#### www.edupij.com

#### **Research Article**

Cite this article: Benitez-Correa, C., & Gonzalez-Torres, P. (2025). Integrating TikTok in Higher Education: A Case of English as a Foreign Language Teacher Education Program. *Educational Process: International Journal*, 15, e2025135. https://doi.org/10.22521/edupij.2025.15.135

Received February 7, 2025 Accepted March 26, 2025 Published Online April 5, 2025

**Keywords:** Academic competencies, Educational technology, EFL learning, TikTok in education

#### Author for correspondence:

Carmen Benitez-Correa

cdbenitez@ytpl.edu.ec

Universidad Tecnica Particular de Loja (UTPL), Ecuador





## **OPEN ACCESS**

© The Author(s), 2025. This is an Open Access article, distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction, provided the original article is properly cited.



# Integrating TikTok in Higher Education: A Case of English as a Foreign Language Teacher Education Program

Carmen Benitez-Correa<sup>®</sup>, Paul Gonzalez-Torres<sup>®</sup>

#### **Abstract**

Background/purpose. Limited studies have explored TikTok's potential in higher education, but scarce research has been conducted about the impact of this tool on developing research and linguistic competencies in Latin-American TEFL students. This research addresses this gap by analyzing the effectiveness of TikTok in supporting these competencies while also exploring students' perceptions of its use in this context. Consequently, this study aims to evaluate the effectiveness of TikTok videos in enhancing research and linguistic competencies among higher-education students in an EFL teacher education program. Additionally, it aims to explore students' perceptions of TikTok as an educational tool.

Materials/methods. Using a mixed-method approach, this study combines a quasi-experimental design, surveys, and structured interviews to assess changes in academic competencies and collect student perceptions. Eighty-seven participants from a private university in Ecuador were divided into control and experimental groups across two courses: Research Methods in ELT and Contrastive Grammar. The intervention involved integrating TikTok videos into the curriculum over four months, with students in the experimental group engaging with and creating TikTok content related to course material.

**Results.** Results indicated improvements in the experimental group, demonstrating the positive impact of TikTok on student performance. Additionally, data revealed that students found TikTok to be an engaging and effective supplementary learning tool that supports effective learning by reducing cognitive load and fostering active, self-paced learning. However, the participants noted challenges such as technological limitations and potential distractions.

**Conclusion.** TikTok videos demonstrate a positive impact on student performance, which supports effective learning experiences and enhances academic competencies through improved retention and comprehension. Additionally, students generally perceive TikTok as an engaging and effective tool for classroom learning.

#### 1. Introduction

In the context of higher education, the development of competencies is deeply tied to fostering meaningful learning, which can be achieved through collaborative learning environments and the strategic integration of technology. Academic competencies, which encompass critical thinking, problem-solving, communication, and teamwork skills, are cultivated more effectively when students participate in collaborative discussions with peers. Such peer interaction serves as a catalyst for knowledge construction, as students not only share diverse perspectives but also challenge and refine each other's ideas, leading to deeper insights and critical understanding (Millis, 2023).

Higher education also plays a key role in cultivating a wide range of essential skills. Notably, linguistic and research skills are particularly valuable due to their wide relevance and importance across various fields. Developing these abilities not only boosts academic success but also equips students for success in various professional settings (Khamrayeva, 2024; Hendriarto et al., 2021).

Regarding the integration of technology, Nurhidayat et al. (2024) highlight that technology greatly contributes to competence development by offering learning experiences that are both personalized and adaptable. Such technologies provide students with real-world applications of knowledge, allowing them to hone their skills in relevant, authentic contexts that simulate professional situations that they are likely to encounter in the future. In this context, social media applications play a crucial role by supporting a connected, collaborative learning environment. These platforms allow for efficient information sharing, enabling institutions to communicate swiftly with students. Through social media, updates, events, and announcements can be instantly shared, helping students remain well-informed (Perez et al., 2023).

TikTok, a popular social media platform, enables users to easily create and share content across various applications and other social media networks, making it accessible to a wide audience. In today's digital age, both teachers and students are adapting to new trends that integrate technology into teaching and learning processes. TikTok has emerged as an innovative tool for presenting content in an interactive and engaging way. There is evidence that TikTok has been successfully utilized in various fields, including medicine and chemistry, as well as in e-learning contexts (Draganić et al., 2021). This tool has emerged as a powerful one for engagement due to their short, visually appealing, and interactive content. TikTok's widespread popularity among university students positions it as a potential resource for enhancing academic competencies, aligning with trends in digital learning (Ibrahim et al., 2023).

Previous research has demonstrated that incorporating TikTok videos into the learning process impacts various educational contexts, enhancing student engagement, comprehension, and learning outcomes (Ardiana & Ananda, 2022). It has proven effective in improving speaking skills (Rahmawati et al., 2023), understanding complex subjects like Sociology and Fiqh, and fostering active and motivated learning in a stimulating environment (Ardiana & Ananda, 2022; Roza et al., 2023).

However, limited studies have explored TikTok's potential in higher education (e.g., Alkhady, 2024; Rahmawati et al., 2023; Roza et al., 2023). Specifically, there has been scarce research on the impact of this tool in developing research and linguistic competencies among Latin American EFL (English as a Foreign Language) learners. This research addresses this gap by investigating whether TikTok can effectively support these competencies while also exploring students' perceptions of its use in educational settings. Research and linguistic competencies are foundational for their academic success and future careers as educators.

Several theoretical frameworks provide a strong foundation for this study. Cognitive Load Theory by Sweller (1988) emphasizes the importance of delivering content in small, manageable chunks to optimize learning, a feature inherent in TikTok's video format. Another theory supporting the use of

TikTok is Social Constructivism (Vygotsky, 1978) that highlights the role of interaction and collaboration in learning, which TikTok facilitates through peer engagement features such as comments and duets. Additionally, Multimedia Learning Theory (Mayer, 2001) supports the use of visuals, text, and audio to enhance comprehension and retention, principles that TikTok harnesses effectively. Finally, Engagement Theory, supported by Kearsley and Shneiderman (1998), argues that meaningful interaction with technology can sustain attention and foster active learning, aligning with TikTok's potential to motivate students.

The purpose of this study is to evaluate the effectiveness of TikTok videos in enhancing research and linguistic competencies among higher-education students in an EFL teacher education program. Additionally, it aims to explore students' perceptions of TikTok as an educational tool to provide insights into its practicality and impact. This research seeks to offer innovative strategies for integrating digital tools into developing academic competencies and to contribute to the growing body of knowledge on social media's role in education. This will be done by answering the following research questions:

RQ 1: How effective is the use of Tik Tok videos to enhance academic competences in higher education students?

RQ 2: What are university students' perceptions regarding the use of TikTok videos to enhance academic skill.

# 2. Literature Review

This section explores contemporary approaches and tools that enhance learning, highlighting the growing role of social media, including platforms like TikTok, as innovative tools for fostering engagement and improving educational outcomes. Drawing from various studies, it underscores the benefits and challenges of these tools, offering insights into their effectiveness in modern pedagogy.

# 2.1. Meaningful Learning

Meaningful learning refers to the process in which new information is effectively integrated into a learner's existing cognitive framework, leading to a deeper and more lasting understanding. Ausubel (1963) emphasizes that for learning to be meaningful, learners must actively connect new knowledge to prior experiences and ideas. This type of learning contrasts with rote learning, where information is memorized without meaningful connections, often resulting in shallow and temporary retention.

Key principles of meaningful learning include the active engagement of the learner, the relevance of content, and the emotional and cognitive connections that are formed. Research shows that learning is more effective when learners actively participate in constructing their own knowledge (Bruner, 1966). Novak (2010) further highlights that concept mapping, a tool for visualizing the relationships between ideas, enhances meaningful learning by helping students organize and integrate new information.

Emotional engagement also plays a critical role in meaningful learning. According to Tyng et al. (2017), emotional involvement strengthens memory retention, as emotional responses are closely linked to cognitive processing. When learners feel emotionally connected to the material, they are more likely to retain and apply what they have learned.

In the context of modern education, meaningful learning can be fostered through collaborative learning environments and technology integration. Vygotsky (1978) argues that social interaction is crucial for cognitive development, and learning is more meaningful when learners collaborate and discuss ideas with peers. Additionally, Nedungadi et al. (2018) suggest that technology, such as

gamified learning tools and AI-based educational platforms, support meaningful learning by providing personalized, real-world contexts for students to apply their knowledge

# 2.2. Acquiring Linguistics and Research Skills in Higher Education

Higher education serves as a crucible for the development of a variety of essential skills. Among these, linguistics and research skills stand out due to their broad applicability and critical importance across multiple disciplines. The acquisition of these skills not only enhances academic performance but also prepares students for diverse professional environments.

Developing linguistic skills in higher education is crucial for several reasons. Firstly, it fosters effective communication. Understanding the nuances of language enables students to articulate their ideas more clearly and persuasively. This is invaluable not only in academic contexts but also in personal and professional interactions, including foreign language teaching (Khamrayeva, 2024). Furthermore, linguistics skills enhance cognitive abilities. The process of analysing language structure and usage sharpens critical thinking and problem-solving skills. For example, parsing complex sentences or understanding language patterns requires analytical skills that are useful in a variety of fields (Sevara Baxodirovna et al., 2021; Syakur & Azis, 2020).

Research skills are equally vital in higher education. They involve the ability to locate, evaluate, and synthesize information, as well as to design and conduct original research. These skills are foundational to academic success and professional development. Research fosters a deeper understanding of subjects, promotes critical thinking, and nurtures intellectual curiosity (Hendriarto et al., 2021).

Effective research skills are crucial for producing high-quality academic work. They enable students to engage with existing literature critically, identify gaps in knowledge, and contribute original insights to their fields of study. Research skills are also indispensable for informed decision-making in professional settings, where evidence-based approaches are increasingly valued (Vázquez-Villegas et al., 2023). Moreover, the emphasis on research in higher education encourages students to approach problems from multiple perspectives, integrating insights from various fields. This approach not only broadens their intellectual horizons but also prepares them for the complexities of contemporary research challenges.

## 2.3. Social Media Applications in Higher Education

In recent years, social media has become an integral part of daily life, influencing various sectors, including education. Higher education institutions have increasingly recognized the potential of social media applications to enhance learning experiences, communication, and engagement.

Social media applications play a pivotal role in higher education by fostering a connected and collaborative learning environment. They serve as platforms for information dissemination, enabling institutions to communicate with students efficiently. Important updates, events, and announcements can be shared instantaneously, ensuring that students stay informed (Perez et al., 2023). Additionally, social media facilitates community building among students, faculty, and alumni. It creates spaces for networking, discussion, and support, which are essential for an effective academic community. These platforms also offer opportunities for promoting institutional achievements, showcasing research, and enhancing the institution's visibility and reputation (Al Balushi et al., 2022).

Social media in higher education offers several benefits, including enhanced communication, collaborative learning, access to educational resources, and the development of digital literacy skills. Platforms such as Facebook, Twitter, and LinkedIn facilitate real-time interaction between students and faculty, improving clarity and feedback. Tools such as group chats, discussion forums, and

collaborative document editing support teamwork on projects, peer reviews, and idea sharing, which are valuable for professional settings (Noori, 2022).

Social media also provides a wealth of educational content, including articles, videos, webinars, and podcasts, which can supplement traditional learning materials and broaden students' knowledge. Additionally, using these platforms helps students develop crucial digital literacy skills, such as evaluating information, creating digital content, and understanding online communication ethics, which are essential in the digital age (Lacka et al., 2021).

However, there are notable disadvantages. Social media can be a significant distraction, reducing students' focus and productivity as they may engage in non-academic activities. The quality of information can be inconsistent, with misinformation spreading quickly, requiring students to have strong critical thinking skills to identify credible sources. Furthermore, the digital gap means that not all students have equal access to the internet and digital devices, exacerbating existing inequalities and limiting the inclusive potential of social media in education (Yılmazsoy et al., 2020).

# 2.4. TikTok as an Educational Tool: Importance and applications

TikTok, a platform characterized by its short, engaging videos, has rapidly evolved into a widely popular one, with more than 1.3 billion users worldwide (Iqbal, 2022). While initially perceived as an entertainment platform (Zannettou et al., 2024), its educational potential is increasingly being recognized (Fiallos et al., 2021). The platform's design enables educators and learners to create and consume content in a visually engaging and interactive way, making it an effective tool for modern learning (Duong et al., 2023). In this context, Syaiba (2024) emphasizes that TikTok can serve as an innovative educational tool. EFL students, who are active users of the platform, have the possibility to combine their creativity with the improvement of their language skills.

One of TikTok's main strengths lies in its ability to present complex concepts in a simple, easily digestible format. In an era of declining attention spans—now averaging 10 to 15 minutes (Bradbury, 2016; Carvalho et al., 2023)—the platform's brief, dynamic videos effectively segment educational content (Asif & Kazi, 2024). In this context, TikTok's brief, dynamic videos appeal to learners by breaking down educational content into manageable segments (Asif & Kazi, 2024). This is particularly effective in language learning, science demonstrations, and skill-based tutorials. For example, educators can use the platform to teach grammar rules, explain scientific phenomena, or offer quick tips on a variety of subjects, increasing accessibility and understanding (Ibrahim et al., 2023).

The platform's interactive features further promote active learning. Students can comment, share, or create response videos, which fosters engagement and collaborative learning (Wang et al., 2024; Sajonia, 2024). This social learning aspect is vital for promoting a sense of community among students. According to Jacobs et al. (2022), TikTok's short-form video format engages students in a new way to learn. Contrary to traditional methods, TikTok's videos tend to be more immersive, interactive, and visually appealing, making the learning experience more enjoyable and effective for many learners (Ibrahim et al., 2023).

#### 2.5. Previous Studies

Alkhady (2024) studied the impact of social media use on the academic performance of 600 university students in Abu Dhabi, UAE. The research, based on descriptive design and a questionnaire, revealed that most students used social media for entertainment rather than academic purposes. It was found that most students primarily used social media for entertainment, such as listening to music and watching movies, while fewer used it for academic purposes. The findings also indicated a negative correlation between prolonged social media use and academic achievement, suggesting that excessive time spent on these platforms could detrimentally affect students' academic performance.

Ardiana and Ananda (2022) investigated the effects of using TikTok as a learning tool on student engagement and learning outcomes in a high school Sociology course. Using a quasi-experimental design, they compared a TikTok-based experimental group with a control group. The results showed that students using TikTok exhibited higher engagement and improved learning outcomes. TikTok enhanced active learning by making lessons more engaging and interesting, leading to increased interest and better academic performance. The study concluded that TikTok positively impacts student engagement and learning outcomes.

Rahmawati et al. (2023) examined the use of TikTok to improve English-speaking skills among midwifery students. Using a quasi-experimental design with pre-tests and post-tests, the study compared an experimental group using TikTok with a control group using traditional methods. Focusing on vocabulary, fluency, pronunciation, and comprehension, the research found that TikTok positively impacted speaking skills, highlighting its effectiveness as a tool for enhancing language proficiency and communication.

Yélamos-Guerra et al. (2022) conducted a study to analyze TikTok's reception among British history students and explore their motivation to learn. The study took place at the University of Málaga, involving 69 second-year students with a degree in English studies, the majority of whom were women aged 19 to 30. The students' perceptions of TikTok as an innovative learning tool were assessed through a specially designed online questionnaire. The findings revealed strong acceptance of TikTok, with students noting that this modern approach enhanced their comprehension and engagement, thereby promoting active and motivating learning in a stimulating environment.

Roza et al. (2023) examined the influence of TikTok as a learning tool on students' understanding of fiqh subjects at MTs Negeri 4 Tanjung Jabung Timur. This descriptive qualitative study involved a population of 30 students, with data collected using observation and questionnaires. A purposive sampling technique was used to select participants. Findings suggest a significant positive impact of TikTok on students' understanding of fiqh subjects, as evidenced by the overall improvement in their scores after using the platform as a learning medium.

Lah et al. (2023) examined the usefulness of TikTok as a learning tool and the students' perceptions of online learning using TikTok in a university in Malaysia. This study employed quantitative research methodology using a cross-sectional survey. The participants were 317 students enrolled in one education university in Malaysia. The results revealed that students have a positive perception of the usefulness of TikTok in online learning. In addition, the findings of this study also show that perceived information value using TikTok in online learning has the highest mean value.

The reviewed studies highlight the role of TikTok and other social media platforms in educational contexts, employing diverse research designs and addressing varied learning outcomes. Using descriptive research designs, Alkhady (2024) and Lah et al. (2023) broadly examined the impact and perceptions of social media networks on university students' academic performance. In contrast, Yélamos-Guerra et al. (2022) and Roza et al. (2023) adopted qualitative approaches to explore TikTok's opinions among students in different educational contexts. Ardiana and Ananda (2022) and Rahmawati et al. (2023) both employed quasi-experimental designs, with the former assessing TikTok's impact on student engagement and learning outcomes in high schools and the latter focusing on its effects on English-speaking skills among university students.

It is evident that previous studies predominantly focus on students' perceptions, while quasi-experimental studies have yet to be conducted in a Latin-American context. Therefore, our study aims to address this gap by exploring TikTok's influence on research and linguistic competencies among university students using a mixed-method approach.

# 3. Methodology

This study employed a mixed-method approach, which, according to Creswell and Plano Clark (2018), combines qualitative and quantitative techniques. The research design included a quasi-experimental component, which was used to assess changes in students' academic competencies through pre- and post-tests, comparing groups selected on a non-probability basis (White & Sabarwal, 2014). Additionally, questionnaires and structured interviews were employed to gather students' perceptions.

# 3.1. Participants

The participants in this study were students enrolled in an ELT program at a private higher education institution in southern Ecuador. A total of 87 students registered in two subjects (Research Methods in ELT and Contrastive Grammar) participated. In the case of Research Methods in ELT, a class of 22 students was the control group, and a class of 21 students was the intervention group. As for Contrastive Grammar, a class of 21 students was the control group, and a class of 23 students was the intervention group. This gives a total of 43 students for the control groups and 44 for the experimental groups. The participants were selected based on their availability in the classes, making it a convenience sample, a type of non-probability sampling.

#### 3.2. Instruments

Pre and post-tests were designed using close-ended (multiple-choice items) and open-ended questions about the contents covered in the courses. There was a total of 15 close-ended items and 4 open-ended questions in each test. The tests were validated through expert review, where two professors evaluated the clarity, relevance, and alignment of the questions with the course content. A questionnaire was also designed using 8 close-ended questions in the form of a Likert scale about the students' perceptions of the use of TikTok. The survey underwent a pilot test with a small sample of students to evaluate its reliability, resulting in a Cronbach's alpha value of 0.75, indicating high internal consistency. In addition, a structured interview consisting of 5 open-ended questions was designed to inquire information from the students about their opinions on the benefits, challenges and suggestions for improvement regarding the use of TikTok to work on assignments for both courses. The interview protocol was peer-reviewed by two experienced professors to ensure that the questions were open-ended, unbiased, and capable of eliciting comprehensive responses.

#### 3.3. Procedure

Students' initial academic competences in both subjects were assessed through a pre-test before the introduction of TikTok videos. These tests evaluated their baseline abilities in conducting and presenting research, as well as their knowledge about English and Spanish grammar. After the intervention, which consisted of a period of exposure to TikTok videos designed to enhance their academic competencies, students were administered a comparable test to measure any changes in their performance. The grades from both the pre-test and post-test were collected and compared to assess the effectiveness of using TikTok videos in enhancing academic competencies.

Regarding the intervention, relevant TikTok videos focused on the contents pertinent to both courses were selected and created by the instructors. These videos covered various aspects of research, such as finding reliable sources, organizing information, applying quantitative and qualitative approaches, and presenting research findings effectively (in the case of Research Methods in ELT) as well as differences and similarities between English and Spanish parts of speech with an emphasis on definition, forms and uses (in the case of Contrastive Grammar).

Over a period of 4 months, students in the experimental group used TikTok videos as part of their learning process. Every week, the instructors shared a TikTok video (2-3 minutes long) related to the

contents of the course. Students had to watch the videos and comment or summarize based on the instructions provided. Every four weeks, students recorded their own TikTok videos (3-4 minutes long) in which they had to explain some of the topics covered during this period and summarize the information provided in the videos shared by the instructor. On the other hand, the control group continued with traditional training methods without TikTok integration.

At the end of the intervention, all students took a post-test to measure any improvements in their academic performance in both courses. Additionally, a structured questionnaire was administered to the intervention groups to gather students' perceptions of using TikTok videos as supplementary material for academic enhancement. Moreover, structured interviews were conducted with a subset of 21 students (10 students from Research Methods in ELT and 11 from Contrastive Grammar) to gain deeper insights into their experiences and perceptions. The interviews focused on the perceived benefits, challenges, and overall effectiveness of using and creating TikTok videos in their activities.

The pre-test and post-test grades were analysed using statistical methods to determine the effectiveness of the TikTok intervention. T-tests were conducted to compare the pre-test and post-test mean scores within the groups (paired samples t-tests) and between the intervention and control groups (independent samples t-tests). On the other hand, the perceptions questionnaire responses were analysed using descriptive statistics to determine the means and find variations in the participants' points of view. Furthermore, the qualitative analysis of the interviews followed a thematic analysis approach to identify patterns and themes within the data, which were mostly related to students' perceptions and experiences during the intervention. The process began with transcribing the interviews. The transcripts were then imported into qualitative data analysis software, in this case, Atlas.ti, to facilitate open coding and organization. The main categories identified were perceived benefits of TikTok videos, challenges found during the intervention, and overall effectiveness of TikTok as a learning tool. Within these areas, sub-themes were identified.

#### 4. Results

# 4.1. How Effective is the Use of TikTok Videos to Enhance Academic Competences in Higher Education Students?

An independent samples t-test was conducted to determine the significance of the differences between the control and experimental groups. This test was selected because it is appropriate for comparing the means of two independent groups when the data is normally distributed. In this case, the normality of the scores was determined using the Smirnov-Kolmogorov test. The results of the pre-test for both the Contrastive Grammar and Research Methods in ELT courses indicated no statistically significant difference between the control and experimental groups. This suggests that both groups in each course started at a similar level, as evidenced by the high p-values (0.4382 for Research Methods in ELT and 0.6201 for Contrastive Grammar), which are well above the significance threshold of 0.05 (see Table 1).

In contrast, the post-test results for both courses showed statistically significant differences between the control and experimental groups. The two-tailed p-values (0.0328 for Research Methods in ELT and 0.0279 for Contrastive Grammar) are below the 0.05 significance level, indicating that the observed differences in the final scores are unlikely to be due to chance. These findings suggest that the intervention—using TikTok videos—had a meaningful impact on the performance of students in the experimental groups compared to the control groups. These results support the effectiveness of integrating TikTok videos into learning activities to enhance performance and provide a more consistent learning experience for students, which is demonstrated by the higher post-test mean scores for the experimental groups.

**Table 1.** Results of the Pre and Post-Test

Course	Group	Pre-test mean	Post-test mean	
Research Methods in ELT	Control	4.975	7.875	
	Experimental	5.2	8.7	
	P-values: 0.4382 (pre-test) 0.0328 (post-test)			
	(1-	,		
Contrastive Grammar	Control	5.2671	7.6024	
	Experimental	5.7633	8.6071	
	P-values = 0.6201 (pre-test) 0.0279 (post-test)			
υ.υ275 (μυσι-τεστ)				

# 4.2. What are University Students' Perceptions Regarding the Use of TikTok Videos to Enhance Academic Skills?

Regarding students' perceptions of using TikTok in both courses, the questionnaire was rated on a Likert scale where 5 = Totally Agree and 1 = Totally Disagree. Below is an analysis of the responses:

Items 1-4 (see Table 2) reflect high levels of student satisfaction with the use of TikTok in the classroom. A mean score of 4.65 suggests that the majority of students either agreed or totally agreed that the use of TikTok was both effective and engaging. This indicates a strong positive perception of the teaching strategy employed, suggesting that TikTok is well-suited to meet students' learning needs. On the other hand, items 5 (4.02) and 7 (4.09) indicate that students perceive a slightly lower impact of TikTok as an effective learning tool, and that they value the frequency of the use of TikTok, but it might not be seen as the primary learning tool. Items 6 (3.92) and 8 (3.94) show the lowest means, which indicate that TikTok is a beneficial learning tool, but students do not perceive it as a strong resource to aid memory retention. After understanding TikTok's role in the learning process, some students may be neutral or slightly less convinced of its full utility.

Table 2. Results of the Students' Perceptions Questionnaire

Item	Mean
I am satisfied with the teaching strategies using TikTok in the classroom.	4.65
The teaching strategies using TikTok are engaging and effective for my learning.	4.65
I am satisfied with the material used in the classroom (textbook, handouts, online resources).	4.61
The materials provided by the instructor support my learning experience.	4.65
TikTok was an effective learning tool.	
TikTok helped me remember the contents studied	3.92
I consider that TikTok should be used frequently as a learning tool in the classroom.	4.09
I consider that TikTok is a helpful aid in the learning process.	3.94

# 4.2.1. Benefits

Regarding students' perceptions, they believe that TikTok can have some benefits as a learning tool. They consider that TikTok's multimedia format aids multimodal learning by catering to visual and auditory learners. Its ability to present information in a concise manner helps learners reduce cognitive load and reinforce and summarize learning, while the opportunity to replay videos supports self-paced learning and recalling.

Additionally, the element of creativity involved can enhance active learning, making TikTok an effective pedagogical tool. Furthermore, students emphasize collaborative and interactive learning supported by the use of TikTok, which indicates that they can benefit from socially constructed knowledge. Creating videos as a group fosters collaboration and enhances social learning and creativity. Participants believe that the use of TikTok as a support tool complements traditional methods like group work, making learning more diverse and dynamic. Students also perceive that the incorporation of TikTok in classroom activities helped them improve their communication skills, engagement, active participation, critical thinking, and understanding of pedagogical strategies. They believe these abilities can be an aid in their research skills.

# 4.2.2. Challenges

Concerning challenges, some students express that they are not comfortable with audio-visual content, and some prefer traditional formats. Additionally, technological limitations, such as poor internet access, could impact TikTok's accessibility and its role in equitable education. Students mention that the format might encourage procrastination because they can be distracted with TikTok videos. Challenges also included students' learning preferences, since some students may prefer written materials over videos.

# 4.2.3. Suggestions for Improvement

Some suggestions were provided by the students regarding the use of TikTok in the classroom. The suggestions indicate a desire for more structured use of TikTok in lessons, incorporating more warm-up activities and more guidance on how to use TikTok videos in the learning process. Creating pre-lesson activities would align with education scaffolding strategies, helping students better process and engage with the videos. Moreover, students recommended more involvement in content creation in order to promote student-centered learning and increase motivation.

Students also suggest high-quality, well-edited content that keeps videos engaging but concise. This indicates a preference for a professional, polished learning experience. Additionally, students believe that incorporating popular media like music and movies could cater to cultural relevance and engage students more effectively.

#### 5. Discussion

The findings from this study suggest that integrating TikTok videos into higher education courses has a significant impact on enhancing students' academic competencies. The results for both the Contrastive Grammar and Research Methods in ELT courses indicated that both groups began at a comparable baseline level. However, there is a notable shift after the intervention, with statistically significant differences in performance between the experimental and control groups. These findings indicate that the experimental groups benefited significantly from the TikTok video intervention, supporting the idea that TikTok can enhance academic competencies by providing an engaging, multimodal learning experience. These results align with related research (Ardiana & Ananda, 2022; Rahmawati et al., 2023), which found increased learning outcomes in higher education students as a result of using TikTok. This positive impact can also be found in studies on other social media and digital platforms used in education. For instance, the use of platforms such as Youtube (Shoufan & Mohamed, 2022), or Facebook (Deng et al., 2023) have also demonstrated benefits when applying these tools in higher education.

Students' perceptions of TikTok's utility align with the quantitative findings, as reflected in the positive responses on the questionnaire. These responses suggest that TikTok's multimedia format and interactive nature make it well-suited for enhancing students' engagement and satisfaction with course content. These findings align with Yélamos-Guerra et al. (2022), who demonstrate that students highly value TikTok, particularly for improving comprehension and engagement, fostering an interactive and motivating learning experience within a supportive environment. However, while TikTok was well-received, certain items on the questionnaire indicate a more moderate perception of its effectiveness as a primary learning tool, which differs from the findings of Lah et al. (2023), who affirm that TikTok has high acceptance among students as a valuable learning resource. For example, the items related to memory retention and its role in the learning process imply that while students find TikTok helpful, they may view it as a supplementary rather than a core resource for retaining information. This finding highlights the importance of blending TikTok content with other materials to meet various learning needs.

Students' responses in the interviews also underscore the benefits of TikTok, such as its ability to support multimodal learning and cater to various learning styles. Students noted that the platform's format, which facilitates self-paced, repeatable viewing, aids in reinforcing and summarizing key concepts; these benefits are supported by Roza et al. (2023). Additionally, TikTok promotes active, collaborative learning, as seen in students' enjoyment of group activities that involve video creation, fostering engagement, communication skills, and social learning. This supports previous research indicating that student-centred, creative projects can enhance learning outcomes by encouraging critical thinking and skill-building in ways that align with modern pedagogical approaches (Franciska et al., 2023; Tanjung et al., 2023).

On the other hand, some challenges were identified, particularly regarding students' comfort levels with audio-visual content and issues related to internet accessibility, which can impact the equitable integration of TikTok in the classroom. Furthermore, some students expressed concerns about potential distractions and procrastination associated with using a social media platform. This distraction is related to the fact that students generally used social media such as TikTok for entertainment rather than academic purposes (Alkhady, 2024). These challenges emphasize the need for a balanced approach when integrating TikTok into academic settings to minimize distractions and maximize learning benefits.

Students' suggestions for improvement included incorporating structured activities and scaffolding techniques, such as pre-lesson exercises and clear guidelines for using TikTok videos effectively. Students also recommended more professional, concise video content and highlighted the potential for increased motivation through student involvement in content creation. Such feedback reflects a desire for a polished, culturally relevant learning experience and suggests that TikTok's full potential in education could be realized by further tailoring its use to meet diverse student needs and learning objectives.

The implications of this study underscore that while TikTok has a positive impact on engagement and learning, its effectiveness can be maximized through thoughtful integration, structured guidance, and a blended approach within the educational context. Addressing issues such as accessibility, distraction management, and appropriate use could optimize TikTok's role as an educational tool and turn it into a resource that effectively meets diverse academic needs.

#### 6. Conclusion

The following conclusions summarize the key findings related to the research questions of the present study:

TikTok videos demonstrate a positive impact on student performance in both courses, Contrastive Grammar and Research Methods in ELT. This means that TikTok's multimodal, engaging format supports effective learning experiences, enhancing academic competencies through improved retention and comprehension. These findings align with research on other digital tools (e.g., YouTube, Facebook), where supplementary use enhances engagement but requires integration with structured pedagogy.

Additionally, students generally perceive TikTok as an engaging and effective tool for classroom learning. However, while TikTok is valued for its engagement and interactive features, students see it more as a supplementary tool rather than a primary learning resource, especially for retaining the contents studied.

With respect to advantages, students believe that including TikTok as support for multimodal learning could reduce cognitive load due to concise content, and self-paced learning. The platform's format encourages creativity and active learning, enhancing communication skills, social learning, and critical thinking through group video creation activities.

Some students face challenges, particularly with comfort in using audio-visual content, preference for traditional materials, and potential distractions that TikTok's entertainment-oriented nature may bring. Additionally, technological limitations, such as limited internet access, can restrict equitable access to TikTok-based learning.

Students favor the integration of more structured pre-lesson activities, concise and professionally edited content, and increased student involvement in content creation. They considered that incorporating popular media and gamified elements could increase engagement, while structured guidance and blended approaches may maximize TikTok's educational potential.

# 7. Implications and Future Research

The implications of this study underscore that while TikTok has a positive impact on engagement and learning, its effectiveness can be maximized through thoughtful integration, structured guidance, and a blended approach within the educational context. Addressing issues such as accessibility, distraction management, and appropriate use could optimize TikTok's role as an educational tool and help it meet diverse academic needs effectively.

This study opens avenues for further research on how TikTok and similar platforms could address diverse academic needs across different fields. Additional research could explore long-term impacts, examine TikTok's role in different EFL educational contexts, and test methods for balancing its benefits with the noted challenges.

#### **Declarations**

**Author Contributions.** All authors have read and approved the published version of the article.

Conflicts of Interest. The authors declare no conflict of interest.

**Funding.** The authors received no financial support for this research.

**Ethical Approval.** Anonymity was ensured by removing information about the participants' identities. All data collection and storage procedures were approved by the University Research Ethics Committee as an exempt study for program improvement and good teaching practices.

**Data Availability Statement.** The data supporting this study's findings are available. The data are not publicly available since they contain information that could compromise the privacy of the participants.

Acknowledgments. We would like to express our gratitude to the Universidad Técnica Particular de Loja for providing the support and infrastructure necessary for the development of our research. During the preparation of this work the authors used ChatGPT in order to proofread some parts of the manuscript. The authors declare that they reviewed and edited the final output as needed and take full responsibility for the content of the published article.

#### References

- Al Balushi, W., Al-Busaidi, F., Malik, A., & Al-Salti, Z. (2022). Social media use in higher education during the COVID-19 pandemic: A systematic literature review. *International Journal of Emerging Technologies in Learning (iJET)*, 17(24), 4-24. https://doi.org/10.3991/ijet.v17i24.32399
- Alkhady, A. (2024). The impact of social networks on the academic performance of higher education students: an experimental study. *Intercontinental Journal of Social Sciences, 1*(3), 231-249. https://doi.org/10.62583/zc08qm93
- Ardiana, E., & Ananda, A. (2022). The effect of using the Tiktok application as a learning media on the activeness and learning outcomes of class XI Social Sciences students in Sociology subjects at SMA N 1 Ampek Angkek. *LANGGAM: International Journal of Social Science Education, Art and Culture, 1*(02), 22-29. https://doi.org/10.24036/langgam.v1i02.13
- Asif, M., & Kazi, S. (2024) Examining the influence of short videos on attention span and its relationship with academic performance. *International Journal of Science and Research (IJSR)* 13(4) 1872-1883. https://dx.doi.org/10.21275/SR24428105200
- Ausubel, D. P. (1963). The psychology of meaningful verbal learning. Grune & Stratton.
- Bradbury, N. A. (2016). Attention span during lectures: 8 seconds, 10 minutes, or more? *Advances in physiology education*. 40(4) 509–513. https://doi.org/10.1152/advan.00109.2016
- Bruner, J. S. (1966). Toward a theory of instruction. Harvard University Press.

- Carvalho, P., Descalço, L., & Gonçalves, H. F. (2023). Attention span in Calculus classes and yoga breaks. In *EDULEARN23 Proceedings*. 2049-2055. IATED. https://doi.org/10.21125/edulearn.2023.0619
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. 3rd ed. SAGE Publications.
- Deng, X., Li, Y., Zhang, Y., Ou, J., & Luo, H. (2023). Trending or Obsolete? A Systematic Review of Facebook-Supported Learning in Higher Education from 2013 to 2022. In 2023 International Symposium on Educational Technology (ISET) (pp. 49-53). IEEE. https://doi.org/10.1109/ISET58841.2023.00018
- Draganić, K., Marić, M., & Lukač, D. (2021). An application of TikTok in higher education. In *E-business technologies conference proceedings* 1(1) 114-11. https://ebt.rs/journals/index.php/conf-proc/article/view/75
- Duong Hoai Lan, Tran Minh Tung, Vo Thi Kim Oanh, & Tran Thi Kim Cuc. (2024). Exploring Gen Z'S consumption and perception of educational content on Tiktok platform: A qualitative study in Vietnam context. *Kurdish Studies*, 12(1), 3243–3270. https://kurdishstudies.net/menuscript/index.php/KS/article/view/1614
- Fiallos, A., Fiallos, C., & Figueroa, S. (2021). Tiktok and education: Discovering knowledge through learning videos. In *Eighth International Conference on EDemocracy & EGovernment (ICEDEG)*. 172-176. IEEE. https://doi.org/10.1109/ICEDEG52154.2021.9530988
- Franciska, D., Soleh, D. R., & Nurhidayati, N. (2023). Using video in the Tiktok application to improve persuasive text writing skills. *Edukasi*, *17*(1), 131-139. https://doi.org/10.15294/edukasi.v17i1.44013
- Hendriarto, P., Mursidi, A., Kalbuana, N., Aini, N., & Aslan, A. (2021). Understanding the implications of research skills development framework for Indonesian academic outcomes improvement. Jurnal Iqra': Kajian Ilmu Pendidikan, 6(2), 51-60. https://doi.org/10.25217/ji.v6i2.1405
- Ibrahim, N. H., Shafie, S. A., & Rahim, I. N. A. (2023). The use of TikTok in learning English as a Second Language. *Asian Journal of Research in Education and Social Sciences*, *5*(2), 355-365. https://doi.org/10.55057/ajress.2023.5.2.35
- Iqbal, M. (2021). TikTok revenue and usage statistics (2021). *Business of Apps, 1*(1) 1-12. https://uploads3.craft.co/uploads/craft/source/document/18740/c7033e6ae7754f5e.pdf
- Jacobs, Aimee; Pan, Yu-Chun; and Ho, Yen-Chen. (2022) More than just engaging? TikTok as an effective learning tool. *UK Academy for Information Systems Conference Proceedings*. https://aisel.aisnet.org/ukais2022/3ne
- Kearsley, G., & Shneiderman, B. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational technology*, *38*(5), 20-23. http://www.jstor.org/stable/44428478
- Khamrayeva, U. F. (2024). Mechanisms for developing linguistic competency in future teachers. *Mental Enlightenment Scientific-Methodological Journal*, 5(03), 237-244. https://doi.org/10.37547/mesmj-V5-I3-33
- Lacka, E., Wong, T. C., & Haddoud, M. Y. (2021). Can digital technologies improve students' efficiency? Exploring the role of virtual learning environment and social media use in higher education. *Computers & Education*, 163. https://doi.org/10.1016/j.compedu.2020.104099

- Lah, N. H. C., Eriansah, J. R., Mustafa, W. A., Hanafi, H. F., Ghani, M. M., Al-Jawahry, H. M., (2023). The usefulness and students' perception of TikTok application as a learning tool in higher education. *2023 3rd International Conference on Mobile Networks and Wireless Communications (ICMNWC)*, 1-8. https://doi.org/10.1109/ICMNWC60182.2023.10435929
- Mayer, R. E. (2001). Multimedia learning. Cambridge University Press.
- Millis, B. (Ed.). (2023). Cooperative learning in higher education: Across the disciplines, across the academy. Taylor & Francis.
- Noori, A. Q., Orfan, S. N., Akramy, S. A., & Hashemi, A. (2022). The use of social media in EFL learning and teaching in higher education in Afghanistan. *Cogent Social Sciences*, 8(1), 2027613. https://doi.org/10.1080/23311886.2022.2027613
- Novak, J. D. (2010). Learning, creating, and using knowledge: Concept maps as facilitative tools in schools and corporations. Routledge.
- Nurhidayat, E., Mujiyanto, J., Yuliasri, I., & Hartono, R. (2024). Technology integration and teachers' competency in the development of 21st-century learning in EFL classroom. *Journal of Education and Learning (EduLearn)*, 18(2), 342-349. https://doi.org/10.11591/edulearn.v18i2.21069
- Perez, E., Manca, S., Fernández-Pascual, R., & Mc Guckin, C. (2023). A systematic review of social media as a teaching and learning tool in higher education: A theoretical grounding perspective. *Education and Information Technologies*, 28(9), 11921-11950. https://doi.org/10.1007/s10639-023-11647-2
- Rahmawati, A., Syafei, M., & Prasetiyanto, M. A. (2023). Improving speaking skills through TikTok application: an endeavor of utilizing social media in higher education. *Journal of Languages and Language Teaching*, 11(1), 137-143. https://doi.org/10.33394/jollt.v11i1.6633
- Roza, G. S., Islamiah, F., Sa'diyah, H. N., & Lestari, M. (2023). Analysis of students understanding of TikTok applications. *International Journal of Education and Teaching Zone*, *2*(1), 95-104. https://doi.org/10.57092/ijetz.v2i1.110
- Sajonia, K. I. (2024). # EduWOW: TikTok App as an educational creative platform. *Educational Administration: Theory and Practice, 30*(4), 8134-8142. https://doi.org/10.53555/kuey.v30i4.2330
- SevaraBaxodirovna, I., Sharipjanovna, R., & BarnoAliyevna, T. (2021). Development of lexical competence in students of higher educational institutions. *International Journal of Aquatic Science*, *12*(3), 2938-2943. https://www.journal-aquaticscience.com/article\_138678.html
- Shoufan, A., & Mohamed, F. (2022). YouTube and education: A scoping review. IEEE Access, 10, 125576-125599. https://doi.org/10.1109/ACCESS.2022.3225419
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285. https://doi.org/10.1207/s15516709cog120
- Syaiba, R. (2024). Social media for learning English: Investigating EFL students' challenges in creating speaking contents on TikTok (Doctoral dissertation, UIN Ar-Raniry Banda Aceh). https://repository.ar-raniry.ac.id/id/eprint/34711
- Syakur, A., & Azis, R. (2020). Developing reading learning model to increase reading skill for animal husbandry students in higher education. *Britain International of Linguistics Arts and Education (BIoLAE) Journal*, *2*(1), 484-493. https://doi.org/10.33258/biolae.v2i1.220

- Tanjung, L. A., Mardianto, M., & Halimah, S. (2023). Development of Islamic Religious Education (PAI) Learning Media Based on TikTok to improve students' critical thinking skills. *EDUTEC: Journal of Education and Technology*, 7(2), 625-633. https://doi.org/10.29062/edu.v7i2.693
- Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, 8, 1454. https://doi.org/10.3389/fpsyg.2017.01454
- Vázquez-Villegas, P., Mejía-Manzano, L. A., Sánchez-Rangel, J. C., & Membrillo-Hernández, J. (2023). Scientific method's application contexts for the development and evaluation of research skills in Higher-Education Learners. *Education Sciences*, 13(1), 62. https://doi.org/10.3390/educsci13010062
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, S., Sun, Z., Li, M., Zhang, H., & Metwally, A. H. S. (2024). Leveraging TikTok for active learning in management education: An extended technology acceptance model approach. *The International Journal of Management Education*, 22(3). https://doi.org/10.1016/j.ijme.2024.101009
- White, H., & Sabarwal, S. (2014). *Quasi-experimental design and methods*. UNICEF Office of Research. https://www.betterevaluation.org/sites/default/files/Quasi-Experimental\_Design\_and\_Methods\_ENG.pdf
- Yélamos-Guerra, M. S., García-Gámez, M., & Moreno-Ortiz, A. J. (2022). The use of Tik Tok in higher education as a motivating source for students. *Porta Linguarum Revista Interuniversitaria De Didáctica De Las Lenguas Extranjeras*, (38), 83–98. https://doi.org/10.30827/portalin.vi38.21684
- Yılmazsoy, B., Kahraman, M., & Köse, U. (2020). Negative aspects of using social networks in education: A brief review on WhatsApp example. *Journal of Educational Technology and Online Learning*, 3(1), 69-90. https://doi.org/10.31681/jetol.662746
- Zannettou, S., Nemes-Nemeth, O., Ayalon, O., Goetzen, A., Gummadi, K. P., Redmiles, E. M., & Roesner, F. (2024). Analyzing user engagement with TikTok's short format video recommendations using data donations. In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1-16). https://doi.org/10.48550/arXiv.2301.04945

#### About the Contributor(s)

**Carmen Benitez,** has a Ph.D. in English Philology at the Universidad Nacional de Educación a Distancia (UNED) de Madrid, Spain. She holds a degree in Educational Sciences: Educational Planning and Research from Universidad Tecnica Particular de Loja (UTPL). She also has a degree in English Teaching English. She is a Professor at Universidad Tecnica Particular de Loja (UTPL), Ecuador for about 23 years. She coordinates the EFL Tech research group at UTPL and she has been co-author of some important indexed articles.

E-mail: cdbenitez@ytpl.edu.ec

ORCID: https://orcid.org/0000-0001-9745-4938

Paul Gonzalez-Torres is a Ph.D. in Language Acquisition at the Basque Country University, Spain. Master of Science in Teaching English as a Foreign Language at Nova Southeastern University of Florida U.S.A. Master of Teaching English as a Foreign Language at UTPL. He is currently a professor at Universidad Técnica Particular de Loja (UTPL), Ecuador in the English as a Foreign Language Program. He is a member of the Research Group "EFL Learning, Teaching and Technology" at UTPL

and has participated as a presenter at national and international academic events. Prof. Gonzalez-Torres is also the co-author of several articles published in indexed journals.

Email: pfgonzalez@utpl.edu.ec

ORCID: https://orcid.org/0000-0003-1964-2671

**Publisher's Note:** The opinions, statements, and data presented in all publications are solely those of the individual author(s) and contributors and do not reflect the views of Universitepark, EDUPIJ, and/or the editor(s). Universitepark, the Journal, and/or the editor(s) accept no responsibility for any harm or damage to persons or property arising from the use of ideas, methods, instructions, or products mentioned in the content.