образовательном процессе. В статье рассматриваются такие модели, как традиционное образование, дистанционное обучение, смешанное обучение (гибридное обучение), экспериментальное обучение, конструктивизм, целевое обучение, проектное обучение, геймификация. В статье дается сравнительный анализ новых*



подходов и методов в образовании, которые важны для создания возможностей для получения учащимися современных знаний.

Ключевые слова: Представление знаний, модель, процесс обучения, образовательные методы, технологии, традиционное образование, дистанционное обучение, смешанное обучение (гибридное обучение), обучение на основе опыта, конструктивизм, целенаправленное обучение, проектное обучение, геймификация, сравнительный анализ, современные знания.

There are several main models of knowledge delivery, adapted for different purposes and audiences. Here are some of them and their applications:

1. Traditional education model (face-to-face)

In this model, the teacher or lecturer communicates directly with the students or learners face to face. It is mainly used in schools, colleges and universities.

In classrooms, practical sessions

Interactive discussions and group work

Explanations, demonstrations and questions and answers

2. Distance learning model (online learning)

In this model, teaching is carried out over the Internet. Students learn from their homes using video lessons, online courses or interactive platforms.

Online courses, webinars

Learning on MOOC (Massive Open Online Courses) platforms

Students can participate from different geographical locations

3. Blended learning model

This model combines elements of traditional face-to-face education and online education. The teacher conducts some lessons in a traditional way and some via the Internet.

In universities and schools

Provide a flexible learning environment for students

Combine different methods to increase the effectiveness of teaching

4. Experiential learning



In this model, students acquire knowledge not only through reading, but also through experience and practice. Students learn to apply knowledge in concrete situations.

Practical exercises, laboratory work

Workplace training (internships)

Problem-solving and project-based learning

5. Constructivism

According to the constructivism model, students do not just passively receive their knowledge, but actively create new knowledge. The teacher guides the students, but the students themselves construct the knowledge.

Problem situations and creative processes

Helping students learn on their own

Collaborative work, group work

6. Goal-oriented learning model

In this model, students are provided with the knowledge necessary to achieve a specific goal. The teacher sets specific goals and students are provided with appropriate resources and methods to achieve them.

Corporate training, professional development

Setting and achieving small goals

Helping students identify and achieve their goals

7. Project-based learning model

In this model, students apply their knowledge to solve real-world problems. The teacher helps students complete a project or task.

Project work, research

Teamwork during lessons

Teaching students practical skills

8. Gamification model

The gamification model enriches the learning process with game elements. Students learn in a playful way, which motivates them and makes the learning process more interesting.



Online games, learning through applications

Gamified tests and exercises

Increasing motivation and making lessons interactive

Each model of knowledge delivery has its own advantages. For example, while traditional education prioritizes personal communication and practice, distance and blended learning models offer flexibility and wide opportunities. Constructivism and experiential learning, on the other hand, encourage students to develop independent thinking and practical skills.

REFERENCES:

1. Esanovna D. B. Modern Teaching Aids and Technical Equipment in Modern Educational Institutions //International Journal of Innovative Analyses and Emerging Technology. – T. 2. – №. 6.
2. Daminova B. et al. Electronic textbook as a basis for innovative teaching //International Scientific and Practical Conference on Algorithms and Current Problems of Programming.-2023. – 2023.
3. Raximov N., Primkulov O., Daminova B. Basic concepts and stages of research development on artificial intelligence //2021 International Conference on Information Science and Communications Technologies (ICISCT). – IEEE, 2021. – C. 1-4.
4. Daminova B. Algorithm of education quality assessment system in secondary special education institution (on the example of guzor industrial technical college) //International Scientific and Practical Conference on Algorithms and Current Problems of Programming. – 2023.
5. Daminova B. FORMATION OF THE MANAGEMENT STRUCTURE OF EDUCATIONAL PROCESSES IN THE HIGHER EDUCATION SYSTEM //Science and innovation. – 2023. – T. 2. – №. A6. – C. 317-325.
6. Даминова Б. Э. Максадхан Султаниязович Якубов, Проблемы защиты от внешних и внутренних информационных угроз //Труды Северо-Кавказского филиала Московского технического университета связи и информатики. – 2013. – Т. 1.



7. Daminova B. ACTIVATION OF COGNITIVE ACTIVITY AMONG STUDENTS IN TEACHING COMPUTER SCIENCE //CENTRAL ASIAN JOURNAL OF EDUCATION AND COMPUTER SCIENCES (CAJECS). – 2023. – Т. 2. – №. 1. – С. 68-71.
8. Benzerara, M., Guedaoura, H., Anas, S. M., Yolchiyev, M., & Daminova, B. (2024). Advanced Strengthening of Steel Structures: Investigating GFRP Reinforcement for Floor Beams with Trapezoidal Web Openings. In *E3S Web of Conferences* (Vol. 497, p. 02013). EDP Sciences.
9. Daminova B. E., Oripova M. O. METHODS OF USING MODERN METHODS BY TEACHERS OF MATHEMATICS AND INFORMATION TECHNOLOGIES IN THE CLASSROOM //Экономика и социум. – 2024. – №. 2 (117)-1. – С. 256-261.
10. Тошиев А. Э., Даминава Б. Э., Тошиев А. Э. ДБЭ Формирование самаркандской региональной транспортно-логистической системы //Перспективные информационные технологии (ПИТ 2017)[Электронный ресурс]: Междунар. науч.-техн. конф. – 2017. – С. 14-16.
11. Даминава Б. Э. СОДЕРЖАНИЕ ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ И ТЕНДЕНЦИИ ЕГО ИЗМЕНЕНИЯ ПОД ВЛИЯНИЕМ НОВЫХ СОЦИАЛЬНО-ЭКОНОМИЧЕСКИХ УСЛОВИЙ //Yosh mutaxassislar. – 2023. – Т. 1. – №. 8. – С. 72-77.
12. Pant R. et al. Study of produced harmonics in DFIG powered by wind turbines over linear and nonlinear loads //E3S Web of Conferences. – EDP Sciences, 2024. – Т. 563. – С. 01006.
13. Рахимов Н., Эсановна Б., Примкулов О. Ахборот тизимларида мантикий хулосалаш самарадорлигини ошириш ёндашуви //International Scientific and Practical Conference on Algorithms and Current Problems of Programming. – 2023.
14. Даминава Б. Э. и др. ОБРАБОТКА ВИДЕОМАТЕРИАЛОВ ПРИ РАЗРАБОТКЕ ОБРАЗОВАТЕЛЬНЫХ РЕСУРСОВ //Экономика и социум. – 2024. – №. 2-2. – С. 117.