Список использованной литературы:

 Борисова И.Н. Искусственный интеллект и учитель: сотрудники или конкуренты? // Сборник трудов конференции. Чебоксары: ИД «Среда», 2022. С. 289-293.

2. Гальперин П.Я. Современная методика английского языка. Москва: Просвещение, 2015. 60 с.

3. Евстигнеев М.Н. Нейросеть Тwee – новый инструментарий для педагога английского языка // Вестник Тамбовского университета. Серия: Гуманитарные науки, 2023. Т. 28, № 6. С. 1428-1442.

4. Лесовая Л.В. Коммуникативно направленное обучение дошкольников английскому языку // Рабочая программа для Инфоурок. Красноярск. URL: <u>https://infourok.ru/kommunikativno-napravlennoe-obuchenie-doshkolnikov-anglijskomu-yazyku-4458510.html?ysclid=lv3toqkcse823814219</u> (дата обращения: 01.04.2024).

5. Пассов Е.И. Коммуникативный метод обучения иноязычному говорению: пособие для учителей иностр. яз. М.: Просвещение, 1985. 208 с.

6. Чернозипунникова Д.А. Формирование коммуникативной компетенции в процессе обучения английскому языку // Гуманитарные исследования. Педагогика и психология, 2021. № 5. С. 38-45.

7. Twee [Электронный pecypc]. URL: <u>https://twee.com/</u> (дата обращения: 10.04.2024).

UDC 378.4:372.881

Yahorava N. A. PhD in Education, Associate Professor Minsk, Republic of Belarus University of the National Academy of Sciences of Belarus <u>egorov1977@yandex.ru</u>

INNOVATIONS IN MODERN PEDAGOGY: SIMULATION-BASED ACTIVITIES AT HIGHER EDUCATIONAL ESTABLISHMENT

Abstract. Simulation-based activities have emerged as a transformative innovation in pedagogy, offering immersive learning experiences in simulated environments. This article explores the significance of simulation-based activities in education, highlighting their role in promoting active learning, critical thinking, and collaboration among students. The primary objective of this study is to analyze the impact of simulation-based activities on learning outcomes and student engagement. The results indicate that simulation-based activities are effective pedagogical tools for fostering deeper understanding, problem-solving abilities, and practical skills acquisition to meet the evolving needs in the digital age.

Keywords: *simulation-based activities, experiential learning, critical thinking, skill development, collaboration, learning styles, problem-solving, decision-making.*

Егорова Н. А. кандидат педагогических наук, доцент Минск, Республика Беларусь Университет НАН Беларуси egorov1977@yandex.ru

ИННОВАЦИИ В СОВРЕМЕННОЙ ПЕДАГОГИКЕ: МОДЕЛИРОВАНИЕ СИТУАЦИЙ В ВЫСШЕМ УЕБНОМ ЗАВЕДЕНИИ

Аннотация: Занятия. основанные на моделировании, стали революционной инновацией в педагогике, предлагая иммерсивный опыт обучения в моделируемой среде. В этой статье обсуждается деятельность, основанная на моделировании ситуаций, подчеркивается ее роль в активном обучении, развитии критического мышления и сотрудничества между студентами. Основная цель данного исследования – проанализировать влияние моделирования ситуаций на качество обучения и вовлеченность всех студентов. Практика показывает, что занятия, основанные на моделировании, эффективны для овладения студентами умением решать проблемы и практическими навыками, необходимыми для удовлетворения растущих потребностей в эпоху цифровых технологий.

Ключевые слова: моделирование ситуаций, опытное обучение, критическое мышление, развитие навыков, сотрудничество, стили обучения, решение проблем, принятие решений.

In modern pedagogy, there's a balance between honoring traditions and embracing innovations. Traditional pedagogical methods like lectures and textbooks still have value, but they're often supplemented with innovative approaches such as experiential learning, simulation-based activities, project-based learning, and technology integration. The focus is on fostering critical thinking, collaboration, creativity, and adaptability among students, preparing them for success in an everchanging world.

In our article we will touch upon simulation-based activities as they are excellent for developing critical thinking and collaboration skills in students. By placing learners in scenarios that mimic real-life challenges, they're encouraged to analyze, problemsolve, and make decisions in a safe environment. Collaborating with peers allows them to consider diverse perspectives, share ideas, and work towards common goals that help students develop essential skills which can be applied in various contexts beyond classroom.

1. The use of simulation in education dates back centuries, but its modern form owes much to the work of Otto Frederik Malling, a Danish educator. In the late 19th century, Malling pioneered the use of simulation to teach navigation skills to sailors. He developed a mechanical device called the "Malling-Hansen Writing Ball," [Aldrich 2005, 13] which simulated the movement of a ship at sea. This device helped sailors learn navigation techniques without actually being on a ship, demonstrating the early application of simulation in educational settings. Since then, simulation has evolved significantly and is now widely used across various fields of education and training. Simulation is indeed a significant innovation in pedagogy. It allows students to engage in experiential learning by replicating real-world scenarios in a controlled environment. Simulation-based activities offer hands-on experiences that deepen understanding and skill acquisition. Additionally, simulations can be tailored to suit different learning styles and levels of expertise [Lave 1991, 46-58], making them a versatile tool for educators at the university level by catering to diverse needs and preferences: 1) visual learners benefit from the visual elements of simulations, such as graphs, diagrams, and interactive interfaces, which help them understand complex concepts more effectively; 2) auditory learners can benefit from simulations that incorporate sound effects, verbal instructions, and discussions, enhancing their comprehension and retention of information; 3) kinesthetic learners thrive in simulations that involve hands-on activities, interactive tasks, and real-life scenarios where they can actively engage and manipulate objects or interfaces; 4) reading/writing learners may excel in simulations that provide written materials, case studies, or textual explanations to reinforce learning objectives.

By incorporating simulation-based activities into the curriculum, universities can accommodate various engaging learning experience for students embracing:

1. Problem-solving: Simulations present students with realistic scenarios or challenges that require them to analyze information, identify problems, and devise solutions. This process encourages them to think critically about the best course of action and consider multiple perspectives before passing out decisions.

2. Decision-making: Students must evaluate various options and consequences within the simulated environment, which enhances their ability to make informed decisions based on available evidence and logical reasoning.

3. Real-world application: Simulations replicate authentic situations that students may encounter in their future careers or daily lives. By engaging with these scenarios, students develop the ability to apply theory in practice, foster deeper understanding and critical thinking skills.

4. Reflection: After participating in simulation activities, students often engage in reflective exercises to analyze their actions, outcomes, and directions for self-improvement. This reflective practice encourages metacognition and self-awareness [Yahorava 2009, 23-45].

Overall, simulation-based activities provide an immersive and interactive learning experience that challenges students to think critically, problem-solve, and make sound decisions, preparing them for success in both academic and professional settings. Simulation-based activities have a significant impact on collaboration at the university level by fostering teamwork, communication, and mutual learning among students due to: 1. Shared goals: Simulations typically involve complex tasks or scenarios that require collaboration to achieve common objectives. Working towards shared goals encourages students to collaborate effectively, pooling their knowledge, skills, and resources to succeed.

2. Role-playing: Many simulations assign students specific roles or responsibilities within a team, mirroring real-world collaboration dynamics. By taking on different roles, students learn to appreciate diverse perspectives, leverage each other's strengths, and coordinate their efforts towards a common purpose.

3. Communication skills: In simulation activities, students must communicate clearly and effectively with their teammates to share information, coordinate actions, and solve problems collaboratively. This practice helps them develop essential communication skills, including active listening, negotiation, and conflict resolution.

4. Feedback loop: Simulations often include feedback mechanisms that prompt students to reflect on their collaborative processes and outcomes. By receiving and providing constructive feedback, students learn to assess their performance, adjust / readjust/ reshape their strategies, and continuously improve their collaboration skills.

5. Real-time interaction: Simulations provide opportunities for real-time interaction and decision-making, simulating the dynamic nature of teamwork in professional environments. Through these interactive experiences, students develop the ability to adapt to changing circumstances, collaborate under pressure, and work effectively in fast-paced settings [Yahorava 2009, 67-81].

Simulation-based activities serve as powerful catalysts for collaboration at the university level, preparing students to thrive in collaborative work environments and contribute meaningfully to team-based projects and initiatives. Simulation-based activities typically involve several stages, which may vary depending on the specific context and objectives. Here are the common stages:

1. Planning and design: This stage involves defining the learning objectives, selecting appropriate simulation tools or platforms, and designing the scenario or

activity structure. Educators plan the simulation to align with course goals, student learning needs, and available resources.

2. Preparation: Before the simulation, students may need to familiarize themselves with the simulation environment, tools, or procedures. This stage may include pre-simulation readings, training sessions, or orientation activities to ensure that students understand their roles and responsibilities.

3. Execution: During this stage, students actively participate in the simulation activity, applying their knowledge and skills to navigate the simulated scenario. They collaborate with teammates, make decisions, and respond to challenges or events within the simulation environment.

4. Debriefing: After the simulation concludes, there is typically a debriefing session where participants reflect on their experiences, discuss their actions and resolutions, and analyze the outcomes of the simulation. Facilitators conduct the discussion, encouraging critical reflection, identifying strengths and areas for improvement, and reinforcing key learning points.

5. Reflection and assessment: Following the debriefing, students engage in individual or group reflection to consolidate their learning, identify tactics and strategies learned, and consider how they can apply their experiences to real-world contexts. Educators may also assess students' performance during the simulation based on predetermined criteria or learning objectives.

6. Integration and follow-up: Finally, educators may integrate the insights gained from the simulation into ongoing coursework or future learning activities. They may also follow up with students to reinforce key concepts, provide additional resources, or facilitate further discussion and reflection on the simulation experience.

These stages form a cyclical process, with each iteration informing subsequent simulations and enhancing students' learning and skill development over time.

Pedagogues may encounter various challenges when implementing simulationbased activities at the university level. Some common difficulties include:

1. Resource constraints: Developing and implementing simulation activities often requires access to specialized equipment, software, or facilities, which may be costly or limited in availability. Pedagogues may struggle to secure adequate resources to support simulation-based learning initiatives.

2. Technical issues: Simulation platforms or technologies may encounter technical glitches, connectivity issues, or compatibility issues with students' devices. Pedagogues may need to troubleshoot these technical challenges or provide alternative solutions to ensure smooth execution of simulation activities.

3. Time constraints: Designing, planning, and executing simulation-based activities can be time-consuming, especially for pedagogues who already have demanding teaching schedules and responsibilities. Finding sufficient time to prepare and facilitate simulations while balancing other academic duties can be challenging.

4. Student engagement: Maintaining student engagement throughout simulation activities can be challenging, particularly if the scenarios are not sufficiently engaging or relevant to students' interests and learning goals. Pedagogues may need to design simulations that capture students' attention and encourage active participation.

5. Assessment and evaluation: Assessing student performance during simulation activities can be complex, as traditional assessment methods may not fully capture students' learning and skills development in simulated environments. Lecturers may need to develop innovative assessment strategies or criteria tailored to simulation-based learning outcomes.

6. Facilitation skills: Facilitating simulation activities requires strong interpersonal and instructional skills to effectively guide student learning, manage group dynamics, and provide constructive feedback. Teachers may need training or professional development opportunities to enhance their facilitation skills in simulation-based contexts.

7. Integration with curriculum: Integrating simulation-based activities into existing curricula and academic programs can be challenging, particularly if there are logistical or administrative barriers to alignment with course objectives or accreditation

requirements. Educators may need to collaborate with colleagues to ensure seamless integration of simulations into the curriculum.

Addressing these challenges requires careful planning, collaboration, and ongoing support from institutional leadership, faculty, and other stakeholders invested in promoting effective simulation-based learning experiences at the university level.

University teachers can effectively use simulation techniques when teaching foreign languages to cope with some of the above-mentioned challenges and enhance students' language acquisition and proficiency. Here are some strategies:

- Role-playing scenarios: Create role-playing scenarios where students take on different roles and engage in simulated conversations, negotiations, or real-life situations in the target language. This helps students practice language skills in context and develop their speaking and listening abilities.

– Virtual immersion: Use virtual reality or online platforms to simulate immersive language environments, such as virtual cafes, markets, or travel scenarios. This allows students to interact with simulated native speakers and practice language skills in realistic settings.

– Interactive simulations: Develop interactive simulations or games that require students to use the target language to complete tasks, solve puzzles, or navigate virtual environments. This promotes active engagement and reinforces vocabulary, grammar, and language structures.

- Cultural simulations: Integrate cultural simulations or scenarios that explore cultural norms, customs, and traditions of countries where the target language is spoken. This helps students develop cultural competence and sensitivity while improving their language skills.

– Role-play interviews: Organize simulated job interviews, news interviews, or debates where students practice speaking, listening, and critical thinking skills in the target language. Provide feedback on language accuracy, fluency, and communication strategies to help students improve.

– Language immersion weekends: Arrange language immersion weekends or short-term study abroad programs where students immerse themselves in the target language and culture. This hands-on experience allows students to practice language skills in authentic contexts and build confidence in using the language.

– Simulated language tasks: Create simulated language tasks, such as ordering food in a restaurant, booking travel accommodations, or participating in group projects, where students collaborate and communicate in the target language to accomplish goals [Aldrich 2005, Lave 1991, Yahorava 2009].

Simulation-based activities enable students to immerse in realistic scenarios to enhance learning outcomes. They offer a dynamic and engaging learning experience by replicating real-world situations where students can apply theoretical knowledge and develop practical skills. By integrating simulations into teaching, educators can create opportunities for active learning, critical thinking, collaboration, and problemsolving. Simulations are especially relevant in today's educational landscape, where technology enables immersive and interactive learning experiences across various disciplines and industries. With their ability to cater to diverse learning styles, address real-world challenges, and promote experiential learning, simulation-based activities hold significant significance in modern education, paving the way for effective skill development and preparing students for success in an ever-evolving world.

References:

1. Aldrich C. Learning by doing: A comprehensive guide to simulations, computer games, and pedagogy in e-learning and other educational experiences. John Wiley & Sons, 2005. 234 p.

2. Lave J. Situated learning: Legitimate peripheral participation / J. Lave, E. Wenger. Cambridge University Press, 1991. 246 p.

3. Yahorova N. A. Professional culture of a foreign language teacher: solving pedagogical situations. Baranovichi: RIO BarSU, 2009. 206 p.