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Streaming Media for English Language Learners' Vocabulary Development: A Systematic Review of Features and Challenges

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Abstract. Focusing on the educational potential of streaming media in English language learners' (ELLs) vocabulary development, this systematic review bridges a notable gap in understanding the nuances of digital learning tools. Utilizing the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework, this review meticulously sifted through academic databases, selecting 22 peer-reviewed journal articles that met stringent eligibility criteria. Keywords that were used to identify the studies were “Streaming Media/Utilization/Implementation/Adoption” or “Vocabulary Learning/Development/Acquisition/Enhancement” and “English Language Learning” or “ESL/EFL Contexts/Environments/Settings.” It yielded six key themes contributing to vocabulary enhancement in ELLs: Authentic Learning Content, Adaptability, Engaging Material, Consolidation, Subtitle, and Multimodality. Concurrently, it revealed five prominent challenges: Limited Content, Access Issues, Passive Learning Risks, Reduced Focus, and Inadequate Pedagogical Support. Employing thematic analysis, the review offers a structured synthesis of these findings. This comprehensive approach not only highlights the beneficial aspects of streaming media in language education but also underscores the critical challenges that educators, educational technologists, and curriculum designers must navigate. The insights gained are poised to guide effective incorporation of streaming media in ELL vocabulary instruction, signifying a step forward in harnessing digital platforms for educational enhancement.

Keywords: Educational technology; English language learners; language pedagogy; streaming media; vocabulary development

1. Introduction

For English language learners (ELLs), encompassing students in both ESL (English as a second language) and EFL (English as a foreign language) settings, acquiring an extensive vocabulary is essential. It not only sharpens their language

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skills but also ensures effective and clear communication (Fan, 2020; Nation, 2001, 2006; Schmitt, 2010). Recent studies show a significant shift from traditional learning methods such as rote memorization or repetitive drills to more interactive and technology-driven modes in enhancing ELLs' vocabulary (Zhang, 2022). Although these methods are considered long standing and may be regarded as effectual in some extent, they may not necessarily always address the individual needs of modern learners who expect more engaging, practical, and realistic language applications. With the advent of the digital revolution, English language teaching and learning in ESL and EFL environments has metamorphosed dramatically (Alobaid, 2021; Santhanasamy & Yunus, 2022; Wong & Yunus, 2023;). This has become evident as students can now develop their vocabulary skills in English without the necessity of going to a brick school. Online resources, interactive applications, and multifarious multimedia platforms are viable options for learners to develop their vocabulary skill beyond the confines of traditional classrooms (Pilonieta et al., 2023). Owing to this digital revolution, teachers are promulgating more personalized, accessible, and diversified learning experiences for ELLs.

Streaming media have transformed from simple entertainment outlets into essential educational resources. Giants such as Netflix and YouTube lead the pack. They captivate diverse audiences with a rich blend of content spanning numerous genres, cultures, and languages, skilfully merging entertainment with learning opportunities (Masrai, 2019). Streaming platforms through shows, movies, and songs open doors to a rich world of language learning. The blend of audio with multi-language subtitles transforms these platforms into avenues that make the learning experience exciting and worthwhile. In this distinct environment, learners are immersed in a holistic process: they simultaneously listen, read subtitles, and decode visual cues. This multifaceted method is quickly gaining acknowledgement as an effective educational approach, believed to enhance linguistic skill and streamline vocabulary learning (Shahril & Abdullah, 2022).

Recent studies and debates suggest that streaming media could significantly change how vocabulary is learned and developed. Teachers and students report how such immersion makes learning more interesting and unforgettable, leading to an appreciation of different cultures (Alm, 2021; Masrai, 2019). However, the ways in which streaming media contributes to ELLs' vocabulary development and challenges involved in its utilization are not yet fully clear. Therefore, this paper seeks to identify the hurdles encountered in leveraging streaming media for educational purposes. Through a meticulous examination of these dimensions, the study endeavours to synthesize existing research and insights, thereby crafting a comprehensive guide to the effective employment of streaming media as a vocabulary enhancement tool in both ESL and EFL settings. This review aims to tackle two key questions: What are the specific features of streaming media that most significantly contribute to ELLs' vocabulary development? What challenges are encountered in using streaming media for ELLs' vocabulary development? By exploring these questions, this paper hopes to connect various research and insights, offering a detailed road map on the nuances of streaming media as a tool for vocabulary enhancement in ESL and EFL contexts.

2. Methodology

The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework (Moher et al., 2009) was followed in this review. This approach involved four phases: identification, screening, eligibility, and inclusion. The number of articles was determined in the identification phase. In the screening phase, the articles were further reduced after the removal of duplicates. Then, the number of assessed and excluded articles was identified in the eligibility phase. Finally, in the included phase, the articles that went through analysis were confirmed. Potential studies were scouted using databases such as Scopus, Web of Science, Science Direct, EBSCO, and Google Scholar. Reference sections of the considered papers were also examined in order to gather more related studies. To ensure a comprehensive and current understanding of streaming media's role in vocabulary development among ELLs, this review meticulously employed a focused keyword strategy. Keywords such as "Streaming Media/Features/Strengths/Utilization" or "Vocabulary Learning Challenges/Difficulties/Shortcomings" and "English Language Learning" or "ESL/EFL Contexts/Environments/Settings. Only peer reviewed journal articles were considered to ensure reliability, validity, rigour, and depth of analysis.

2.1 Eligibility Criteria

Rigorous and transparent criteria were set to guide the selection of relevant studies. For the first criterion, studies should have provided extensive analysis on the impact of different streaming media platforms for the vocabulary development of ELLs. Studies were not restricted to particular generational groups of learners. Given the rapidly evolving landscape of digital education technologies, the review was delimited to studies published within an eight-year window, from 2016 to 2023. This temporal boundary allowed crucial studies that capture significant technological and pedagogical advancements in streaming media for vocabulary development among ELLs to be included, ensuring a comprehensive review. No preference was given to specific types of research methods and designs to guarantee a rich tapestry of insights, which added another layer of comprehensiveness to the analysis. On the other hand, exclusion criteria comprised documents that might reference streaming media or ELL instruction only tangentially, without a direct investigation into their interplay. Works which focused on streaming platforms that were not able to pinpoint their roles in the vocabulary enhancement of ELLs were automatically removed. Other scholarly works such as conference papers, opinion pieces, feature articles, editorials, commentaries, and informal publications were excluded.

Table 1: Eligibility and Inclusion Criteria for Study Selection

Criterion	Description
Study Focus	Studies must provide extensive analysis on the impact of different streaming media platforms on the vocabulary development of ELLs, highlighting features of such platforms and challenges in their utilization.
Publication Type	Only peer-reviewed journal articles were considered.
Publication Period	Articles published from January 2016 to December 2023. This narrows the review to an 8-year period.

Research Methods	No preference was given to particular types of research methods and designs to ensure a comprehensive analysis.
Exclusion Criteria	Documents that reference streaming media or ELL instruction only tangentially or do not directly investigate their interplay were excluded. Additionally, works focusing on platforms not directly related to vocabulary enhancement were removed.

A total of 1,478 articles were identified during the initial search. Afterward, 54 duplicates were determined and removed from the list, giving a total of 1,424 articles. A thorough examination of titles and abstracts further reduced the number of articles to 1,124. The remaining articles were checked using the inclusion and exclusion criteria, leading to the removal of 1,080 documents. After an exhaustive scrutiny of the remaining 35 articles, 13 of these did not fully capture the impact of streaming media in ELL vocabulary enhancement. Consequently, a grand total of 22 articles formed the core of this review.

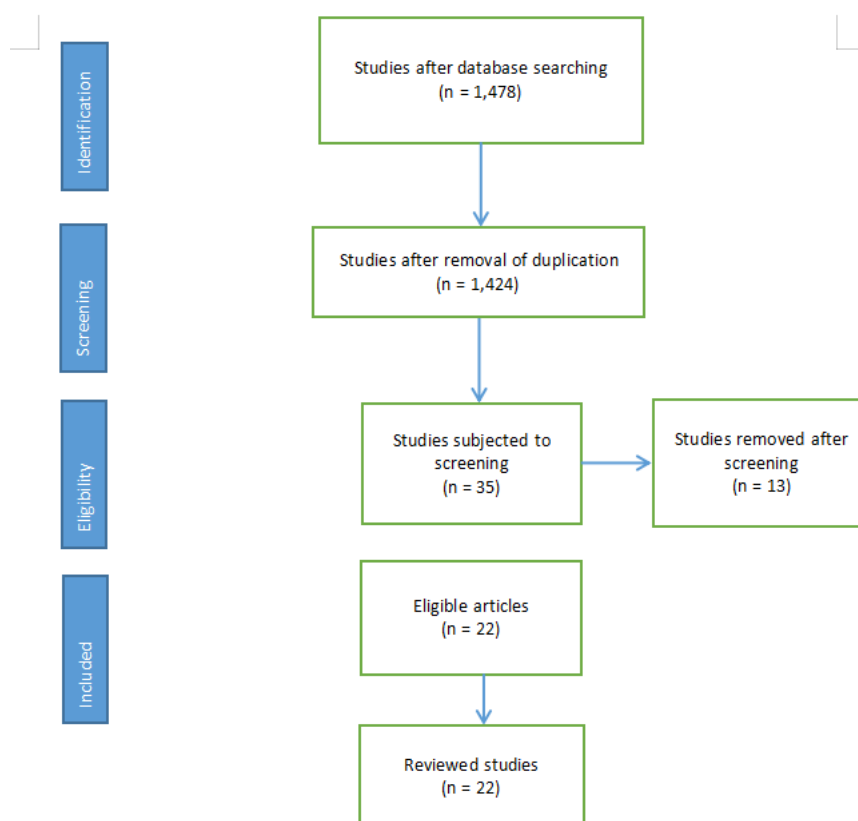


Figure 1: Phases in selecting the studies

2.2 Data Analysis Procedures

Thematic Analysis

Thematic analysis, conducted manually, served as the foundational method for the data analysis, meticulously guiding the identification, examination, and synthesis of prevailing and emergent themes related to the impact of streaming media on ELLs' vocabulary development. Drawing upon the framework outlined by Braun and Clarke (2023), the process began with an initial reading of selected articles to gain an overall understanding of the content. Subsequently, a detailed coding phase took place, where relevant data excerpts were labelled and coded, representing specific ideas or concepts. These initial codes were then reviewed and grouped into potential themes that captured significant patterns across the data set. Following this, themes were refined and defined through an iterative process of reviewing and re-coding the data, ensuring alignment with the research objectives and coherence across the analysis. This manual approach facilitated a deep, contextual engagement with the data, allowing for the exploration of nuanced insights into common features, challenges and the holistic impact of streaming media on English language acquisition. The systematic yet flexible method was particularly attuned to uncovering and integrating emerging themes, thereby enriching the study's findings with comprehensive and contextually grounded insights.

Expert Validation and Source Selection

The expertise of three specialists was solicited in order to enhance the trustworthiness of the thematic analysis. The first expert, is an academic in English language education, whose experience rendered profound knowledge of vocabulary learning and pedagogical strategies. Next, a scholar in educational technology shared perspectives on technology-infused learning environments. Lastly, a well-published qualitative researcher shared expansive insights on research methodologies and qualitative data analysis. To ensure the rigorous selection of sources, these experts utilized a checklist validated through a pilot study involving a representative sample of articles, which refined the criteria to accurately identify studies relevant to ELLs' vocabulary development through streaming media. This validated checklist ensured that each selected source was methodologically sound and aligned with the study's objectives, underscoring the critical role of the experts in theme validation and adherence to current academic standards.

Inputs gleaned from the three specialists allowed for adjustments in the thematic framework, implemented at the researcher's discretion. This discretion is considered vital in attaining a harmonious approach in themes validation, as expert opinion is fused with the researcher's scholarly discernment. This collaborative effort in theme validation manifests the review's commitment to generate reliable and valuable insights into the utilization of streaming platforms for vocabulary development of ELLs.

3. Results

This section presents the results of the study, which are based on its two objectives: to determine the features of streaming media which significantly contribute to ELLs' vocabulary development, and to identify the challenges

encountered in using such platforms. Table 2 summarizes the identified themes and their descriptions. The frequency of each theme is also provided to reflect their prevalence in each studies reviewed.

Table 2: Summary of Themes, Descriptions and Frequencies

	Themes	Descriptions	Frequencies
Features of streaming media for vocabulary development of ELLs	Authentic learning content	Real-world content facilitating language acquisition through cultural and practical exposure	13
	Adaptability	The versatility of streaming platforms in supporting diverse learning styles and needs	4
	Engaging material	Content that captivates and maintains learner interest, enhancing retention and involvement	16
	Consolidation	The reinforcement and integration of new vocabulary through repetitive exposure	7
	Subtitle	Supporting understanding and retention of vocabulary through on-screen text	6
	Multimodality	The combination of visual, auditory, and textual elements to enhance learning engagement	5
Challenges related to the use of streaming media for vocabulary development of ELLs	Limited content	Challenges associated with the availability and diversity of suitable educational content	7
	Access Issues	Barriers to platform access, including technological and regional limitations	3
	Passive learning risks	The potential for reduced active engagement and interaction with the language	6
	Reduced focus	Difficulties in maintaining educational focus amid entertaining content	10
	Inadequate pedagogical support	The need for effective teaching strategies to leverage streaming media fully	2

Building upon the themes presented in Table 2, Table 3 summarizes the reviewed studies, providing an overview of their key characteristics and findings:

Table 3: Summary of Reviewed Studies

Study Details	Research Method and Design	Purpose of the Study	Sample Size	Country and Platform	Key Features Identified	Challenges Identified
Vongpumivitch et al. (2023)	Quantitative, quasi-experimental	Explored how Vietnamese students enhance their English idiom knowledge by watching idiom-related videos on YouTube	34	Vietnam, YouTube	Adaptability; Engaging Material; Consolidation	Limited Content
Dizon and Thanyawatpokin (2021)	Quantitative, quasi-experimental	Explored how streaming videos and dual subtitles enhanced vocabulary and listening skills in English	124	Japan, Netflix	Authentic Learning Content; Subtitle	None
Masrai (2019)	Quantitative, experimental and correlational	Investigated the impact of extensive viewing of English movies on phonological vocabulary knowledge and listening comprehension among Arab EFL learners	78	Saudi Arabia, Various streaming platforms	Authentic Learning Content; Engaging Material	Limited Content; Access Issues
Abbas et al. (2019)	Quantitative, descriptive and correlational	Examined the impact of social and streaming media on vocabulary acquisition of ESL learners	30	Pakistan, YouTube	Authentic Learning Content; Engaging Material' Subtitle	Access Issues
Damanik and Katemba (2021)	Quantitative, descriptive	Investigated college students' perceptions about the contribution of English movies and series on Netflix as a digital EFL learning aid for vocabulary improvement	60	Indonesia, Netflix	Adaptability; Engaging Material; Consolidation ; Subtitle	Limited Content; Reduced Focus
Hidayati and Syafryadin (2023)	Quantitative, descriptive	Described students' perceptions of using YouTube to improve young learners' vocabulary with a focus on Islamic English content	20	Indonesia, YouTube	Authentic Learning Content; Engaging Material	Reduced Focus
Nureani and Warni (2023)	Quantitative, descriptive	Identified students' perspectives on utilizing Spotify tracks as an English learning medium	100	Indonesia, Spotify	Authentic Learning Content; Adaptability; Engaging Material	Limited Content
Khadawardi (2022)	Quantitative, quasi-experimental	Investigated the impact of watching video clips with English subtitles on L2 learners' vocabulary learning and retention	35	Saudi Arabia, YouTube	Authentic Learning Content; Engaging Material; Subtitle	None

Hariyono (2020)	Qualitative, descriptive	Observed how young learners were engaged during the implementation of video on YouTube in teaching vocabulary at an English course	7	Indonesia, YouTube	Authentic Learning Content; Engaging Material	Passive Learning Risks
Hakim (2019)	Mixed methods, descriptive	Evaluated the effectiveness of YouTube videos as a teaching aid for vocabulary learning among young learners.	Not specified	Indonesia, YouTube	Authentic Learning Content	Limited Content; Passive Learning Risks
Asmawati et al. (2022)	Quantitative, experimental	Determined the impact of using 'Learn English with TV Series' as a learning medium on students' vocabulary size	84	Indonesia, YouTube	Engaging Material; Consolidation	Passive Learning Risks;; Reduced Focus
Simamora et al. (2023)	Quantitative, experimental	Explored the impact of streaming media on vocabulary development in English Language Learners, identifying key features and challenges	40	Indonesia, Spotify	Engaging Material; Consolidation	Reduced Focus
Candarli (2023)	Quantitative, descriptive	Investigated the potential of YouTube worldwide trending videos for incidental vocabulary learning in the context of academic lectures and seminars at English-speaking universities	Not specified	Global, YouTube	Authentic Learning Content; Engaging Learning Content	None
Kabooha and Elyas (2018)	Quantitative, experimental	Evaluated the effects of using YouTube in multimedia vocabulary instruction for Saudi EFL students, including their comprehension, retention, and perceptions	100	Saudi Arabia, YouTube	Authentic Learning Content; Multimodality	Limited Content
Bostanci (2022)	Mixed methods, Quasi-experimental	Examined how watching subtitled films affects vocabulary retention in ESL students and to investigate their attitudes towards this learning approach	40	Pakistan, YouTube	Engaging Material; Multimodality	Passive Learning Risks; Reduced Focus
Ibhar (2022)	Quantitative, experimental	Investigated the use of YouTube in enhancing English vocabulary acquisition of Public Administration students	25	Indonesia, YouTube	Authentic Learning Content	Limited Content; Inadequate Pedagogical Support
Pattemore & Muñoz (2023)	Quantitative, experimental	Analyzed Malaysian university students' perceptions of using Netflix and subtitles for English as a Second Language (ESL) learning	12	Malaysia, Netflix	Adaptability; Engaging Material; Consolidation ; Subtitle	Access Issues; Reduced Focus

Turkmen (2020)	Quantitative, descriptive	Investigated the use of Netflix in supporting second language (L2) learning, focusing on its contribution to developing language competencies among university students	150	Turkey, Netflix	Authentic Learning Content; Engaging Material; Subtitle	Inadequate Pedagogical Support
Truong and Le (2022)	Mixed-methods, descriptive	Assessed the impact of YouTube in enhancing English speaking skills among EFL tertiary students, focusing on their practices and perceptions.	106	Vietnam, YouTube	Authentic Learning Content; Engaging Material	Limited Content
Dai (2023)	Qualitative, thesis research method	Analyzed the effects of Bilibili on English language learning among Chinese primary and secondary students during the pandemic	Not Specified	China, Bilibili	Authentic Learning Content; Engaging Material; Consolidation; Subtitle; Multimodality	None
Arndt and Woore (2018)	Quantitative, experimental	Examined vocabulary learning from watching YouTube videos, specifically focusing on the effectiveness of this method for vocabulary acquisition	79	International, YouTube	Consolidation	Passive Learning Risks
Dizon and Gayed (2021)	Quantitative, pretest-posttest design	Evaluated the use of interactive videos from Netflix for enhancing aural vocabulary in second language English learners	14	Japan, Netflix	Engaging Material; Multimodality	Reduced Focus

3.1 Features of Streaming Media which Significantly Contribute to ELLs' Vocabulary Development

In examining the features of streaming media that significantly contribute to vocabulary development of ELLs, six key themes emerged: Authentic Learning Content, Adaptability, Engaging Material, Consolidation, Subtitle, and Multimodality. These themes collectively underscore the diverse ways through which streaming platforms facilitate language learning and vocabulary enhancement.

Theme 1: Authentic learning content

The first theme accentuates the diverse ways in which real-world content facilitates language acquisition. Netflix, as a leading streaming platform, offers abundant options of authentic ESL contents (Abbas et al., 2019; Dizon & Thanyawatpokin, 2021). For instance, learners experienced tremendous improvements in speaking skills, pronunciation, and vocabulary knowledge through their engagement with realistic movies and series (Masrai, 2019). Likewise, in China, Bilibili gained popularity because of its culturally rich contents for vocabulary enhancement (Dai, 2023). Furthermore, Dai claimed that

real-life language exposure familiarizes students on the intricacies of English language learning such as colloquialisms, jargons, and cultural expressions. In the same vein, YouTube and Spotify surfaced as favorite streaming platforms of students, as these are capable of proffering diverse and culturally rich contents for learning vocabulary. The integration of Islamic contents is credited with the vocabulary gains of Indonesian learners (Hidayati & Syafryadin, 2023), while Spotify's massive repository of songs is acknowledged for the students' increased cultural awareness and linguistic comprehension (Nureani & Warnil, 2023). Additionally, audio-visual-textual elements of streaming media facilitated not just vocabulary learning but also deep cultural perspectives (Ibhar, 2022; Khadawardi, 2022; Turkmen, 2020). Khadawardi stressed that streaming media's authentic content enabled learners to embark on a cultural journey without having the need to travel physically. The potency of YouTube in fostering linguistic fluency and pronunciation was also noted in research where cross-cultural content was seen as a key contributor (Truong & Le 2022; Hariyono, 2020; Hakim, 2019). Collectively, Candarli (2023) and Kabooha and Elyas (2018) confirmed that YouTube's portrayal of real-life situations contributed to learners' practical vocabulary expansion. This enables learners to master words that are likely to be used in real-life conversations, situations, and cultures.

Theme 2: Adaptability

Moving to the next theme, "Adaptability", refers to the versatility of streaming platforms in providing support to ELLs. Vongpumivitch et al. (2023) highlighted YouTube's accessibility and user-friendly features as reasons for cultivating students' comprehension of idioms. Likewise, Netflix was favored due to the confluence of entertainment and educational value in language acquisition (Damanik & Katemba, 2021). Students demonstrated positive attitudes toward Netflix due to their experience with captivating English movies of their choice. Damanik and Katemba added that this trend signaled the transformation of English vocabulary development from the traditional rote memorization and drills to enjoyable and accessible language immersion through movies offered by streaming media. Pattemore and Muñoz (2023) expounded on another dimension of streaming media's adaptive nature. For them, Netflix underscored personalized learning, where students can access content anytime and anywhere, considering their personal schedules and other commitments. Such flexibility honed learners to become independent in their own learning, an impetus in increasing motivation and achieving learning outcomes. On the other hand, Spotify's contribution to vocabulary gains galvanized the criticality of daily integration (Nureani & Warni, 2023). In their study, approximately 70% utilized Spotify regularly and was considered integral aspect of their daily routines. This consistent exposure to songs on Spotify illustrated that continuous interaction with the target language yielded positive results in vocabulary development.

Theme 3: Engaging material

The third theme presents the alluring nature of streaming platforms and their impact on English vocabulary learning. Abbas et al. (2019) and Vongpumivitch et al. (2023) emphasized the captivating qualities of YouTube and Netflix. They asserted that the clear pronunciation, diverse and entertaining nature of content on YouTube and Netflix attracted students to learn English across different levels

of difficulty. Similarly, the audio-visual materials on YouTube, such as animation and background music, strengthened vocabulary recognition and retention (Bostanci, 2021; Khadawardi, 2022). This assertion is supported by Dai (2023), who emphasized that Bilibili's audio-visual elements enhanced the engagement of Chinese students in learning new English vocabulary words. The wide array of movies and series to watch in Netflix was fundamental in learning multifarious genres and language styles, thus improving vocabulary (Damanik & Katemba, 2022; Dizon & Gayed, 2021; Masrai, 2019). Also, Pattemore and Muñoz (2023) and Turkmen (2020) pointed out that Netflix's engaging content transcended across age groups. Both young and adult learners were found to enjoy their engagement in Netflix as a tool for vocabulary learning. For Hidayati and Syafryadin (2023), exploring Islamic English content made language learning more enjoyable and personal for Indonesian students. Likewise, students who frequently listen to English songs demonstrated significant growth in motivation and linguistic memory (Nureani & Warni, 2023). YouTube's repository of language practice materials pushed learners to persevere in learning without worrying about making mistakes (Asmawati et al., 2022; Hariyono, 2020; Truong & Le, 2022). In a similar fashion, Candarli (2023) and Simamora et al. (2023) also contributed to this theme, juxtaposing the tedious and monotonous traditional vocabulary learning experiences of learners with the interactive and stimulating nature of streaming platforms.

Theme 4: Consolidation

In the context of English language learning, the fourth theme, "Consolidation", refers to the assimilation of new vocabulary through streaming media's ability to promote repetitive immersion and active engagement in the content. Arndt and Woore (2018), Dai (2023) and Pattemore and Muñoz (2023) exemplified this consolidation process when their studies revealed that persistent exposure to subtitled contents in streaming platforms amalgamated learners' retention of lexical items. Correspondingly, repetitious note-taking while watching YouTube videos facilitated familiarity in idiomatic expressions (Vongpumivitch et al., 2023). Damanik and Katemba (2021) claimed that iterative watching of English movies and series in Netflix reinforces vocabulary recall and deeper understanding, and eventually led to improvements in comprehension among learners. It connotes comprehension of words in various contexts. Damanik and Katemba also underscored that success in English vocabulary learning, lies on the gravity of immersion to Netflix's content. Moreover, YouTube is perceived to expand and consolidate vocabulary through its multitudinous content. Asmawati et al. (2022) averred that routinely engaging in YouTube's wide-ranging contents boosted learners' lexical retention. On the other hand, Simamora et al. (2023) foregrounded Spotify's role in the consolidation process. According to them, frequent listening to podcasts and songs buttressed acquisition of new language elements and enhanced oral communication skills.

Theme 5: Subtitle

This theme revolves around how streaming media's on-screen texts augment vocabulary development process. The presence of dual subtitles in Netflix's movies and series underpinned learners' vocabulary command and syntactic structures (Abbas et al., 2019; Dizon & Thanyawatpokin, 2021). This argument

has been further upheld by studies that showcased the learners' deeper comprehension and word acumen through the visibility of dual subtitles (Bostanci, 2022; Dai, 2023; Khadawardi, 2022). Analogously, students who struggle in lexical proficiency and comprehension found that reading on-screen subtitles are valuable aids in addressing their difficulties. Moreover, Damanik and Katemba (2021) ascertained motivational benefits that accompany subtitled content in English vocabulary learning.

Theme 6: Multimodality

The last theme centres on the integration of various sensory inputs, emphasizing its importance in conveying new vocabulary or content to multitude of learners. The combination of visual and auditory stimuli in streaming platforms promoted better lexical memory (Dizon & Gayed, 2021). This is further supported by Kabooha and Elyas (2018), when they reported that learners who see mental representations, listen to pronunciation, and read words or sentences greatly simultaneously have improved vocabulary recall. Kabooha and Elyas added that learning a new word from a movie clip or portion of a song propelled contextual learning through its multimodal properties. For Bostanci (2022), the multimodal content of streaming media is more engaging for learners as opposed to single-mode materials. Students who repeatedly access multimodal content from streaming platforms do not feel overloaded because vocabulary words are presented in varied ways. On the other hand, learners have individual learning preferences. The multimodal properties of streaming platforms were regarded useful in catering to varied learning styles, thereby ensuring inclusiveness and equity in vocabulary learning (Arndt & Woore, 2018). Teachers who also integrate streaming media in their praxes create more dynamic and less monotonous lessons, thus enhancing learners' overall educational experiences (Dai, 2023).

3.2 Challenges Encountered in Using Streaming Media in the Vocabulary Development of ELLs

Although streaming media offers benefits in vocabulary learning, it also comes with challenges. Limited Content, Access Issues, Passive Learning Risks, Reduced Focus, and Inadequate Pedagogical Support are the five themes identified in this review. These themes jointly illuminate hindrances to effective use of streaming media in English language learning contexts.

Theme 1: Limited content

Although streaming media proffered authentic content, an eminent challenge identified is the "Limited Content" on these platforms. This theme tackles the restrictions in content diversity and suitability for language learning. Vongpumivitch et al. (2023) featured the limitations of YouTube in learning English idioms. Their study found that videos from the said platform may not fully represent essential linguistic elements. Further, there are YouTube contents that may be a mismatch with the current linguistic level of students (Damanik & Katemba, 2021). To some extent, YouTube may not contain the materials appropriate for students' language proficiency (Masrai, 2019). While Spotify and YouTube harbour a wide-range of songs and videos, this feature posits a challenge in a way that students are limited in finding what aligns with their vocabulary needs (Nureani & Warni, 2023). In the same vein, Hakim (2019) stressed that

YouTube's shortcoming lies in learners' being restricted to a narrow range of dialects and expressions, therefore presenting constraints for students from acquiring global perspectives in learning English. Furthermore, learners may encounter inaccurate pronunciation and word meaning as content creators may focus on entertainment rather than educational value, thus limiting vocabulary learning opportunities (Truong & Le, 2022). Meanwhile, Kabooha and Elyas (2018) revealed YouTube's limitation in addressing wider learners. They contended that streaming content usually caters to English learning as a first language rather than a global language. Ibhar (2022) added that another drawback of YouTube is its prominence to limited genre. This may lead to repetition of words, resulting in a narrow vocabulary range.

Theme 2: Access issues

Delving into the second challenge, "Access Issues" illuminates the obstacles to accessing these platforms. The fundamental problem related to accessibility is evident in regions where English is not widely spoken (Masrai, 2019). Scarce technological infrastructures and unstable Internet connectivity are common challenges that were identified. For those learners relying on mobile data for Internet services, expenses related to accessing streaming content deter their immersion in English language content (Abbas et al., 2019). Pattemore and Muñoz (2023) underscored that despite the advantages of streaming media in optimizing vocabulary learning experiences, a lack of digital literacy skills of both teachers and learners in navigating these platforms remain a barrier. They also added that platform restrictions, such as limited choices of movies per country in Netflix, exacerbates the accessibility challenge.

Theme 3: Passive learning risks

The third challenge focuses on the potential drawbacks associated with lack of active engagement in vocabulary acquisition. Merely watching movies or listening to music in streaming platforms is not enough for effective vocabulary development (Arndt & Woore, 2018; Masrai, 2019). For Arndt and Woore, communicative activities, such as role-playing and writing stories, are paramount for applying learned vocabulary words. For Masrai, it was essential to engage in a discussion of cultural nuances from movies to leverage linguistic competency and cultural awareness. Hariyono (2020) and Hakim (2019) purported that the absence of teacher-student or peer-peer interaction demarcates opportunities for collaboration, which is an essential aspect of vocabulary development. Hakim was concerned about the tendency of heavily relying on watching movies or listening to songs without processing the information offered by streaming platforms. This scenario may lead to a deficiency in critical thinking and analytical skills, which are pivotal for deeper linguistic comprehension. Bostanci (2022) added another dimension by claiming that passive watching of YouTube movies leads to limited practice opportunities. Consequently, the paucity of structured learning procedures in YouTube limits learners' navigating content for effective vocabulary acquisition (Truong & Le, 2022). Concerning teachers, Asmawati et al. (2022) warned that integrating streaming media in their pedagogical practices may leave them overconfident on its capability to cater to individual learning needs of their students, causing them to be fixated on a one-size-fits-all approach.

Theme 4: Reduced focus

The fifth theme, “Reduced Focus”, stresses a significant challenge: sustaining educational focus, given the captivating entertainment features of streaming platforms. Streaming media is chiefly intended for entertainment. The appeal of the content may lead students to focus only on the storyline or visual elements instead of noting the words or sentences used (Damanik & Katemba, 2021). In utilizing Netflix and YouTube for vocabulary enhancement, learning objectives may be overshadowed by the entertaining qualities of the movies (Bostanci, 2022; Dizon & Gayed, 2021; Simamora et al., 2023). According to Hidayati and Syafrudin (2023), enticing visual effects, catchy music, and compelling scenes may limit concentration and linguistic recall. Similarly, singing along while listening to songs on Spotify may distract the students from focusing on vocabulary development, which emphasizes that sustaining focus in learning is crucial (Nureani & Warni, 2023). The quality and suitability of language content in streaming media may tend to prioritize entertainment value. Overlooking variable content quality may pose challenges for students in maintaining their focus on learning new vocabulary (Asmawati et al., 2022; Candarli, 2023). On a different note, the vast options of films and songs in streaming media is prone to cognitive overload, where learners juggle with too much information and may be overwhelmed by a myriad of visual and auditory stimuli. Cognitive overload detracts from learners’ language learning objectives (Dai, 2023; Pattemore & Muñoz, 2023).

Theme 5: Inadequate pedagogical support

The final challenge, “Inadequate Pedagogical Support”, highlights teachers’ difficulty in employing streaming media in the pedagogical practices for vocabulary enhancement. Such shortfall is due to the lack of teacher preparation to leverage streaming platforms as educational resources. Ibhar (2022) noted that despite teachers’ awareness of digital tools’ educational benefits, there are usually drawbacks in training for effective use of streaming platforms for vocabulary enhancement. Often, the challenge in the lack of teacher training arises from generational disparities, as evidenced by the differing levels of comfort and familiarity with these technologies between older and younger teachers (Turkmen, 2020). Turkmen added that there is also a generational gap between teachers and learners, wherein the latter are digitally adept, while the former are struggling to keep up.

4. Discussion

This review unpacks the remarkable role of streaming media in vocabulary development of ELLs, a role painted by a constellation of features: authentic content, adaptability, engaging materials, consolidation, subtitles, and multimodality. Platforms such as YouTube, Netflix, Spotify, and Bilibili, teeming with real-world language, provide learners with an authentic learning experience through culturally-rich content and practical vocabulary utilization. Analogously, these platforms exhibit inherent adaptability through their capacity to cater to multifaceted learning styles and paces, which is fundamental for personalized and learner-centred vocabulary enhancement. The engaging content and nature of streaming platforms, marrying education with entertainment,

emerge as a potent tool in perpetuating learner interest and strengthening vocabulary retention. Further, the repetitive nature of content is helpful in the reinforcement and consolidation of vocabulary words. Additionally, the presence of on-screen subtitles facilitates vocabulary retention. Multimodality in streaming media is characterized by the harmonious interrelationship among visual, audio, and textual stimuli. This feature accommodates diversity, ensuring that learners learn based on their learning preferences.

However, the journey is not without its challenges. The use of streaming media for vocabulary development of ELLs poses several hurdles: limited content, accessibility issues, passive learning risks, reduced focus, and the lack of sufficient pedagogical framework. Amid these impediments, the findings of this review illuminate the place of streaming media as a revolutionary digital tool in English language education. When used deliberately, streaming media can enrich the vocabulary learning experience of ELLs through its entertaining format and educational value. For effective integration to occur, educators, educational technologists, and curriculum developers must balance streaming media's benefits and address limitations towards an immersive English language learning landscape.

The findings of this review not only resonate with but also significantly expand upon the existing body of literature concerning the use of streaming media in language education. Highlighting the authentic, engaging, and adaptable characteristics of streaming content, this review aligns with and extends the assertion of Huang et al. (2012) that real-world media substantially enhances language acquisition and experience. Likewise, it also corroborates the contention that digital media motivates learners and promotes active participation in language learning (Yang & Patel, 2022).

Notably, this study stretches the discussion by exploring the pedagogical advantages and challenges of streaming media for ELLs. Diverging from the broader analysis of Timotheou et al. (2023) about digital media's impact on education, this review unravels the prospects of streaming platforms to tailor learning content for various types of learners. This perspective expands new understanding into the flexibility of digital tools in individualizing language learning experiences (Arantes, 2023; Schmid et al., 2023).

Moreover, the review challenges prevailing questions by explicating the risks involved in passive learning and limited content. These topics were less explored in prior studies. This facet of the study contradicts the findings of Haleem et al. (2022), which principally emphasise only the benefits of digital media while overlooking its pitfalls. Channelling the attention to these challenges widens perspectives in streaming media's effective utilization, in resonance with Genc and Koksal's (2021) cautionary pronouncement against indiscriminate adoption of digital tools in language education.

Building on the results that leverage the impactful role of streaming media in the vocabulary development of ELLs, this review navigates into wider educational

implications of these results, especially in integrating streaming media in language education curricula. Embedding authentic content in digital tools, such as streaming platforms, enriches language teaching by offering real-life situations (Shadiev et al., 2017). Exposure to authentic contexts addresses the gap between theoretical language learning with practical usage, thereby empowering students to use vocabulary words in actual situations. In addition, the ability of streaming media to stimulate personalized learning experience aligns with the trend towards more individualized instruction and independent learning (Islam, 2011). Nevertheless, English language educators should surmount challenges in integrating technology-enhanced learning approaches in established curricula in order to augment traditional teaching practices and address the needs of modern learners (Ilomaki & Lakkala, 2018).

The engaging and multimodal feature of streaming content offer a promising solution to sustaining students' motivation in learning English. Rambe and Bere (2013) underscored that multimedia learning resources can tremendously boost student engagement and confidence in vocabulary learning. By integrating streaming media in English language programs, teachers can sustain student interest to ensure long-term linguistic memory. Yet, the adoption of such digital resources should be deliberate and purposeful, as without careful consideration, their integration may be underused and detrimental (Singh, 2021). Hence, educators and curriculum mappers should meticulously incorporate streaming media in English language education and ensure it acts as an assistive tool in vocabulary acquisition. Moreover, it must equip students with media literacy skills necessary to optimize language skills.

In light of the numerous advantages that this review highlights about the use of streaming media for ELLs' vocabulary development, it is equally pivotal to tackle the identified key challenges: limited content alignment with educational needs and the risks of passive learning. Considering these challenges is paramount to a prudent utilization of streaming media in English vocabulary learning.

It is imperative not to dismiss the issue of limited content in streaming platforms. Despite the abundant authentic content, not all of it is designed for educational purposes. This can lead to challenges in identifying which streaming content is meant for entertainment and intended education (Luders et al., 2021). To mitigate this, careful curation of content is critical to ensure learning objectives are addressed. Thoughtful consideration of the appropriateness of educational technologies adheres to the Technological Pedagogical Content Knowledge (TPACK) framework of Mishra and Koehler (2006).

Likewise, the possibility for passive learning through streaming media is another issue. The convenience and easy access to digital tools can result in over-reliance, leading to passive consumption of content (Basham et al., 2016). Countering this, teachers should implement active learning activities in conjunction with streaming media. This could include interactive discussions, debates, and activities that will allow learners to engage with the content (Omar, 2017). By

doing so, teachers can harness the capacity of streaming media for innovative, creative, and stimulating English vocabulary learning.

Following the analysis of impact of streaming media for vocabulary enhancement of ELLs, this study marks a notable advancement in English language education and educational technology. It affords fresh perspectives on digital learning resources by articulating strategic incorporation of streaming media in English language teaching, with a particular focus on vocabulary enhancement. The insights from this review not only contribute to ongoing debates but also have the potential to shape future research trajectories in the realm of technology-based English language education.

5. Limitations of the Review

This review faces certain limitations, including its temporal restriction to articles published from 2017 to 2022, potentially omitting relevant earlier works. Its focus on peer-reviewed journal articles may overlook insights from other forms of scholarly outputs such as conference papers and dissertations. The variability across studies in terms of educational contexts, learner demographics, and methodologies may impact the generalizability of the findings. Additionally, the review's language bias towards English-published literature could exclude significant research in other languages. Given the rapid technological advancements in digital media, the findings represent a snapshot of the current research landscape, underscoring the dynamic nature of streaming media's role in vocabulary development and highlighting the necessity for ongoing investigation in this evolving field.

6. Conclusion

This systematic review illuminates the critical role of streaming media in developing the vocabulary skills of ELLs. It determines key features such as authentic learning content, adaptability, engaging material, consolidation, subtitles, and multimodality. Collectively, they elucidate streaming media's potentiality as an enriching educational tool, capable of transforming vocabulary learning into a dynamic experience. Conversely, the review also highlights varied challenges such as limited content alignment with educational needs, access issues, risks of passive learning, reduced focus, and inadequate pedagogical support. These issues necessitate a careful integration of streaming media into language teaching and curricula, signalling the path for future studies to optimize its applicability in diverse educational settings.

7. Recommendations and Future Directions

To leverage streaming media effectively for enhancing vocabulary development among ELLs, it is recommended that educators integrate carefully selected streaming content into language curricula, fostering engagement and authentic language exposure. Policymakers should support this integration through resource allocation and policy development, enhancing access and efficacy. Researchers are encouraged to investigate streaming media's pedagogical impacts further across various demographic settings, contributing a refined understanding of best practices. Technology developers and content creators, in

collaboration with educational experts, should design streaming media features and content that are pedagogically aligned with language learning needs, ensuring suitability for the intended audience. Future directions should focus on evaluating the long-term effects of these strategies, exploring innovative technological solutions, and expanding the scope of research to include diverse learning contexts, populations, and age-specific applications of streaming media.

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