Tech. Edu. J. 19 (1) : 271-292, Winter 2025

Technology of Education Journal
(TEJ)
Homepage: jte.sru.ac.ir

ORIGINAL RESEARCH PAPER

Exploring Iranian University Students' Expectations and Technology Use for Out-of-Class English Language Learning

M. Zeitounl*, M. R. Ghorbani*, M. A. Robatjazy

Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

Received: 01 June 2024
Reviewed: 31 July 2024
Revised: 03 September 2024
Accepted: 09 November 2024

KEYWORDS:
University Students
Actual Use of Technology
Expectations
Learning English as a Foreign Language

* Corresponding author
ghorbani@ub.ac.ir
(+98915) 3849506

ABSTRACT

Background and Objectives: This study examines the expectations and actual use of technology by Iranian university students for out-of-class English as a Foreign Language (EFL) learning. It explores the factors influencing technology use, barriers encountered, and students' recommendations for enhancing technology-driven language learning. The research aims to provide insights into how students adapt to technological barriers in Iran, such as internet filtering, high costs, and low-speed connections. The study is guided by the Technology Acceptance Model (TAM) and Expectation-Disconfirmation Theory (EDT), which posit that satisfaction arises when actual experiences meet or exceed expectations.

Materials and Methods: Using a sequential exploratory mixed-methods design, the study consisted of both qualitative and quantitative phases. The qualitative phase involved semi-structured interviews with 24 senior English students (11 males, 13 females), while the quantitative phase included a survey of 48 undergraduate TEFL and English Literature students (7 males, 41 females). The research was conducted during the 2024–2025 academic year.

Findings: Students were generally satisfied with their technology use for language learning, as their actual experiences closely aligned with their expectations. Despite infrastructural and political constraints, such as low internet speed, filtering of websites requiring VPNs, and high costs, students demonstrated resilience and resourcefulness in utilizing digital tools for language acquisition. Key factors influencing technology use included time flexibility, accessibility, cost efficiency, and teacher support. However, students reported significant challenges, including lack of teacher guidance and distractions associated with technology use. Quantitative analysis revealed no significant differences between students' expectations and their actual use of technology. Additionally, there were no notable gender-based differences in either expectations or usage patterns, indicating that male and female students face similar challenges and opportunities. These findings align with TAM and EDT, suggesting that students' satisfaction arises from the alignment between their expectations and actual experiences. Students emphasized the importance of teacher guidance in improving the effectiveness of technology use, highlighting the need for educators to provide direction on selecting appropriate tools and strategies. They proposed practical recommendations, including reducing internet filtering, incorporating gamified learning tools, establishing consistent study routines, and focusing on high-quality resources to optimize their learning experiences.

Conclusions: This study underscores the critical role of technology in facilitating out-of-class EFL learning in restrictive contexts like Iran. It highlights students' ability to overcome challenges, leveraging available resources for language acquisition. Policymakers are encouraged to reconsider restrictive measures, such as internet filtering, as students have demonstrated responsible and effective use of technology for educational purposes. Teachers are urged to guide students in utilizing technology more effectively, ensuring personalized and structured learning experiences. Despite its contributions, the study faced limitations, including a small sample size restricted to English-major students at two universities, which may limit the generalizability of findings. Future research should expand to include students from diverse academic disciplines, educational levels, and geographical regions. Incorporating teacher perspectives and conducting comparative studies across different cultural contexts would provide a more comprehensive understanding of technology's role in EFL learning. By addressing barriers and leveraging teacher support, this study highlights

how technology can further enhance autonomous learning experiences. Policymakers and educators are encouraged to foster a more supportive environment for technology integration, ensuring equitable and effective access to digital resources for all learners.

NUMBER OF REFERENCES
37

NUMBER OF FIGURES
1

NUMBER OF TABLES
9

مقاله پژوهشی

بررسی انتظارات دانشجویان دانشگاه‌های ایران و استفاده از فناوری برای یادگیری زبان انگلیسی خارج از کلاس

مهدیه زیتونلی، محمد رضا قربانی*، محمد علی رباط جزی

گروه آموزشی زبان‌های خارجی، دانشکده علوم انسانی، دانشگاه بجنورد، بجنورد، ایران

چکیده

پیشینه و اهداف: این مطالعه به بررسی انتظارات و استفاده واقعی دانشجویان دانشگاه‌های ایران از فناوری برای یادگیری زبان انگلیسی به‌عنوان زبان خارجی (EFL) در خارج از کلاس می‌پردازد. این پژوهش عواملی که بر استفاده از فناوری تأثیر می‌گذارند، موانع موجود و پیشنهادات دانشجویان برای بهبود یادگیری زبان مبتنی بر فناوری را بررسی می‌کند. هدف این تحقیق ارائه بینشی درباره نحوه تطبیق دانشجویان با موانع فناوری در ایران، مانند فیلترینگ اینترنت، هزینه‌های بالا و سرعت پایین اینترنت است. این مطالعه بر اساس "مدل پذیرش فناوری (TAM) " و "نظریه انتظار-ناهمخوانی (EDT) "انجام شده است که بیان می‌کنند رضایت زمانی حاصل می‌شود که تجربیات واقعی با انتظارات برابر یا فراتر از آن باشند.

روش‌ها: این مطالعه با استفاده از طرح ترکیبی اکتشافی متوالی انجام شد و شامل دو مرحله کیفی و کمی بود. مرحله کیفی شامل مصاحبه‌های نیمه‌ساختاریافته با ۲۴ دانشجوی سال آخر رشته زبان انگلیسی (۱۱ مرد و ۱۳ زن) بود. در مرحله کمی، از ۴۸ دانشجوی کارشناسی رشته‌های آموزش زبان انگلیسی (TEFL) و ادبیات انگلیسی (۷ مرد و ۴۱ زن) نظرسنجی شد. این پژوهش در سال تحصیلی ۲۰۲۴–۲۰۲۵ انجام گرفت.

یافته‌ها: دانشجویان عموماً از استفاده خود از فناوری برای یادگیری زبان رضایت داشتند، زیرا تجربیات واقعی آن‌ها به‌طور کلی با انتظاراتشان مطابقت داشت. با وجود محدودیت‌های زیرساختی و سیاسی، مانند سرعت پایین اینترنت، فیلترینگ سایت‌ها که نیاز به استفاده از VPN داشتند و هزینه‌های بالا، دانشجویان انعطاف‌پذیری و خلاقیت خود را در استفاده از ابزارهای دیجیتال برای یادگیری زبان نشان دادند. عوامل کلیدی تأثیرگذار بر استفاده از فناوری شامل انعطاف‌پذیری زمانی، دسترسی‌پذیری، مقرون‌به‌صرفه بودن و حمایت معلمان بود. با این حال، چالش‌های مهمی مانند نبود راهنمایی معلمان و حواس‌پرتی ناشی از استفاده گسترده از فناوری گزارش شد. تحلیل کمی نشان داد که بین انتظارات دانشجویان و استفاده واقعی آن‌ها از فناوری تفاوت معناداری وجود ندارد. علاوه بر این، تفاوت قابل توجهی بین انتظارات و الگوهای استفاده دانشجویان زن و مرد مشاهده نشد که نشان می‌دهد دانشجویان زن و مرد با چالش‌ها و فرصت‌های مشابهی مواجه هستند. این یافته‌ها با مدل TAM و نظریه EDT همخوانی داشت و نشان داد که رضایت دانشجویان از هماهنگی بین انتظارات و تجربیات واقعی ناشی می‌شود. دانشجویان بر اهمیت راهنمایی معلمان برای بهبود اثربخشی استفاده از فناوری تأکید کردند و نیاز به جهت‌دهی معلمان در انتخاب ابزارها و استراتژی‌های مناسب را برجسته کردند. آن‌ها پیشنهاداتی عملی ارائه کردند، از جمله کاهش فیلترینگ اینترنت، استفاده از ابزارهای یادگیری بازی‌محور، ایجاد روال‌های مطالعه منظم و تمرکز بر منابع باکیفیت برای بهینه‌سازی تجربیات یادگیری خود.

تاریخ دریافت: ۱۲ خرداد ۱۴۰۳
تاریخ داوری: ۱۰ مرداد ۱۴۰۳
تاریخ اصلاح: ۱۲ شهریور ۱۴۰۴
تاریخ پذیرش: ۱۹ آبان ۱۴۰۳

واژگان کلیدی:
دانشجویان دانشگاه
استفاده واقعی از فناوری
انتظارات
یادگیری زبان انگلیسی به عنوان زبان خارجی

* نویسنده مسئول
ghorbani@ub.ac.ir
۰۹۱۵-۳۸۴۹۵۰۶

نتیجه‌گیری: این مطالعه نقش حیاتی فناوری در تسهیل یادگیری زبان انگلیسی در خارج از کلاس، به‌ویژه در زمینه‌های محدودکننده‌ای مانند ایران را برجسته می‌کند. این مطالعه توانایی دانشجویان در غلبه بر چالش‌ها و استفاده بهینه از منابع موجود برای یادگیری زبان را نشان می‌دهد. از سیاست‌گذاران خواسته می‌شود تا محدودیت‌هایی مانند فیلترینگ اینترنت را بازنگری کنند، زیرا دانشجویان استفاده مسئولانه و مؤثر خود از فناوری برای اهداف آموزشی را نشان داده‌اند. همچنین از معلمان خواسته می‌شود تا دانشجویان را در استفاده مؤثرتر از فناوری راهنمایی کنند و تجربه‌های یادگیری شخصی‌سازی‌شده و ساختارمندتری را ارائه دهند.

علی‌رغم دستاوردهای این مطالعه، محدودیت‌هایی مانند اندازه نمونه کوچک که به دانشجویان رشته زبان انگلیسی در دو دانشگاه محدود می‌شد، ممکن است قابلیت تعمیم یافته‌ها را کاهش دهد. تحقیقات آینده باید دامنه خود را گسترش دهد و شامل دانشجویان از رشته‌های دانشگاهی، سطوح تحصیلی و مناطق جغرافیایی مختلف شود. همچنین، گنجاندن دیدگاه معلمان و انجام مطالعات مقایسه‌ای در زمینه‌های فرهنگی مختلف می‌تواند درک جامع‌تری از نقش فناوری در یادگیری زبان انگلیسی به‌عنوان زبان خارجی ارائه دهد. با غلبه بر موانع و استفاده از حمایت معلمان، این مطالعه نشان می‌دهد که چگونه فناوری می‌تواند تجربیات یادگیری خودمختار را تقویت کند. سیاست‌گذاران و مربیان تشویق می‌شوند تا محیطی حمایتی‌تر برای ادغام فناوری فراهم کنند و دسترسی عادلانه و مؤثر به منابع دیجیتال را برای همه زبان‌آموزان تضمین کنند.

Introduction

In today's fast-evolving world, students' learning styles, expectations, and educational needs are in constant flux. Each generation brings with it unique characteristics shaped by interactions with teachers, classroom dynamics, technology, and other educational resources. Staying current with these shifts is essential for maintaining and improving educational quality [1]. In particular, language education has experienced significant transformation over recent years, and the COVID-19 pandemic further underscored the critical role of technology in language learning, accelerating the adoption of digital tools and remote learning practices [2]. These developments highlight the ongoing need to evaluate and adapt educational strategies to align with the changing landscape, ensuring that students' needs are effectively met in an increasingly digital environment.

Technology has become a core component of language education, fundamentally changing how students approach learning by enabling self-directed study outside the traditional classroom [3, 4]. With the advent of digital platforms, students increasingly rely on technology to facilitate independent learning, making education more accessible across diverse socioeconomic and geographic backgrounds [5]. This shift towards autonomous learning is especially beneficial as traditional classroom environments often struggle to meet the needs of students with varying backgrounds, learning styles, and language proficiencies [6]. Research indicates that out-of-class learning, when supported by technology, can supplement in-class instruction and positively impact language proficiency [7]. However, to fully realize these benefits, ensuring the quality of out-of-class learning experiences is paramount [8]. As such, the integration of technology must be approached with a focus on inclusivity, quality, and the development of resources that cater to diverse learner needs.

Autonomy, or students' ability to direct their own learning, is often enhanced through the effective use of technology. Teachers play a crucial role in guiding students on how to use these resources effectively, helping foster independence while providing necessary support [9]. Social media, educational apps, and other digital platforms allow students to personalize their language learning experiences based on their individual preferences and needs. However, excessive or unstructured use of such technology can lead to challenges, such

as reduced face-to-face social interaction, potential distractions, and disruptions to sleep patterns [10]. Therefore, a balanced approach is essential, where technology is used to complement, rather than replace, meaningful human interactions and structured learning environments.

In this study, "actual use of technology" refers to the self-reported frequency and ways in which students utilize technology for language learning, while "technology expectations" represent students' beliefs about how extensively and effectively technology should be incorporated into their studies [11]. Drawing on Expectation-Disconfirmation Theory (EDT), this study considers expectations as students' anticipated performance of specific technologies, with satisfaction dependent on whether these expectations are met or exceeded [12, 13]. This framework provides a valuable lens through which to understand the interplay between students' perceptions and their actual experiences, offering insights that can guide educators and policymakers in optimizing technology use.

For the purposes of this research, technology is defined under the umbrella of "Technology-Enhanced Language Learning" (TELL), which includes a wide range of digital tools and methods aimed at supporting language acquisition. TELL encompasses approaches like Computer-Assisted Language Learning (CALL), Blended Learning, and Computer-Mediated Communication (CMC), which collectively work to improve language learning outcomes through technology [14]. Studies have shown that TELL can effectively improve various language skills and boost student motivation. However, there are potential drawbacks to an over-reliance on technology, such as its impact on students' focus, attention spans, and social interactions [15, 16]. When applied thoughtfully, TELL can support autonomous, out-of-class learning, providing students with resources tailored to their individual goals and language proficiency levels [17]. Building on this foundation, it is essential to examine how students' expectations align with their actual use of TELL tools, as mismatches in this alignment could influence the effectiveness of language learning.

In Iran, in-class language learning faces significant challenges, including overcrowded classrooms, limited educational resources, and reliance on outdated instructional methods such as the Grammar Translation Method [18]. These factors restrict students' meaningful exposure to English and limit opportunities for active language practice, underscoring the need for robust out-of-class learning options. Addressing these limitations is vital for fostering language proficiency, as in-class instruction alone cannot provide the comprehensive and immersive experiences required for mastering a second language. Without interventions to enhance out-of-class learning, students are at risk of falling behind in their language development, which can limit their academic and professional opportunities in a globalized world.

Technology offers unique advantages for language learners, such as access to native speakers, authentic materials, and interactive, engaging environments [19, 20]. Yet, despite these benefits, Iranian students encounter substantial barriers when attempting to access digital resources outside the classroom. These include limited internet speed, high costs, and restricted access to essential social media platforms, which are often blocked [21]. Such barriers hinder students' ability to fully leverage technology for language learning and to take advantage of the resources available globally. Overcoming these challenges is essential to ensure that students can participate in a technology-driven educational landscape and

access opportunities that align with global standards of language education.

Given these constraints, it is crucial to investigate Iranian students' expectations for technology-enhanced learning versus their actual use of such technology beyond the classroom. Analyzing this gap provides insights into students' needs and sheds light on how existing barriers may affect their educational outcomes. By understanding these dynamics, educators and policymakers can develop strategies to address the challenges and improve the accessibility and quality of language learning in Iran, helping students make the most of technology for their language education. Additionally, bridging this gap can contribute to reducing educational inequities and ensuring that all students, regardless of socioeconomic background, have the opportunity to develop the language skills necessary to thrive in a competitive global environment.

Research Objectives

While previous studies have examined students' expectations or actual use of specific technologies [22, 23], this study provides a broader view by exploring Iranian university students' expectations and actual use of various technologies for out-of-class English as a Foreign Language (EFL) learning. The study aims to explore two primary objectives: first, to investigate whether a significant disparity exists between students' expectations and their actual utilization of technologies for EFL learning outside the classroom; and second, to examine whether gender-based differences influence both expectations and actual usage patterns of these technologies in the context of EFL learning.

Additionally, a qualitative component explores (1) factors influencing students' use of technology, (2) barriers they encounter, and (3) their suggestions for improving technology-based language learning. These insights can inform strategies to enhance out-of-class learning and address the gap between students' expectations and their actual experiences.

Review of the Related Literature

Theoretical Background

This study draws on two key theories: Davis's Technology Acceptance Model (TAM) [24] and Oliver's EDT [25], both of which provide a foundation for understanding students' expectations and use of technology.

- *TAM:* TAM explains how users come to accept and adopt new technology. It highlights two primary factors: Perceived Usefulness (PU), which refers to how much a user believes a technology will improve their performance, and Perceived Ease of Use (PEU), which is the extent to which technology is viewed as user-friendly [24]. These factors shape users' attitudes toward technology, which in turn influence their behavioral intention to use it. In the context of language learning, students are more likely to adopt a technology if they find it useful and easy to use [26].
- *EDT:* EDT assesses satisfaction by comparing users' expectations with their actual experiences [25]. If a technology's performance meets or exceeds expectations, positive disconfirmation takes place, resulting in satisfaction. On the other hand, if the performance is below expectations, negative disconfirmation occurs [27]. By applying EDT, this study assumes students will be satisfied if their actual experience with technology aligns with or surpasses their expectations for English learning.

Factors such as cultural background, age, and gender may influence students' technology expectations and usage [28]. Research shows students generally have positive attitudes

toward technology in language learning, but barriers like cost, limited knowledge, and internet restrictions can prevent full utilization [1]. This study focuses on Iranian students' expectations and actual use of technology for out-of-class English language learning, aiming to uncover the specific challenges they face and how these impact their language learning beyond the classroom. By integrating TAM and EDT, this study hypothesizes that students' satisfaction with technology is influenced both by its perceived ease and usefulness, as well as by whether their expectations align with their actual experiences.

Qualitative Research Questions

- What factors influence the extent to which Iranian university students utilize technology to support their EFL learning beyond the classroom setting?
- What barriers do Iranian university students face in using technology for EFL learning beyond the classroom?
- What suggestions do Iranian university students have for optimizing the use of technology in EFL learning beyond the classroom?

Research Hypotheses

In accordance with the quantitative research questions, the following null hypotheses were formulated:

- *H01:* No significant difference exists between the expectations of Iranian university students and their actual use of technology for EFL learning beyond the classroom.
- *H02:* There is no significant difference between the expectations of Iranian male and female university students regarding the use of technology for EFL learning beyond the classroom.
- *H03:* There is no significant difference in the actual use of technology for EFL learning beyond the classroom between Iranian male and female university students.

Method

Participants

The research was conducted in the second semester of the Iranian academic year 1402-1403 (2024-2025) at Gonbad Kavous University in Golestan and the University of Bojnord in North Khorasan. Participants were undergraduate English students studying Teaching English as a Foreign Language (TEFL) and English Literature. The qualitative phase included 24 students (11 males, 13 females, ages 21–24), while the quantitative phase involved 48 students (7 males, 41 females, ages 19–30).

The study employed convenience and purposive sampling techniques as outlined by Dörnyei [30]. Universities were selected based on geographical proximity and ease of access, meeting the criteria for convenience sampling. For the qualitative phase, senior English students with more experience in using technology for language learning were chosen through purposive sampling, aimed at identifying participants who were capable of offering varied and comprehensive insights into the research topic. According to Dörnyei, purposive sampling is especially effective in qualitative research for selecting individuals who can offer in-depth perspectives on the phenomenon being studied.

In the quantitative phase, the limited sample size restricted the possibility of random sampling. As a result, all available students were

Research Design

This study utilized a sequential exploratory mixed-methods approach, as described by Creswell [29].

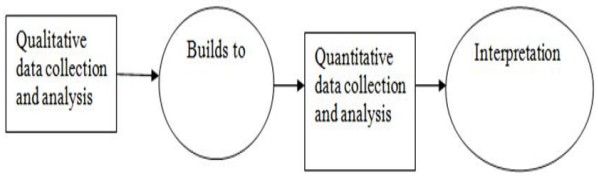

Figure 1: Exploratory Sequential Mixed Methods Design (Creswell, 2012)

The study began with qualitative data collection and analysis to gain a deep understanding of the research problem. This was followed by the development of a questionnaire based on qualitative findings, which was then administered in the quantitative phase to validate and generalize the results.

Instruments

Qualitative Instrumentation

Interview Protocol: Semi-structured, one-on-one interviews were conducted to gather in-depth qualitative data and systematically inform the development of the questionnaire. The interview questions were carefully designed based on a comprehensive review of relevant literature and subsequently reviewed by experienced TEFL professors to ensure their validity and alignment with the study's objectives. To facilitate rich and authentic responses, participants were given the option to answer in either Persian or English, allowing them to express their thoughts with greater ease and precision.

To enhance the credibility of the interview process, the protocol was piloted with 10 English students, enabling the refinement of question phrasing and structure based on their feedback. Additionally, considering participants' preferences and potential constraints, the final interviews were conducted in a written format rather than traditional face-to-face or oral interviews. This approach provided respondents with more flexibility and time to articulate their responses thoughtfully, ultimately improving the depth and accuracy of the qualitative data collected.

Quantitative Instrumentation

Questionnaire: A six-point Likert-scale questionnaire was developed to collect quantitative data based on themes identified during the semi-structured interviews conducted in the initial phase of the study. The questionnaire contained 48 items in total, split into two distinct sections: one assessing students' expectations and the other examining their actual use of technology for language learning. Each section included 24 carefully crafted questions to ensure comprehensive coverage of the research objectives.

Content Validity and Reliability: To ensure the validity of the instrument, experienced EFL professors were invited to review the questionnaire. Their expert feedback helped refine the wording of items for clarity and ensure alignment with the study's goals. Items were assessed for relevance, comprehensiveness, and potential ambiguity. After these revisions, a pilot study was conducted with a sample group to test the instrument.

Reliability analysis using Cronbach's alpha, a statistical measure of internal consistency, produced an impressive score of .92. This result indicated that the questionnaire was highly reliable for measuring the constructs under investigation and suitable for further analysis.

Exploratory Factor Analysis (EFA): EFA was conducted independently for the Actual Use Scale and the Expectations Scale to identify the underlying components within each section of the questionnaire. The following steps were undertaken:

- *Actual Use Scale:* Principal Component Analysis (PCA) initially identified seven components. However, based on rigorous

analytical criteria, including Cattell's scree test and Parallel Analysis, only two components were retained for further examination. Together, these components explained 37.8% of the total variance, with Component 1 contributing 26.4% and Component 2 contributing 11.4%. The Kaiser-Meyer-Olkin (KMO) value of 0.602 indicated moderate adequacy of the sample for factor analysis, while Bartlett's Test of Sphericity provided statistically significant results, confirming the appropriateness of the data for PCA.

- *Expectations Scale:* PCA revealed four components initially, but once again, two components were retained through the same rigorous procedures. The retained components accounted for a substantial 59.3% of the variance, with Component 1 explaining a dominant 50.0% and Component 2 explaining 9.3%. The KMO value of 0.81 demonstrated excellent sampling adequacy, and Bartlett's Test of Sphericity confirmed the robustness of the dataset for factor analysis.

These analyses validated the structure of the questionnaire and ensured its ability to capture meaningful insights into students' behavior and expectations. Given the study's timing and the need for accessibility, the questionnaire was distributed online via Google Forms. This method allowed participants to complete the survey conveniently, even during their final exams, minimizing disruptions to their academic commitments. The streamlined online administration ensured efficient data collection and broad participation across the target sample.

The comprehensive statistical analyses provided robust validation for the questionnaire while highlighting essential themes through the retained components. By concentrating on these overarching findings, the study emphasized insights that contribute directly to its objectives without overwhelming readers with excessive details about individual questionnaire items. This approach ensured that the analysis remained focused and impactful.

Procedure

Qualitative Data Collection: The qualitative phase of the study commenced in April 2024 with semi-structured interviews designed to explore students' perspectives on technology use in language learning. Purposive sampling was employed to select senior English students, ensuring that participants had sufficient academic experience to provide meaningful insights. To facilitate open-ended discussions, interviews were conducted in person using a paper-and-pencil format, allowing participants to express their thoughts comfortably and seek clarification when necessary. The interviews continued until data saturation was reached, meaning no new themes or insights emerged, which occurred after 24 participants had been interviewed.

To enhance the credibility of the qualitative findings, the interview questions were developed based on a thorough review of relevant literature and expert consultations with TEFL professors. Additionally, the interview protocol was piloted with 10 English students to refine question clarity and ensure that responses effectively captured participants' experiences. The final dataset served as the foundation for developing the questionnaire used in the subsequent quantitative phase.

Quantitative Data Collection: The quantitative phase followed in May 2024 with the development of a Likert-scale questionnaire based on themes and insights derived from the qualitative data. The questionnaire underwent a rigorous review process by experienced EFL professors, who assessed its content validity,

clarity, and alignment with the study's objectives. To further ensure reliability, the instrument was piloted with 24 students, and feedback from this process was incorporated into the final version.

The final questionnaire was distributed online via Google Forms in July 2024, ensuring ease of access and participant convenience. This digital administration method was particularly advantageous given the academic calendar, as it minimized disruptions during the exam period and enabled a broader reach beyond those available for in-person participation. A total of 48 students completed the questionnaire, providing quantitative data that was subsequently analyzed to examine patterns in students' expectations versus actual use of technology for language learning.

Results and Findings

Data Analysis

Qualitative Data Analysis: Qualitative data were analyzed manually using Creswell and Creswell's [31] guidelines, which provided a systematic approach to coding and interpreting interview responses.

Quantitative Data Analysis: Statistical analyses included internal consistency checks using Cronbach's alpha and normality tests via skewness and kurtosis. Paired-samples t-tests examined differences between students' expectations and actual use of technology, while independent-samples t-tests assessed gender-based differences in expectations and technology use.

Ethical Considerations

The study adhered to ethical guidelines by obtaining permissions from EFL professors at both universities. Consent forms were provided, and participants were informed of their rights, including confidentiality and the voluntary nature of their participation. Data confidentiality was assured throughout both phases of the study.

Qualitative Results

The qualitative phase involved 24 Iranian university students, aged 21-24, from the University of Bojnord and Gonbad Kavous University. The sample included 11 males and 13 females, with 21 students studying TEFL and 3 studying English Literature, all in their final (8th) semester.

Table 1: Demographic Characteristics of the Subjects in the Qualitative Phase

Characteristic	Category	Frequency
Gender	Male	11
	Female	13
Age Range	21- 24	24
University	University of Bojnord	13
	Gonbad Kavous University	11
Field of Study	TEFL	21
	English Literature	3
Semester	Semester 8	24

In addressing the first research question - What factors influence the extent to which Iranian university students utilize technology to support their EFL learning beyond the classroom setting? - participants identified several key factors:

- *Time and Flexibility:* Many students noted the importance of managing time effectively, with technology enabling them to learn at any convenient time and place.
- *Accessibility:* Easy access to technology, including global educational resources, was highlighted as a major advantage.
- *Cost:* While some technologies are cost-effective, the high cost of internet access was noted as a limitation.

- *Teacher Support:* Teachers' guidance and motivation were seen as crucial in encouraging effective technology use.
- *Student Motivation:* Personal interest and desire to use technology were essential for engagement.
- *Quality and Usability:* Students appreciated technology's ease of use, portability, and engaging features. However, issues like internet quality, filtering, and the need for VPNs were seen as drawbacks.

These insights highlight that factors such as ease of access, time flexibility, cost efficiency, and quality of resources play a significant role in students' technology use for language learning.

Table 2: Factors Affecting Iranian University Students' Use of Technology for EFL Learning Beyond the Classroom

Theme	Code	Representative Quote	Frequency
Time	Using at suitable time	"Time for me is the number one factor since I have to schedule really precisely on when and for how long..." (Student 21)	3
	Preventing time waste	"Technology prevents wasting time on in-person classes, especially when our class isn't held in our city..." (Student 11)	2
	Having enough time	"If I have time, I can spend more time on using technology... social media, find idioms, and take some practices." (Student 6)	6
Place	Usable anytime	"Time and place are in the hands of learners." (Student 20)	4
	Usable anywhere	"We can use it from where we stand." (Student 18)	7
Accessibility	Easily accessible	"The access to technology is easier." (Student 13)	9
	Access to global resources	"We can access materials worldwide, like lectures from popular universities." (Student 11)	3
Cost	Cost-saving	"Cost saving is an important factor." (Student 11)	4
	Free usage	"Being free to use is one of the important factors in choosing a technological tool." (Student 4)	1
	High Internet costs	"We don't have limitations on time and place, but Internet costs are high." (Student 13)	3
Teacher	Guidance in technology use	"Teachers should guide students in using technology and make them aware of it during class time." (Student 23)	3
	Providing motivation	"Teachers and tutors are factors that can provide motivation." (Student 7)	2
Student	Desire to use technology	"Having internal motivation and desire for using technology are really important." (Student 9)	2
Quality	Low Internet quality	"The low quality of the Internet is a drawback, especially for watching videos online." (Student 21)	2
	Filtering and VPN requirements	"The filtering of websites and need for VPNs are other factors." (Student 17)	1
	Ease of use	"Technology is easy to use for today's students." (Student 18)	2
	Visual appeal	"Visual attractions are important in choosing a tool for learning." (Student 4)	2
	Portability	"Being portable is mostly effective in choosing a technology." (Student 5)	2

For the second research question - What barriers do Iranian university students face in using technology for EFL learning beyond the classroom? - participants identified several obstacles:

- *Internet Issues:* Students cited low-speed internet, limited data plans, and high internet costs as major constraints.
- *Restricted Access:* Many educational websites and social media platforms require VPNs due to filtering in Iran, which complicates access.
- *Lack of Guidance:* Absence of teachers or advisors to guide students in selecting appropriate tools or resources was noted as a barrier.
- *Distractions and Health Concerns:* Students mentioned the risk of distraction, potential internet addiction, and eye strain from prolonged screen use.
- *Language Proficiency:* Some students faced difficulties understanding advanced content due to limited language proficiency.

Overall, connectivity issues, restricted access, lack of instructional support, and health concerns are key barriers for Iranian students.

Table 3: Barriers Faced by Iranian University Students in Using Technology for English Language Learning Beyond the Classroom

Theme	Code	Quote	Frequency
Issues related to the Internet	Low-speed Internet connectivity	"The low speed of the Internet can be a major problem." (Student 22)	12
	Limited volume-based Internet connection	"Limited volume-based Internet connection is a major barrier against using technology." (Student 2)	2
	High cost of Internet	"A high cost of buying Internet is a barrier." (Student 1)	4
Issues with Websites, Apps, & Social Media	Being filtered and need for VPNs	"Some educational websites need to use VPNs." (Student 11)	9
	Requiring a subscription	"Some technologies are paid subscription." (Student 17)	6
Challenges in Using & Choosing Technology	Lack of guidance from teachers or advisors	"One of the barriers is the absence of an advisor like a teacher or someone to guide us in using technology." (Student 19)	5
	Confusion due to wide range of materials	"The lack of knowledge in content, meaning that the learner may not know if their preferred content/platform is suitable or not." (Student 20)	2
Disadvantages of Technology	Distraction	"It is most likely that learners get distracted by surfing the net." (Student 14)	3
	Addiction	"It may cause Internet addiction." (Student 14)	1
	Vision problems	"It can hurt humans' eyes." (Student 13)	1
Proficiency Level Challenges	Difficulty understanding advanced content	"Low level of knowledge about a language might cause problems in understanding content of a more advanced level." (Student 21)	1

In response to the third research question - What suggestions do Iranian university students have for optimizing the use of technology in EFL learning beyond the classroom? - students provided the following recommendations:

- *Improved Accessibility:* Participants suggested reducing filtering to make valuable educational content more accessible.
- *Scheduling and Consistency:* Setting a regular study schedule was advised to make learning more structured.
- *Diversified Learning Tools:* Developing age-appropriate and engaging apps and platforms would cater to diverse learner needs.
- *Gamification:* Incorporating game elements was proposed as a way to make learning more engaging.
- *Effective Tool Selection:* Students recommended choosing a few high-quality resources rather than using many different tools.
- *Teacher Support:* Teachers should inform students about effective ways to use technology for language learning.
- *Focused Use:* Students suggested limiting distractions by locking other apps and focusing only on learning.
- *Personalization and Assessment:* Using technology to personalize learning and assess progress was seen as beneficial.

These suggestions emphasize the need for more accessible resources, consistent study habits, and personalized tools to optimize language learning through technology.

Table 4: Suggestions by Iranian University Students for Effective Use of Technology in English Language Learning Beyond the Classroom

Theme	Code	Quote	Frequency
Accessibility	Access without filtering	"Providing and not filtering good contents and sharing them more can be suggested." (Student 20)	2
Scheduling	Regular study schedule	"We should set a regular schedule for studying." (Student 10)	4
	Utilizing free time	"During free time, listening to podcasts, watching YouTube videos, and listening to music can help you learn a new language." (Student 22)	1
Diversification	Develop diverse applications for all ages	"More diverse and interesting applications should be developed for children, as well as language learners of all ages." (Student 12)	2
Gamification	Integrate games into learning technology	"Gamification is the best way, in my opinion, for teaching English." (Student 18)	1
Effective Use Tips	Select high-quality technology	"Try to find the best tools based on your needs. There's no benefit in using too many websites; use a few good ones." (Student 15)	7
	Teachers guide technology use	"Teachers should inform students about using technology for English learning, as most learners aren't aware of the resources available." (Student 23)	2
	Focus on learning, avoid social distractions	"We should use mobile phones, apps, and websites for learning, not for wasting time on unrelated social media." (Student 13)	2
	Lock other apps while studying	"We should set a specific learning time each day, locking other apps on mobile phones and computers during that time." (Student 8)	1

Theme	Code	Quote	Frequency
	Learn how technology works	"Understand how technology works and in what ways it can be used effectively before starting." (Student 17)	2
	Take notes during technology-assisted learning	"We should write down new concepts to review intensively." (Student 10)	2
	Share knowledge with peers	"Sharing information with other learners and discussing it is another suggestion." (Student 14)	1
	Keep technology updated	"We should update phones, laptops, etc., regularly." (Student 6)	1
	Use technology for self-assessment	"Educational applications and sites with assessment options can help us gauge our learning progress." (Student 7)	2
	Tailor learning to personal needs	"Technology allows us to personalize learning based on our interests, learning styles, and skills for optimal use." (Student 9)	3

Quantitative Results

The quantitative phase included 48 students from the same universities, with 41 females and 7 males, aged 19-30. Participants were predominantly TEFL majors across various semesters. Skewness and kurtosis values fell within the acceptable range (±2.0), indicating that the data were normally distributed, permitting the use of parametric tests such as paired-samples and independent-samples t-tests.

Table 5: Demographic Characteristics of the Subjects in the Quantitative Phase

Characteristic	Category	Frequency
Gender	Male	7
	Female	41
Age Range	19- 30	
University	University of Bojnord	26
	Gonbad Kavous University	22
Field of Study	TEFL	34
	English Literature	14
Semester	Semester 2	5
	Semester 4	22
	Semester 6	7
	Semester 8	14

Table 6: Skewness and Kurtosis values of Normality

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Actual use	48	.320	.343	-.453	.674
Expectations	48	-.604	.343	-.392	.674

Comparison of Students' Expectations vs. Actual Use of Technology

Table 7: Paired Samples Test for Iranian University Students' Expectations and Actual Use of Technology

		Mean	N	Std. Deviation	1(df)	Sig.
Pair 1	Actual use	119.79	48	11.745	-.858(47)	.395
	Expectations	121.54	48	17.518		

A paired-samples t-test was performed to assess the difference between Iranian university students' expectations and their actual use of technology for English language learning beyond the classroom. The results showed no significant difference between students' actual use (M = 119.79, SD = 11.745) and their expectations (M = 121.54, SD = 17.518), t (47) = -.858, p = .395> 0.05. The mean difference between the two variables was -1.75, with a 95% confidence interval of -5.85 to 2.35. Although the eta squared statistic was 0.93, indicating a large effect size, the lack of statistical significance led to the acceptance of the null hypothesis, suggesting that students' actual use of technology aligns closely with their expectations.

Gender-Based Comparison of Expectations

An independent-samples t-test showed no significant difference between females (M = 120.24, SD = 17.632) and males (M =129.14, SD =15.889; t (46) = -1.250, p = .218. The mean difference of -8.90 had a 95% confidence interval ranging from -23.24 to 5.44. The effect size was small, as indicated by an eta squared value of 0.032. This result suggests that gender does not significantly impact students' expectations of technology use in English language learning beyond the classroom.

Gender-Based Comparison of Actual Use

An independent-samples t-test indicated no significant difference in actual technology use scores between female students (M = 118.98, SD = 10.45) and male students (M = 124.57, SD = 17.92), t(6.713) = -0.803, p = .449. The mean difference was -5.60, with a 95% confidence interval ranging from -22.22 to 11.03. The effect size was small (η^2 = 0.013), supporting the null hypothesis that gender does not significantly impact the actual use of technology for English language learning beyond the classroom.

Discussion

This study explored the gap between Iranian university students' expectations and their actual use of technology for out-of-class EFL learning, aiming to enhance the quality of this educational context. A sequential exploratory mixed-methods design was used to gain a comprehensive understanding.

The qualitative phase revealed several barriers faced by Iranian students, such as low internet speed, filtering of websites, and high costs. These infrastructural and political constraints often pose significant challenges to seamless technology use in the Iranian context. Despite these hurdles, students displayed notable resilience by finding creative and resourceful ways to circumvent these barriers. For instance, the use of virtual private networks (VPNs) and offline resources enabled students to continue their language learning endeavors effectively, even when faced with restricted access to online platforms and tools.

Table 8: Independent Samples Test for Iranian Male and Female Students' Expectations of Technology

	Gender	N	Mean	Std. Deviation	t(df)	Sig.
Expectations	Female	41	120.24	17.632	-1.250 (46)	.218
	Male	7	129.14	15.889		

Table 9: Independent Samples Test for Iranian Male and Female Students' Actual Use of Technology

	Gender	N	Mean	Std. Deviation	t(df)	Sig.
Actual use	Female	41	118.98	10.451	-0.803 (6.713)	.449
	Male	7	124.57	17.924		

Quantitative analysis showed no significant difference between students' expectations and their actual use of technology, indicating that, despite these barriers, students were generally satisfied with their access to technology for language learning. This suggests that while external constraints remain a challenge, students managed to align their expectations with their actual experiences through adaptive strategies and resourceful decision-making. This satisfaction could be attributed to their autonomy in choosing when, how, and which digital tools to use, which may mitigate frustrations stemming from infrastructural limitations.

This finding aligns with the TAM and EDT, suggesting that students' actual technology use met their expectations, leading to satisfaction. The alignment between expectations and experiences highlights the adaptability and resourcefulness of students in optimizing their technology use, even under restrictive circumstances. Additionally, students reported effective use of technology for language learning, demonstrating resilience in overcoming challenges such as the distraction potential of digital tools and the lack of adequate teacher guidance. Notably, they emphasized the importance of flexibility in technology use, which aligns with the tenets of TAM, where ease of use and perceived usefulness strongly influence technology adoption and satisfaction.

This result contrasts with previous studies by Algubaisi [14] and Dashtestani [1], which suggested that barriers like filtering and lack of teacher support hinder effective technology use. However, those studies focused on in-class contexts where students had limited control, whereas this study examined out-of-class learning, where students exercise greater autonomy. The autonomy afforded in out-of-class settings enables students to make individual choices regarding their learning tools, platforms, and schedules, tailoring their experiences to their preferences and learning styles. This autonomy may explain why students in this study reported greater satisfaction despite external challenges, as they were able to exercise control over their learning experiences.

This study also reinforces the importance of supporting students' autonomy and agency in language learning. The findings indicate that while infrastructural and political constraints persist, students' adaptability and self-directed learning approaches allow them to leverage available technological resources effectively. Educators and policymakers should recognize the resilience of students in navigating these challenges and support their efforts by addressing systemic barriers, such as internet filtering and limited teacher support, to optimize their technology-driven learning experiences.

The study's findings of no significant gender differences in expectations or actual use of technology are noteworthy in several ways. These findings align with studies by Desta et al. [32] and Lee et al. [33], which also reported uniform patterns of technology use across genders. This trend may reflect a shift in societal dynamics, particularly with the increasing integration of technology into daily life, which has likely reduced traditional gender-based gaps in digital literacy and skills. The

widespread availability of user-friendly digital tools and the normalization of technology in education and entertainment have fostered an environment where both male and female students are equally adept at navigating technological resources.

The contrast with studies by Li and Kirkup [34] and Volman et al. [35], which observed gender-based differences in technology use, could be attributed to contextual factors. Those studies may have been conducted in settings or time periods where cultural norms, educational access, and exposure to technology varied significantly between genders. In the current study, the similar challenges faced by male and female students, such as internet restrictions, high costs, and infrastructural limitations, appear to have overshadowed any potential disparities in access or use. These shared obstacles may have created a level playing field, compelling both genders to develop comparable levels of competence and adaptability in using technology for language learning.

Furthermore, the evolving nature of education, where digital tools are now integral to academic practices, may have contributed to diminishing gender-based differences. Initiatives aimed at promoting equitable access to technology in education, combined with the growing emphasis on digital skills development, have likely played a pivotal role in ensuring that both genders are equally equipped to utilize technology effectively.

Students' expressed need for teacher guidance underscores the critical role educators play in bridging the gap between technology availability and its effective utilization for learning. While students demonstrated autonomy and motivation in their use of technology, their call for structured guidance highlights the limitations of self-directed approaches, particularly in identifying and leveraging high-quality resources. This resonates with findings by Esfandiari and Gawhary [36] and Healey [37], which emphasize that teacher involvement is instrumental in fostering autonomy. Teachers can serve as facilitators, helping students optimize their use of technology through tailored recommendations, troubleshooting technical challenges, and promoting time management strategies.

Moreover, teacher guidance could be especially valuable in addressing the issue of distractions associated with technology use, a challenge frequently reported by students. By providing clear objectives, curated resources, and practical tips for maintaining focus, educators can help students harness the potential of technology while mitigating its drawbacks. The development of structured learning routines, as suggested by students in this study, further supports the notion that teacher involvement is crucial in creating a balanced and effective technology-enhanced learning environment.

In addition to technical and strategic support, teachers can foster a deeper understanding of how to align technology use with specific language acquisition goals. For instance, guiding students to integrate gamified learning tools, collaborative platforms, or interactive media into their study routines could enhance engagement and motivation while yielding better outcomes. Ultimately, such guidance not only enhances immediate learning experiences but also equips students with the skills needed for lifelong learning in an increasingly digital world.

Conclusions

This study reveals that Iranian university students have largely adapted to using technology for EFL learning beyond the classroom, finding satisfaction despite

structural and political barriers. However, students expressed a need for more teacher guidance to maximize the effectiveness of their technology use. The study highlights the essential role that technology plays in out-of-class English language learning in Iran, with students demonstrating resilience against challenges like internet filtering and high costs. Despite these obstacles, students' expectations generally aligned with their actual usage, leading to overall satisfaction.

Using a mixed-methods approach, the research investigated Iranian students' expectations versus their actual use of technology for out-of-class English language learning. Qualitative findings identified key factors influencing technology use, including time flexibility, accessibility, cost, and teacher support, while barriers included poor internet quality, filtering, and a lack of guidance. Quantitative results showed no significant differences between students' expectations and actual use, and no significant gender-based differences in either expectations or usage patterns.

The study underscores the importance of technology in supporting language learning beyond the classroom, even in restrictive environments. It suggests that policymakers and educators should support this trend by reducing unnecessary restrictions and providing guidance to help students fully benefit from digital learning tools. Students also suggested enhancing accessibility, establishing regular study routines, and personalizing learning to further improve the effectiveness of technology in their language-learning journey.

Pedagogical Implications and Suggestions for Future Research

The study highlights the need for a more supportive approach to integrating technology into language learning in Iran. Rather than imposing additional restrictions, Iranian authorities should consider reducing barriers, such as internet filtering, since students have demonstrated they can use technology responsibly and effectively for educational purposes. The findings show that students are satisfied with their technology use in learning, suggesting that investments in restrictive measures may be unnecessary. Additionally, training teachers to guide students in effective technology use would further enhance the benefits of digital learning tools.

Pedagogical Implications

- *Teacher Training:* Teachers should receive training to effectively guide students in using technology for language learning, equipping them with strategies to maximize the educational potential of these tools.
- *Policy Recommendations:* Iranian authorities should reconsider restrictive policies, such as internet filtering, recognizing that students require access to digital resources for learning and have shown responsible use of these technologies.
- *Support for Autonomy:* Teachers should promote autonomous learning by motivating students to engage with technology effectively beyond the classroom, fostering independent, self-directed learning.

Suggestions for Future Research: To build on these findings, future studies could address several areas for a broader understanding of technology's role in language learning:

- *Diverse Educational Levels:* Research should explore students' expectations and technology usage across various educational levels, including elementary and high school, to assess developmental differences in technology needs.
- *Broader Demographics:* Expanding research to include students from different academic disciplines could offer insights into

the general applicability of these findings across fields.

- *Teacher Perspectives:* Including teachers in future studies would provide valuable insights into their perspectives on supporting out-of-class technology use for language learning.
- *Contextual Comparisons:* Comparative studies across different cultural or geographical settings would help determine the generalizability of these findings and identify unique challenges or advantages in diverse environments.

The study faced several limitations. A small sample size, limited to English-major students from two universities in Iran, may affect the generalizability of the results. Furthermore, the sample included only a few male students, and data collection coincided with final exams, which may have limited participation. Lastly, the research was geographically restricted to Gonbad Kavous University and the University of Bojnord, which may not represent the broader Iranian student population. Future research could expand to different fields of study and geographical locations to provide a broader perspective.

Authors' Contribution

Author 1: Conceptualization, Writing original draft, Data curation, Investigation, and Formal analysis. Author 2: Methodology, Project administration, and Supervision. Author 3: Validation, review, and editing

Acknowledgements

We would like to acknowledge the use of the *Creative Writing Coach by ChatGPT* in editing the final draft of this manuscript.

Conflict of Interest Statement

The authors declare no competing interests.

GenAI Use Disclosure Statement

The authors used Creative Writing Coach by ChatGPT, a customized version of ChatGPT by OpenAI, to assist in editing the final draft of this manuscript. The tool was accessed through OpenAI's platform and utilized to enhance clarity, coherence, and structure in the text. No modifications were made to the tool, and it was used solely as an editorial aid without adding any proprietary or external data. The version employed was ChatGPT as of October 2024. All ethical guidelines were adhered to in ensuring that the content remains the author's original work. The author declares no competing interests related to the use of this AI tool.

References

[1] Dashtestani R. Moving bravely towards mobile learning: Iranian students' use of mobile devices for learning English as a foreign language. Computer-Assisted Language Learning. 2015;29(4):815–32. Available from: https://doi.org/10.1080/09588221.2015.1069360

[2] Moorhouse BL, Wong K, Li L. Teaching with technology in the post-pandemic digital age: Technological normalisation and AI-induced disruptions. *RELC Journal*. 2023;54(2):311–20. Available from: https://doi.org/10.1177/00336882231176929

[3] Ahmadi MR. The use of technology in English language learning: A literature review. *International Journal of Research in English Education*. 2018;3(2):115–25. Available from: https://doi.org/10.29252/ijree.3.2.115

[4] Duong TM, Tran TQ, Nguyen TTP. Non-English majored students' use of English vocabulary learning strategies with technology-enhanced language learning tools. *Asian Journal of University Education*. 2021;17(4):455. Available from: https://doi.org/10.24191/ajue.v17i4.16252

[5] Kaur N, Gopal K. An assessment of students' intention of technology acceptance for online education. *Journal of Positive School Psychology*. 2022;6(3):3410–24.

[6] Mede E, İnceçay G, İnceçay V. Fostering learner autonomy through extensive reading: The case of oral book reports. *ELT Research Journal*. 2013;2(1):16–25.

[7] Lai C. Perceiving and traversing in-class and out-of-class learning: Accounts from foreign language learners in Hong Kong. *Innovation in Language Learning and Teaching*. 2014;9(3):265–84. Available from:

https://doi.org/10.1080/17501229.2014.918982

[8] Lai C, Zhu W, Gong G. Understanding the quality of out-of-class English learning. *TESOL Quarterly*. 2014;49(2):278–308. Available from: https://doi.org/10.1002/tesq.171

[9] Lai C. Modeling teachers' influence on learners' self-directed use of technology for language learning outside the classroom. *Computers & Education*. 2015;82:74–83. Available from: https://doi.org/10.1016/j.compedu.2014.11.005

[10] Kolhar M, Kazi RN, Alameen A. Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi Journal of Biological Sciences*. 2021;28(4):2216–22. Available from: https://doi.org/10.1016/j.sjbs.2021.01.010

[11] Essex G. Educational technology behaviors and expectations of students entering three dental programs; a bi-coastal survey [dissertation]. University of San Francisco; 2009. Publication No. 3388381. ProQuest Dissertations and Theses Global.

[12] Churchill GA, Surprenant C. An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*. 1982;19(4):491. Available from: https://doi.org/10.2307/3151722

[13] Elkhani N, Bakri A. Review on "expectancy disconfirmation theory" (EDT) model in B2C E-Commerce. *Journal of Information Systems Research and Innovation*. 2012;2(12):95–102.

[14] Algubaisi BA. Exploring and understanding of administrator's, teachers', and students' expectations and actual use of technology-enhanced language learning in a Saudi tertiary context [dissertation]. Indiana University of Pennsylvania; 2017. Publication No. 10640342. ProQuest Dissertations and Theses Global.

[15] Miniawi HE, Brenjekjy A. Educational technology, potentials, expectations and challenges. *Procedia - Social and Behavioral Sciences*. 2015;174:402–9. Available from: https://doi.org/10.1016/j.sbspro.2015.01.777

[16] Shukla A, Kirmani MN. Effect of internet addiction on aggression and attention span in adolescents: Empirical investigation. *International Journal of Humanities & Social Science Studies*. 2023;9(5):154–63. Available from: https://doi.org/10.29032/ijhsss.v9.i5.2023.154-163

[17] Richards JC. The changing face of language learning: Learning beyond the classroom. *RELC Journal*. 2015;46(1):5–22. Available from: https://doi.org/10.1177/0033688214561621

[18] Gholaminejad R, Raeisi-Vanani A. English language teaching in Iranian mainstream schools: Pedagogical, societal and government policy environments. *Issues in Educational Research*. 2021;31(1):111–29.

[19] Altun M, Ahmad HK. The use of technology in English language teaching: A literature review. *International Journal of Social Sciences & Educational Studies*. 2021;8(1):226–32. Available from: https://doi.org/10.23918/ijsses.v8i1p226

[20] Lai C, Gu M. Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*. 2011;24(4):317–35. Available from: https://doi.org/10.1080/09588221.2011.568417

[21] Banihashemi P. International law and the right to global internet access: Exploring internet access as a human right through the lens of Iran's Women-Life-Freedom movement. *Chicago Journal of International Law*. 2023;24:31.

[22] Chaw LY, Tang CM. The voice of the students: Needs and expectations from learning management systems. *Proceedings of the European Conference on E-Learning*. 2017.

[23] Ozturk E. Students' expectations from mobile devices for mobile learning. *International Journal of Mobile Communications*. 2019;17(4):409–21. Available from: https://doi.org/10.1504/IJMC.2019.100496

[24] Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*. 1989;13(3):319. Available from: https://doi.org/10.2307/249008

[25] Oliver RL. A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*. 1980;17(4):460–79. Available from: https://doi.org/10.2307/3150499

[26] Afshari M, Ghavifekr S, Siraj S, Duan J. Students' attitudes towards computer-assisted language learning. *Procedia - Social and Behavioral Sciences*. 2013;103:852–9. Available from: https://doi.org/10.1016/j.sbspro.2013.10.407

[27] Bhattacherjee A, Premkumar G. Understanding changes in belief and attitude toward information technology usage: A theoretical model and longitudinal test. *Management Information Systems Quarterly*. 2004;28(2):229. Available from: https://doi.org/10.2307/25148634

[28] Cohen A, Soffer T, Henderson M. Students' use of technology and their perceptions of its usefulness in higher education: International comparison. *Journal of Computer Assisted Learning*. 2022;38(5):1321–31. Available from: https://doi.org/10.1111/jcal.12678

[29] Creswell JW. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. 4th ed. Pearson; 2012.

[30] Dörnyei Z. *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press; 2007.

[31] Creswell JW, Creswell JD. *Research design: Qualitative, quantitative, and mixed methods approaches*. 5th ed. SAGE Publications; 2018.

[32] Desta MA, Workie MB, Yemer DB, Denku CY, Berhanu MS. Social media usage in improving English language proficiency from the viewpoint of medical students. *Advances in Medical Education and Practice*. 2021;12:519–28. Available from: https://doi.org/10.2147/AMEP.S310181

[33] Lee C, Yeung AS, Ip T. Use of computer technology for English language learning: Do learning styles, gender, and age matter? *Computer Assisted Language Learning*. 2016;29(5):1035–51. Available from: https://doi.org/10.1080/09588221.2016.1140655

[34] Li N, Kirkup G. Gender and cultural differences in Internet use: A study of China and the UK. *Computers & Education*. 2007;48(2):301–17. Available from: https://doi.org/10.1016/j.compedu.2005.01.007

[35] Volman M, Van Eck E, Heemskerk I, Kuiper E. New technologies, new differences: Gender and ethnic differences in pupils' use of ICT in primary and secondary education. *Computers & Education*. 2005;45(1):35–55. Available from: https://doi.org/10.1016/j.compedu.2004.03.001

[36] Esfandiari M, Gawhary MW. Is technology paving the way for autonomous learning? *World Journal of English Language*. 2019;9(2):64. Available from: https://doi.org/10.5430/wjel.v9n2p64

[37] Healey D. Learner autonomy with technology: What do language learners need to be successful? *TESOL 2002, CALL-IS Academic Session*. 2002.

AUTHORS' BIOSKETCHES

Mahdieh Zeitounly is an MA student of Teaching English as a Foreign Language at the Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

Zeitounly, M., MA student of Teaching English as a Foreign Language, Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

zeitounly78.mahdieh@gmail.com

Mohammad Reza Ghorbani is an associate professor of Teaching English as a Second Language at the Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord Iran

Ghorbani, MR, Associate Professor, Teaching English as a Foreign Language, Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

ghorbani@ub.ac.ir

Mohammad Ali Robatjazy is an assistant Professor of Applied Linguistics at the Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

Robatjazy, MA, Assistant Professor, Applied Linguistics, Department of Foreign Languages, Faculty of Humanities, University of Bojnord, Bojnord, Iran

ma.robatjazy@ub.ac.ir

Appendix A
Interview Protocol for University Students

I. Demographic & Personal Information

1. Name:
2. Age:
3. Gender:
4. University Name:
   - ☐ University of Bojnord
   - ☐ Gonbad Kavous University
5. Field of Study:

II. Subjects' Actual Use of Technology & Technology Use Expectations

6. Do you use technology to assist with learning English?
7. What technologies do you use outside the classroom to learn English? *(Examples: language learning tools, applications, websites, social media platforms such as Instagram, WhatsApp, YouTube, Facebook, etc.)*
8. How does technology help you with English learning outside the classroom?
9. Which technologies or social media platforms do you recommend for learning English outside the classroom?
10. What are the advantages of using such technologies for English learning outside the classroom?
11. What challenges or barriers do you face in using technology for English learning outside the classroom?
12. What factors influence how frequently or effectively you use technology for English learning outside the classroom?
(Consider aspects such as time, location, teacher support, institutional policies, cost, accessibility, and technology quality.)
13. What suggestions do you have for maximizing the benefits of technology in English language learning outside the classroom?
14. What are your expectations regarding technology-enhanced English language learning outside the classroom?
15. How do you envision the future of technology in English language learning in a global context?
16. How do you foresee the future of technology in English language learning within the Iranian context?
17. Do you have any additional comments or insights to share?

Appendix B
Survey Questionnaire

Iranian University Students' Expectations and Actual Use of Technology in English Language Learning Beyond the Classroom

Introduction

The researcher is an MA student conducting a study on Iranian university students' expectations and actual use of technology in English language learning beyond the classroom. The primary objective of this questionnaire is to determine whether there is a significant difference between students' expectations and their actual use of technology for English learning outside the classroom. Your honest and clear responses will be invaluable in contributing to this research. All responses will remain confidential and will be used solely for academic purposes.

Consent Form

By participating in this study, I acknowledge that:

✅ My participation is voluntary.

✅ I allow the researcher to use my responses as research data.

✅ My identity will remain anonymous, and all information provided will be treated with confidentiality.

☐ I agree to participate in this study.

Section I: Biographical Data

1. Full Name (Optional):
2. Age:
3. Gender:

☐ Female

☐ Male

4. University Name:

☐ University of Bojnord

☐ Gonbad Kavous University

5. Field of Study:

☐ TEFL

☐ English Literature

6. Semester:

☐ 2

☐ 4

☐ 6

☐ 8

Section II: Actual Use of Technology in English Language Learning

Instructions: Please indicate your level of agreement with the following statements using the scale below:

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Slightly Agree
5 = Agree
6 = Strongly Agree

I use technology to learn English outside the classroom because...

#	Statement	1	2	3	4	5	6
1	It is more fun and interesting.	☐	☐	☐	☐	☐	☐
2	It improves my motivation.	☐	☐	☐	☐	☐	☐
3	It is more engaging.	☐	☐	☐	☐	☐	☐
4	It is easy to use.	☐	☐	☐	☐	☐	☐
5	It is free to use.	☐	☐	☐	☐	☐	☐
6	It provides easy access to academic sources.	☐	☐	☐	☐	☐	☐
7	I can access it anytime and anywhere.	☐	☐	☐	☐	☐	☐
8	It is easily accessible.	☐	☐	☐	☐	☐	☐
9	It provides authentic materials.	☐	☐	☐	☐	☐	☐
10	It offers a wide range of learning materials.	☐	☐	☐	☐	☐	☐
11	It provides visually enhanced materials.	☐	☐	☐	☐	☐	☐
12	It makes learning English easier.	☐	☐	☐	☐	☐	☐
13	It speeds up the learning process.	☐	☐	☐	☐	☐	☐
14	It is regularly updated with new content.	☐	☐	☐	☐	☐	☐
15	I can communicate with native speakers.	☐	☐	☐	☐	☐	☐
16	I can search for any topic I want to learn.	☐	☐	☐	☐	☐	☐
17	It provides self-study opportunities.	☐	☐	☐	☐	☐	☐
18	It saves my time and energy.	☐	☐	☐	☐	☐	☐
19	It improves my English speaking skills.	☐	☐	☐	☐	☐	☐
20	It improves my English writing skills.	☐	☐	☐	☐	☐	☐
21	It improves my English reading skills.	☐	☐	☐	☐	☐	☐
22	It improves my English listening skills.	☐	☐	☐	☐	☐	☐
23	It improves my English grammar skills.	☐	☐	☐	☐	☐	☐
24	It improves my English pronunciation skills.	☐	☐	☐	☐	☐	☐

Section III: Expectations of Technology in English Language Learning

Instructions: Please indicate your level of agreement with the following statements using the same scale (1–6).

I expect technology for English language learning outside the classroom to...

#	Statement	1	2	3	4	5	6
1	Be easily accessible anywhere.	☐	☐	☐	☐	☐	☐
2	Be of high quality.	☐	☐	☐	☐	☐	☐
3	Be easy to understand.	☐	☐	☐	☐	☐	☐
4	Be user-friendly.	☐	☐	☐	☐	☐	☐
5	Cater to different proficiency levels.	☐	☐	☐	☐	☐	☐
6	Make learning more engaging.	☐	☐	☐	☐	☐	☐
7	Simplify the learning process.	☐	☐	☐	☐	☐	☐
8	Save time and effort.	☐	☐	☐	☐	☐	☐
9	Provide feedback on my performance.	☐	☐	☐	☐	☐	☐
10	Offer a structured daily learning routine.	☐	☐	☐	☐	☐	☐
11	Provide a study timetable.	☐	☐	☐	☐	☐	☐
12	Include useful and diverse materials.	☐	☐	☐	☐	☐	☐
13	Offer fast internet access.	☐	☐	☐	☐	☐	☐
14	Provide authentic English materials.	☐	☐	☐	☐	☐	☐
15	Function offline when necessary.	☐	☐	☐	☐	☐	☐
16	Be free or affordable.	☐	☐	☐	☐	☐	☐
17	Be unrestricted and unfiltered.	☐	☐	☐	☐	☐	☐
18	Improve all aspects of English language skills.	☐	☐	☐	☐	☐	☐

Please leave your phone number or Telegram ID if you are open to further communication regarding this study. Thank you for your time and valuable contribution to academic research! Your input is sincerely appreciated.

Citation (Vancouver): Zeitounly M, Ghorbani M. R, Robatjazy M. A. [Exploring Iranian University Students' Expectations and Technology Use for Out-of-Class English Language Learning]. *Tech. Edu. J. 2025; 19(1): 271-292*

https://doi.org/10.22061/tej.2025.11598.3170