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Innovative Approaches in English As A Second Language Classroom: A Systematic Review of Web 2.0 Integration (2020-2024)

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ABSTRACT

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Upon entering the digital era, the English as a Second Language (ESL) landscape has been transformed with the infusion of information communication technology (ICT) in the classroom. In tandem with the national policies advocating digital learning for learners, Web 2.0 tools are gaining traction among Malaysian ESL practitioners to be employed as a learning tool for students. These tools, characterised by features that foster collaboration and facilitate information sharing, offer promising avenues for enhancing language learning experiences. Drawing insights from one database, this systematic literature review paper sheds light on how different Web 2.0 tools can be integrated into the Malaysian ESL classroom. Furthermore, the challenges for educators and learners upon implementation of Web 2.0 tools are thoroughly discussed. With that, this paper aims to help Malaysian English teachers in choosing appropriate tools to facilitate students' learning process. Nevertheless, practitioners should exercise caution when introducing Web 2.0 tools in the classroom setting as technology is always perceived as a double-edged sword.

Keywords:

Web 2.0 tool; challenge; English as a second language

1. Introduction

The global adoption of online learning tools, which is due to the significant advancements in technology, has made English language learning more accessible. Digitalisation facilitates flexible learning beyond conventional classrooms and thus enriching education [1]. Lampropoulos et al., [2] propose that effective learning should involve Information and Communication Technology (ICT) integration. To address global demands, the Ministry of Education has introduced the Digital Educational Learning Initiative Malaysia (DELIMa) to facilitate online teaching and learning [3]. This is because implementing technology-enhanced learning can enhance student involvement in classroom activities, thereby ensuring high-quality education for students.

Web 2.0, a second-generation web development and design approach, has revolutionised learning, enabling interactive and intercultural connections worldwide [4]. According to Genç and

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Kırmızıbayrak [5], Web 2.0 tools help students monitor their learning progress, encouraging autonomy and self-directed learning. In addition, Web 2.0 tools can also significantly change teacher and learner roles in language learning, thus enhancing classroom instruction methodologies [6].

However, Malaysian educators often struggle to adequately utilise Web 2.0 tools in the classroom due to a lack of experience and knowledge in the subject [7]. Moreover, there are insufficient reviews of Web 2.0 tools in Malaysia in the present literature.

Therefore, to fill the gap, this study reviews journal articles from 2020 to 2024 that discuss the integration of Web 2.0 tools in ESL classrooms and the research will be guided by the following research questions (RQ):

RQ 1: How can Web 2.0 tools be utilised to teach or learn English in an ESL classroom in Malaysia? RQ 2: What are the potential challenges of integrating Web 2.0 tools in an ESL classroom in Malaysia?

2. Literature Review

2.1 Concept of Web 2.0

According to Bakir Arabaci and Akilli [8], the term 'Web 2.0' was first introduced by Tim O'Reilly in 2004, which refers to the second iteration of the World Wide Web (www) and encompasses several novel applications that facilitate a collaborative framework. Unlike the first generation of the Web (Web 1.0) that concerned more with content production and consumption leaving no room for interaction, Web 2.0 is a web technology that aims to enhance creativity, information sharing, and user collaboration [9]. Furthermore, according to Abdel-Rahem Amin [10], Web 2.0 is a concept that includes a range of rapidly advancing technologies and signifies the second generation of web development. Web 2.0 tools have facilitated user-driven knowledge creation, information sharing, and content generation, impacting learning and teaching dynamics in education [10,11].

2.2 Integration of Web 2.0 Tools in English Language Teaching (ELT)

Web 2.0 tools such as Google and social media applications (Facebook, Instagram, WhatsApp, etc.) in ELT have revolutionised language classrooms, increasing students' motivation and proficiency in English [12-14]. Google Apps and Docs can aid writing and error correction [15,16]. Additionally, the Google search engines have also aided learners in identifying and rectifying their writing errors, and Google's speech recognition supports English language acquisition [12,15,16].

Social media platforms like Facebook, Instagram, YouTube, Twitter, Telegram and WhatsApp, are used for educational communication, encouraging interaction with content and peers [17-19]. Telegram and WhatsApp support flipped classroom models due to ease of use. They allow for seamless communication and collaboration between teachers and students, as well as among students themselves [5]. Facebook and Instagram can improve student performance in using English by sharing their opinions through posts [20,21]. YouTube and Twitter help improve various English skills such as reading proficiency, grammar, speaking and writing skills [22-24]. YouTube also offers educational content for peer assessment [5].

It is important to note that Web 2.0 tools are increasing immensely due to the rapid development of technology [9]. Therefore, continuous research should be conducted to explore the ever-evolving potential and impact of Web 2.0 tools on language teaching and learning, especially in the ESL classrooms.

3. Methodology

This systematic literature review follows a rigorous and transparent methodology. As highlighted by Tranfield *et al.*, [25], it involves exhaustive literature searches to minimise bias and provide a clear audit trail of decisions and conclusions. This approach ensures a comprehensive and unbiased synthesis of existing evidence on the topic.

3.1 Identification Phase

The literature search for this study included keywords such as "app website teaching English". The Education Resources Information Centre (ERIC) database was consulted.

3.2 Screening Phase

After searching for the relevant articles for the study, the obtained search record was 61 articles. Out of the acquired articles, 33 relevant documents were screened for inclusion for this research study. To ensure that the articles met the researchers' criteria, additional information was included in the search for related articles, which is detailed in Table 1.

Table 1Inclusion and exclusion criteria

inclusion and exclusion criteria	
Inclusion criteria	Exclusion criteria
Articles from journals	Conference proceedings, review articles, conceptual papers, book chapters, reports
Related to Web 2.0 tools for teaching English	Not related to Web 2.0 tools for teaching English
Focus on primary, secondary and tertiary level English learners	No specific study groups
Articles from 2020 - 2024	Articles earlier than 2020

3.3 Eligibility Phase

After collecting the relevant articles, a preliminary assessment was conducted on the full-text articles to determine their quality and eligibility for inclusion in the study. Specifically, the focus was on evaluating journal articles, with a careful examination of the publishers' reputations to ensure reliability. The selection process involved a series of iterations, including forward and backward searches to identify appropriate literature review techniques and to exclude articles not related to teaching English. This meticulous approach led to the identification of 14 articles that met the criteria for full-text review.

3.4 Exclusion Phase

The criteria for inclusion were focused on academic and peer-reviewed publications examining the integration of Web 2.0 tools in an ESL classroom. Non-academic materials, poorly conducted studies, and publications from unreliable sources were excluded. Out of the 14 articles reviewed in full-text, 10 were deemed directly relevant to the study's exploration of using Web 2.0 tools in a Malaysian ESL classroom. The search flow and the amount of literature identified in the Preferred

Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework are shown in Figure 1.

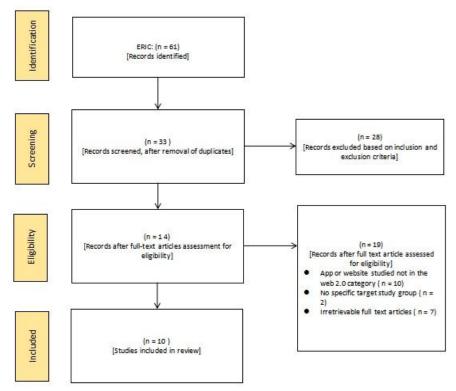


Fig. 1. PRISMA procedure

4. Results

The selected studies are listed in Table 2, with 10 articles sourced from the ERIC database. The focus of all the studies revolved around the aspect of integration and the challenges encountered by teachers and learners in ESL classrooms. The majority of the research was carried out in university settings (2,3,4,5,6,8,9,10), with 1 study conducted in primary school (1) and secondary school (7) respectively. Most of the studies were carried out in contexts outside of Malaysia (1,2,3,4,5,6,7,8), with only 3 articles related to the Malaysian context (5,9,10).

Table 2Summary of the findings

No	Articles	Apps/ Websites	Context	Level	Country
1	Al-Jarf [27]	WhatsApp, YouTube, Google Play	Digital Reading among Children in Saudi Arabia	Primary	Saudi Arabia
2	Amin [10]	Google Docs, Google Machine Translation, Google Speech Recognition System, Google Earth	English language learning and teaching	University	Saudi Arabia
3	Kusuma [29]	Facebook, Instagram, WhatsApp, YouTube	Online teaching in rural schools during the COVID-19 pandemic	University	Indonesia
4	Noroozi <i>et al.,</i> [47]	WhatsApp	Flipped instruction on conditional sentences in EFL learners	University	Iran
5	Al-Jarf [27]	WhatsApp, Facebook, Twitter, Instagram	Vocabulary teaching and learning in EFL college students during the pandemic and post-pandemic	University	Saudi Arabia, Iran, Korea, Thailand, Turkey, Iraq, and Malaysia.
6	Ipek & Mutlu [42]	Smartphone apps, social media websites	English language learning outside the classroom	University	Turkey
7	Toleuzhan <i>et</i> al., [33]	YouTube	Communication Fluency Development in English	Secondary	Kazakhstan
8	Reflianto <i>et</i> al., [48]	WhatsApp, Microsoft Teams	Online Flipped Classroom Learning and Student Engagement	University	Indonesia
9	Rashid & Nagaletchimee [38]	Whatsapp, Zoom, Google Meet, YouTube, Google Forms	English language learning during the COVID-19 pandemic in Pakistan	University	Malaysia
10	Daulay <i>et al.,</i> [46]	Google Classroom	Flipped Learning Instruction on Tertiary English Learners' Writing Achievement	University	Malaysia

From the 10 studies enlisted in Table 2, 7 types of Web 2.0 tools are identified that are commonly integrated in ESL classrooms, including YouTube, Google Applications (Google Docs, Google Form, Google Classroom, Google Meet, Google Earth, Google Translate, Google Play, and Google Speech recognition), Whatsapp, Facebook, Twitter, Instagram, and Microsoft Teams.

The analysis categorises commonly used Web 2.0 tools in ESL classrooms based on aspects like communication, content sharing, collaborative work, word translation, pronunciation, and language learning, as outlined in Table 3. It reveals that in ESL classrooms, Web 2.0 tools are integrated primarily from the aspect of communication (1, 4, 5, 8, 9) and content sharing (1, 3, 6, 7, 9). Notably, only 1 study (3) addresses the integrating collaborative work using Web 2.0 tools in ESL classrooms, indicating a potential area for further research and enhancement.

Table 3Aspects of Integrating Web 2.0 Tools in ESL Classrooms

Study	/ Aspects					
	Communication	Content Sharing	Collaborative work	Translation & Pronunciation	Skill-based Learning	
[1]	/	/			/	
[2]				/		
[3]		/	/			
[4]	/					
[5]	/					
[6]		/		/	/	
[7]		/				
[8]	/					
[9]	/	/				
[10]						

Challenges in integrating Web 2.0 tools in ESL classrooms are summarised in Table 4, including limited technology access and the internet, privacy concerns, content and engagement issues, technical problems, and credibility and reliability issues. The majority of the studies (1, 2, 4, 7, 8, 9, 10) have identified technology access as a significant barrier. ESL educators and learners often face technical issues (3, 4, 10) when utilising Web 2.0 tools effectively in language learning. The review articles (6, 7, 9) indicate that teachers struggle with overloaded information content and students' lack of engagement when introducing Web 2.0 tools in an ESL classroom.

Table 4Challenges of Integrating Web 2.0 Tools in ESL Classrooms

Study	Challenges				
	Technology	Privacy	Content &	Technical	Credibility &
	Assess		Engagement	Issues	Reliability
[1]	/				
[2]	/				/
[3]		/		/	
[4]	/			/	
[5]		/			
[6]			/		
[7]	/		/		
[8]	/				
[9]	/		/		
[10]	/			/	

4. Discussion

In what follows, classroom approaches are suggested for Malaysian ESL practitioners by considering the aspects of integration followed by a thorough discussion of the challenges that arise upon implementation.

4.1 Flipped Classroom

The YouTube platform contains accessible English videos that can serve as authentic materials [26-29]. Before classroom instruction, teachers can provide learners with English YouTube videos that are related to the topic learnt to be watched. The videos prepare learners for in-class activities by scaffolding information before class to reduce the cognitive load during instruction [12].

Primary school students can learn English via musical-based activities that are enjoyable and they can help to create a motivating atmosphere [30,31]. English songs and nursery rhymes enable learners to differentiate between phonemes and improve their pronunciation of English words via repetition and memorisation [27].

As for secondary school learners, by watching YouTube videos, they can speak more fluently and confidently as English acquisition is attained with ease and enjoyment [26,32,33]. Furthermore, visual and auditory learners can observe the visuals and listen to YouTube videos [34]. Hence, this reinforces listening comprehension as audio and visual perceptions happen concurrently [35]. Appropriate English films shown to students also allow them to observe how native speakers of English use the target language when speaking English [33].

4.2 Online Learning

Learners are able to collaborate in online writing tasks and exchange ideas in chat rooms via Google Docs [36]. The autocorrect feature allows students to be conscious of their language errors made, hence increasing their motivation in English writing [10]. In addition, the Google search engine can help students to identify their writing errors and provide corrections [10]. Furthermore, Google Earth improves students' language skills via game-based learning [37]. Learners are able to travel to other countries virtually and have the opportunity to use English meaningfully in authentic tasks.

4.3 Communication Tool

Whatsapp is compatible with most devices and does not require a high internet bandwidth [29,38]. Thus, teachers can share English materials to students via Whatsapp. They can read the materials shared using their gadgets at their own pace [38,39].

Besides, incidental learning happens as Whatsapp allows its users to conduct two-way discussions and provide comments or feedback in English [38,40.41]. Even though the chats among students are informal, students can learn to initiate, sustain and end a discussion [38]. They can use the correct register when communicating with their teachers via Whatsapp. Virtual interactions also indirectly help to improve the students' writing skills because they are constantly engaged in self-correction before sending messages to others [38]. Thus, the improvement in vocabulary and grammar is perceived as the by-product of employing Whatsapp as a communication tool [38].

As for social networking sites such as Facebook, Twitter and Instagram, when students follow foreign accounts on them, they read the posts and comments in English and this improves their comprehension skills [42,43].

4.4 Learning Management System (LMS)

Microsoft Team can serve as an LMS in the ELT context as it offers many features: scheduled online meeting, assignment, material sharing, evaluation system and communication via chats and calls [39,44]. The completeness of features improves the students' ability of completing language tasks as they are able to have interactive discussions via online meetings [39,40,44].

4.5 Challenges Upon Implementation

Content and engagement issues arise when students often find huge amounts of information in Web 2.0 tools, a distraction, causing boredom and confusion [45]. Next, parents' misunderstanding

of Web 2.0 tools integration in ESL classrooms as solely for entertainment purposes, decreases students' engagement and seriousness of learning, leading to lagged learning in classrooms [27]. Besides, learners' engagement depends on students' own preferences of Web 2.0 tools rather than what is useful [42].

Technical issues are prevalent when some Web 2.0 applications are not user-friendly for teachers in ESL classrooms. For instance, in WhatsApp, with limited function features, all activities appear in a chatroom with more clutter and are less organised, causing teachers to waste a lot of time checking and assessing students' work [39].

Next, internet access issues are evident. Students may not have internet access required to use Web 2.0 tools for language practice [27]. Not only students, teachers usually consider internet connectivity and accessibility while integrating Web 2.0 tools in ESL classrooms [29].

The accuracy and reliability of translations like with Google Machine Translation, may vary at different attempts, leading to confusion [10]. Plus, over-reliance on translation tools makes learners not discern the credibility and reliability of translations. Some tools may not accurately recognise the different accents, hampering ESL learning [10].

Privacy issues are evident when some students do not have their own smartphones but use their parents' devices at home which makes Web 2.0 integration in ESL classrooms difficult [29]. These students might not be able to create or log into their own accounts for learning because they are still using their parents' smartphones and accounts.

5. Conclusion

This systematic literature review paper is used to explore how Web 2.0 tools can be integrated in Malaysian ESL classrooms and the potential challenges with respect to it. The Web 2.0 tools identified are Youtube, Google Applications, Whatsapp, Facebook, Twitter, Instagram, and Microsoft Teams. They can be infused in classrooms from the aspect of communication, content sharing, collaborative work, translation and pronunciation, and skill-based learning. After considering the aforementioned aspects, four classroom approaches: flipped classroom, online learning, communication tool and LMS are proposed for Malaysian ESL teachers. Nevertheless, teachers should address issues pertaining to internet access, privacy, content and engagement, credibility and reliability, and technical issues when introducing Web 2.0 tools in ESL classrooms.

This paper hopes to offer Malaysian educators' insights into Web 2.0 integration in ESL classrooms. Even though technology is a supplement for effective language learning, educators should use their judgement in picking the best tool for the betterment of the students.

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