

Abdulxaev Abrorbek Abdullokhon o'g'li, Assistant

Namangan Engineering and Technology Institute

CONSTRUCTIVIST TEACHING: BUILDING KNOWLEDGE THROUGH ACTIVE LEARNING

***Abstract** Constructivist Teaching is an educational approach grounded in the belief that learning occurs as learners actively construct their own knowledge and understanding of the world, through experiences and reflecting on those experiences. This approach contrasts with traditional forms of education that often emphasize passive reception of knowledge. Constructivist Teaching encourages exploration, questioning, and experimentation, allowing learners to build their knowledge base and understandings through active engagement.*

***Keywords** Constructivist Teaching, Active Learning, Knowledge Construction, Learner-Centered Activities, Collaborative Learning, Exploration, Critical Thinking, Problem-Solving, Educational Theory, Reflective Thinking.*

Абдулхаев Аброрбек Абдуллохон огли Ассистент

Наманганский инженерно-технологический институт

КОНСТРУКТИВИСТСКОЕ ПРЕПОДАВАНИЕ: НАКОПЛЕНИЕ ЗНАНИЙ ПОСРЕДСТВОМ АКТИВНОГО ОБУЧЕНИЯ

***Аннотация** Конструктивистское преподавание - это образовательный подход, основанный на вере в то, что обучение происходит по мере того, как учащиеся активно формируют свои собственные знания и понимание мира посредством опыта и размышлений над этим опытом. Этот подход контрастирует с традиционными формами образования, которые часто делают упор на пассивное получение знаний. Конструктивистское преподавание поощряет исследования, расспросы и эксперименты, позволяя учащимся наращивать свою базу знаний и понимание посредством активного вовлечения.*

Ключевые слова Конструктивистское преподавание, Активное обучение, Конструирование знаний, Деятельность, ориентированная на учащегося, Совместное обучение, Исследование, Критическое мышление, Решение проблем, Теория образования, Рефлексивное мышление.

Constructivist Teaching is a pedagogical approach based on the constructivist learning theory, which posits that learners construct knowledge rather than simply absorb it. This method centers around the learner's active participation in the learning process, facilitating understanding through experiences, interaction, and reflection. It encourages learners to question, explore, and engage critically with content, fostering deeper understanding and retention. Constructivist Teaching shifts the focus from teacher-centered instruction to a more learner-centered approach, where the teacher acts as a guide or facilitator rather than a transmitter of knowledge.

Foundational Principles: Constructivist Teaching is based on theories by educators such as Jean Piaget and Lev Vygotsky, who emphasized the active role of learners in constructing their own understanding. Knowledge is seen as a construct developed by learners through interaction with their environment and through the interpretation of experiences.

Instructional Strategies: Strategies in constructivist teaching include problem-based learning, inquiry-based learning, and project-based learning. These methods encourage learners to explore, investigate, and engage in hands-on activities, thereby constructing knowledge through experience.

Role of the Teacher: In this approach, the teacher's role is to create a learning environment that encourages exploration and facilitates learning. Teachers guide, mentor, and scaffold learning experiences, rather than directly imparting knowledge.

Benefits and Challenges: Benefits include enhanced critical thinking skills, improved problem-solving abilities, and greater learner engagement. However, challenges can arise in implementing constructivist strategies effectively, particularly in traditional education systems and with large class sizes.

Impact on Learner Outcomes: Research has shown that constructivist teaching can lead to deeper understanding of material, better application of knowledge, and increased motivation and self-confidence in learners.

Contemporary Applications: Constructivist principles have been applied in various educational settings, including primary, secondary, and higher education. Its influence is also evident in the design of modern educational technology and e-learning environments.

Constructivist Teaching offers a dynamic and engaging approach to education, emphasizing active learning and the construction of knowledge. By focusing on learner-centered activities and encouraging exploration and critical thinking, it prepares learners to navigate and understand an increasingly complex world. While there are challenges in its implementation, the potential benefits for learner engagement and understanding make constructivist teaching a valuable and influential approach in contemporary education.

References

1. Piaget, J. (1954). *The Construction of Reality in the Child*.
2. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*.
3. Bruner, J. S. (1961). *The Process of Education*.
4. G Gulyamov, N Yu Sharibaev Influence of temperature on the semiconductor band gap. FIP PSE 9, 40-43, 2011

5. G Guliamov, N Yu Sharibaev. Determination of the density of surface states of the interface, the semiconductor-insulator in the MIS structure. FTP 45 (2), 178-182, 2011
6. G Gulyamov, IN Karimov, N Yu Sharibaev, U I Erkaboev. Determination of the Density of Surface States at the Semiconductor-Insulator Structures in Al-SiO₂-Si and Al-SiO₂-n-Si at Low Temperatures. Uzbek Journal of Physic 12 (3), 143-146, 2010
7. G Guliamov, N Yu Sharibaev. The temperature dependence of the density of surface states, determined by transient spectroscopy. Physical Engineering surface 8 (1), 53-68, 2010
8. Аъзам Абдумажидович Мамаханов, Шерзод Собиржонович Джураев, Носир Юсубжанович Шарибаев, Мухамадали Эркинжон Угли Тулкинов, Даврон Хошимжон Угли Тухтасинов. Устройство для выращивания гидропонного корма с автоматизированной системой управления. Universum: технические науки, 17-20, 2020
9. S Zaynobidinov, U Babakhodzhayev, A Nabiyev, N Yu Sharibayev. The mechanism of hole transport in photocells based on A-Si: H. International Journal of Scientific and Technology Research 9 (1), 2589-2593, 2020
10. Носиржон Юсубжанович Шарибоев, Шерзод Собиржонович Джураев, Анвар Мансуржонович Жабборов. Вейвлет-метод обработки кардиосигналов. Автоматика и программная инженерия, 37-41, 2020
11. Nosirjon Shariboev, Sherzod Juraev, Anvar Zhabborov. Wavelet method for cardio signals processing. Common Information about the Journal A&SE, 11, 2020
12. Г Г Гулямов, М Г Дадамирзаев, Н Я Шарибаев, Н М Зокиров. ЭДС, возникающая в —-переходе при воздействии сильного СВЧ поля и света. Физика и техника полупроводников 53 (3), 396-400, 2019

13. Gafur Gulyamov, Muhammadjon Gulomkodirovich Dadamirzaev, Nosir Yusupjanovich Sharibayev. EMF of Hot Charge Carriers Arising at the pn-Junction under the Influence of the Microwave Field and Light. Journal of Electromagnetic Analysis and Applications 7 (12), 302, 2015