Ibrohimov Islombek Zafarbek o'g'li, Assistent

Namangan Engineering and Technology Institute

INQUIRY-BASED LEARNING: STIMULATING CURIOSITY AND RESEARCH SKILLS

Abstract *Inquiry-Based Learning (IBL) is an educational approach that emphasizes the student's role in the learning process, encouraging curiosity, critical thinking, and research skills. This pedagogy centers on students formulating questions, investigating to find answers, and constructing new understandings. IBL fosters deep engagement with content, promoting a more active and participatory form of learning. It has been linked to improved understanding of complex concepts, enhanced problem-solving abilities, and greater retention of information.*

Keywords *Inquiry-Based Learning, Student Engagement, Curiosity, Critical Thinking, Research Skills, Active Learning, Constructivist Learning, Problem-Solving, Lifelong Learning, Educational Innovation.*

Иброхимов Исломбек Зафарбек оглы Ассистент

Наманганский инженерно-технологический институт

ОБУЧЕНИЕ, ОСНОВАННОЕ НА ОПРОСЕ: СТИМУЛИРОВАНИЕ ЛЮБОЗНАТЕЛЬНОСТИ И ИССЛЕДОВАТЕЛЬСКИХ НАВЫКОВ

Аннотация *Обучение, основанное на запросах (IBL) - это образовательный подход, который подчеркивает роль учащегося в процессе обучения, поощряя любознательность, критическое мышление и исследовательские навыки. Эта педагогика сосредоточена на том, чтобы учащиеся формулировали вопросы, исследовали, чтобы найти ответы, и формировали новое понимание. IBL способствует глубокому взаимодействию с контентом, продвигая более активную форму*

обучения, основанную на участии. Это было связано с улучшенным пониманием сложных концепций, расширенными способностями к решению проблем и большим объемом запоминаемой информации.

Ключевые слова *Обучение, основанное на опросе, Вовлеченность учащихся, Любознательность, Критическое мышление, Исследовательские навыки, Активное обучение, Конструктивистское обучение, Решение проблем, Обучение на протяжении всей жизни, Образовательные инновации.*

Inquiry-Based Learning (IBL) is an educational strategy that encourages students to learn by engaging in their own research and inquiry. This approach is rooted in constructivist theory, where learning is seen as an active process of constructing knowledge rather than passively receiving information. IBL promotes a more engaging and interactive classroom environment, where students take the lead in their learning journey. It emphasizes critical thinking, questioning, and exploration, allowing students to develop skills essential for academic success and lifelong learning.

Principles and Philosophy of IBL: IBL is based on the idea that learning is most effective when students are actively engaged in the discovery process. It prioritizes student inquiry, encouraging learners to ask questions, investigate, and construct their own understanding.

Benefits of IBL in Developing Critical Thinking and Research Skills: IBL enhances critical thinking and research skills, teaching students to analyze information, synthesize data, and draw conclusions. This approach prepares students for the complexities of the real world, where problem-solving and information evaluation are crucial.

Challenges in Adopting IBL and Solutions: Implementing IBL can be challenging due to the need for a flexible curriculum and the development of new teaching methodologies. Professional development for educators and support from educational institutions are critical for successful implementation.

IBL's Role in Fostering Lifelong Learning: IBL instills a love of learning and curiosity, which are essential for lifelong learning. By engaging students in inquiry and exploration, it helps them develop a continuous desire to understand and learn beyond the classroom.

Impact of IBL on Student Motivation and Engagement: IBL has been shown to increase student motivation and engagement. When students are active participants in their learning process and can explore topics of interest, they are more likely to be motivated and engaged in the learning process.

Inquiry-Based Learning offers an effective and dynamic approach to education, fostering critical thinking, research skills, and a deeper understanding of content. It transforms the classroom into an interactive learning environment, where students are empowered to explore and discover. While there are challenges in implementing IBL, its benefits in promoting active learning, engagement, and lifelong curiosity are substantial.

References

1. Bruner, J. (1961). *The Act of Discovery*. Harvard Educational Review.
2. Dewey, J. (1938). *Experience and Education*. Kappa Delta Pi.
3. Шерзод Собиржонович Джураев, Носир Юсубжанович Шарибаев, Мухаммадзиё Исманов, Бекзод Махмудов, Фуркат Худайбердиев, Росулжон Шарибаев. Технология приготовления натурального корма гидропонным методом. Universum: химия и биология. 8-1 (74), с. 32-35,

2020. https://cyberleninka.ru/article/n/tehnologiya-prigotovleniya-naturalnogo-korma-gidroponnym-metodom/viewer

4. S Djuraev, N Sharibaev, N Sharibaev, S Sharipbaev. Effective and Sustainable Methods of Bitumen Emulsion Production. European Science Methodical Journal 1 (4), 1-3, 2023
5. N Sharibaev, N Sharibaev, S Djuraev, S Sharipbaev. Recommended bitumen emulsion for road construction: enhancing durability and sustainability. European Journal of Emerging Technology and Discoveries 1 (4), 21-23, 2023
6. N Sharibaev, S Sharipbaev, S Djuraev, N Sharibaev. Disclosure of the Potential of Bitumen Emulsion in Waterproofing and Roofing Works. Eurasian Journal of Research, Development and Innovation 22, 1-2, 2023
7. N Sharibaev, N Sharibaev, S Djuraev, S Sharipbaev. Improving Road Safety with Bitumen Emulsion: A Closer Look at Anti-Slip Surfaces. Eurasian Journal of Engineering and Technology 20, 37-38, 2023
8. N Sharibaev, S Sharipbaev, S Djuraev, N Sharibaev. Innovations in Bitumen Emulsion: Improving the Durability and Performance of Road Surfaces. Eurasian Research Bulletin 22, 19-20, 2023
9. Sobir Sharipbaev, Nurbek Sharibaev, Nosir Sharibaev, Sherzod Djuraev. Problems and Solutions in the Production of Bitumen Emulsions: A Comprehensive Analysis. Eurasian Scientific Herald 22, 10-11, 0
10. Erkin Sharibaev, Akbar Abrorov, Bobir Otaboev, Nosir Sharibaev, Abdunabi Daliev. Experimental investigation of the relationship between raw shaft density and saw cylinder electric motor load current. Journal of Physics: Conference Series 2388 (1), 012174, 2022

11. Salokhiddin Fazliddinov, Behzod Kuchkarov, Nosir Sharibaev, Abror Abdulkhaev, Mukhammad-Ali Tulkinov . Analysis of modern methods of determination of mechanical status and diagnostic models of power transformers. Journal of Physics: Conference Series 2388 (1), 012173, 2022
12. N Yu Sharibayev, JI Mirzayev. Temperature Dependence of the Density of States and the Change in the Band Gap in Semiconductors. International Journal of Engineering and Advanced Technology (IJEAT), ISSN …. Issue, 1012, 2019