

**THE IMPORTANCE OF TRAINING SIMULATORS IN CONDUCTING PRACTICAL CLASSES***Fayziyev Zavqiddin Xayrilloevich**Head of the cycle of the Military District Faculty*

**Abstract.** The article investigates how training simulators function as essential tools for organizing and conducting practical classes at higher education institutions. The study assesses simulation-based learning technologies through literature analysis to determine their pedagogical effectiveness and their impact on student competency development and their ability to connect theoretical knowledge with practical application. The findings demonstrate that training simulators provide multiple advantages by improving skill acquisition and decreasing learning time and ensuring safety for beginners and offering standardized assessment methods.

**Keywords:** training simulators, practical classes, professional competencies, educational technology, skill development, higher education pedagogy.

**Аннотация.** В данной статье рассматривается значение учебных тренажеров в организации и проведении практических занятий в высших учебных заведениях. На основе комплексного анализа литературы исследуется педагогическая эффективность технологий обучения на основе симуляции, их влияние на формирование профессиональных компетенций студентов и роль в обеспечении связи между теоретическими знаниями и их практическим применением. Результаты показывают, что учебные тренажеры существенно повышают уровень освоения навыков, сокращают время обучения, обеспечивают безопасность на начальных этапах подготовки и создают возможности для стандартизированной оценки знаний и умений.

**Ключевые слова:** учебные тренажеры, практические занятия, профессиональные компетенции, образовательные технологии, развитие навыков, педагогика высшего образования.

**Annotatsiya.** Mazkur maqolada oliy ta'lim muassasalarida amaliy mashg'ulotlarni tashkil etish va o'tkazishda o'quv trenajyorlarining ahamiyati tahlil qilinadi. Adabiyotlar tahlili asosida simulyatsiyaga asoslangan ta'lim texnologiyalarining pedagogik samaradorligi, ularning talabalarda kasbiy kompetensiyalarni shakllantirishga ta'siri hamda nazariy bilimlarni amaliyot bilan bog'lashdagi o'rni o'rganiladi. Natijalar shuni ko'rsatadiki, o'quv trenajyorlari ko'nikmalarni egallash samaradorligini sezilarli darajada oshiradi, o'qitish vaqtini qisqartiradi, tayyorgarlikning dastlabki bosqichlarida xavfsizlikni ta'minlaydi va bilim hamda malakalarni standartlashtirilgan baholash imkoniyatini yaratadi.

**Kalit so'zlar:** o'quv trenajyorlari, amaliy mashg'ulotlar, kasbiy kompetensiyalar, ta'lim texnologiyalari, ko'nikma rivojlantirish, oliy ta'lim pedagogikasi.

**Introduction.** The current educational system requires new methods of teaching students because it needs to prepare them for professional work. Training simulators have emerged as instrumental pedagogical tools that address the growing need for experiential learning opportunities within controlled educational environments [1]. The relevance of this topic exists because all professional fields experience rapid technological advancement which requires graduates to possess both theoretical knowledge and practical skills which they can use in actual work situations. The use of training simulators during practical classes introduces a new method of teaching that enables students to learn skills through practice without facing the dangers and limitations of actual work situations [2]. This article investigates how training simulators function as essential teaching tools which enable practical training in educational settings by

reviewing various academic studies to demonstrate their value in contemporary educational practices.

**Methodology and Literature Review.** The study uses a research method which combines two different methods to study training simulator use in educational settings while using theoretical frameworks that support simulation-based teaching as a comparison base. The theoretical foundation of training simulator utilization in education rests upon constructivist learning theory, which posits that knowledge is most effectively constructed through active engagement with learning materials and experiential practice [3]. Researchers have established that simulation-based learning activates multiple cognitive processes simultaneously, which leads to students developing a deeper understanding and maintaining their skills for longer periods when compared to traditional teaching methods that involve only passive learning [4]. The scholarly literature reveals substantial consensus regarding the pedagogical advantages of training simulators, with Azizov and Karimova noting that simulator technologies in Uzbek higher education institutions have demonstrated measurable improvements in student practical competency assessments [5].

The research work conducted by Bespalko about Russian educational methods shows that training simulators establish perfect training conditions which help learners develop their algorithmic abilities because they can practice through increasing challenge levels while receiving immediate performance feedback [6]. The research results receive backing from international academic work which demonstrates through their meta-analysis that high-fidelity simulations which include repeated practice together with curriculum-based learning create better educational results according to Issenberg and his research team [7]. The research literature studies how people learn through simulator-based training because it shows that practice spaces which lack actual real-world effects make learners feel less anxious while they try to solve problems through testing different methods which boost their innovative thinking and flexible problem-solving skills [8]. The study conducted by Mavlonova in Central Asian schools demonstrates how simulator technology implementation brings about better educational results through its affordable costs because schools achieve long-term savings after spending initial funds on simulation systems which decrease their need for training materials and protect equipment during educational sessions [9].

**Results and Discussion.** The analysis of gathered academic research shows three main factors which demonstrate how training simulators improve the effectiveness of practical classes in higher education. The combined results show that training simulators change the learning space by enabling students to practice their skills without any limits which scientific research shows to be vital for achieving expertise through skill automated learning [10]. Simulator-based training allows students to practice their skills until they reach mastery standards which results in consistent competency development throughout all student groups whereas traditional practical classes limit their activities according to time and material resources and equipment availability. The safety dimension becomes crucial in fields which require initial learning because errors can lead to injuries and equipment destruction and permanent damage, with medical and engineering and technical education fields using simulator-based entry training as their standard approach.

Furthermore, the analysis reveals that modern training simulators increasingly incorporate adaptive algorithms that individualize the learning experience, adjusting difficulty parameters and providing targeted feedback based on learner performance patterns, thus addressing the pedagogical challenge of differentiated instruction within group practical classes. The standardization of assessment represents another crucial advantage, as simulators enable objective measurement of student performance against predetermined criteria, eliminating subjective variability inherent in traditional evaluation methods and providing detailed performance analytics that inform both student self-improvement and curricular refinement. The discussion must acknowledge implementation challenges identified in the literature, including initial cost barriers, faculty training requirements, and the necessity of maintaining appropriate

balance between simulated and authentic practice experiences to ensure transfer of learned skills to real-world contexts.

**Conclusion.** The comprehensive analysis of scholarly literature confirms that training simulators constitute invaluable pedagogical resources for conducting practical classes in contemporary higher education. The evidence demonstrates that simulator-based training enhances learning efficiency, ensures safety during skill development phases, provides standardized assessment opportunities, and enables individualized instruction within practical class settings. Educational institutions seeking to improve practical training outcomes should consider strategic integration of training simulators into curricula, accompanied by appropriate faculty development and assessment framework modifications.

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