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The Use of Video-mediated Communication (VMC) Tools for English Language Speaking Practice: A Systematic Review

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Abstract

With the increasing integration of technology in foreign language instruction, video-mediated communication (VMC) has gained prominence as a means of delivering online education and improving speaking skills. This study systematically reviews research articles concentrating on the use of VMC in English language speaking practice. Based on predetermined inclusion criteria, thirty articles were included from three electronic databases. The selected articles published in the last ten years were analyzed, focusing on their publication trends, identifying commonly used VMC modes and tools, as well as their technical affordances and limitations. By qualitatively synthesizing the main implications of existing research, this systematic review also provides insights into the role of synchronous or asynchronous VMC tools in improving the speaking proficiency of English language learners. The findings revealed that the integration of VMC tools in-class activities or beyond classroom tasks is beneficial for foreign or second language speaking practice.

Keywords: English language teaching, speaking practice, video-mediated communication (VMC)

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Introduction

The integration of technology in foreign language instruction has evolved significantly, transitioning from a desirable alternative to an essential pedagogical practice (Wang & Devitt, 2022). In particular, the use of technology in foreign language classrooms has immense advantages, providing learners with invaluable opportunities for practice and skill development. A particularly promising component of technology lies in its convenience for improving foreign language speaking skills and facilitating social interaction (e.g., Chen et al., 2023; Sevy-Biloon & Chroman, 2019). In this regard, Vygotsky's sociocultural theory becomes particularly relevant to the technology-mediated instruction with its emphasis on social interaction and mediation (Vygotsky, 1986). Mirroring Vygotsky's belief in the pivotal role of social interaction in learning, the incorporation of technology in foreign language teaching is crucial for learners to advance their oral communication skills and proficiency (Alahmadi & Alraddadi, 2020; Brown, 2000; Rusk & Pörn, 2019; Van Compernolle, 2015). As highlighted by Vygotsky's theory, foreign language learners progress better when they practice the language in meaningful contexts. Therefore, language learners should engage in tasks which involve authentic language use. Video-mediated communication (henceforth VMC) tools enable learners to utter and exchange spoken language in authentic, collaborative, and contextually meaningful tasks and receive immediate feedback, and these features promote negotiation of meaning, interaction and learning within their ZPD (Hampel & Stickler, 2012; Jauregi & Bañados, 2008; Kato et al., 2016; Lenkaitis, 2019).

Mediated communication refers to an interaction between interlocutors who are not in the same physical environment (Croes et al., 2018). Video-mediated communication (VMC), as an advanced form of CMC (computer-mediated communication) encompassing various communication modes facilitated through networked computers (Lee & Oh, 2015), is an indispensable part of language learning and instruction. VMC facilitates communication between individuals or groups, enabling real-time (synchronous) or delayed (asynchronous) interactions through visual and auditory channels. VMC allows users to interact with people through a combination of voice, video, and text (Manstead et al., 2011). It can be in the form of video conferencing, video chats, video calls or the exchange of recorded video messages. With the rise of multimedia resources and the extensive use of the Internet, VMC has gained prominence, enabling collaborative learning and remote interactions among learners and researchers (Wang & Devitt, 2022). The VMC tools, well-equipped with numerous ingredients for interactive learning, enable students and teachers to effortlessly connect and engage in collaborative activities, irrespective of their physical locations.

The use of video-based technologies, such as synchronous communication platforms and asynchronous channels, has witnessed an upsurge in educational contexts. Various studies exploring the role of VMC in foreign language learning and teaching have showcased its efficacy in improving speaking practices for learners in diverse contexts (e.g., Ahmad & Lidadun, 2017; Hung & Higgins, 2016; Mekheimer, 2011; Toleuzhan et al., 2023; Yousefi, 2014). For example, Yousefi (2014) demonstrated how video-based networks facilitated speaking practices, while Hung and Higgins (2016) highlighted the advantages of video-based synchronous computer-mediated communication (SCMC) in enhancing fluency and pronunciation over text-based communication. This growing body of research underscores the significance of VMC in language instruction. A comprehensive review of existing studies in this field provides valuable insights into the role of VMC in English speaking practice and the prevalent tools used for online video-based interaction.

Present Study

Among the four major language learning skills (listening, reading, writing, and speaking), speaking is widely regarded as the most challenging (Leong & Ahmadi, 2017). Language learners commonly acknowledge the difficulties they face in developing productive skills, particularly in improving oral communication competence. Even after progressing beyond the initial stages of language learning and achieving proficiency in English, learners are still struggling to improve their speaking skills (Paneerselvam & Mohamad, 2019). Recognizing that learners often feel reluctant to speak in a traditional classroom environment, it is crucial for language teachers to establish a positive and interactive atmosphere (Mango, 2019). Thus, educators need to explore new approaches and tools that foster communication and help students improve their speaking abilities (Edwards & Lane, 2021).

Technology-enabled oral tasks offer a "safer, lower-stakes environment" where students can practice speaking without pressure from peers and teachers (Shanks, 2021). In this sense, video assignments, whether synchronous or asynchronous, offer pedagogically meaningful opportunities to enhance language learning. Incorporating videos is an effective way for EFL learners to develop speaking skills, as it supports the improvement of fluency, pronunciation, and self-confidence in a flexible and encouraging environment (Nguyen, 2024). Furthermore, video-based tasks enable students to participate in real-time online discussions or share recordings on asynchronous platforms, extending their oral practice beyond the boundaries of the traditional classroom. Consequently, this systematic review focuses on studies that use video-mediated communication within English teaching contexts to improve oral proficiency. It is expected to contribute valuable insights to the realm of English language instruction by highlighting the affordances that facilitate speaking practice, as well as identifying the potential technical limitations that may impede the integration of synchronous or asynchronous VMC for speaking practice. It also sheds light on the main implications derived from the previous research on VMC, offering guidance to language educators on how to effectively incorporate synchronous or asynchronous video-mediated speaking assignments into their language courses.

The changing landscape of education, especially in the post-pandemic era, has led to a shift from text-based interactions to multimodal environments (Huertas-Abril, 2021). In online courses, students require more interaction with their peers compared to traditional classrooms. Many language teachers, therefore, integrate technology into their classrooms and leverage video-based programs or software applications to achieve the oral interactional goals of language learning. However, the abundance of Web 2.0 tools and specialized software have made online speaking practice feasible and manageable through oral presentations or self-recording, highlighting their advantages. Keeping this in mind, this systematic review focuses on the utilization of digital online video platforms to enhance foreign language speaking skills.

Although several systematic literature reviews have explored computer-mediated communication in foreign language learning and teaching contexts, there is a limited number of reviews specifically focusing on VMC. Existing reviews include a research synthesis on the effectiveness of CMC (Lin, 2014, 2015), the role of synchronous CMC in interaction (Ziegler, 2016), synchronous CMC-based telecollaboration in foreign language learning (Akiyama & Cunningham, 2017), a bibliometric analysis of synchronous CMC in foreign language learning (Hou & Yu, 2023), and use of CMC in Chinese as a foreign language (Wang & Devitt, 2022). However, no systematic review has specifically examined the use of VMC in the field of foreign language teaching and learning. Driven by this gap, the objective of this systematic review is

to analyze research articles comprising the last ten years to review VMC in this particular context, shedding light on the benefits and problems of incorporating VMC into language instruction. By synthesizing information, an in-depth understanding for language instructors, educators and the success of peer collaboration in synchronous VMC aligns with Vygotsky's concept of learning through social mediation, particularly within learners' ZP looking for evidence-based methods to improve foreign speaking skills. Furthermore, this review would guide future investigations and contribute to the continued improvement of language teaching approaches in the digital age.

This systematic review explores the potential of VMC tools in enhancing the speaking performance of foreign or second language learners. The review focuses on studies that investigate students' experiences across various proficiency levels while engaging in speaking activities using VMC tools. The following research questions guide this study:

1. What are the publication trends of studies on the use of video-mediated communication in English language speaking practice between 2013 and 2023?
2. What types of VMC tools are commonly utilized in English language speaking practice?
3. What are the main implications of the use of VMC in English language speaking practice?

Method

Research Design

This study utilized a systematic review design, following a pre-established method or protocol for collecting, reviewing, and evaluating a body of literature (Dekkers et al., 2022). To ensure transparency and provide a clear presentation of the research process, the study adopted The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (the PRISMA) 2020 Statement (Page et al., 2021).

Search Strategy

For article selection, a comprehensive search was conducted in three databases: Web of Science (WOS), The Education Resources Information Center (ERIC), and SCOPUS. ERIC is the largest and most widely used education database (ProQuest, 2023), while Web of Science and SCOPUS are accepted as the most comprehensive bibliographic databases for various purposes in today's academic world (Zhu & Liu, 2020). To get better results, multiple databases were used, particularly for data source triangulation (Kuckertz & Block, 2021). The following search string was employed for the query in an attempt to retrieve relevant articles from the selected databases in May 2023:

> ("video-mediated" OR "video-assisted" OR "video-based" OR "video-enhanced" OR "video-aided" OR "videoconferencing" OR "synchronous video*" OR "asynchronous video*") AND ("communication" OR "interaction" OR "instruction" OR "discussion" OR "presentation") AND ("speaking" OR "speech" OR "oral" OR "verbal" OR "language")

A set of eligibility criteria was devised to determine which articles should be included or excluded from this systematic review. Developing explicit inclusion and exclusion criteria based on the scope of the systematic review and research questions helps researchers to eliminate hidden publication bias (EPPI-Centre, 2010). In this respect, the screening of articles was conducted depending on seven criteria listed in Table 1:

Table 1

Inclusion / Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• studies published in the last 10 years	• studies published before 2013
• articles published in English.	• articles published in other languages.
• peer-reviewed primary research articles (qualitative, quantitative or mixed-methods)	• secondary research (conference reports, dissertations, systematic reviews, etc.)
• English language teaching (ELT)	• teaching other foreign languages
• articles focusing on speaking practice in ELT (fluency, communication skills, pronunciation, etc.)	• other language skills (reading, writing, listening, grammar, vocabulary)
• video-mediated communication (either asynchronous or synchronous)	• non-video-based computer-mediated communication (audio, text-based, etc.)

This systematic review focuses on research between 2013 and 2023, capturing the most current developments, technological advancements, and methodologies in video-mediated communication (VMC) in language teaching context. Given the increasing popularity of online learning, this time frame is characterized by the substantial development and broad use of VMC tools in language instruction. Focusing on peer-reviewed primary research ensures the inclusion of high-quality studies that have undergone rigorous evaluation and validation by experts in the field. Restricting the review to the field of English Language Teaching ensures that the selected studies are directly relevant to language pedagogy and instructional strategies specific to teaching the English language. By specifically focusing on speaking skills, the review narrows its scope to a specific aspect of language learning and teaching.

Study Selection Process

The search string was used in all databases without modification to minimize bias and ensure comprehensiveness. Quick filters were applied to select open-access research articles from peer-reviewed journals. Table 2 lists the automated filters used in each database:

Table 2

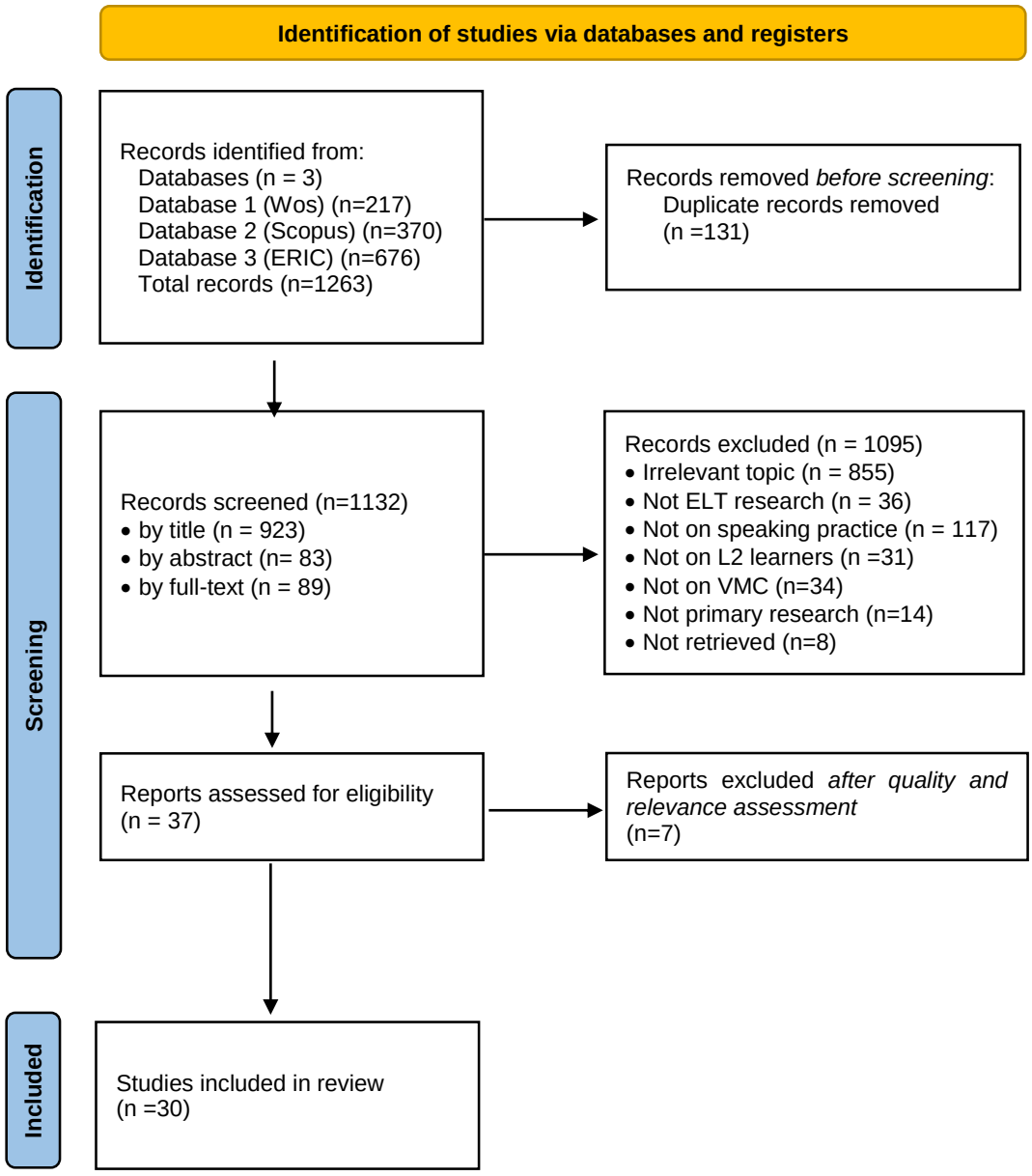
Automated Filters Used for the Initial Query

Database	Research Field	Other Filters
WOS	• Language & Linguistics • Education & Educational Research	• Publication Years • Document Types • Languages
SCOPUS	• Social Sciences • Computer Science	• Year • Document Type • Language
ERIC	• Second Language (English)	• Publication Date • Publication Type

After the initial search using automated filters, 1263 records were obtained from three databases, as seen in Figure 1. Duplicates were removed, resulting in 1132 articles for screening. Through the screening process of titles and abstracts, 1095 articles were excluded for reasons such as irrelevance, not focusing on speaking practice in English, not involving VMC, or not being primary research. Two researchers carefully examined the full texts of the remaining 126 articles, utilizing the web-based program Rayyan for blind review. Conflicts were resolved through collaboration and discussion. Ultimately, 37 articles were assessed on Rayyan for eligibility. After this final check, 30 articles that met the eligibility criteria were included in this systematic review.

Figure 1

Flow Diagram of Article Elimination Process



Data Analysis

Table 3 presents the analysis of three dimensions in light of the research questions: 1) publication trends, 2) VMC tools used for speaking practice, and 3) main implications. Content analysis was employed to examine the first two research questions, while an open coding process was utilized to dissect the articles based on the following sub-dimensions for the third research question.

Table 3

Data Analysis Framework

Dimensions	Sub-Dimensions
(RQ1) Publication trends	a)publication year b)context (country) c)focus of investigation (key attributes)
(RQ2) VMC tools	a)mode of VMC (synchronous vs. asynchronous) b)type of VMC tools c)technical affordances vs. limitations
(RQ3) Main Implications	a)positive vs. negative implications b)impacts on speaking practice

Trustworthiness

Three criteria were employed to ensure the trustworthiness of this qualitative systematic review as presented in Table 4:

Table 4

Criteria for Trustworthiness

Criterion	Strategy Employed
Credibility	• External review appraisal • Quality and relevance assessment • Inter-coder agreement (reliability)
Dependability	• Search and selection strategy (replicability)
Confirmability	• Providing evidence in the findings
Transferability	• Thick description of included research

In order to increase the credibility of this study, the whole review process was followed by an external researcher who is an expert in the study field. This 'external review appraisal' is considered a crucial aspect for improving the quality of the review (EPPI-Centre, 2010). Secondly, the quality and relevance of each included study were assessed using a checklist

adapted from Vissenberg et al. (2022), which is organized into two sections on methodological trustworthiness and relevance to the review. Two researchers independently evaluated their responses to reach a consensus for each criterion in the checklist (see Appendix A). An overall score of "low, medium, or high" was assigned based on the consensus (see Appendix B). Studies rated as “low” in relevance were excluded from the review.

For the reliability of the coding process, a subset of six studies representing 20% of the total included studies (n=30) was independently coded by two researchers. The coding results were then compared. The inter-coder agreement was assessed using the Kappa statistic, resulting in a Kappa value of .72. This high Kappa value indicates a reliable level of agreement between the two coders in their coding decisions.

In addition to the credibility, the dependability criterion was met by thoroughly documenting and disclosing all the steps regarding the search strategy and data selection procedures, enhancing the potential of replicability of this systematic review. Lastly, the confirmability criterion was fulfilled by providing evidence of the included articles in the findings section.

Findings

The findings reached in the research should be explained with tables, figures, graphics or pictures in a way that supports the purpose of the study and research questions and preserves the integrity of the research. While presenting the findings, the order of the research questions should be followed and comments should be made in the discussion section.

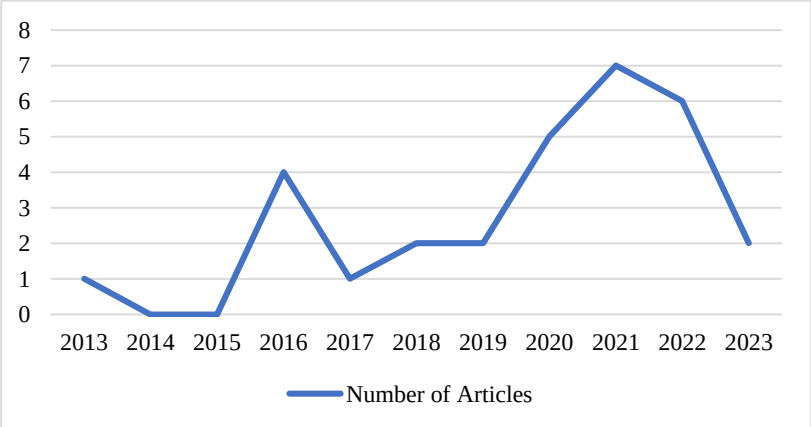
Publication Trends

The Distribution of Studies by Publication Year

This study reviews 30 articles published between 2013 and 2023. Two-thirds of the articles were published after 2020, indicating a noticeable increase in research using VMC in speaking practice, which was likely influenced by the outbreak of COVID-19 and the widespread shift to online education. Figure 2 illustrates the distribution of articles by publication year:

Figure 2

Distribution by Year

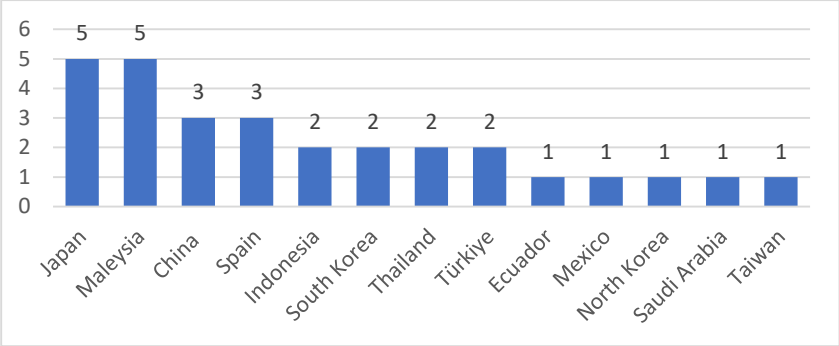


The Distribution of Studies by Context

The studies were conducted in 14 different contexts. As shown in Figure 3, most of the articles were conducted mainly in far eastern countries. The studies carried out in Japanese and Malaysian contexts have the highest frequency (n=10 in total), followed by those in China (n=3) and Spain (n=3). Six studies were conducted in multiple contexts to employ video-mediated interaction with the participants living abroad. The technological advancement in East Asia could be one reason for the greater integration of technology into foreign education, which may explain why Japan, Malaysia, and China rank among the top three countries.

Figure 3

Distribution by Context

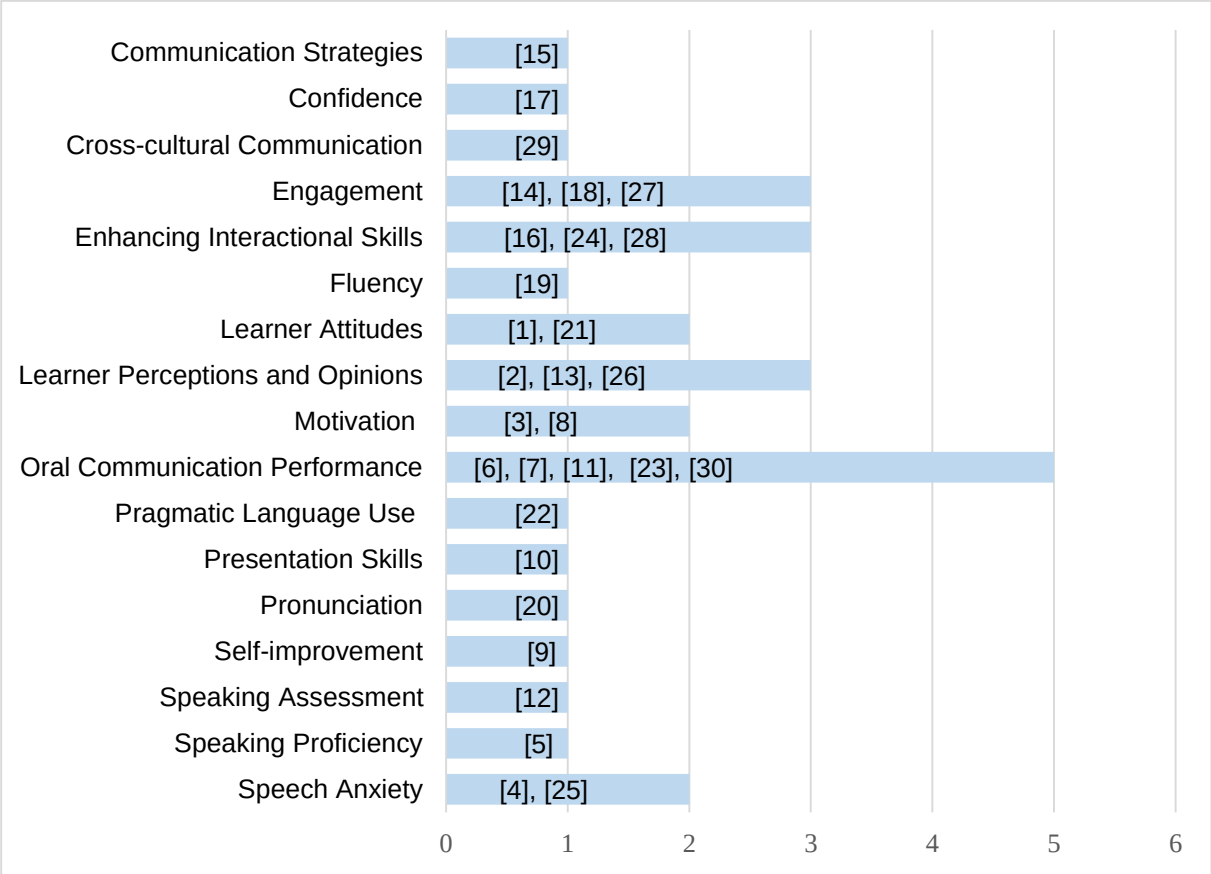


The Distribution of Articles by Foci of Investigation

There are 17 different key attributes regarding the research interest of selected studies. The articles analyzing learners' performance in oral communication by mediating asynchronous or synchronous video-based tools receive the highest attention among others (n=5). The articles focusing on learners' perceptions, engagement, and interactional skills are in the second rank in terms of foci of investigation (n=3), followed by affective filters influencing speaking performance such as learner attitudes, anxiety and motivation (n=2). Figure 4 lists all the key attributes in selected articles in alphabetical order:

Figure 4

Distribution by Research Focus



Note: The numbers displayed within the bars refer to the article numbers in Appendix C.

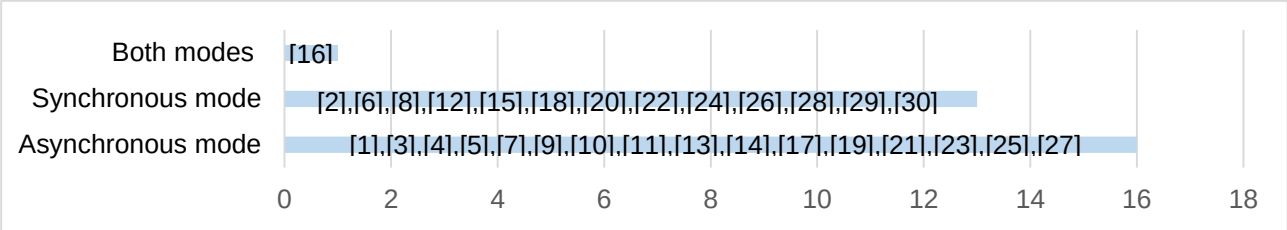
Video-Mediated Communication

The Distribution of Studies by VMC Modes and Tools

Two main video-mediated communication modes, synchronous and asynchronous, are commonly employed in foreign language teaching and learning. Synchronous communication occurs in real-time, either in-person or through online videoconferencing or telecollaboration tools (Lim, 2017). In contrast, asynchronous communication allows for non-live interaction, enabling communication at different times. Language teachers show a strong preference for both synchronous and asynchronous VMC modes to facilitate oral skills practice. Figure 5 depicts the frequently utilized VMC modes in the selected articles. Asynchronous VMC is most common in 30 studies (n=16), while synchronous VMC is used in 13 studies. One study combines both modes.

Figure 5

Distribution by VMC mode

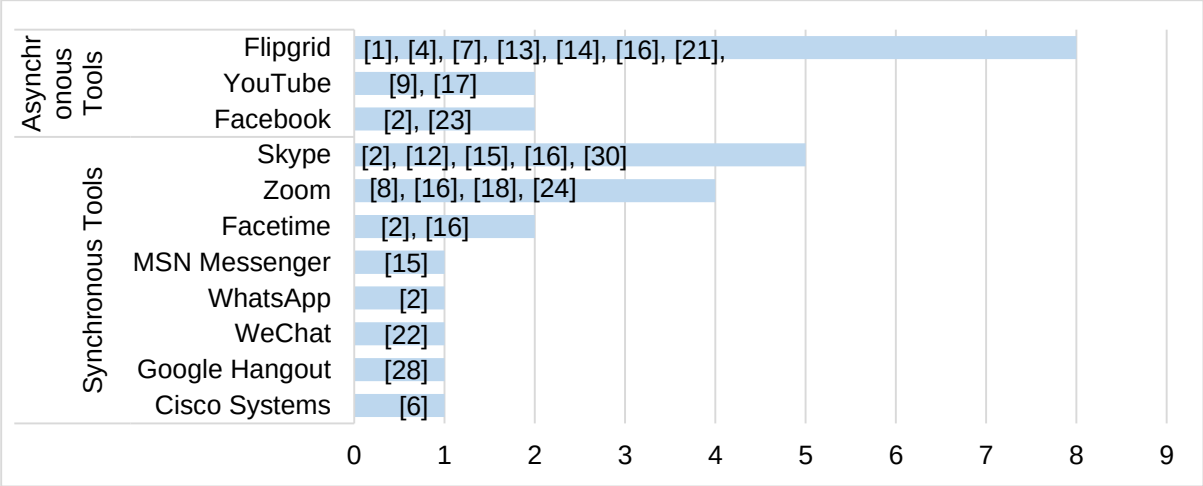


Note: The numbers displayed within the bars refer to the article numbers in Appendix C.

The analysis demonstrated that various online video tools, digital platforms, and social networking sites are used in asynchronous and synchronous modes of communication. Figure 6 lists the commonly preferred tools for each mode. According to findings, Flipgrid is the most frequent platform for conducting asynchronous VMC. In addition, in some studies, students were found to share their videos on YouTube or Facebook asynchronously. On the other hand, Skype and Zoom were highly preferred for synchronous communication platforms, while FaceTime supported mobile-assisted synchronous interaction among language learners. Other tools like WhatsApp and WeChat were also utilized in some studies on synchronous video conferencing.

Figure 6

Distribution of VMC Tools



Note: The numbers displayed within the bars refer to the article numbers in Appendix C.

Limitations and Affordances of VMC Modes and Tools

Several categories emerged regarding the affordances and limitations of both synchronous and asynchronous VMC tools, including tool-specific functions. Table 5 provides an overview of the limitations and affordances associated with synchronous VMC.

Table 5
Limitations and Affordances of Synchronous VMC

	Categories	Codes	Evidence
Limitations	Student responsibility problems	● assignment completion	[2]
		● time management	[2], [26]
	Technical issues	● Internet connection	[2], [6], [8], [12], [18], [24], [26], [29]
		● dropped video call	[12]
	Contextual problems	● distracting environment	[8]
		● time difference	[2]
Affordances	Technical affordances	● instant technical support	[6]
		● multimodality	[8], [15], [20], [28], [30]
		● visual clarity	[12]
	Opportunities for users	● user-friendly	[6], [12]
		● free of charge	[15], [22], [28]
		● independent from setting	[18]
		● swift transitions	[8], [15]
	Embedded features	● screen sharing	[20], [28]
		● recording option	[6], [12], [24]
		● written chat box	[8], [28], [30]
		● countdown timer	[12]
		● breakout room	[8], [12]
		● dual screen monitor	[12]

Table 5 presents the technical limitations and affordances of synchronous VMC based on the employed tools. Technical affordances of synchronous VMC were found to be more abundant than their limitations. The limitations fall into three categories: student responsibility problems, technical issues, and contextual challenges. The Internet connection failure was the most frequently encountered technical issue. Student responsibility issues such as time management and lack of speaking partners, were highlighted in a few studies. Besides, contextual problems, including distractions and time differences between countries, are mentioned in two studies.

Technical affordances of synchronous VMC can be grouped into three categories: technical aspects, user opportunities, and embedded features. Multimodality enables access to various online resources and media, including visual sources and emojis. Visual clarity and instant technical support are also provided by certain platforms. Synchronous VMC tools have various opportunities for users, such as being user-friendly and free of charge.

Moreover, some studies highlight the embedded features of synchronous VMC tools. The recording option is commonly mentioned as a significant feature. Platforms like Zoom and Skype offer breakout room functionality for pair or group work activities, which is considered a

valuable pedagogical affordance of synchronous communication. The chat box feature, available in most VMC tools, is mentioned in three studies, allowing learners to use it to a limited extent during interactive sessions. Additionally, screen sharing is highlighted as an affordance in two studies. Other features, such as a countdown timer and dual-screen monitor, are cited in one study.

Regarding asynchronous VMC, the included studies discuss various technical limitations and affordances as shown in Table 6.

Table 6

Limitations and Affordances of Asynchronous VMC

	Categories	Codes	Evidence
Limitations	Student-based concerns	● time consuming	[1], [11], [13]
		● privacy	[10], [13]
	Technical problems	● video-uploading	[1], [11], [13], [27]
		● Internet connection	[4], [21], [27]
		● limited storage capacity	[10]
Affordances	Technical issues	● requires no specialized equipment	[3]
		● multimodality	[7], [13], [23], [27]
	Opportunities for users	● user-friendly	[4], [7], [10], [13], [14], [21], [23], [25], [27]
		● easy to access	[1], [3], [13], [14], [17], [27]
		● free of charge	[3], [7], [14], [17], [27]
		● feedback opportunity	[1], [4], [5], [9], [10], [14], [19], [21], [23], [25], [27]
		● public audience	[9], [23], [25]
	Embedded features	● subtitle option	[4], [13]
		● viewing (re-watching)	[1], [7], [10], [11], [13], [14], [19], [23], [25], [27]
		● sharing comments	[13], [14], [19], [27]

In terms of limitations of the asynchronous VMC tool, two categories emerged: student-based concerns and technical problems. Privacy issues were raised in two studies, and learners found asynchronous VMC time-consuming due to tasks like video recording or editing. Technical problems include video-uploading issues, Internet connection problems, and limited storage capacity. Internet connection problems are a prominent issue shared between asynchronous and synchronous VMC. Video-uploading problems and limited storage capacity are mentioned in a few studies.

Concerning technical affordances of asynchronous VMC, three categories emerged: technical aspects, user opportunities, and embedded features. Similar to synchronous VMC, multimodality is a prevalent theme in the technical aspects, with three occurrences. Asynchronous VMC tools are often described as user-friendly in nine studies, and access to

these tools is considered easy in six studies. Feedback opportunities, highlighted in eleven studies, are a significant aspect of asynchronous VMC platforms. The cost-effectiveness of these tools, being free of charge, is noted in five studies. Three studies mention the ability to showcase learner video productions to a public or authentic audience. Viewing and re-watching videos emerged as a notable embedded feature, emphasized in multiple studies. Sharing comments, including replies to peer videos, is considered valuable. Additionally, Flipgrid's subtitle option, aiding in checking pronunciation errors, is mentioned in two studies.

Main Implications of VMC Use in Speaking Practice

For the third research question, implications from the findings of the studies were coded separately for the two VMC modes. All of the categories derived from the coding process are directly related to speaking practice or the development of communicative competence in English through VMC tools.

Asynchronous VMC

Table 7 presents the positive and negative implications identified in the selected studies for asynchronous VMC. The positive impacts of asynchronous VMC on speaking skills were found to include increased motivation, self-confidence, comfort, enjoyment, self-autonomy, and reduced anxiety compared to face-to-face interaction. The second category focused on students' willingness to participate in asynchronous speaking tasks, where students felt engaged and eager to actively participate. Sharing videos on a public platform provided a sense of achievement for students. The third category highlighted the speaking practice opportunities facilitated by asynchronous video tools, including speaking with peers outside the classroom, practicing self-talk, and rehearsing before presentations or public speaking. Students found value in watching friends' videos for peer learning and performance comparison. Feedback from teachers and peers through comments on shared videos was also mentioned. Asynchronous VMC was believed to be beneficial for improving fluency, pronunciation, vocabulary, presentation skills, and clear expression of ideas. Furthermore, asynchronous platforms allowed students to monitor their progress and identify mistakes by re-watching themselves.

Table 7
Implications of Asynchronous VMC

	Categories	Codes	Evidence
Positive Implications	Emotions	● increased motivation	[3], [9], [21], [23]
		● less anxiety	[1], [4], [10], [11], [17], [19], [21], [25], [27]
		● self-autonomy	[1], [3], [7], [10], [14], [21]
		● gaining self-confidence	[1], [3], [4], [11], [14], [17], [21]
		● feeling enjoyment	[1], [3], [9], [13], [21]
		● feeling comfortable	[1], [4], [13], [19], [27]
	Participation in Speaking Tasks	● willingness to share videos	[9], [14]
		● student engagement	[1], [9], [11]
	Practice Opportunity	● opportunity for rehearsal	[1], [4], [9], [14], [17], [21], [27]
		● practice beyond the classroom	[7], [11], [17], [21], [23], [27]
		● peer interaction	[1], [13], [14]
	Feedback	● teacher feedback	[1]
		● peer feedback	[1], [4], [14], [19], [27]
		● learning from peers	[4], [7], [10], [13], [14], [19], [21], [23]
	Speaking Improvement	● fluency	[1], [4], [5], [9], [11]
		● pronunciation	[1], [3], [4], [5], [25]
		● new vocabulary	[11], [19], [21]
		● self-monitoring own progress	[1], [4], [10], [11], [14], [23]
		● better presentation skills	[4], [10]
		● better expression of ideas	[11]
Negative Implications	Affective filters	● embarrassment from being recorded	[10], [13], [19]
		● fear of negative judgement	[1], [10], [13]
		● fear of making a mistake	[1]
	Practice Experience	● inauthentic	[4], [9], [11], [13]
		● miscommunication	[19]
		● need for digital skills	[9]
		● time consuming	[1], [13]

The negative implications of asynchronous VMC, although fewer in number, can be classified into two categories: affective filters impacting speaking performance and negative experiences. Students may feel embarrassed or afraid of making mistakes when being recorded and receiving unfavorable judgments from peers. Asynchronous speaking is not perceived as natural by some students, as they dislike acting and talking on cameras, thereby leading to potential miscommunication issues. Additionally, uploading videos may require certain digital skills and time investment.

Synchronous VMC

Table 8 presents the significant implications of synchronous VMC. Under the theme of positive implications, five categories emerged: emotions, participation in speaking tasks, practice opportunities, receiving feedback, and improvement in speaking skills. Synchronous communication was found to reduce speech anxiety, enhance students' self-confidence, and increase motivation. It also promotes self-autonomous learning as students can control their speech pace and topic management. Synchronous VMC tools foster student engagement, willingness to communicate, and collaboration among speech partners. Students have the chance to interact with native speakers or peers outside the classroom, receiving immediate feedback that enhances fluency and pronunciation, thereby improving their speaking performance.

Table 8
Implications of Synchronous VMC

	Categories	Codes	Evidence
Positive Implications	Positive Emotions	● increased motivation	[2], [8], [18]
		● low anxiety	[6], [12], [18], [26]
		● self-autonomy	[8], [20], [29]
		● gaining self-confidence	[2], [6], [8], [20]
	Participation in Speaking Tasks	● willingness to communicate	[2], [6], [8], [18]
		● student engagement	[12], [16], [18], [20], [22]
		• peer collaboration	[20], [30]
	Practice Opportunity	● interaction with native speakers	[2], [28], [29]
		● peer interaction beyond the classroom	[2], [8], [20], [24], [26]
	Feedback	● teacher feedback	[8], [20]
		● peer feedback	[8]
		● immediate feedback from native speakers	[6]
	Speaking Improvement	● fluency	[6], [15], [22]
		● pronunciation	[6], [15]
		● self-monitoring progress	[6]
Negative Implications	Affective Filters	● nervousness towards talking with strangers	[12], [15], [18]
		● low span of attention	[20]
	Practice Experience	● inauthentic	[18]
		● lack of eye contact	[12], [18]
		● lack of real essence of face-to-face interaction	[8], [12]
		● difficult to talk without preparation	[6]
		● lack of control by the teacher	[2], [20], [30]

In contrast, two categories emerged for negative implications: affective filters and bad practice experiences. Some studies highlighted that speaking tasks pairing students with

native speakers or strangers could cause nervousness, while they felt more at ease when paired with familiar peers for synchronous conversations. Additionally, compared to face-to-face interactions, online speaking practice may lead to decreased attention span due to distracting factors in the online environment. Despite being synchronous, VMC platforms may not provide an authentic experience for some learners as they lack the sense of real communication and direct eye contact present in face-to-face interactions. Furthermore, maintaining synchronous speech can be challenging due to a lack of teacher control over students and the need for impromptu speech without preparation, as noted in some studies.

Discussion

This systematic review analyzes 30 articles on video-mediated communication (VMC) in various EFL contexts. The general trends of included studies revealed that there has been a remarkable increase in the number of articles concentrating on VMC published in 2020 and onwards. Notably, this increase can be attributed to the COVID-19 pandemic, which compelled educational institutions to rapidly shift towards e-learning platforms (Ying et al., 2021). Besides, the current technological advancements, especially the development of available multimedia and the Internet in the twenty-first century, have supported the integration of computer-assisted language learning (Wang & Devitt, 2022). Correspondingly, CMC implemented through synchronous or asynchronous videos has become widespread in language instruction contexts, and this issue has begun to gain popularity among researchers worldwide in recent years (Edwards & Lane, 2021; Vázquez, 2022; Yu, 2022), especially in far eastern countries (Qiu & Bui, 2022; Ro, 2023; Zhang, 2022). As research topics related to the use of VMC in foreign language teaching, many subjects dealing with learners' overall oral communication performance, engagement in practice through videos, and learner perceptions have attracted the most attention.

The analysis of the second research question indicated that the number of studies employing synchronous or asynchronous VMC modes were distributed in a roughly balanced manner. Considering the VMC modes employed in the included studies, it is not possible to argue the numerical superiority or preferability of one mode over the other. According to findings, the most commonly used VMC tools were video conferencing platforms like Skype Zoom and Flipgrid. Concerning the synchronous mode of VMC, Skype and Zoom were identified as the most preferred synchronous video conferencing tools in this systematic review. The extensive use of Skype compared to other synchronous VMC tools might be attributed to its overall usability in terms of its efficiency, accessibility, and universality (Correia et al., 2020). Correia et al. (2020) found that Skype had the highest usability scores among other synchronous VMC tools, including Zoom, Microsoft Teams, and WhatsApp. Among asynchronous VMC tools, Flipgrid is the most preferred platform in English-speaking classes for its ability to foster learners' creative language use during online discussions or presentations (Bauler, 2021). Microsoft (2018) acquired Flipgrid, making it accessible to students and educators worldwide. This free video discussion application is safe and easy to access for students of all ages, skills, and backgrounds, providing opportunities to discover new ideas, engage with others, get inspired, and contribute to meaningful discussions (Flipgrid, 2023). In educational contexts, Flipgrid-like tools serve as a video platform where students can express their voices. McLain (2018) describes it as a combination of a social media platform and a video capture tool, creating a manageable space for users. One of its recent pedagogical affordances is the subtitle option in which user responses are automatically transcribed into

English through automatic speech recognition, helping learners check their pronunciation errors. Although Flipgrid itself is no longer available, similar tools like VoiceThread continue to offer these pedagogical affordances and remain useful for developing speaking skills in online or blended environments

This systematic review also demonstrates that both asynchronous and synchronous VMC tools have various limitations and affordances. As a technical limitation, the Internet connection problems are commonly shared by both communication mediums (e.g., Kim & Kweon, 2022; Sevy-Biloon & Chroman, 2019; Shin & Yunus, 2021). This finding must specifically be considered by the authorities or instructors to see up close the challenges encountered by students who have utilized video conferencing tools in e-learning processes. Besides, the studies examined in this study also emphasized the concern of learners about privacy issues while uploading their videos on VMC platforms (e.g., Edwards & Lane, 2021; Toland et al., 2016). Therefore, it is highly important that privacy settings should be controlled by educators in order not to inhibit participation. Moreover, speaking activities on asynchronous platforms are also suggested to be time-consuming due to the video uploading process (e.g., Edwards & Lane, 2021; Hanh & Huong, 2021). Thus, students need to be allocated sufficient time to complete the speaking exercises.

Regarding the affordances of VMC tools, it is interesting to note that different types of feedback opportunities such as teacher and peer feedback can be enabled by asynchronous VMC tools (e.g., Bayraktar-Çepni et al., 2022; Hanh & Huong, 2021). The feedback feature should be taken into consideration while using any VMC tool since it has been perceived to be efficient for L2 learners' English learning, and feedback on their speaking performance has been valued by learners (Hanh & Huong, 2021). In addition, as one of the prevalent affordances in both modes, the multimodality of videoconferencing tools fosters dynamic meaning-making processes by enabling users to convey meanings through various representational forms, including linguistic, visual, and gesture features, and this feature meets the fundamental function of communication (Yu, 2022).

The focus of the third research question revolved around the main implications derived from the studies investigating the use of VMC to improve speaking skills. The findings showed that the positive implications of VMC outweigh the negative outcomes. This can be attributed to the advantages offered by both modalities more than their disadvantages as mentioned above. For instance, asynchronous VMC offers flexibility, engagement, learner autonomy, and self-paced learning, while synchronous mode provides immediate feedback, willingness to communicate, authentic conversation experience, and spontaneous interaction with peers or native speakers. Online synchronous video computer-mediated communication systems such as Zoom and Skype allow learners with several affordances for second or foreign language development, including the ability to interact with native speakers of the target language (Loewen et al, 2022; Plonsky & Ziegler, 2016). Furthermore, the synthesis of implications suggests that synchronous video platforms may reduce psychological pressure in foreign language speaking to some extent (e.g., Alshahrani, 2016; Nilayon & Brahmakasikara, 2018; Ockey et al., 2019). However, asynchronous speaking practice through videos can be claimed to have a more relieving effect on students' foreign language speaking performance because it does not occur in real-time, providing opportunities for rehearsal, self-talk, preparation, and self-monitoring (Andiappan et al., 2022; Spring, 2020).

In essence, there is no clear-cut explanation to determine which mode is better for foreign language speaking practice. The selection between synchronous or asynchronous

VMC to enhance oral skills or promote speaking practice relies on various factors such as course objectives, learning goals, learner preferences, and the teaching context. Both modes possess their own strengths and weaknesses, which should be taken into consideration to address diverse learning needs. A balanced approach that integrates both modes in speaking courses can provide enhanced learning experiences, allowing students to benefit from the affordances of each method.

Reviewed studies demonstrate that speaking performance in language learning contexts can be significantly enhanced by video-mediated communication (VMC) tools. This suggests that they support language development by acting as mediational tools (Lenkaitis, 2019). The scaffolding provided by VMC tools not only assists learners in developing foreign language learning that they were unable to construct individually, but it also promotes chances for meaning negotiation (Liu et al., 2022; Pitura & Chang, 2023; Yanguas, 2010; Yeh & Lai, 2019). As mentioned in the reviewed studies, these tools provide immediate feedback, willingness to communicate, authentic language exchange experience, and spontaneous-meaningful interaction with both native and L2 English speakers. It can be claimed that socio-cultural theory, in particular the notion of the Zone of Proximal Development (ZPD), provides clear justification for these effects because such interactions embody the main concepts of the theory, emphasizing the importance of social mediation in language learning contexts.

Conclusion and Suggestions

With a special focus on speaking skills, this study offers a comprehensive overview of VMC in foreign language learning and teaching. Despite certain reported limitations and negative impacts, the utilization of VMC was perceived positively by learners. Both VMC modes were found to have a significant number of advantages such as increasing learner motivation, reducing public speaking anxiety, enhancing self-autonomy, and fostering self-confidence. Furthermore, improvements in speaking performance, particularly in terms of fluency, pronunciation, and vocabulary were observed. The inclusion of peer feedback opportunities facilitated collaborative learning among L2 learners. Additionally, it can be hypothesized that both modes of VMC support learners in self-monitoring their own progress.

Moreover, this systematic review offers several pedagogical implications. Firstly, VMC can be beneficial for L2 English learning, specifically in the development of speaking abilities. Therefore, the integration of VMC as in-class activities or beyond classroom tasks can be recommended for L2 speaking practice. Secondly, L2 instructors and learners should be informed about and consider the affordances and limitations associated with both synchronous and asynchronous VMC tools to improve learning outcomes. Especially, gaining an awareness of the limitations of VMC enables teachers to adjust their teaching methods when needed and to create more effective and engaging learning experiences for students.

It is also important to disseminate the findings of this study to decision-makers, such as education staff and curriculum committees, emphasizing the significance of developing speaking skills in remote and online learning contexts. By ensuring the proper integration of VMC in educational services, it can be ensured that no students are left behind in their L2 English learning, particularly in terms of communication skills.

Limitations

This study specifically analyzes articles in English language teaching contexts, which may result in the exclusion of relevant studies conducted on other foreign languages. Examining VMC in various second language (L2) settings would offer more comprehensive insights into its utilization. This review was limited to research published between 2013 and 2023 in order to include the most recent breakthroughs in video-mediated communication systems. Although the selected time frame focuses on recent advancements, future studies could consider extending the time frame to capture the growth of VMC more comprehensively. The effectiveness of VMC, however, may have also been impacted by possible institutional and cultural variations among the 14 nations included in the review; this is an area that needs more research. Furthermore, because the current review focused on EFL and ESL contexts, specifying the scope may improve our understanding of how VMC works in different linguistic and cultural backgrounds. Finally, future research could look into how VMC tools can be improved or integrated into specific contexts-for example, in conjunction with emerging technologies like AI-driven feedback systems-to enhance their pedagogical value.

Contribution Rate of the Researchers

All authors critically reviewed the manuscript and have agreed upon the final version. The following authorship roles were determined in accordance with the Contributor Roles Taxonomy (CRediT).

Author 1 (30%): investigation, methodology, data curation, data analysis, formal analysis, writing-original draft

Author 2 (25%): investigation, methodology, data curation, data analysis, formal analysis, writing-original draft

Author 3 (15%): writing-original draft, methodology, visualization

Author 4 (15%): supervision, methodology

Author 5 (10%): methodology, review & editing

Author 6 (5%): conceptualization, review & editing

Statement of Conflict of Interest

No potential conflict of interest was reported by the authors.

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Appendix A- Quality and Relevance Assessment Checklist

1. Methodological trustworthiness	
Criteria	**Considerations**
Design	● Is an adequate study design used to answer the research questions? Is the design rigorous?
Context	● Is the context in which the research was conducted clearly described?
Sampling	● Is the sampling strategy clearly described and appropriate?
Data collection	● Is the process of data collection clearly described and appropriate?
Data analysis	● Is the data analysis strategy clearly described and appropriate?
Claims and evidence	● Are the claims and the evidence to support these claims grounded in sufficient and appropriate data?
2. Relevance to the review	
● How relevant is the study to the review? ● To what extent does the study cover the use of VMC in English speaking practice?	

For each study, the criteria were considered and an overall score of “low”, “medium”, or “high” was assigned.

Appendix B – Evidence for Quality and Relevance Assessment

No	Document Title	Methodological trustworthiness	Relevance to the review
1.	Applying Flipgrid-Based Portfolio to Improve Vietnamese EFL High School Students' Speaking Scores	High	High
2.	Authentic Use of Technology to Improve EFL Communication and Motivation through International Language Exchange Video Chat	Medium	High
3.	Camera Roll, Action! Non-Specialist Undergraduate English Learners' Perceptions of Using Video Production in Learning English	High	Medium
4.	Can asynchronous video-mediated oral book reports be the solution for foreign language speaking anxiety?	High	High
5.	Can Video-Creation Project Work Affect Students' Oral Proficiency? An Analysis of Fluency, Complexity and Accuracy	High	Medium
6.	Communicating authentically: Enhancing EFL students' spoken English via videoconferencing,	High	High
7.	Delay in L2 interaction in video-mediated environments in the context of virtual tandem language learning,	High	**Low**
8.	Developing Speaking with 21st Century Digital Tools in the English as a Foreign Language Classroom New Literacies and Oral Skills in Primary Education	High	Medium
9.	Effects of English proficiency on motivational regulation in a videoconference based EFL speaking class,	High	High
10.	EFL Students' Improvement through the Reflective YouTube Video Project	High	High
11.	Enhancing Japanese university students' English-language presentation skills with mobile-video recordings,	High	High
12.	Enhancing Multimodal Interaction and Communicative Competence through Task-Based Language Teaching (TBLT) in Synchronous Computer-Mediated Communication (SCMC)	High	**Low**
13.	Examining the Effectiveness of Digital Video Recordings on Oral Performance of EFL Learners	High	High
14.	Exploring the Impact of Synchronous, Asynchronous, and Bichronous Online Learning Modes on EFL Students' Self-Regulated and Perceived English Language Learning	High	**Low**
15.	Exploring the Potential of a Video-Mediated Interactive Speaking Assessment,	High	High
16.	Facilitating student interaction: The role of flipgrid in blended language classrooms	High	High
17.	Flipgrid netiquette": unearthing language ideologies in the remote learning era	High	**Low**
18.	Improving Students' Speaking Performance and Communication Engagement through Technology-Mediated Pedagogical Approach	High	High
19.	Learners' use of communication strategies in text-based and video-based synchronous computer-mediated communication environments: opportunities for language learning	High	High
20.	Modern language: Interaction in conversational NS-NNS video SCMC eTandem exchanges	High	High
21.	Myscene Tube-- A Web Channel to Enhance English Speaking Skills in an ESL classroom	High	High
22.	Perception of Improving English Language Proficiency through Video Compositions among Male and Female Students of MRSM Kuala Krai	High	**Low**
23.	Pre-task planning effects on learner engagement in face-to-face and synchronous computer-mediated communication	High	High
24.	Scaffolding speaking tasks using videoblog portfolio in an ESL classroom,	High	High
25.	Strategies adopted by ESP students to perform oral presentations through videos,	High	**Low**
26.	Synchronous computer-mediated communication in English pronunciation teaching: A case study of Rovira i Virgili University	High	High
27.	The Application of Video Clips with Small Group and Individual Activities to Improve Young Learners' Speaking Performance	Medium	**Low**
28.	The Attitudes of Pupils towards using Flipgrid in Learning English Speaking Skills	High	High

29.	The influence of practice contexts on L2 learners' compliment responses: telecollaborative video-based practice versus face-to-face practice	High	Medium
30.	The Use of Vlogging to Enhance Speaking Performance of ESL Students in Malaysian Secondary School	Medium	High
31.	Topicalization as a practice for facilitating L2 discussion in video-mediated extensive reading book club meetings	High	Medium
32.	Use of Video Blogs in Alleviating Public Speaking Anxiety among ESL Learners	High	High
33.	Using Social Network Sites for Language Learning and Video Conferencing Technology to Improve English Speaking Skills: A Case Study of Thai Undergraduate Students	High	High
34.	Utilizing Flipgrid Application on Student Smartphones in a Small-Scale ESL Study	High	High
35.	Video-Based Interaction, Negotiation for Comprehensibility, and Second Language Speech Learning: A Longitudinal Study	High	High
36.	Videoconferencing Improves Students' Language Learning in the EFL Classroom	High	High
37.	'What Can We Do to Talk More?': Analysing language learners' online interaction	High	Medium

Appendix C – List of Documents Included in Systematic Review

	Document Title	Author(s)	Year	Context(s)	Participants	Level of Participants	Research Design	Foci of Investigation
1	Applying Flipgrid-Based Portfolio to Improve Vietnamese EFL High School Students' Speaking Scores	Hanh, L. T. T. & Huong, T. T. B.	2021	Vietnam	86 EFL Students	High School	Quantitative	The Effect of Flipgrid-Based Portfolio on EFL Students' Speaking Score and Attitude
2	Authentic Use of Technology to Improve EFL Communication and Motivation through International Language Exchange Video Chat	Sevy-Biloon, J., & Chroman, T.	2019	Ecuador	17 EFL Students	Tertiary Level	Mixed-method	Vide-Chat Technology (Whatsapp, Skype, Facebook or Facetime) on Oral Communication and Students' Opinions
3	Camera Roll, Action! Non-Specialist Undergraduate English Learners' Perceptions of Using Video Production in Learning English	Mahardika, I. G. N. W., Widiati, U., Bhastomi, Y., & Suryati, N.	2021	Indonesia	35 English Students	Tertiary Level	Mixed-method	Video Production on Motivation and Perception
4	Can asynchronous video-mediated oral book reports be the solution for foreign language speaking anxiety?	Çepni, S. B., Keles, N., & Cepni, G.	2022	Turkey	42 EFL Students	Tertiary Level	Mixed-method	Use of Asynchronous Video-Mediated Oral Book Report Assignments on Speaking Performance and Anxiety
5	Can Video-Creation Project Work Affect Students' Oral Proficiency? An Analysis of Fluency, Complexity and Accuracy	Spring, R.	2020	Japan	40 EFL Learners	Tertiary Level	Mixed-method	The Effect of Video Creation on Speaking Proficiency
6	Communicating authentically: Enhancing EFL students' spoken English via videoconferencing	Alshahrani, A. A.	2016	Saudi Arabia	38 EFL Learners and 2 Native Speaker Teachers	Tertiary Level	Mixed-method	Use of Synchronous Videoconferencing Tools on Speaking
7	Developing Speaking with 21st Century Digital Tools in the English as a Foreign Language Classroom New Literacies and Oral Skills in Primary Education	Huertas-Abril, C. A.	2021	Spain	82 EFL Learners	Primary School	Quantitative	Use of Online Video Discussion Platform (Flipgrid) on Oral Expression
8	Effects of English proficiency on motivational regulation in a videoconference based EFL speaking class	Kim, J., & Kweon, S. O.	2022	South Korea	340 EFL Learners and 8 Teacher	Tertiary Level	Mixed-method	The relationships between Videoconference Platform (Synchronous) (Zoom), Motivational Regulation, and Proficiency Levels

9	EFL Students' Improvement through the Reflective YouTube Video Project	Sari, A. B. P., Dardjito, H., & Azizah, D. M.	2020	Indonesia	79 EFL Learners	Tertiary Level	Qualitative	Self-improvements Through the Reflection Process YouTube Video Project
10	Enhancing Japanese university students' English-language presentation skills with mobile-video recordings	Toland, S. H., Mills, D. J., & Kohyama, M.	2016	Japan	129 EFL Learners	Tertiary Level	Mixed-method	Mobile-Video and Presentation Skills
11	Examining the Effectiveness of Digital Video Recordings on Oral Performance of EFL Learners	Göktürk, N.	2016	Turkey	10 EFL Learners	Tertiary Level	Mixed-method	Digital Video Recording on Oral Performance
12	Exploring the Potential of a Video-Mediated Interactive Speaking Assessment	Ockey, G. J., Timpe-Laughlin, V., Davis, L., & Gu, L.	2019	United States and China	72 ELL Learners from United States and 74 EFL Learners from China	Tertiary Level and a Private Language Learning Institution	Mixed-method	Computer Video-mediated Technology (Skype) and Speaking Assessment
13	Facilitating student interaction: The role of Flipgrid in blended language classrooms	Edwards, C. R., & Lane, P. N.	2021	Japan	189 EFL Learners	Tertiary Level	Mixed-method	Use of online video discussion platform (Flipgrid) on Communication and Perceptions
14	Improving Students' Speaking Performance and Communication Engagement through Technology-Mediated Pedagogical Approach	Robillos, R. J.	2023	Thailand	29 EFL Learners	Tertiary Level	Mixed-method	The Impact of Video-based Discussion Platform (Flipgrid) on Speaking Achievement and Communication Engagement
15	Learners' use of communication strategies in text-based and video-based synchronous computer-mediated communication environments: opportunities for language learning	Hung, Y. W., & Higgins, S.	2016	Taiwan and United Kingdom or Ireland	6 Chinese-Speaking Learners of English and 6 English-Speaking Learners Of Chinese	Tertiary Level	Mixed-method	English Text-based SCMC, Chinese Text-based SCMC, English Video-based SCMC and Chinese Video-based SCMC on Communication Strategies (CSs)
16	Modern language: Interaction in conversational NS-NNS video SCMC eTandem exchanges	Strawbridge, T.	2021	United States and Mexico	9 L1 English-L2 Spanish and 9 L1 Spanish-L2 English	Tertiary Level	Mixed-method	NS-NNS Interaction in VidSCMC eTandem Conversations
17	"Myscene Tube" A Web Channel to Enhance English Speaking Skills in an ESL classroom	Kooi Lian, C., Kathiyaiah, D., Hani, F., Chanderan, V., & Yunus, M. M.	2021	Malaysia	118 ESL Learners	Secondary School	Mixed-method	Use of MyScene Tube on Confidence and Speaking

18	Pre-task planning effects on learner engagement in face-to-face and synchronous computer-mediated communication	Qiu, X., & Bui, G.	2022	China	36 ESL Learners	Tertiary Level	Mixed-method	Engagement in Oral Tasks Regarding Face-to-face and Synchronous Video-based Computer-mediated Communication (SvCMC)
19	Scaffolding speaking tasks using videoblog portfolio in an ESL classroom	Shuib, A. S., Ismail, L., & Abdul Manaf, U. K. A.	2020	Malaysia	19 ESL Learners	Tertiary Level	Qualitative	Video Blog Portfolio (Vlogging) on Speaking Fluency
20	Synchronous computer-mediated communication in English pronunciation teaching: A case study of Rovira i Virgili University	Vázquez, L. Q.	2022	Spain	40 Learners from Different Nationalities	Tertiary Level	Mixed-method	SCMC Application (with Video-based Platforms) on Pronunciation
21	The Attitudes of Pupils towards using Flipgrid in Learning English Speaking Skills	Shin, J. L. K., & Yunus, M. M.	2021	Malaysia	60 ESL Learners	Primary School	Mixed-method	Use of Flipgrid on Speaking and Attitude
22	The influence of practice contexts on L2 learners' compliment responses: telecollaborative video-based practice versus face-to-face practice	Zhang, Y.	2022	China	65 EFL Learners	Tertiary Level	Mixed-method	Telecollaborative Video-based Context versus Face-to-face Context on Compliment Responses (Pragmalinguistic Accuracy and Fluency)
23	The Use of Vlogging to Enhance Speaking Performance of ESL Students in Malaysian Secondary School	Andiappan, S., Hock Seng, G., & Ruey Shing, S.	2022	Malaysia	73 ESL Learners	Secondary School	Mixed-method	Use Of Vlogging on Speaking Performance
24	Topicalization as a practice for facilitating L2 discussion in video-mediated extensive reading book club meetings	Ro, E.	2023	South Korea	5 ESL Learners	Tertiary Level	Qualitative	Video-mediated Interaction and Practicing L2 with Book Discussion
25	Use of Video Blogs in Alleviating Public Speaking Anxiety among ESL Learners	Madzlan, N. A., Seng, G. H., & Kesevan, H. V.	2020	Malaysia	54 ESL learners	Tertiary Level	Mixed-method	Use of Personal Video Blogs (ASCMC) on Speaking Anxiety
26	Using Social Network Sites for Language Learning and Video Conferencing Technology to Improve English Speaking Skills: A Case Study of	Nilayon, N., & Brahmakasikara, L.	2018	Thailand	6 ESL Learners	Tertiary Level	Qualitative	Social Network Sites and Video Conferencing Technology on Speaking and Learners' Perception

	Thai Undergraduate Students							
27	Utilizing Flipgrid Application on Student Smartphones in a Small-Scale ESL Study	Petersen, J. B., Townsend, S. D., & Onak, N.	2020	Japan	37 ESL Learners	Tertiary Level	Mixed-method	Use of Video Recording Application (Flipgrid) on Speaking Proficiency and Learner Engagement
28	Video-Based Interaction, Negotiation for Comprehensibility, and Second Language Speech Learning: A Longitudinal Study	Saito, K., & Akiyama, Y.	2017	Main context: Japan Collaborator: United States	30 EFL Learners (15 L1 Japanese-L2 English and 15 L1 English-L2 Japanese)	Tertiary Level	Quantitative	Video-based Interaction Regarding Pronunciation, Fluency, Accentedness, Comprehensibility And Lexicogrammar
29	Videoconferencing Improves Students' Language Learning in the EFL Classroom	Jung, M. Y.	2013	Main context: Korea Collaborators: Japan, Singapore, The Philippines, Hong Kong, Taiwan, and Malaysia	45 EFL Learners	Tertiary Level (12 MA Students, 7 PhD Students and 26 Undergraduate Students)	Mixed-method	Videoconferencing Systems on Cross-cultural Communication
30	What Can We Do to Talk More?: Analysing language learners' online interaction	Dooly, M., & Davitova, N.	2018	Spain and Sweden	43 EFL Learners (15 from the School in Spain and 28 from the School in Sweden)	Secondary School	Qualitative	Videoconferencing Tool (Skype) on L2 Communication