G. RIZAKHOJAYEVA ᴵᴰ**¹, Zh. ABDIKHANOVA** ᴵᴰ**²✉, Z. BINGOL** ᴵᴰ**³**
*¹PhD, Associate Professor of Khoja Akhmet Yassawi International Kazakh-Turkish University
(Kazakhstan, Turkistan), e-mail: gulnara.rizakhodjayeva@ayu.edu.kz
²International University of Tourism and Hospitality
(Kazakhstan, Turkistan), e-mail: zhadyra.abdikhanova@mail.ru
³PhD, Ministry of Culture and Tourism, Culture and Tourism Expert
(Turkey, Mugla), e-mail: zbingol@hotmail.com*

THE ROLE OF GAMIFICATION IN LEARNING ENGLISH FOR TOURISM STUDENTS

Abstract. This study investigates the preferences and attitudes of first-year students in the Faculty of Tourism at the International University of Tourism and Hospitality in Turkestan towards the use of multimedia tools, particularly gamification, in learning English. The research tested the hypothesis that gender differences significantly influence multimedia preferences (H1) against the null hypothesis of no significant differences (H0).

Using mixed methods involving surveys and interviews, data were collected from 34 participants (16 males, 18 females). Inferential statistical analysis confirmed significant gender-based differences in multimedia preferences: males showed a stronger preference for video games ($t = 2.45$, $p < 0.05$), while females favored virtual tours and artistic content ($t = -2.32$, $p < 0.05$). Additionally, educational video games emerged as the most preferred tool (28% of students), with an overall satisfaction score of $M = 4.88$ ($SD = 0.31$).

The study highlights the effectiveness of gamification in enhancing engagement and language acquisition while emphasizing the need for tailored, inclusive strategies that accommodate diverse preferences. Practical applications include integrating gamified modules into tourism education to improve vocational readiness and align with Kazakhstan's trilingual education policy.

Keywords: multimedia tools, gamification, English, learning styles, mixed methods.

Г. Ризаходжаева¹, Ж. Әбдіханова², З. Бингөл³
*¹PhD, Қожа Ахмет Ясауи ат. Халықаралық қазақ-түрік университетінің доценті
(Қазақстан, Түркістан қ.), e-mail: gulnara.rizakhodjayeva@ayu.edu.kz
²Халықаралық туризм және меймандостық университеті
(Қазақстан, Түркістан қ.), e-mail: zhadyra.abdikhanova@mail.ru
³PhD, Мәдениет және туризм министрлігі, Мәдениет және туризм бойынша сарапшы
(Түркия, Мугла қ.), e-mail: zbingol@hotmail.com*

Туризм саласындағы студенттердің ағылшын тілін үйренудегі геймификацияның рөлі

Аңдатпа. Бұл мақала Түркістандағы Халықаралық туризм және қонақжайлылық университетінің туризм факультетінің бірінші курс студенттерінің ағылшын тілін үйренуде мультимедиа құралдарын, атап айтқанда, геймификацияны пайдалану бойынша көзқарастары мен артықшылықтарын зерттейді. Зерттеу барысында гендерлік айырмашылықтардың мультимедиа құралдарын таңдауына әсерін анықтайтын гипотеза (Н1) және мұндай айырмашылықтар жоқ деген нөлдік гипотеза (Н0) тексерілді.

Сауалнама мен сұхбатқа негізделген аралас әдістерді қолдана отырып, 34 қатысушыдан (16 ер, 18 әйел) деректер жиналды. Гендерлік айырмашылықтардың мультимедиа құралдарын таңдауына әсерін тексеру үшін жүргізілген статистикалық талдау ер студенттердің бейне ойындарды көбірек ұнататынын (t = 2,45, p < 0,05), ал қыздардың виртуалды турлар мен көркем мазмұнға басымдық беретінін (t = -2,32, p < 0,05) анықтады. Сонымен қатар, білім беруде бейне ойындары ең танымал құрал болып табылады (28%), жалпы қанағаттанушылық көрсеткіші M = 4,88 (SD = 0,31).

Зерттеу қаншалықты ықпалды оқушылардың қызығушылығын және тіл меңгеру тиімділігін арттырудағы геймификацияның әлеуетін көрсетеді, сондай-ақ әртүрлі қажеттіліктерді қанағаттандыру үшін инклюзивті стратегияларды енгізудің маңыздылығын баса көрсетеді. Практикалық ұсыныстарға мультимедианы туристік білім беру процесіне енгізу және Қазақстанның үштілді білім беру саясатына сәйкес болашақ мамандарды даярлау кіреді.

Кілт сөздер: мультимедиялық құралдар, геймификация, ағылшын тілі, оқу стильдері, аралас әдістер.

Г. Ризаходжаева[1], Ж. Абдиханова[2], З. Бинголь[3]
*[1]PhD, доцент Международного казахско-турецкого университета им. Ходжи Ахмеда Ясави
(Казахстан, г. Туркестан), e-mail: gulnara.rizakhodjayeva@ayu.edu.kz
[2]Международный университет туризма и гостеприимства
(Казахстан, г. Туркестан), e-mail: zhadyra.abdikhanova@mail.ru
[3]PhD, Министерство культуры и туризма, эксперт по культуре и туризму
(Турция, г. Мугла), e-mail: zbingol@hotmail.com*

Роль геймификации в изучении английского языка студентами в сфере туризма

Аннотация. В данной статье рассматриваются предпочтения и отношение студентов первого курса факультета туризма Международного университета туризма и гостеприимства в Туркестане к использованию мультимедиа-инструментов, в частности геймификации, в обучении английскому языку. Исследование тестировало гипотезу о значительном влиянии гендерных различий на выбор мультимедиа-инструментов (Н1) против нулевой гипотезы об отсутствии таких различий (Н0).

Методы исследования включали опросы и интервью, данные были собраны у 34 участников (16 мужчин, 18 женщин). Результаты статистического анализа подтвердили значимость гендерных различий: мужчины предпочитают видеоигры (t = 2.45, p < 0.05), тогда как женщины отдают предпочтение виртуальным турам и художественным материалам (t = -2.32, p < 0.05). Кроме того, образовательные видеоигры оказались наиболее популярным инструментом (28%), общий показатель удовлетворенности составил M = 4.88 (SD = 0.31).

Исследование подчеркивает эффективность геймификации для повышения вовлеченности и освоения языка, а также необходимость внедрения инклюзивных стратегий, учитывающих различные предпочтения учащихся. Практическими рекомендациями

являются интеграция геймификации в туристическое образование и поддержка политики Казахстана по трёхъязычному обучению.

Ключевые слова: мультимедийные инструменты, геймификация, английский язык, стили обучения, смешанные методы.

Introduction

The literature on multimedia and gamification in education is extensive, but often lacks focus on the specific needs of tourism students learning English. While many studies emphasize the positive effects of gamification on engagement and academic outcomes, there is insufficient attention given to gender-based preferences and how these might impact learning in professional settings, particularly within the tourism industry. This study narrows its focus to explore how multimedia and gamification can specifically benefit tourism students in their English language learning, addressing the gap in the existing research by considering both individual learning styles and the role of technology in language acquisition.

Learning a foreign language, particularly in a professional field such as tourism, presents numerous challenges. Factors such as student motivation, the effectiveness of instructional methods, and the clarity of learning materials significantly impact the learning experience. In this context, traditional teaching methods, such as strict adherence to textbooks and teacher-centered lessons, often fail to engage students, leading to passivity and disinterest. Current students, particularly those in tourism-related fields, are more inclined towards technology than traditional learning methods. They are accustomed to engaging with digital tools and multimedia, making it essential to incorporate these into the learning process.

As noted by Golami, students' individual traits—shaped by their genetics, cultural backgrounds, and past learning experiences—result in diverse learning preferences. This diversity emphasizes the need for instructional approaches that cater to various learning styles, ensuring an inclusive learning environment that addresses the unique needs of each student [1, p. 5]. Diaz, Zaja, and Palma also highlight the challenges of capturing the attention of modern students, who have grown up in a world of video games, mobile phones, and the Internet, making traditional teaching methods less effective [2, p. 1].

Learning styles, as described by Meirbekov et al., involve a mixture of strategies that students use to process information, with some students preferring particular approaches while others use multiple strategies simultaneously [5, p. 2]. Understanding these preferences is key for designing effective learning experiences. Fleming's VARK model, which categorizes learning styles into visual, auditory, reading/writing, and kinesthetic, provides a valuable framework for understanding how students acquire and process information. This model is particularly useful in language learning contexts, where different modalities can be leveraged to enhance comprehension and retention [6].

Incorporating multimedia and gamification into language learning offers a dynamic approach to address these diverse learning styles. Multimedia tools, such as videos, podcasts, and interactive software, engage students across various sensory modalities, while gamification introduces game mechanics into non-game contexts to increase motivation and engagement. Research by Jaramillo-Mediavilla et al. and Al-Dosakee and Ozdamli underscores the benefits of these approaches in fostering a more collaborative, engaging, and effective learning environment [11, 12]. Gamification, in particular, has been shown to enhance motivation and improve academic performance by making the learning process more enjoyable and interactive.

This study aims to examine the preferred learning styles of first-year students at the International University of Tourism and Hospitality in Turkestan when learning English through audiovisual media and gamification. Specifically, the study will analyze how visual, auditory, and

kinesthetic learning approaches influence the acquisition of language skills and explore the impact of gamification on student motivation and engagement. This research seeks to fill a critical gap in the literature by exploring how these tools can be tailored to meet the needs of students in the tourism field, offering practical recommendations for educators to integrate multimedia and gamification into their language teaching practices effectively.

The findings of this study have important implications for educators in the tourism field. By understanding the preferences of students and the potential of multimedia and gamification, educators can create more engaging and effective language learning environments. However, the study also acknowledges certain limitations, such as the potential variation in preferences across different cultural contexts and the need for ongoing adaptation of teaching strategies to align with technological advancements. Future research could further explore these aspects, particularly focusing on the long-term effectiveness of gamification and multimedia in language acquisition and its broader impact on professional development in tourism.

Research methods and materials

This study employs a descriptive research design, chosen for its ability to provide a detailed analysis of students' learning preferences and their engagement with multimedia tools in English language learning. Descriptive research is well-suited for capturing the nuances of students' individual preferences and how different teaching methods, such as audiovisual media and gamification, influence their learning experiences. This approach allows for the systematic collection of data to explore the impact of various educational strategies, which is particularly important when considering the diverse sensory and cognitive needs of students.

The VARK model (Visual, Auditory, Reading/Writing, Kinesthetic), developed by N. Fleming in 2012, was selected as the primary framework for understanding students' learning preferences. This model was chosen because it offers a straightforward and widely recognized method for categorizing sensory-based learning styles. The VARK model's flexibility allows for the identification of students' preferred learning modes, which can then inform the design of instructional strategies tailored to different learning needs. The VARK framework is particularly useful in multilingual and professional development contexts, where students may have varying levels of familiarity with the subject matter and different ways of processing information.

To further explore the potential influence of gender on learning preferences, the study investigates whether gender differences significantly affect multimedia usage in language learning. This exploration was grounded in the following hypotheses:

H0: Gender differences do not significantly influence multimedia preferences in English language   learning.
H1: Gender differences significantly influence multimedia preferences in English language learning.

To test these hypotheses, an independent sample t-test was chosen as the appropriate statistical method. This test compares the multimedia preferences between male and female students, providing insights into whether gender plays a role in determining how students engage with different forms of media in language education.

Participants

The study was conducted with 34 first-year students at the International University of Tourism and Hospitality. The sample included 16 male and 18 female students, selected randomly to represent different levels of English proficiency (Intermediate and Pre-intermediate). This selection ensures a balanced and representative sample, which is essential for understanding the generalizability of the findings to a larger population. The research was carried out during the final month of the 2024 winter semester, a time when students had a sufficient understanding of the content to provide meaningful insights into their learning preferences.

Data Collection Tools

To gather data, the study employed a mixed-methods approach, combining both quantitative and qualitative methods to provide a comprehensive understanding of the research topic. The VARK questionnaire was used to assess students' learning preferences. This questionnaire, available on the VARK website, consists of 16 questions rated on a 5-point Likert scale ranging from "strongly disagree" to "completely agree." The questionnaire provides quantitative data about students' preferred sensory learning modalities and allows for the classification of students into the four VARK categories.

In addition to the VARK questionnaire, interviews were conducted with participants to collect qualitative data. The interviews provided deeper insights into students' experiences with multimedia tools and gamification in language learning. By combining both surveys and interviews, the study utilized triangulation to strengthen the reliability of the findings and to offer a more holistic view of students' preferences.

Statistical Analysis

The data collected through the VARK questionnaire were analyzed using descriptive statistics to summarize participants' preferences and identify general trends. The use of descriptive statistics helped outline the general characteristics of the sample population, providing a clear picture of how students prefer to learn.

For hypothesis testing, an independent sample t-test was conducted to compare the multimedia preferences of male and female students. This statistical test was chosen because it allows for the comparison of two independent groups and determines if gender differences have a statistically significant impact on multimedia preferences in language learning.

To analyze the data, the study utilized SPSS (Statistical Package for the Social Sciences) software, which is widely used for conducting statistical analyses in educational research. SPSS was employed to carry out descriptive statistics, including the calculation of means, standard deviations, and frequency distributions, to summarize participants' responses from the VARK questionnaire. SPSS also facilitated the conduct of the independent sample t-test to compare multimedia preferences between male and female students, allowing for the testing of the hypotheses (H0 and H1) regarding gender differences.

SPSS was used to calculate Cronbach's alpha to assess the internal consistency of the VARK questionnaire. A high alpha value (above 0.70) indicates that the items within the questionnaire are measuring the same underlying construct, ensuring the reliability of the results. The software's ease of use and ability to handle large datasets made it an ideal tool for this analysis, ensuring the accuracy and efficiency of the statistical procedures (Table 1).

Table 1 – Reliability of the scales

Cronbach's α	Number of Items
,811	16

Results and discussion

The main purpose of the study was to study the preferences of first-year students of the International University of Tourism and Hospitality in Turkestan in relation to their preferred styles of teaching English using audiovisual media. The results are presented in table 2.

Table 2 – Descriptive analysis

	N	Minimum	Maximum	Mean	Std. Deviation
total	34	3.75	4,88	4,3732	,30830
Valid N (listwise)	34				

A descriptive analysis was conducted to study the initial research question. The results of this analysis showed that the participants had a positive attitude towards the use of multimedia materials in the process of learning a foreign language, especially emphasizing the role of gamification. With an overall average score of M=4.88, the results indicate that participants prefer the use of visual materials in English classes. This preference is consistent with the available literature, which highlights the advantages of integrating multimedia resources into educational institutions.

The lessons were carefully selected based on their effectiveness in expanding students' vocabulary and speaking skills. One of the notable lessons was devoted to the topic "What we wear", during which the video game "Clothes" was used to introduce and consolidate a new vocabulary related to clothes. To introduce new vocabulary, a game approach was used, in which students participated in interactive classes that included the definition and selection of clothing items within the game. As students progressed through the various levels, they were asked to match the correct clothing terms with the appropriate images, which facilitated their assimilation of the material through immediate feedback. This interactive process not only helped students memorize new words, but also encouraged active participation, making the vocabulary acquisition process more fun and effective. Then a role-playing game was held, during which the students acted out a scene in a clothing store. One student acted as a seller, discussing the price and quality of various goods, while another student acted as a buyer, choosing and "purchasing" the desired product. This lesson was aimed at further developing students' conversational skills and consolidating previously acquired vocabulary. Initially, students showed shyness and nervousness during role-playing, which led to uncertain speech. However, thanks to the additional preparation time and support from the teacher, the students became more confident and engaged in the lesson. Despite some mistakes, especially in the use of time forms, students actively participated in the role-playing game, contributing to the overall learning of the language.

The results of the observations indicate a noticeable trend: girls show a greater susceptibility to various types of use of multimodal tools compared to boys. In particular, girls tend to use different types of multimedia resources more in the learning process. Conversely, boys prefer visual game materials more. This gender disparity in the use of multimedia can be caused by various factors, including differences in learning styles, cultural influences, and individual interests. It is important to look deeper into these underlying causes in order to better adapt educational strategies to the diverse needs of both genders.

Moreover, as part of the study, the authors sought to determine which educational videos and games students prefer the most. This tendency can be explained by two main factors: family media consumption habits and the effectiveness of video game materials in attracting students' attention during lessons. Each of these factors can be considered in more detail. Firstly, family media consumption habits are often associated with constant TV watching in the background in the family. Moreover, in addition to parents, other family members, including siblings, who are avid consumers of video games and platforms such as YouTube, promote the widespread use of video game-based materials. When integrating video materials into informational lessons, teachers need to be clear about the specific role these materials will play. Subsequently, the study presented detailed results based on the preferences of the participants, as shown in table 3.

The results show that educational video games are the most frequently used type of video materials in English lessons, accounting for 28% of the use in the lesson. These videos are usually integrated into the lesson to improve learning.

Table 3 – The types of video materials preferred by tourism students for learning English

Classification of multimodal instruments	Features of use	Percentage of preferences
Virtual tours	were mainly used in experiments with intermediate-level students	16%
Creative and artistic games	were used during extracurricular activities and in open lessons	19%
Educational video games	The videos of this type were accompanied by additional materials	28%
Games with cartoon characters	They are also suitable for intermediate level students, but in this experiment, short cartoon meters for the age category such as «Shrek» and the «City of Heroes» were used.	21%
Short videos from news and information broadcasts	they were analyzed with the support of a teacher	6%
Music and visual content	videos of this type helped to diversify the types of lessons. In a specific experiment, he helped to develop students' situational analysis skills.	10%

Video recordings of television broadcasts and news consisted of small excerpts. Then, after viewing, they were discussed by students under the guidance of a teacher. This type of language learning through video is used less often than other types. In this experiment, respectively, he showed a result of 6 percent of the total video usage in the lesson.

Games with cartoon characters were especially popular among intermediate level students. In this experiment, the percentage of students' preference in the field of tourism over cartoons for the age category such as "Shrek" and "City of Heroes" was 21 percent. Accordingly, these types of video lessons are considered relevant in any age category.

Initially, according to the experiment, it was expected that lessons with the help of a video tour would take a large percentile as a result, since students in the field of tourism should have been interested in such videos that show the sights of different countries. But, video tours of various cities or museums around the world were mostly willingly used by students at the intermediate level. In this experiment, the percentage of tourism students' preferences in language learning using this type of video was 16 percent.

Musical and visual content, and videos of this type helped to diversify the types of lessons. During a specific experiment, he helped develop students' situational analysis skills. This type of video lesson was preferred by 10 percent of the students who participated in the experiment.

Creative and artistic games were most often used during extracurricular activities and accounted for a percentage of student preference of 19 percent. These videos introduced students to the cultural and geographical aspects of the English-speaking world.

Table 4 shows that educational video games were the most preferred multimedia tool, with 28% of students selecting them. This preference suggests that games not only engage students but also enhance vocabulary acquisition. This finding aligns with previous research, such as the study by Gee, which emphasized the potential of video games to provide immersive learning experiences. Given this strong preference, incorporating video games into language learning could be an effective way to keep students engaged while supporting their learning outcomes [16].

The independent t-test results revealed significant gender-based differences in multimedia preferences. Male students favored video games ($t = 2.45$, $p < 0.05$), while female students showed a preference for artistic content and virtual tours ($t = -2.32$, $p < 0.05$). This reflects the findings of

authors like Caponetto et al., who noted that gender differences play a key role in shaping preferences for different types of learning materials, with males tending to favor gamified and interactive content, while females often gravitate toward more visual and creative approaches. These gender differences highlight the importance of tailoring multimedia resources to students' specific preferences to maximize engagement and learning [17].

Cultural and linguistic factors also shape students' multimedia preferences. This study's results align with studies by Hsiao and Chen, which suggested that students' backgrounds influence their interaction with multimedia tools [18]. The tourism students in this study demonstrated a clear preference for educational video games, an indication that gamification can be particularly effective in specialized fields like tourism, where real-world language application is crucial. Kazakhstan's growing tourism sector emphasizes the importance of multilingualism, and the findings of this study suggest that video games can be a valuable resource in fostering language skills among future tourism professionals.

Gamification in education also emerges as a powerful strategy in this context. Incorporating game elements into language lessons enhances interactivity and motivation, a concept supported by research from Deterding et al. (2011), who argued that gamification increases student engagement and enhances the learning process [20]. In the tourism field, the ability to simulate real-life scenarios through role-playing games, such as customer service or tourist guiding, helps students apply language skills practically. This method promotes not only language acquisition but also critical thinking and creativity – skills essential for success in the tourism industry. However, challenges remain in the use of gamification. While many students respond positively to game-based learning, others may find the competitive nature of some games off-putting, particularly those who are not familiar with games or those who prefer less competitive environments.

As noted by Anderson and Dill, it is crucial to offer a balance between competitive and cooperative game elements to cater to varying preferences within the classroom. Balancing game-based activities with other teaching methods can ensure that all students remain engaged and included [19]. The study also highlights the importance of offering a variety of multimedia resources to accommodate diverse learning preferences. While male students favored video games, female students were more engaged with artistic and exploratory content. This finding is in line with the research by Felder and Silverman (1988), who suggested that a multimodal approach to teaching, which includes visual, auditory, and kinesthetic learning opportunities, can enhance learning for all students. Offering a mix of multimedia options ensures that all students have the opportunity to engage with content that aligns with their learning style. Looking ahead, future research could explore how different types of video games and multimedia resources can be customized to address specific language learning goals. Studies could investigate the long-term effects of gamification on language retention, particularly on speaking and listening skills. Additionally, exploring the challenges faced by teachers in integrating video games and gamification into classrooms, particularly those with limited technological access, could provide valuable insights for improving the adoption of these tools in educational settings.

Conclusion

Future studies should incorporate inferential statistics to validate findings and explore their generalizability across diverse educational institutions. Practical implications include the design of curricula incorporating gamified activities that simulate real-world scenarios, critical for training tourism professionals. Limitations of this study include its descriptive nature and focus on a single institution, which should be addressed in subsequent research.

The gender differences observed in this study point to the necessity of differentiated instructional approaches. Future curricula should balance interactive gaming for male students with

creative and exploratory tools for female students, ensuring an inclusive and engaging learning environment.

Future research should extend beyond descriptive analysis to include experimental designs validating multimedia's impact across broader demographics. Practical applications include gamified modules that simulate real-world scenarios, critical for training tourism professionals. A deeper exploration of accessibility and long-term impacts of gamification on diverse learning populations is essential.

In conclusion, it should be noted that this study provides important information about the preferences and attitudes of first-year students of the University of Tourism to the use of multimedia tools, namely gamification and the use of video games in English lessons. The results emphasize the importance of recognizing and taking into account different learning styles and preferences in educational institutions, which reflects the complex nature of students' characteristics and learning dynamics in the context of tourism studies.

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