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Art & Game-Based Approaches in Language Teaching: From Creativity to Communication

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ABSTRACT
The aim of the study is to develop and validate a methodology for teaching English to tourism students in Kazakhstan through art-based approaches and gamification. It may be assumed that the use of such approaches will contribute to the development of students' linguistic creativity, to the improvement of communication skills as well as to the ability increase to effectively interact with clients from different countries of the world. 180 tourism students were involved in the study. who are studying English at higher education institutions in Kazakhstan (Turkistan, Almaty, Astana). The results of the study confirmed that a combined learning model that integrates art technologies and gamification elements is more effective than traditional methods of teaching English to students of tourism specialties. An increase in the level of linguistic creativity and communicative flexibility of students was established. This contributed to their motivation increase as well as involvement in the educational process. The most effective tool for developing communicative flexibility was simulation exercises, which contributed to an increase in adaptability, speed of reaction, and diversity of communicative strategies. Digital quests and simulations also increased students' engagement, confidence, and readiness for professional interaction. In addition, customer-oriented outcomes, including customer satisfaction and problem-solving quality, improved, confirming the practical relevance of the proposed methodology for the tourism industry. The qualitative analysis of students' narratives showed that the stories they created became more creative, emotionally expressive, and adaptable to different communicative situations.

KEYWORDS
Art and game-based technologies; game methods; game situations; motivational sphere; foreign language communication.

INTRODUCTION

Modern foreign language learning is based on the active use of innovative methods that combine artistic and game approaches. As a result of globalization, communicative competence becomes especially important, which goes far beyond the traditional mastery of grammar and vocabulary (Govender & Arnedo-Moreno, 2021; Vedaschi Ozzola, 2025). In the field of tourism and related services, intercultural interaction and the ability to effectively communicate are the key professional skills that can be mastered by using creativity and game activities. Moreover, artistic methods in modern education contribute to learners' cognitive development. Researchers have emphasized that certain artistic practices (drama, storytelling, music, and visual arts) generally enhanced the language learning process by combining linguistic forms with authentic emotional experiences (Aden et al., 2025; Song & Liu, 2022). For example, this involves particular drama-based techniques that allow learners to simulate real-life communication, improvise using role-playing games, and develop certain aspects of interaction (Ongoro et al., 2023; Xiang & Norliza, 2025). Similarly, writing creative aspects expand the vocabulary, the knowledge of grammatical structures use, and original as well as critical thinking.

In terms of teaching foreign languages modern methodologies, approaches that focus on students' active participation, creativity and real communicative situations modelling have become important. The theoretical basis of such approaches was L. Vygotsky' sociocultural theory of learning, according to which the development of speech occurs in the process of social interaction and joint activity. Within the framework of this theory, learning is described as a culturally mediated process where creative and communicative practices play an important role. According to M. Csikszentmihalyi's a very important approach is the "flow" phenomenon, which explains that effective learning occurs when students are immersed in an activity that combines intellectual challenge, interest and intrinsic motivation. In this sense, art-based learning approaches have also gained a significant role, which involve the use of dramatic practices, storytelling, creative writing and other artistic forms as tools for the development of language competence. Studies have shown that the use of artistic methods allows the formation of linguistic creativity, develops emotional expressiveness and increases students' intercultural sensitivity. Such approaches are especially effective in professionally oriented foreign language teaching, where the acquisition of grammar and vocabulary as well as the development of communication skills are important.

For tourism, artistic approaches are important in terms of professional communicative situations development, excursion accompaniment, and customer service. By engaging higher education students in authentic scenarios, these approaches have developed linguistic competence, soft skills (empathy, cultural awareness, and emotional self-regulation). However, investigations concerning artistic methods in Kazakhstan are limited. Most scholars have focused on traditional communication methods study, the teacher-centred learning process. Within this context, the use of drama, creative writing, and other artistic strategies in language tourism courses is largely unexplored (Esteban et al., 2024). The presence of such a gap indicates

the requirement for empirical research that would adapt global artistic practices to the multilingual and multicultural educational environment of Kazakhstan. Gamification has been recognized as an effective method. Researchers have pointed to its ability in motivation and engagement increase, as well as in the success in language practical application (Klimova et al., 2021; Li et al., 2024). Games used in language tasks have transformed the educational process into an interactive activity, providing learners with opportunities for practical communication in a safe, low-risk environment. Gamified learning includes game mechanics (scores, levels, and immediate feedback) that enliven repetition while maintaining learner interest (Turebayeva et al., 2020; Viyevska, 2022).

When teaching English for the tourism industry, the game-based learning has provided opportunities to engage in authentic professional tasks, including booking procedures, handling complaints, and conducting guided tours. Such activities have had a positive impact on vocabulary and grammar development, pragmatic competence, and interpersonal communication skills (Noor, 2022; Yüncü & Akgül, 2023). Research has also shown that role-playing games have improved students' adaptation to unexpected situations (Kartal Baş & Tugrul, 2025; Zhang & Zou, 2020). At the same time, the use of game and art technologies in language education in Kazakhstan is quite limited. Few higher education institutions in Ossetia systematically use gamified approaches in English language courses for tourism professionals. Existing studies are primarily descriptive, rather than experimental. Accordingly, there is a significant gap in the research that would measure the involvement of education seekers, the results of their learning in real professional conditions. This indicated the possibility of applied research assessing the effectiveness of using innovative game and art methods in Kazakhstani universities.

Modern research indicates the presence of strong synergy between art and game approaches (Ningsih, 2023; Pikhart et al., 2024). This allowed assuming the relevance of creative and game strategies combination. Potentially, this should lead to improved learning outcomes, the use of new methodologies, etc. Role-playing games, which were based on dramatic methods, storytelling and game mechanics, led to the simultaneous development of linguistic accuracy and creative thinking (Coleman & Money, 2019). Such integrative models reflected the growth of student-centred pedagogy, active language learning with a socially interactive subtext (Denham & Guyotte, 2017; Fitanti, 2025). The combination of artistic and game elements allowed students to act out different situations through simulation, which increased their motivation to learn.

However, there is a lack of integrative approaches in Kazakhstan. Research typically examines artistic and playful methods separately, paying little attention to hybrid models that could enhance communicative creativity in English for professional needs in tourism. These gaps highlight the need for further empirical research aimed at developing curricula and enhancing professional competence. In this study, the integration of art and game technologies is considered not only as a separate methodological technique, but as an element of updating the

English curriculum for students majoring in Tourism (ESP curriculum). The proposed course is modelled as a holistic 12-week curriculum that is structurally integrated into existing higher education programs in Kazakhstan. Thus, the study combines the analysis of the effectiveness of specific pedagogical tools with the broader dimension of curriculum reform for professionally oriented foreign language learning.

Kazakhstan's official strategy has made the stage of tourism a top priority. The expansion of incoming travel and the development of service quality are the main focuses of the Tourism Development Strategy through 2030. Creative communication abilities became increasingly crucial in this context (Bokayev et al., 2025; Iskindirova et al., 2024). A professional needs to be able to modify the speech in order to meet the consumers from many nations' cultural norms, in addition to speaking practices. Creativity in linguistic communication boosts the nation's competitiveness abroad, enhances the visitor practice, and helps spread recommendations (word-of-mouth). The use of art and game-based technology aligns with contemporary educational trends and enables the development of professionals who can swiftly adjust to the ever-changing model of tourism. In order to develop and validate a methodology for teaching English to Kazakhstani tourism education students based on art technologies and gamification, methodological and psychological principles of organising and utilising artistic and game elements in a foreign language lesson are involved in the study. This will help students become more creative in their language and communication skills and improve their capacity to engage with clients from around the world.

The research hypothesizes that the inclusion of art and game-based technologies (dramatic scenes, creation of tourist narratives, simulation of tourist scenarios, digital quests) in teaching English to tourism specialists significantly increases the level of their creative self-expression and emotional expressiveness in speech, as well as helps accelerate the formation of spontaneous communication skills and adaptation to unforeseen communication situations. The research questions are as follows:

RQ1: Does the integration of art-based and gamified teaching methods significantly improve students' linguistic creativity (originality, flexibility, emotional expressiveness) compared with traditional instruction?

RQ2: Does the proposed methodology improve students' communicative flexibility, including speech adaptability, response speed, and variability of communication strategies in simulated tourism situations?

RQ3: Which specific instructional tools (dramatization, storytelling, visual practices, simulations, digital quests) have the strongest effect on educational outcomes such as linguistic creativity, communicative flexibility, motivation, and professional readiness?

RQ4: How does the integration of art-based and gamified methods influence students' motivation and professional performance indicators, including customer-oriented outcomes such as problem solving and client satisfaction?

METHODOLOGY

A pre-post quasi-experimental design with a control group was implemented in the study. The choice of this design is explained by the need to capture shifts in the participants' language and communicative competencies and to compare the effectiveness of two different teaching models: the traditional (grammar-translation with elements of role-playing) and the innovative (combining art technologies and gamification) (Creswell & Creswell, 2018; Weyant, 2022). At the same time, this design allowed for the minimization of external factors influence (previous English level, professional experience, internal motivation), as participants were randomly assigned to two groups and completed the same amount of class time. The peculiarity of this work lies in the fact that the training course was modelled as a replicated ESP course for tourism professionals, lasting 12 weeks, with two 90-minute sessions per week. This ensured a balance between academic validity (controlled conditions, fixed variables) and practical relevance (the course aligns with the typical format of training programs in the tourism sector).

Sample and Participants

The study involved 180 tourism students who studied English at higher education institutions in Kazakhstan (Turkistan, Almaty, Astana). The choice of this specific category is explained by the fact that future professionals in the tourism sector are the direct target audience for ESP courses (English for Specific Purposes) and require a high level of communicative creativity and adaptability in their future professional activities. Participant distribution: Experimental group - 90 people; Control group - 90 people. The distribution was randomized, considering the initial level of English proficiency (A2, B1, B2 according to the CEFR), in order to ensure the even composition of the groups.

The inclusion criteria for the study were based on aspects such as English proficiency at a level no lower than A2 according to the CEFR (determined by a preliminary test), the enrolment in a higher education institution in a tourism faculty (future operators, guides, managers), and providing consent to participate in all stages (pre/post-testing, intervention, interviews). Accordingly, participants were excluded if they had an English proficiency level below A2, declined to participate in the experiment, or withdrew at any stage. The groups were formed based on stratified random sampling.

Procedure

The study was conducted in 3 stages: diagnostic, interventional and final. During the diagnostic stage, a preliminary testing was carried out. A comprehensive assessment of the participants initial level of language competence (total N = 180) was considered. For this purpose, a standard English test was used. At the intervention stage (12 weeks), the main experiment took place - testing the effectiveness of the combined methodology, integration of artistic technologies, and gamification elements. In the experimental group, each 90-minute session included 20-30 minutes of language training, 40-50 minutes of artistic practice (role-playing, storytelling), 20-30 minutes of gamification (digital quizzes in Kahoot/Quizizz to strengthen vocabulary, simulation of typical situations). The direct emphasis was placed on the development of

linguistic creativity, communicative flexibility in real conditions. In general, gamification in learning a foreign language is a fairly simple matter, since it was necessary to create a graphic representation of the stages of the game, outline the rules that must be followed, and develop an evaluation system. For a short correct answer to a question, the student received 1 point, and for a detailed answer - 2 points. A certain number of points allowed moving to the next level. In order to help weaker participants points were awarded. The components of role-playing mobile games were also carefully separately considered, if the level and desire of the students made it possible to dramatize the process of learning a foreign language.

In the control group, classes were held twice a week for 90 minutes each time, but the program was based on traditional ESP methods: 40–50 minutes for grammar and translation exercises, 30–40 minutes for classic role-playing and text work, and 10–20 minutes for vocabulary review and practice. Thus, the control group did not have a systematic implementation of art and play practices. After the intervention was completed, a re-evaluation was conducted. A language test was conducted in order to determine the level of proficiency, and a motivational questionnaire was administered. A CEFR-based rubric for oral speech was also used. Additionally, an external evaluation was conducted by "mystery shoppers": invited foreign experts participated in the final simulations and acted as tourists, after which they filled out checklists regarding service satisfaction (customer satisfaction, NPS). At this stage, each team also gave group presentations and simulations in a "masterclass" format. The participants presented the developed tourist route and conducted a mini excursion for foreign guests. This allowed for the assessment of language skills and integrated professional competencies.

Measurement tools

Language proficiency test

To assess the language proficiency of the participants a standardized English for Professional Needs in Tourism (ESP) test was used. The test was developed by the research team based on the descriptors of the Common European Framework of Reference for Languages (CEFR) for levels B1–B2 and adapted to communicative situations in the tourism industry. The test consisted of four components: lexical and grammatical block (multiple choice and gap-filling tasks); listening (listening to dialogues on tourism topics); oral speech (short monologues and improvised dialogues, for example: “My city tour”, “Meeting foreign guests”); creative speech tasks (creating a short advertising text or story about a tourist attraction). The speaking was assessed by using a rubric based on the CEFR criteria, which included the following indicators: linguistic accuracy, communicative effectiveness, fluency and creative expression. The content validity of the test was confirmed based on expert evaluation by three teachers of English for professional needs in the field of tourism. The reliability of the instrument was determined using the internal consistency coefficient (Cronbach’s $\alpha = 0.82$).

Motivation questionnaire

Students’ motivation to use innovative teaching methods was assessed using a 15-question questionnaire developed by the research team based on previous research on academic

motivation and digital learning. The questionnaire used a five-point Likert scale (1 – strongly disagree, 5 – strongly agree) and included four main scales: intrinsic motivation to learn English; expected usefulness of innovative methods; communicative anxiety; readiness to use new educational technologies. The reliability of the scale was confirmed by Cronbach's $\alpha = 0.86$. Construct validity was checked using factor analysis, which confirmed the four-factor structure of the instrument.

Assessment of communicative flexibility

The communicative flexibility was assessed during simulation tasks using three indicators: adaptability of speech; speed of reaction in a communicative situation; variability of communicative strategies. A behavioural observation rubric developed by the authors of the study was used for assessment. Each indicator was assessed on a five-point scale by two independent experts. The inter-expert agreement was high (Cohen's $\kappa = 0.79$), which indicates a sufficient level of assessment reliability.

Assessment of professional communication

To assess the results of professional communication, external experts ("mystery tourists") were involved and participated in the final simulations. After each interaction, the experts filled out an assessment checklist that included: customer satisfaction; communication quality; problem-solving effectiveness; Net Promoter Score (NPS). The assessment tool was developed based on tourism service quality models used in the training of tourism industry professionals. Inter-expert agreement was $\kappa = 0.74$, indicating an acceptable level of reliability.

Data analysis

The data analysis was applied with the use of quantitative and qualitative methods. This approach made it possible to verify the effectiveness of the pedagogical intervention and interpret changes in students' communicative behaviour in professional situations. The quantitative analysis was aimed at assessing changes in the following indicators: linguistic creativity (originality, flexibility, emotional expressiveness); communicative flexibility (adaptability of speech, speed of reaction, variability of strategies); motivation for learning; customer satisfaction during simulations of tourist situations. Before conducting the main analysis, the prerequisites for using parametric methods were checked. For this purpose, the following were used: Shapiro–Wilk test to check the normality of data distribution; Levene's test to check the homogeneity of variances.

The test results indicated that the data met the conditions for using parametric methods. To assess changes within each group, a paired t-test was used, which allowed comparing the results before and after the experiment. For intergroup comparison of the control and experimental groups results, an independent t-test was used. To determine the gradual changes during the 12-week intervention, the method of analysis of variance with repeated measures (ANOVA) was used. To determine the relationships between the used pedagogical tools (dramatization, storytelling, visual practices, simulations, digital quests) and educational results, the Pearson correlation coefficient was used. In the next stage, multiple linear regression was

used to assess the contribution of each instrument to the results. Dependent variables (Y): Y_1 – Linguistic creativity • originality, • flexibility, • emotional expressiveness; Y_2 – Communicative Flexibility • Speech adaptability, • Reaction speed, • Strategy variability; Y_3 – Motivation • interest in the subject, • self-confidence, • willingness to use the methods in their profession; Y_4 – Customer Satisfaction • Customer Satisfaction Score, • Net Promoter Score (NPS), • Problem-solving quality; Independent variables (X): X_1 - dramatization, X_2 - storytelling, X_3 - visual practices, X_4 - simulations, X_5 - digital quests; The general form of the model is the next: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$

The regression analysis made it possible to establish the strength and direction of the influence of each component of the intervention on educational outcomes. Cohen's d coefficient was used to assess the practical significance of the results. All statistical calculations were performed using IBM SPSS Statistics software. The qualitative analysis was carried out at the final stage of the experiment after the final testing. Narrative analysis of student texts and presentations created within the final simulations of tourist situations was used. The analysis was aimed at assessing three key characteristics of speech: originality of the narrative, adaptability of communicative strategies, and emotional expressiveness of speech. In addition, a content analysis of the responses of "mystery shoppers" who acted as independent experts during the final simulations of tourist scenarios was conducted. Qualitative analysis allowed to supplement the statistical results and interpret changes in the students' speech behaviour, particularly the development of creativity, communicative flexibility and the ability to adapt speech to different types of tourists.

RESULTS

Foreign language learning in the field of tourism requires the mastery of grammatical structures, the acquisition of specialized vocabulary, and the development of creative and adaptive thinking skills. In this context, linguistic creativity is defined as the ability to produce original statements, combining language tools in new communicative situations with non-standard solutions when interacting with clients. The use of art technologies (dramatization, storytelling, visual practices) and gamification elements (simulations, digital quests) made it possible to form a learning environment that stimulated the reproduction of knowledge, activated the creation of new speech products. Dramatization provided space for improvisation, the development of the ability to quickly adapt communicative strategies. Storytelling influenced the skills of structured presentation, building logical sequences to create a structured narrative. Visual practice (working with multimedia presentations, photographs and videos) expanded the range of expressive means. Gamification (digital quests, simulations) enhanced the learning effect, as they required students to respond linguistically and creatively to language resources. Simulations of tourist scenarios ("meeting at the airport", "conflict resolution in the hotel", "city tour") allowed them to train their ability to respond to unforeseen circumstances. Digital quests contributed to the rapid finding of original solutions. Namely, it was found that the experimental

group demonstrated an increase in linguistic creativity indicators, while the control group underwent minimal changes. Statistical analysis using paired t-tests confirmed this process within the experimental group ($p < 0.001$), while the results remained statistically insignificant in the control group ($p > 0.05$). An independent t-test also revealed differences between groups in the post-test ($p < 0.001$) (see Table 1).

Learning a foreign language in the field of tourism requires not only mastering grammatical structures and professional vocabulary but also developing the ability to think creatively and adaptively. In this context, linguistic creativity is defined as the ability to produce original statements, combine linguistic means in new communicative situations, and find non-standard solutions when interacting with clients. The application of art technologies (dramatization, storytelling, visual practices) and gamification (simulations, digital quests) has allowed for the creation of a learning environment that stimulates knowledge reproduction and the active creation of new speech products. Dramatization provided space for improvisation and emotional immersion, which in turn influenced the development of the ability to quickly adapt communication strategies. Storytelling influenced skills in structured presentation, logical sequencing, and imagery in speech, which are key for creating tourist narratives. Visual practices (working with multimedia presentations, photos, and videos) allowed for an expansion of the range of expressive means, as they synthesized verbal and non-verbal elements. Gamified elements (digital quests, simulations) enhanced the learning effect as they required students not only to have the correct linguistic response but also to creatively apply language resources in dynamic situations. Simulations of tourist scenarios ("meeting at the airport," "resolving a conflict at the hotel," "city tour") allowed training the ability to react to unforeseen circumstances. Digital quests promoted quick finding of original solutions and increased the interest, which directly impacted students' willingness to experiment with the language. Thus, the experimental group showed an increase in language creativity indicators (originality, flexibility, expressiveness), while the control group experienced minimal changes.

Table 1.

Comparison of Pre- and Post-Test Results

Group	Pre-test (M ± SD)	Post-test (M ± SD)	t (df)	p-value	Cohen's d
Control (n=90)	5.6 ± 1.1	5.9 ± 1.0	1.21	0.229	0.12
Experimental (n=90)	5.4 ± 1.2	7.8 ± 1.0	8.62	<0.001	0.85
Group comparison (post-test)	–	–	6.14	<0.001	0.82

The statistical analysis using paired t-tests confirmed the significance of shifts within the experimental group ($p < 0.001$), while the results remained statistically insignificant in the control group ($p > 0.05$). The independent t-test also revealed significant differences between the groups in the post-test ($p < 0.001$) (See Table 1).

The communicative flexibility was based on three indicators: speech adaptability, reaction speed in simulation tasks, and strategy variability. In the control group (n = 90), the changes were minimal. The average score for adaptability increased from 3.5 (SD = 0.8) to 3.7 (SD = 0.9), but the difference was not significant (t (89) = 1.02, p = 0.311, Cohen's d = 0.10). Reaction time decreased from 18.1 seconds (SD = 3.2) to 17.6 seconds (SD = 3.0), which also did not yield a significant result (p > 0.05). The variability of strategies increased from 2.1 (SD = 0.6) to 2.3 (SD = 0.7), but the difference remained insignificant (t (89) = 1.14, p = 0.257). Positive changes were observed in the experimental group (n = 90). The adaptability score increased from 3.6 (SD = 0.9) to 4.4 (SD = 0.8), and this difference was high (t (89) = 6.15, p < 0.001, Cohen's d = 0.65). Reaction time decreased from 18.4 seconds (SD = 3.1) to 12.7 seconds (SD = 2.5), demonstrating a significant improvement in speech improvisation speed (t (89) = 9.24, p < 0.001, Cohen's d = 0.89). The variability of strategies increased from 2.2 (SD = 0.7) to 3.4 (SD = 0.8) (t (89) = 7.43, p < 0.001, Cohen's d = 0.71). An independent t-test confirmed a significant difference between the groups in the post-test for all three indicators (p < 0.001). Specifically, students in the experimental group showed a 0.7-point higher level of adaptability, a 5-second faster reaction time, and a 1.1-point greater variability in strategies compared to the control group (See Table 2).

Table 2.

Indicators of communicative flexibility in the control and experimental groups

Indicator	Group	Pre-test (M ± SD)	Post-test (M ± SD)	t (df)	p-value	Cohen's d
Speech Adaptability	Control (n=90)	3.5 ± 0.8	3.7 ± 0.9	1.02	0.311	0.10
	Experimental (n=90)	3.6 ± 0.9	4.4 ± 0.8	6.15	<0.001	0.65
Response Speed (sec.)	Control (n=90)	18.1 ± 3.2	17.6 ± 3.0	1.09	0.278	0.11
	Experimental (n=90)	18.4 ± 3.1	12.7 ± 2.5	9.24	<0.001	0.89
Strategy Variability	Control (n=90)	2.1 ± 0.6	2.3 ± 0.7	1.14	0.257	0.12
	Experimental (n=90)	2.2 ± 0.7	3.4 ± 0.8	7.43	<0.001	0.71
Group Comparison (Post-test)	–	–	–	7.02	<0.001	0.77

A multivariate regression analysis was conducted to identify the contribution of individual art and play methods to the formation of educational and practical outcomes. The model included independent variables such as dramatization, storytelling, visual practices, simulations, and digital quests.

The multivariate regression analysis showed that the proposed pedagogical interventions explained a substantial proportion of variance in the studied outcomes. The model for linguistic creativity explained 37% of the variance (R^2 = 0.37), while the model for communicative flexibility demonstrated the strongest explanatory power (R^2 = 0.45). Motivation and customer satisfaction models explained 34% and 41% of variance respectively. All

regression models were statistically significant ($p < 0.001$). Hence, the proposed indicators determined that different teaching aids had a specific impact on individual components of educational outcomes. The language creativity (Y_1) increased most due to storytelling, dramatization and visual practices, which formed the originality and expressiveness of speech. Simulations played an important role in the development of communicative flexibility (Y_2). Digital quests (interest), simulations (confidence) and storytelling (professional readiness) had the greatest impact on motivation (Y_3).

Table 3.

Predictors of dependent variables (Y_1–Y_4) by sub-indicators

Table 3. Predictors of educational outcomes based on multivariate regression analysis

Dependent variable	Sub-indicator	Strongest predictor	β	p-value	R	R^2	F	p (model)
Y_1 Linguistic creativity	Originality	X_2 Storytelling	0.46	<0.001	0.61	0.37	19.4	<0.001
	Flexibility	X_1 Dramatization	0.29	<0.01				
	Emotional expressiveness	X_3 Visual practices	0.21	<0.05				
Y_2 Communicative flexibility	Speech adaptability	X_4 Simulations	0.48	<0.001	0.67	0.45	24.7	<0.001
	Reaction speed	X_4 Simulations	−0.44	<0.001				
	Strategy variability	X_2 Storytelling / X_5 Quests	0.31 / 0.27	<0.01 / <0.05				
Y_3 Motivation	Interest	X_5 Digital quests	0.41	<0.001	0.58	0.34	17.2	<0.001
	Self-confidence	X_4 Simulations	0.33	<0.01				
	Professional readiness	X_2 Storytelling	0.28	<0.05				
Y_4 Customer satisfaction	Customer satisfaction	X_4 Simulations	0.45	<0.001	0.64	0.41	22.5	<0.001
	NPS	X_2 Storytelling	0.34	<0.01				
	Problem solving quality	X_4 Simulations	0.47	<0.001				

A qualitative analysis of student narratives was conducted based on thematic content analysis. This method allowed identifying recurring communicative patterns and expressive

strategies in students' speech production. The analysis focused on three key categories: originality of narrative construction, communicative adaptability, and emotional expressiveness. Before the intervention, the narratives created by the control and experimental groups demonstrated similar structural characteristics. Most of the narratives had a simple descriptive format with limited variation in vocabulary and communicative strategies. After the intervention, significant qualitative changes were observed in the narratives created by students in the experimental group.

Students more often introduced creative narrative elements, particularly, alternative storylines for famous tourist attractions, unexpected cultural details, and figurative descriptions of historical events. Additionally, the use of figurative language, such as metaphors, humour, and similes, significantly increased. The narratives also indicated greater communicative adaptability, as students adapted their explanations to different types of tourists (families, young travellers, and foreign business visitors). Participants varied their presentation style, including moving from formal to informal communication depending on the simulated tourist scenario. In addition, a notable change was the increased use of simplified explanatory strategies, as students reformulated complex historical or cultural information in a more accessible form for hypothetical novice tourists. This indicates the development of audience-oriented communicative strategies.

The content analysis confirmed these qualitative observations. The proportion of narratives that were highly original increased from 18% to 46%. However, the proportion of narratives that were highly communicatively adaptable increased from 22% to 49%. Narratives that indicated strong emotional expressiveness increased from 25% to 53%. In contrast, the control group showed only minimal changes (no more than 5–7% for each indicator). These qualitative data complemented the quantitative results and indicated that the integration of artistic and play-based learning practices contributed to measurable improvements in outcomes and the development of richer communicative behaviours.

DISCUSSION

In this context, the main research problem was to determine the role of synthesizing art technologies (dramatization, storytelling, visual practices) and gamification (simulations, digital quests) in developing language creativity, communicative flexibility, and motivation among tourism students. The obtained results determined that the integrated use of art and play methods allowed for an increase in the level of linguistic creativity. This is also confirmed by the findings of other researchers who emphasized that creativity in speech developed based on the creation of special conditions for improvisation and alternative solutions (Dimitra et al., 2020; Nash & Brady, 2021). The obtained data as well align with research showing the effectiveness of storytelling in forming original expressions in ESP learning (Aljad, 2023). At the same time, this study complemented their findings and proved that it was the combination of storytelling,

dramatization, and visual practices that yielded the greatest effect (Andreoni & Richard, 2023; Chaldogeridis & Tsiatsos, 2020; Tymoshenko et al., 2025).

As shown in the study, the experimental group demonstrated a significant increase in adaptability, reaction speed, and strategy variability. This aligns with the research findings of the authors, who indicated that simulations contribute to the development of adaptive thinking (Elsayary & Baroudi, 2023; Halachev, 2024; Zasiekina et al., 2025). At the same time, other works indicate that game scenarios improved speech improvisation (Hart et al., 2021). In this case, simulations of tourist situations had the greatest effect, which confirms the relevance of practically oriented learning.

The effectiveness of simulations and digital tasks, which were evident in the study, can be explained by several pedagogical mechanisms. Particularly, simulation-based learning recreated authentic professional situations that closely resembled real-life interactions in tourism. Such experiential contexts encouraged spontaneous language use and enabled the development of adaptive communication strategies. Furthermore, role-playing simulations reduced the affective barriers that were often associated with foreign language learning. When students interacted in a fictional professional scenario rather than in a formal classroom, they tended to be more willing to experiment with language and express ideas more creatively. Finally, digital tasks, such as quests and interactive quizzes, provided opportunities to increase engagement, particularly the elements of challenge, immediate feedback, and progression that are essential elements of a game-based learning environment. In addition, the integration of artistic practices and dramatization enhanced emotional engagement and imaginative thinking. As a result, students developed greater communicative skills and had a higher level of linguistic creativity in simulated professional situations.

As the results showed, the main motivational indicators also increased in the experimental group, particularly thanks to digital quests and simulations. Thus, game-based and challenge-based learning allowed for increased intrinsic motivation (Khan & Wells, 2023; Koparan, 2019). Similar results were obtained by other authors, who indicated that gamification allowed in student engagement increase and willingness to experiment with language (Kumar, 2024; Malgazhdarova et al., 2024). Scientific papers also indicate that not only weak motivation hinders students from making progress, but also a rather diverse level of initial language preparation (Chiaramonte, 2025; Mendes & Finardi, 2020; Raikhan et al., 2020). Therefore, when designing the course, the instructor should conduct a series of studies not only of the language level but also of the emotional state and the ability to work in a group (Soyoof et al., 2022). This should be accomplished based on a survey, after which the instructor can develop the goal of the gamified course and the specific types of gamification elements.

The achievement of the main goal should be divided into key stages, individualized and specified according to the group's level and needs. It is worth agreeing with other scientists who have pointed out that a certain number of students should be involved in the design of the game itself, especially those who demonstrate leadership qualities based on the survey results

(Rizakhojayeva et al., 2017; Tlepbergen et al., 2022; Uaidullakyzy et al., 2022). As can be seen from this study, gamifying a foreign language course was not easy, as a graphical representation of the game stages was created beforehand, the rules that must be followed were outlined, and an assessment system was developed (Bilytska et al., 2022; Sbardella & Dolci, 2023). However, modern scientists agree that given the current conditions of total gadgetization among young people, the use of special programs during the educational process can be predicted (Akhmetova et al., 2025; Aranas et al., 2025; Hamakali & Josua, 2023; Mazur et al., 2025; Vedaschi Ozzola, 2025; Zhao et al., 2023). To do this, scientists recommend using modern online learning platforms, particularly DuoLingo (Akhmetova et al., 2025; Behas et al., 2019). Although it was not used in this study, there are many works that have experimented with this tool. In this study, digital quizzes in Kahoot/Quizizz were chosen, which allowed everyone to learn the language at their own level with the possibility of improvement. Participants first learned vocabulary, then grammar, after which they reinforced their knowledge with a system of exercises. Thus, these results confirmed the initial hypothesis: a combined intervention model that involves the synthesis of art technology and gamification is more effective than traditional teaching methods. It increases the level of linguistic creativity and communicative flexibility and enhances student motivation and improves external client ratings (Turdiyeva, 2024). This indicates the promise of integrated methods in professionally oriented English language teaching for the tourism profile.

CONCLUSIONS

The results confirmed the initial hypothesis that a combined intervention model integrating art technologies and gamification was more effective than traditional teaching methods. It allowed for an increase in the level of linguistic creativity and communicative flexibility, which in turn strengthened student motivation. This indicated the prospect of using integrated methods in professionally oriented teaching of English for tourism education students. Thus, the results have direct implications for the design of English language curricula for tourism students. First, they show that art and game approaches should be incorporated not as stand-alone activities but as structural elements of the curriculum: in the formulation of learning outcomes, module content, and summative assessment formats. Second, these empirical data can be used as a basis for revising existing ESP courses to strengthen their creative, communicative, and practice-oriented components in the context of the modernization of educational programs in Kazakhstan.

The most intensive development of communicative flexibility was observed during simulation exercises, which improved students' flexibility and accelerated their reaction time. Digital quests and simulations also significantly increased motivation and engagement, which strengthened motivation to learn. Confidence in communication and willingness to take responsibility in a professional environment were also noted. Client-oriented results also increased, including overcoming problems and favourable impressions of the guide, which demonstrated the applicability of the methodology in the tourism sector.

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