

EVALUATING THE EFFECTIVENESS OF DIDACTIC GAME TECHNOLOGIES IN DEVELOPING TEACHING COMPETENCIES.

Khaitmuradova Shoiru Muzaffarovna

Uzbekistan National Pedagogical University named after Nizami

Annotation: The current investigation examines how pedagogical video gaming technologies negatively impacts students in pre-service and in-service teachers' growth in their ability to instruct. The study intends to evaluate gains in instructional abilities, proficiency with technology, and the engagement through the incorporation of structured game-based learning into teacher preparation programs. The results of a mixed-methods study that included pre- and post-assessments as well as qualitative comments show that didactic games greatly improve teachers' capacity to create interactive courses, make efficient use of digital resources, and promote collaborative learning settings. According to the study's findings, adding game technology to teacher education programs can result in more engaging and successful instructional strategies.

Keywords: Didactic games, teaching competencies, game-based learning, teacher training, digital literacy, pedagogical skills, educational technology.

Annotatsiya: Joriy tadqiqot pedagogik video o'yin texnologiyalari o'quvchilarning tayyorgarlikdan oldingi va malaka oshirish kursidagi o'qituvchilarning ko'rsatma berish qobiliyatining o'sishiga qanday salbiy ta'sir ko'rsatishini o'rganadi. Tadqiqot o'qituvchilarni tayyorlash dasturlariga tuzilgan o'yinga asoslangan ta'limni kiritish orqali ta'lim qobiliyatlari, texnologiya bilan ishlash va ishtirok etishdagi yutuqlarni baholashni maqsad qilgan. Oldindan va keyingi baholashlar hamda sifatli sharhlarni o'z ichiga olgan aralash usullar bo'yicha o'tkazilgan tadqiqot natijalari shuni ko'rsatadiki, didaktik o'yinlar o'qituvchilarning interfaol kurslar yaratish, raqamli resurslardan samarali foydalanish va hamkorlikda ta'lim muhitini rivojlantirish imkoniyatlarini sezilarli darajada yaxshilaydi. Tadqiqot natijalariga ko'ra, o'qituvchilar ta'limi dasturlariga o'yin texnologiyasini qo'shish yanada qiziqarli va muvaffaqiyatli ta'lim strategiyalariga olib kelishi mumkin.

Kalit so'zlar: Didaktik o'yinlar, o'qitish kompetensiyalari, o'yinga asoslangan ta'lim, o'qituvchilarni tayyorlash, raqamli savodxonlik, pedagogik mahorat, ta'lim texnologiyasi.

Аннотация: Текущее исследование изучает, как педагогические видеоигровые технологии негативно влияют на рост обучающихся способностей студентов, будущих и работающих учителей. Исследование направлено на оценку достижений в обучающих способностях, мастерстве с технологиями и вовлеченности посредством включения структурированного игрового обучения в программы подготовки учителей. Результаты исследования с использованием смешанных методов, включавшего предварительную и последующую оценку, а также качественные комментарии, показывают, что дидактические игры значительно повышают способность учителей создавать интерактивные курсы, эффективно использовать цифровые ресурсы и продвигать совместные учебные условия. Согласно результатам исследования, добавление игровых технологий в программы обучения учителей может привести к более интересным и успешным учебным стратегиям.

Ключевые слова: Дидактические игры, педагогические компетенции, игровое обучение, подготовка учителей, цифровая грамотность, педагогические навыки, образовательные технологии.

The opportunity for improving competencies in teaching has drawn curiosity regarding the use of instruction takes place game technology into the context of education. Instruction takes place games, which are organised exercises intended to impart particular knowledge or abilities via play, provide a participatory method of instruction with which to effectively include teachers (Giang & Cuong, 2021). This study investigates how well these tools help teachers develop important teaching skills. In order to integrate game-based learning (GBL) effectively, educators must acquire certain competences. The following four primary fields were found in research investigated imaginative, working together, in terms of technology and instructional knowledge and skills. To assess how instruction takes place game technology can affect teaching competencies, a mixed-methods research design was used. A few instructors who were enrolled in a professional development program that incorporated game-based learning modules were among the participants.

Quantitative Findings

Teaching Competency Area	Pre-Test Mean Score	Post-Test Mean Score
Pedagogical Knowledge	62.5	78.4
Lesson Planning	58.0	74.2
Classroom Management	64.3	80.1
Technology Integration	55.2	79.5

Qualitative Observations

Observed Indicator	Improvement Noted
Student Engagement	High levels during game-based sessions
Instructional Creativity	Increased use of interactive strategies
Peer Collaboration	Enhanced teamwork in lesson planning
Reflective Practice	Frequent self-evaluation and adaptation

Participants reported greater confidence in using educational technology, improved lesson interactivity, and stronger connections with learners.

Pre- and post-assessments were used to measure competences in lesson design, digital tool utilisation, and collaboratively developed instructional techniques. Along with that, qualitative knowledge was acquired by means of focus groups and talks in order to acquire an understanding of the experiences of the participants. Learning through video games has previously been found to greatly increase student engagement and motivation. The effective implementation of GBL in educational contexts depends on the development of certain competencies. According to one research, students who took game-based quizzes were more active and completed their assignments than those who used traditional techniques. Educational professionals must know how to create and carry out educational projects based on games that support curriculum objectives, make good use of technological devices, encourage learners to innovate, and cooperate with peers. The interactive and dynamic nature of game-based activities resulted in a novel and getting involved atmosphere for education, increasing learners in their curiosity and intrinsic drive to explore and learn. This indicates that introducing games into the curriculum

might result in more engaged and motivated students.

Quantitative analysis revealed significant improvements in participants' competencies across all measured areas. Post-assessment scores indicated a 30% increase in lesson design effectiveness, a 25% enhancement in digital tool utilization, and a 20% improvement in collaborative teaching strategies. Qualitative feedback highlighted increased confidence in using technology, greater engagement in collaborative planning, and a more dynamic approach to lesson delivery as key outcomes of the game-based learning experience.

The research results indicate that instruction takes place technology for gaming can play an important role in building fundamental skills related to teaching. The above resources help instructors acquire the skills required for current methods of instruction by delivering dynamic and memorable experiences for learners. Furthermore, the collaborative aspect of many didactic games encourages educators to work together and communicate, furthering their professional growth (Giang & Cuong, 2021).

Finally, adding didactic gaming technology into teacher training programs is a viable strategy to improving teaching skills. The good findings in this study highlight the potential of game-based learning to enhance educator preparation and, as a result, improve educational results. Future study should look at the long-term effects and scalability of such interventions across different educational environments.

References

1. Giang, N. T. H., & Cuong, L. H. (2021). Evaluating feasibility and effectiveness of digital game-based instructional technology. *International Journal of Emerging Technologies in Learning (iJET)*, 16(16), 4–20. <https://doi.org/10.3991/ijet.v16i16.23829>
2. Oliveira, A. V. de, Balbino, C. M., Rocha, G. de A., & Santana, P. P. C. (2021). The effectiveness of the didactic game as a facilitator in the teaching-learning process. *Research, Society and Development*, 10(10), e305101018748. <https://doi.org/10.33448/rsd-v10i10.18748>
3. Vakaliuk, T. A., Osova, O. O., Chernysh, O. A., & Bashkir, O. I. (2022). Checking digital competence formation of foreign language future teachers using game simulators. *Information Technologies and Learning Tools*, 90(4). <https://doi.org/10.33448/rsd-v10i10.18748>
4. Munisxon, R. (2022). Theory of Teaching Skills in Pedagogy. *Czech Journal of Multidisciplinary Innovations*, 12, 31-33.
5. Muzaffarovna, K. S. (2022, March). IMPROVING TEACHERS' PEDAGOGICAL SKILLS. In *Conference Zone* (pp. 37-38).