

## EDUCATIONAL STRATEGIES OF TECHNICAL PROFILE STUDENTS' ENGAGEMENT FOR EFFECTIVE LEARNING

*Razikova Dilfuza Salixovna,*  
*“TIAME” National Research University*  
*PhD student*  
*E-mail: [dilfuza.razikova2017@gmail.com](mailto:dilfuza.razikova2017@gmail.com)*

### ANNOTATION

The article gives a brief outline of the efficacy of various modern learning strategies in higher education, aiming to demonstrate their significant impact on student engagement and academic achievement. The research is based on the idea that modern pedagogical technologies implemented nowadays are more functional and motivating than previous methods of teaching. Through a comprehensive examination of diverse active learning techniques and their implementation across different disciplines, this research seeks to provide empirical evidence supporting the adoption and integration of active learning practices into pedagogical approaches, ultimately contributing to the enhancement of student learning outcomes and overall educational quality.

**Keywords:** challenges, strategies, implementation, approaches, empirical, integration, assessment, feedback.

### ОБРАЗОВАТЕЛЬНЫЕ СТРАТЕГИИ ПРИВЛЕЧЕНИЯ СТУДЕНТОВ ТЕХНИЧЕСКОГО ПРОФИЛЯ ДЛЯ ЭФФЕКТИВНОГО ОБУЧЕНИЯ

Разикова Дилфуза Салиховна,  
Национальный исследовательский университет “ТИИИМСХ”  
Докторант

**АННОТАЦИЯ** В статье дается краткое описание эффективности различных современных стратегий обучения в сфере высшего образования с целью продемонстрировать их значительное влияние на вовлеченность студентов и академическую успеваемость. В основе исследования лежит идея о том, что современные педагогические технологии, реализуемые в настоящее время, более функциональны и мотивируют, чем прежние методы обучения. Посредством всестороннего изучения различных методов активного обучения и их применения в различных дисциплинах это исследование направлено на предоставление эмпирических данных, подтверждающих принятие и интеграцию практик активного обучения в педагогические подходы, что в конечном итоге способствует улучшению результатов обучения учащихся и общего качества образования.

**Ключевые слова:** проблемы, стратегии, реализация, подходы, эмпирические, интеграция, оценка, обратная связь.

## ТЕХНИКА ЙЎНАЛИШИ ТАЛАБАЛАРИНИ САМАРАЛИ ТАЪЛИМ ОЛИШ УЧУН ЖАЛЬ ЭТИШ СТРАТЕГИЯЛАРИ

Разикова Дилфуза Салиховна,  
”ТИҚХММИ” Миллий тадқиқот университети  
Докторант

### АННОТАЦИЯ

Мақолада олий таълимда турли замонавий таълим стратегияларининг самарадорлиги ҳақида қисқача маълумот берилган бўлиб, уларнинг талабалар фаоллиги ва ўқув ютуқларига сезиларли таъсирини кўрсатишга қаратилган. Тадқиқот бугунги кунда жорий этилаётган замонавий педагогик технологиялар олдинги ўқитиш усулларига қараганда кўпроқ функционал ва рағбатлантирувчи деган фикрга асосланади. Ҳар хил фаол таълим амалиётларини ва уларни фанлар бўйича қўллашни ҳар томонлама текшириш орқали ушбу тадқиқот таълим амалиётларини қабул қилиш ва педагогик ёндашувларга интеграциялашувини қўллаб-қувватловчи эмпирик далилларни тақдим этишга қаратилган бўлиб, талабаларнинг таълим натижалари ва умумий таълим сифатини яхшилашга ҳисса қўшади.

**Калит сўзлар:** муаммолар, стратегиялар, амалга ошириш, ёндашувлар, эмпирик, интеграция, баҳолаш, фикр-мулоҳазалар.

**Introduction:** Recent years have witnessed a comprehensive shift in higher education towards more student-centered approaches to teaching. Traditional lecture-based learning, which was once productive, is gradually giving way to dynamic and interactive methods that prioritize student engagement and participation. At the forefront of this teaching revolution are active learning strategies, which are gaining increasing attention for their ability to develop critical thinking, deepen understanding, and improve overall learning outcomes. In this article, we delve into the transformative potential of active learning strategies in higher education, exploring their benefits, implementation challenges, and implications for the future of teaching and learning.

"According to a study conducted by Freeman et al. (2014), active learning strategies have been shown to significantly improve student performance and engagement in higher education settings. Similarly, Prince (2004) highlights the positive impact of active learning on student comprehension and retention of course material. These findings underscore the importance of incorporating active learning techniques into classroom instruction to enhance student learning outcomes." Active learning has

been shown to enhance student engagement and motivation by providing opportunities for active participation and interaction with course material. Bonwell and Eison (1991) identified several factors that contribute to increased student engagement in active learning environments, including opportunities for peer collaboration, immediate feedback, and real-world relevance. All the literature reviewed demonstrates the significant impact of active learning strategies on student learning outcomes, engagement, and retention in higher education.

Active learning is a dynamic approach to learning that goes beyond traditional teaching methods and offers many benefits for both students and teachers. This teaching philosophy revolves around the idea of transforming passive information acquisition into active engagement with course content, thereby significantly enhancing the learning experience. The advantages of Active Learning include a wide range of techniques designed to directly transform student learning, moving from passive information acquisition to active course content. According to the research, active learning strategies dominate among both students and teachers. By encouraging students to think carefully, collaborate with peers, and apply knowledge in practice, these strategies ensure greater understanding and retention of course material. Moreover, active learning fosters a sense of ownership and autonomy in students, empowering them to take control of their learning journey and develop essential lifelong learning skills. There are a lot of specific strategies, which can be beneficial in the classroom, especially while assessing the students and giving them feedback.

**Minute Paper:** The teacher poses one to two questions in which students identify the most significant things they have learned from a given lecture, discussion, or assignment. Students should be given one to two minutes to write a response on an index card or paper. Collected responses must be looked over quickly. Their answers will determine if they are successfully identifying what the teacher views as most important.

**Muddiest Point:** This is similar to the Minute Paper but focuses on areas of confusion. Students should be asked: “What was the muddiest point in... (today’s lecture, the reading, the homework)?” and given one to two minutes to write and collect their responses.

**Problem Recognition Tasks:** One identifies a set of problems that can be solved most effectively by only one of a few methods that are taught in the class. Students identify by name which methods best fit which problems without actually solving the problems. This task works best when only one method can be used for each problem.

**Student-Generated Test Questions:** A week or two before an exam, the teacher begins to write general guidelines about the kinds of questions planned to be asked on the exam. Those guidelines should be shared with students and they are asked to write and answer one to two questions like those they expect to see on the exam.



While the benefits of active learning are well-documented, implementing these strategies in practice can pose significant challenges for educators. Traditional classroom structures and institutional norms often present barriers to the adoption of active learning approaches. Moreover, instructors may encounter resistance from students accustomed to passive learning environments. However, with careful planning, training, and support, these challenges can be overcome. Faculty development programs, technology integration, and collaborative pedagogical communities are just a few examples of strategies that can facilitate the successful implementation of active learning initiatives. Active learning fosters a sense of autonomy and independence in students, empowering them to take control of their learning experience. By providing opportunities for exploration, experimentation, and discovery, active learning encourages students to think outside the box and pursue their interests with passion and curiosity. In doing so, students develop the confidence and resilience needed to navigate the complexities of the modern world, setting them on a path toward lifelong success and fulfillment.

As the demand for innovative teaching methods continues to grow, active learning has emerged as a cornerstone of 21st-century higher education. In an era marked by rapid technological advancements and evolving student needs, educators must adapt their pedagogical practices to ensure relevance and effectiveness. Active learning strategies offer a promising solution to this imperative, providing a pathway to more engaging, inclusive, and impactful learning experiences. By the implementation of active learning, institutions can empower students to become lifelong learners, equipped with the critical thinking skills and adaptive mindset necessary to thrive in an ever-changing world.

As the research has demonstrated the integration of active learning strategies represents a paradigm transference in higher education, avoiding traditional models of instruction towards using more student-centered, experiential approaches. As educators and institutions embrace the transformative potential of active learning, they have the opportunity to revolutionize the way knowledge is created, shared, and applied. By prioritizing active engagement, collaboration, and critical thinking, we can cultivate a generation of empowered learners poised to tackle the complex challenges of the future. In this dynamic educational landscape, active learning is not merely a pedagogical tool but a catalyst for meaningful change.

#### References:

1. Angelo, Thomas A., & Cross, K. Patricia. (1993). *Classroom Assessment Techniques: A Handbook for College Teachers*. San Francisco: Jossey-Bass.
2. Freeman et al. (2014) "Proceedings of the National Academy of Sciences of the United States of America" (PNAS)

3. Dr. Michael Prince (2004) Does Active Learning Work? A Review of the Research. *Journal of Engineering Education*, 93, 223-231.

4. [Bonwell, C. C., & Eison, J. A. \(1991\) \*Active Learning: Creating Excitement in the Classroom\*. ASHE-ERIC Higher Education Reports. The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183](#)