A review of research on the use of social media in language teaching and learning

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Article Info	Abstract
Keywords: *CALL* Social media Language learning Language teaching Review Article	The various possibilities that social media offers to language learners and teachers have long been recognized by researchers within the field of language instruction, and many studies have been carried out in an attempt to address and unpack its potential contributions. This paper aims to review such research on the use of mainstream social media in language teaching and learning published in *Computer Assisted Language Learning*, a top tier (i.e., Q1) journal indexed in major citation index systems (e.g., Arts & Humanities Citation Index, the Social Sciences Citation Index and Scopus), between the years 2016-2020 inclusive. For the purposes of the study, a total of 23 articles that meet the selection criteria is reviewed and presented in five sections. The first section deals with the majority of the articles, which are found to be on the use of social networking in language teaching and learning. In the following sections, studies on the use of videoconferencing, wikis, blogging and forums are discussed. Collectively, the studies reviewed in this paper outline a critical role for the use of social media in language instruction and the study aims to provide valuable insights for researchers, teachers and learners.

1. Introduction

Being popularized as a term to refer to the second generation of the World Wide Web, Web 2.0 tools opened new doors to their users by making it possible to produce and share content through social media (İstifçi, 2014b). Since then, social media has become a global phenomenon playing an important role in many people's lives. Today, with a 49% social penetration rate, social media platforms are used by almost half of the world's population (Statista, 2021). As in many other aspects of life, they have caused changes in the educational landscape, and language instruction has been no exception. These platforms have revolutionized language learning, so much so that social networking sites and applications, such as Busuu or Livemocha, that are solely aimed at language learning have been designed. They obviously have a lot to offer to anyone who would like to learn and practice a new language, yet even mainstream social media, in the forms of social networking sites (hereafter SNSs), videoconferencing platforms, wikis, blogs and forums, are also being used for such purposes by growing numbers of language teachers and learners. Social media provides learners and teachers with so many opportunities that how they could be most effectively exploited has been a major area of interest within the field of language teaching and learning.

Being one of the most popular social media platforms, Facebook has attracted the attention of many researchers. In their studies Eren (2012), Yang (2013), İstifçi (2014a, 2014b) and Wu (2016) all find positive attitudes towards Facebook as a language teaching and learning tool. Several studies have also reported on its positive contributions to teaching and learning languages. These include opportunities for

better student-teacher interactions (Aydın, 2014), for creating a sense of belonging to a learning community (Blattner & Fiori, 2009; Lin et al., 2016), for intercultural communication and socio-pragmatic awareness (Blattner & Fiori, 2009, 2011; H. I. Chen, 2017), for collaborative learning activities (Lantz-Andersson et al., 2013), for improving writing ability (Alberth, 2019; Barrot, 2016, 2021a; Shih, 2011; Yunus & Salehi, 2012), and for learner autonomy (Akbari et al., 2015). In a similar vein, research on Twitter suggests a potential to encourage participation, engagement, reflective thinking and collaborative learning (Gao et al., 2012). Twitter is also found to have positive effects on teaching pronunciation (Mompean & Fouz-González, 2016) and maintaining motivation and learning routines (Fewell, 2014; Sekiguchi, 2012). Although much of the research to date has tended to focus on Facebook and Twitter, other social media platforms such as Instagram, Pinterest, Snapchat and WhatsApp are becoming extremely difficult to be ignored by the researchers considering the numbers of their young users and the features they offer (Manca, 2020). Winet (2016) explores instant messaging and highlights WeChat, Facebook Messenger and WhatsApp as excellent tools in improving students' enthusiasm, and thus writing ability. Qi and Wang (2018) underline that teachers have positive experiences of creating social and work relationships using WeChat, which they described as an ideal tool for professional development. Furthermore, Andujar and Cruz-Martinez (2017) reveal the contributions of WhatsApp to oral proficiency. Videoconferencing tools such as Skype are also considered powerful resources for language learning (Taillefer & Munoz-Luna, 2014) that have the potential to improve linguistic and intercultural competence (Tian & Wang, 2010). Blogs are found to be "motivating, enjoyable and encouraging" learning tools in İstifçi's (2011) study. In addition, YouTube is another Web 2.0 tool that has been shown to facilitate language learning (Brook, 2011), provide opportunities for self-regulated learning (Wang & Chen, 2020) and improve listening abilities (Silviyanti, 2014). Finally, Chao and Lo's (2011) and Ducate et al.'s (2011) projects reveal positive perceptions of wikis as language learning tools.

Based upon the above-mentioned concerns, this review article is a further attempt to analyze the last five years (2016-2020 inclusive) of published research in *Computer Assisted Language Learning* (hereafter CALL) on the use of mainstream social media platforms in language instruction in order to shed more light on the academic possibilities they offer to facilitate language teaching and enhance learning outcomes since research providing insight into the use of social media in language teaching and learning plays a critical role in the much-needed integration of technology and language instruction. By giving a brief account of such research, this meta-narrative review aims to contribute to the wider implementation of this integration in various language teaching and learning settings.

2. Methodology

2.1. Selection Criteria for the Journal

For the purposes of the present review, CALL, a highly respectable top tier journal ranking in the first quartile (i.e., Q1) in the language and linguistics subject category (Scopus, 2021) was chosen. CALL was found to rank first in terms of *h-index* along with *Language Learning and Technology* and was identified as "the most significant publication venue in terms of productivity" in Barrot's (2021b) comprehensive review of literature on social media in language learning, which is based on his survey of over 1,600 journals indexed by Scopus. Therefore, considering its high number of publications on the subject and the citations they get, it is safe to say that CALL proves to be an ideal venue for the present review of literature which aims to provide insights into the current body of research investigating the use of social media tools in language learning and teaching.

2.2. Selection Criteria for the Articles

The last five volumes of CALL (i.e. volumes 29, 30, 31, 32, 33) spanning over a period of 2016-2020 were scanned for articles investigating the use of social media by language learners and teachers as a tool for second or foreign language instruction. The total number of articles in these five volumes was 230, but after

the initial search was completed by reading the titles and the abstracts of the articles, 41 of these articles were identified to be related to social media. Next, these articles were read and the articles focusing on some other issues of language use on social media, the articles on the use of social media and applications designed only for language learning and review articles were excluded. By employing a content analysis, the common themes, most preferred methodologies, common implications were detected for each category.

3. Findings

This review presents 23 articles that meet the selection criteria in five sections. It begins with the studies that investigate the use of social networking sites and then goes on to the studies on videoconferencing, wikis, blogging and forums. In each section, the studies are discussed in relation to their research purposes, context, designs and results. Furthermore, the findings that emerge from analyses of their above-mentioned features are reported with regard to their similarities and differences. The table below provides an overview and shows the main characteristics of the research that will be reviewed in the following five sections.

Table 1.

Articles published in CALL in the 2016-2020 period

Year	Volume	Issue	Authors	Country	Social Media Focus	Research Focus
2016	29	4	P. Chen	Taiwan	blogging	metalinguistic awareness, affective performance in writing
		4	Pham & Usaha	Vietnam	blogging	peer response in writing
		5	Hsu	Taiwan	voice blogging	speaking skills
		5	Zou &Wang & Xing	China	Wikispaces	error correction in writing
		6	Terhune	Japan	Skype	computer mediated communication
		8	Dizon	Japan	Facebook	writing skills
2017	30	1-2	Rassaei	Iran	Skype	face-to-face recasts with computer-meditated recasts
		3-4	Sun et al.	China	Papa	speaking skills
		3-4	Xu & Peng	China	WeChat	feedback on oral production
		6	Özdemir	Turkey	Facebook	intercultural communicative effectiveness
		7	Fouz-González	Spain	Twitter	pronunciation
2018	31	1-2	Jin	China	WeChat	language development affordances
		7	Zou & Li & Li	China	WeChat	perceptions of WeChat as a learning tool
		8	Peeters	Belgium	Facebook	online peer interaction
2019	32	5-6	Paul &Friginal	China	Facebook Twitter	written production
		5-6	Su et al.	China	wikis	literature circles, online self-regulation
		8	Hsu	Taiwan	Wikispaces	collaborative writing
		8	Ko	South Korea	NaverCafè	vocabulary feedback
2020	33	3	Börekçi & Aydın	Turkey	Facebook	teacher-student interaction
		3	Ma	Hong Kong	Google Sites	online peer feedback on wiki writing
		4	C. W. Chen	Taiwan	social media	language awareness, digital literacies
		5-6	Lenkaitis	the USA	Zoom	language learning, learner autonomy
		7	Viáfara González	Colombia the USA	Skype	telecollaboration, pre-service teachers' perceptions

3.1. Studies Investigating Social Networking

Social networking has long been a question of great interest in a wide range of fields, including language instruction. Indeed, eleven out of 23 articles reviewed in the present paper belong to the social networking category and are related to the various opportunities SNSs provide for language teachers and learners. C. W. Chen (2020) investigated whether facilitating language awareness and digital literacies could be one such opportunity via a five-stage process involving the use of SNSs. In the *observation* stage, 27 Taiwanese EFL students were asked to read the anonymized YouTube comments they were provided with by the researcher and took part in discussions in the *guided exploration and analysis* stage. Compiling a portfolio of online comments and their annotated commentary, the students engaged in a critical analysis of language forms and functions in the *collection* stage. In the *creation and participation* stage, they posted their own comments and reported the responses they generated in their portfolios. Finally, the *reflection* stage was related to the whole experience, and according to the students' entries, they gained valuable insights about online comments, which could be fertile grounds for language and intercultural learning.

The above-mentioned study, which draws attention to the potential benefits of making learners read and analyze online comments, is the only study that explores a general feature shared by various SNSs. The remaining studies, on the other hand, tend to focus on the use of particular SNSs in language teaching and learning, and they are presented in the following sections based on these SNSs.

Facebook

Investigating Facebook within the context of language teaching and learning has received considerable attention. In a quasi-experimental study, Dizon (2016) aimed to explore the efficacy of Facebook in improving the participants' writing fluency, lexical richness and grammatical accuracy in a 12-week EFL writing class. 24 in-class focused free writings were assigned both to the experimental group, who needed to post them on Facebook and comment on at least two of others, and to the control group, who needed to complete the assignments using paper and pencil. Although no significant differences were found in terms of lexical richness and grammatical accuracy, improved writing fluency was observed in the experimental group. Therefore, the study suggested that Facebook could indeed promote second language (hereafter L2) writing. Another study on Facebook-integrated writing courses was conducted by Peeters (2018), who carried out a two-year project to investigate Facebook's potential for an additional peer interaction space. The participants of the case study, more than 200 first year EFL majors at a Belgian University, joined a Facebook group which they used to discuss academic writing activities. The analysis of their interactions on Facebook revealed that they carried out a great number of communicative functions that could be categorized under four developmental processes: cognition, metacognition, organization and socio-affect. Peeters (2018) concluded, as these developmental processes and related communicative functions could enhance learning outcomes, Web 2.0 tools such as Facebook could be of assistance in language instruction.

Another possibility Facebook could provide for EFL learners was examined by Özdemir (2017) in the context of a Turkish university. Özdemir (2017) explored the potential of Facebook for developing Intercultural Communicative Effectiveness (ICE), a subcomponent of Intercultural Communicative Competence, in a mixed-method study employing multiple data collection tools. Following a pre-test of intercultural effectiveness scale, the participants were given a five-week instruction on intercultural communication, and after each class, some participants were asked to participate in discussions led by the researcher on a Facebook group with 69.000 members while the others participated in-class discussions. The post-test revealed significantly higher scores for the participants of the Facebook group, who, in their semi-structured interviews and essays, also expressed positive attitudes and experiences about the process. Therefore, Facebook was suggested as a viable platform for intercultural communication, especially in countries like Turkey, where opportunities for such interactions were scarce. The only study that investigated teachers' perceptions of the use of Facebook in language instruction also came from Turkey. In their descriptive study, Börekçi and Aydın (2020) examined English teachers' perceptions and practices

of student-teacher interactions on Facebook with respect to certain variables. Female teachers, high school teachers and teachers with a BA and those who spent more than one hour on Facebook were found to be more comfortable with active interactions, whereas certain variables such as age, teaching experience, and the number of friends/student friends were found to be insignificant. However, the survey data also revealed that teachers mostly preferred passive behaviours, such as viewing the students' profiles or reading through their posts, which do not require any direct contact with them on Facebook. Whatever the reasons might be behind these passive behaviours, the researchers suggested that teachers should increase their interactions with their students on Facebook, as improved teacher-student relationships could enhance language learning.

In conclusion, although they employ different research designs and investigate different aspects of integrating Facebook into various language learning and teaching contexts, taken together, these studies all highlight Facebook's potential positive contributions to EFL instruction as an additional tool.

Facebook and Twitter

Facebook was also the research focus of the only study that compared two SNSs. Paul and Friginal (2019) explored the effects of Facebook on L2 learners' writing ability in comparison to those of Twitter in a pseudo-experimental setting. The researchers drew attention to the different nature of communication on these two SNSs, categorizing Facebook as a symmetric SNS which required mutual agreement on the friendship, and Twitter as an asymmetric SNS which did not require an invitation or approval to be able to follow a user. After completing a pre-questionnaire, English-speaking learners of Chinese were assigned to a Facebook or a Twitter group and asked to regularly post in Chinese as part of their coursework. Data were gathered from the coded screenshots of the posts and the pre- and post-questionnaires separately for a short term (10 days) and a long term (50 days) project. In both projects, the participants were found to display different online behaviours, which could be related to distinct characteristics of the two SNSs. Overall, the analysis of the data led the researchers to conclude that symmetric SNSs such as Facebook might provide a more effective platform for peer-to-peer interaction and feedback.

Twitter

The only other study on Twitter reported more positive findings regarding its use in language instruction. Fouz-González (2017) designed a quantitative study with a control and experimental group to investigate the opportunities Twitter could provide for teaching pronunciation. All of the participants, 121 Spanish learners of English, got a daily tweet of a vocabulary item (whose pronunciation was problematic for Spanish speakers) with short explicit explanations for 22 days, but only those in the experimental group received an additional link to a video or an audio file on its pronunciation and use in authentic contexts. Pre-, post- and delayed post-tests revealed that the participants' pronunciation of the commonly mispronounced words significantly improved, and the improvements were retained over time. Although not very strong, there was also a positive correlation between high engagement scores and high improvement scores. Most of the participants were already active users of many SNSs including Twitter, as the pre-study questionnaires showed, and according to the results of the post-questionnaires, the participants believed Twitter held great potential for language learning, too. The study is significant in terms of its focus on a less-studied SNS (Twitter), group of participants (Spanish learners of English) and language skill (pronunciation).

WeChat

WeChat is another popular SNS, especially in Chinese-speaking communities. Trying to identify various affordances of WeChat for language learning, Jin (2018) gave an account of two students on a study-abroad program in China who had been taking Chinese classes in their home country. The researcher adopted qualitative data collection methods: a weekly survey the participants filled out on their language learning experience, screenshots of the participants' public and private texts on WeChat and two semi-structured

interviews. A casual space with easy access to native speakers of Chinese, authentic meaning-focused communication with native speakers of Chinese, linguistic resources and multiliteracies and space for new identity creation were the affordances identified. Although each participant made use of each affordance on a different level depending on their personalities and proficiency levels, both reported positive attitudes towards and experiences with the use of WeChat as a language learning tool. Another study that explored the use of WeChat in the context of teaching Chinese as a second language was by Xu and Peng (2017). Their exploratory study specifically investigated the characteristics of mobile-assisted feedback on oral skills of 13 learners of Chinese studying at a Chinese university and their perceptions related to this practice. During a 12-week semester, the participants were assigned nine voice recordings on topics such as food or dream jobs after they were covered in class and asked to send them to the class group on WeChat. The participants received oral and written feedback on their 2-to-3-minute recordings again on WeChat. The pre- and post-study questionnaires completed by the participants and their interviews revealed a positive perception of WeChat as a tool for facilitating oral skills. Already using WeChat in their daily lives, the majority of the participants agreed on the effectiveness of WeChat as a feedback platform in language teaching and learning.

In a similar vein, Zou, Li and Li (2018) aimed to explore learners' perceptions of WeChat as a language learning tool in addition to that of a curriculum app they designed for their four English for Academic Purposes (EAP) classes at a Chinese university. 84 participants of the mixed-method study who enrolled in these classes used the curriculum app and two groups on WeChat, one class group which enabled student-student and teacher-student interaction and another with French college students who were also learning English. They actively used both WeChat platforms to chat, ask and answer questions and give feedback to each other as well as getting feedback from their teacher, which they found to be useful, easy, comfortable and fun. The participants reported positive perceptions related to the integration of WeChat into their classes in their questionnaires and interviews. As it provided additional space for communicating with teachers, local and international peers, SNSs such as WeChat were strongly recommended by the researchers for supplementing students' learning.

To sum up, the studies reviewed here share certain common features. They all investigate the perceptions of their participants, who are either learners of Chinese or Chinese-speaking learners of English, and overall, they provide evidence that WeChat is recognized as a useful platform for language teaching and learning.

Papa

Although not as popular as WeChat, Papa is another Chinese-based SNS that enables its users to record, upload and share audio. Focusing on the use of this less known SNS, Papa, with a less studied group of learners, Sun et al. (2017) explored the effect of SNSs on the oral skills of Chinese elementary school students learning English in a quasi-experimental study. While some randomly chosen members of the control group presented their oral assignments in class, all the members of the experimental group submitted their assignment on Papa. The analysis of the pre-test and post-test showed similar gains in terms of accuracy and pronunciation; however, significantly better progress at fluency was evident in the experimental group. Focus-group interviews revealed that 90% of the participants enjoyed using the SNS and the four affordances that stood out were the fostering of an encouraging environment, reduction of anxiety, situated learning and ease of use. Considering the importance of these affordances for young EFL learners who lacked opportunities for practicing their speaking skills anywhere in the world, the study provided important insights by touching upon an area about which relatively little is known, the use of SNSs when teaching young learners.

3.2. Studies Investigating Videoconferencing

Computer-mediated communication in the form of videoconferencing enables communication to happen between participants who are not in the same space and time and obviously holds great potential for

language instruction. The studies reviewed in this part aimed to explore the possible contributions of videoconferencing in the various research settings. In his experimental study, Rassaei (2017) compared the effects of face-to-face recasts with computer-mediated recasts during videoconferencing via Skype on Iranian EFL learners' language development. Two experimental groups received one type of above-mentioned corrective feedback while the control group did not receive any feedback on their article usage during the three treatment sessions which involved storytelling activities. The findings from the pre- and post-tests revealed both types of recasts to be equally effective and supported their use since the participants in both experimental groups outperformed those in the control group. Therefore, the study provided important evidence in favour of computer-mediated recasts during videoconferencing, which could indeed be the only option during online education. Terhune's (2016) mixed-method study, on the other hand, showed that learners might not be very pleased to replace face-to-face learning with computer-mediated learning. The study portrayed the integration of computer-mediated communication through Skype provided by a language school in the Philippines into a university-level EFL class in Japan which aimed to prepare the students for academic study overseas. Twenty students taking the class made reservations and accessed the qualified teachers of the language school for either free conversation classes on mutually agreed topics or text-based conversation classes on visual prompts. As revealed by the end of class survey, more students would have preferred if the practice had not been a required part of their class at all or had been optional. In addition, although most students were pleased about the use of Skype for conversation, they were not sure about whether they wanted to continue learning English through Skype and showed a bigger preference for traditional classroom learning. Terhune (2016) also quantitatively analysed students' use of the service and linked the students' diminishing participation over time to certain issues related to motivation and autonomy. The study provided important pedagogical implications by concluding that a task-based approach with more concrete tasks and specific goals could be used to overcome such problems in the use of videoconferencing in language learning. Skype was also used as a telecollaboration tool in Viáfara González's (2020) qualitative study which investigated the effects of telecollaboration between pre-service English teachers from Colombia and Spanish heritage language students from the USA on the Colombian future teachers' self-perceptions as (non)native speakers. During the eight weeks of telecollaboration, the participants took part in information exchange and comparison and analysis tasks on topics like language learning experiences, bilingualism and Spanglish through chats on social media and weekly audio/video calls on Skype in both English and Spanish. Data from these chats and calls, pre- and post-questionnaires and interviews with Colombian participants, and their reflection logs were thematically analysed. The participants were found to rethink and change their negative self-perceptions as non-native speakers thanks to the cooperative and intercultural relationships they built with their telecollaboration partners.

Another videoconferencing platform, Zoom, was studied by Lenkaitis (2020), who investigated the effect of videoconferencing via Zoom on L2 learning and learner autonomy employing a mixed-method research design. The participants were 25 students learning Spanish at the same university in the USA, who were assigned into 10 Zoom groups that met weekly during the six-week treatment period. They were asked to use Spanish to discuss the assigned topics with their peers on Zoom and complete a survey after the session. Data from the transcribed zoom sessions, weekly reflection surveys and pre-/post surveys revealed Zoom to be an effective tool to practise L2 skills by providing additional space. Without the help or feedback from the teacher, the participants created an autonomous learning environment. The study demonstrated that the integration of videoconferencing activities with tools like Zoom could also help students who are studying at the same university.

In short, as demonstrated by the studies above, videoconferencing tools like Skype or Zoom can be utilized in language teaching and learning for various purposes. Although not likely to be preferred to classroom teaching by everybody, it is certain that the integration of videoconferencing into language instruction opens new, and sometimes otherwise impossible, doors to language teachers and learners.

3.3. Studies Investigating Wikis

Wikis have attracted the attention of researchers, teachers and learners who would like to find new ways to enhance L2 development thanks to their ease of use and support for collaborative learning. The majority of the research on wikis has been carried out in relation to its use in collaborative writing. In a mixed-method study, Hsu (2019) explored the nature of collaborative dialogue during wiki-mediated collaborative writing and its effect on the development of L2 learning in the context of a writing class at a Taiwanese university. Twelve groups of 2-3 EFL learners were formed and asked to write the two drafts of a four-paragraph expository essay on their wiki page. Wikispaces, a useful tool with Edit, Comment, Discussion and History functions, enabled the learners to work on their collaborative project and the researcher to collect data on their activities. Among the 341 collaborative dialogues that were identified, the majority were language-related episodes followed by content- and organization-related ones, indicating a bigger preference for language accuracy (local concern) than content and organization (global concerns). Although there were unresolved, incorrectly resolved or neglected episodes, correctly resolved episodes were found to be more in all three types of episodes. The study provided insights into the nature of learner-learner interactions on wikis and highlighted its benefits, especially in terms of scaffolding. In another mixed-method study on collaborative writing, Zou, Wang and Xing (2016) focused on error correction in a language exchange program between students learning English at a Chinese university and students learning Chinese at a university in the UK. The students in both groups used the wiki platform on Wikispaces to upload their 3 pieces of writing in the target language and later to correct the mistakes and make comments on the writings in their own language. The data were collected from the Chinese students' corrections and comments, interviews and pre- and post-test results of the students in the above-mentioned treatment group and the control group. The students reported that they were highly motivated and believed that they benefitted from the practice and improved their writing, which explained why they were found to be active on the collaborative tasks on the platform and performed better than the control group in the post-test.

Google Sites was another wiki platform that was studied in relation to collaborative writing using a mixed-method approach. Ma (2020) examined wiki-based collaborative writing in terms of types of inter-group online peer feedback, the teacher's evaluation of their effect on the quality of the written product and students' perceptions related to their usefulness. The participants were 37 English majors taking an EAP course, Introduction to Linguistics, at a university in Hong Kong, for which they needed to write an academic book chapter similar to the ones they studied in class. After the students collaboratively wrote the first draft, all the other students individually provided feedback on what they learned from the chapter and how it could be improved. More than 1000 entries on Google Sites by the students and the teacher were found to fall into two broad categories of praise or suggestions for improvement. The students provided more praise for their peers than suggestions, probably due to the open to public nature of wikis, and they were mostly on content, not on the use of language, probably because it was an EAP setting. The suggestions were found to predict the final score by the teacher well, and according to the online survey, the student found the feedback on the wikis useful and provided positive comments on how they improved their wiki writing. In general, the three studies reviewed above offered positive evidence regarding the integration of wikis into writing classes by outlining their role when providing feedback and correction during peer interaction.

The only study which focused on collaborative learning opportunities that wikis could provide for reading classes was by Su et al. (2019), who designed a mixed-method study to investigate the relationship between online self-regulation and attitudes towards the use of wiki-based literature circles. 285 Chinese EFL learners participated in the study which required them to complete five literature circle tasks, each carrying out the roles of discussion leader, summarizer, word master, passage person, and connector in groups of five. The participants were found to be highly engaged, and the data from the questionnaires and the interviews showed that they had positive attitudes towards the practice in terms of perceived usefulness, self-efficacy, affection and behaviour. The findings also indicated a positive correlation between some of

the students' online self-regulated learning strategies and their attitudes (i.e., goal setting and perceived usefulness /self-efficacy). The researchers suggested that wiki-based literature circles could be integrated into reading classes to facilitate L2 learning through the use of self-regulation and collaborative learning strategies.

In conclusion, although wikis mostly seem to have been investigated in relation to writing instruction, they can also be used in other practices of self-regulated collaborative learning such as those regarding reading instruction, as suggested by the final study reviewed in this section.

3.4. Studies Investigating Blogging

Blogging has been another social media medium that researchers have investigated in relation to language teaching and learning, focusing on its potential contributions to the writing and speaking skills of learners. P. Chen (2016) examined learners' metalinguistic awareness and affective performance in two different writing classes at a Taiwanese university: A conventional English writing class as the control group and a blog-integrated one as the experimental group. Although students in both groups had the same instructor and were subjected to the same classroom procedures, the students in the experimental group used their blogs to post assignments, peer-review other assignments and get feedback. Due to the open environment blogs provide, the students in the experimental group had an additional opportunity to see the archives for their peers' marked papers and all peer reviews, which, according to the researcher, could be the reason why they made significantly more progress in metalinguistic awareness. However, this could also be the reason why they reported lower self-efficacy beliefs than the students in the control group. Finally, it was found that the participants did not differ significantly in their metalinguistic strategies, writing motivation and anxiety. Therefore, increased metalinguistic awareness was the only benefit identified by the study. Another study with a research focus on blogging and EFL writing was by Pham and Usaha (2016) who explored how blog-based peer-response could enable students to improve their writing revisions. The 32 students taking a 15-week academic writing class at a Vietnamese university posted their writings on four different topics on their blogs through the semester and got feedback on their first and second drafts from their peers, the third draft from the instructor, and produced the final draft. For the fourth topic, the participants were given e-peer response training, and the student drafts, peer comments and revisions made after that in addition to the in-depth interviews with the participants regarding these provided the quantitative and qualitative data for the mixed-method study. The most frequent revisions happened at the 'word' level, and at times did not happen as they were found incorrect or unnecessary by the writers. Indeed, more revisions were made because of the writers' independent choices than the peer feedback. Therefore, although the findings of the study did not provide evidence on the effectiveness of blog-based peer response, they could be of use to anyone who would like to incorporate it into their writing classes.

Finally, in her exploratory study, Hsu (2016) investigated the use of voice blogging as a tool for improving EFL learners' speaking complexity, accuracy and fluency. The participants were 30 students of a conversation class at a Taiwanese university, who had no other speaking practice opportunities other than that two-hour class and the class blog created for it. The participants were required to post their recordings on the weekly topic and also provide written feedback to at least one of their peers for 15 weeks. The data used in the study came from the voice blog entries of the first two and the last two weeks and coded in line with the measures of complexity, accuracy and fluency adopted and developed for the study. Although not in accuracy or fluency, the findings suggested improvements in speaking complexity. Therefore, the researcher concluded that integrating voice blogging into speaking classes held some pedagogical potential.

To sum up, the studies reviewed in this part show that there still is a need for more research to be conducted on the use of blogging in language teaching and learning. Without further studies, the educational affordances of blogging can only be partially exploited.

3.5. Studies Investigating Forums

The only study which explored social media forums was by Ko (2019), who integrated NaverCafe into the vocabulary teaching part of an EFL reading class at a South Korean university. During the classes, the instructor provided instant feedback on the grammatical accuracy and the contextual appropriacy of the vocabulary items in the sentences the students produced and posted on the forum using their smartphones. At the end of the semester, the students completed open- and closed-ended surveys which aimed to collect data on the benefits and constraints of the use of smartphones and social media in the classroom and their perceptions regarding timeliness, quality and student engagement when getting vocabulary feedback through smartphones and social media. Inducing comfort and active learning, increasing interest and satisfaction, enhancing cooperation and sharing, and improving word use were the benefits identified. Although some constraints such as low battery problems, feeling ashamed of the mistakes or logging into other applications were reported, they were not shared by the majority of the participants. They were in general satisfied with the timeliness, quality and student engagement. Therefore, it can be concluded that social media forums can also play important roles in various aspects of language teaching and learning. However, it is clear that they remain understudied and more research is needed on forums as social media platforms that can be used in language instruction.

4. Conclusion

It is now known that with 3.81billion active users, the global social media penetration rate has reached 49% of the world's population (Statista, 2020). Considering the fact that it is becoming more and more common for people to use their L2 to interact with new people in addition to their friends, teachers, employers or colleagues on social media, knowing how to communicate effectively on these platforms has obviously become crucial in today's world. Furthermore, given the considerable amount of input and interaction required to learn a new language and the limited time spent in language classrooms, it is essential to take advantage of the opportunities that social media offers for practice without being constrained by time, space and distance. In this respect, recent research into the use of various social media platforms in language teaching and learning plays a critical role in guiding and shaping future practices. Therefore, by presenting a review of such research in one of the most prestigious publication venues in the field, CALL, in the 2016-2020 period, the present study aims to prove useful in expanding our understanding of how social media can be integrated into language instruction. Although the scope of this study is relatively limited, the insights gained from this study may be of assistance to the researchers who would like to carry out further research to unlock social media's potential to facilitate language instruction as well as the language professionals who would like to fully exploit that potential.

In all of the studies reviewed by the present study, social media is recognised as a tool that can be utilized for various gains on the part of language learners. It is also possible to observe some broad research trends that these studies seemed to follow. In general, the studies reviewed are found to follow mixed-method research designs, use university students as participants and report positive findings regarding the use of social media in language teaching and learning. The studies are mostly conducted in Far Eastern countries (particularly China), and Taiwanese and Chinese speakers of English appear more frequently than speakers from other nationalities. EFL is the overwhelmingly dominant research context overall, however, there are also a few studies on Chinese and Spanish as an L2. Furthermore, the reviewed research tends to explore the effect of social media integration on the writing or writing-related skills of learners more frequently than the other skills. The type of social media that the majority of the studies focus on appears to be social networking and the most commonly studied SNS is Facebook, followed by WeChat. In these studies of various research designs and contexts, SNSs are mainly investigated in relation to certain aspects of written and oral production. The findings reported and the participants' perceptions tend to be positive in line with the earlier research. However, the studies investigating videoconferencing report mixed results. Videoconferencing seems to be effective and positively perceived when it is the only option for

communication, yet when there is a comparison to face-to-face practices, it is found to be neither more effective nor more preferred. The videoconferencing tool that attracts the greatest attention from the researchers is Skype. As for wikis, which are explored as potential platforms for collaborative learning, especially collaborative writing, the research reviewed by the present study provides positive evidence, supporting their use in language instruction. A common theme for these studies is the opportunities wikis provide for peer interaction, and Wikispaces is the platform mainly used by the studies. When it comes to blogging/voice blogging, one of the less-studied platforms, the studies tend to find positive effects only on some, but not on the greater number of the areas investigated, and hence is the need for more research to be conducted. Similarly, as there was only one study on it, there remain several aspects of the use of forums in language instruction about which relatively little is known.

To conclude, the research reviewed by the present study collectively outlines a critical role for social media in enhancing language teaching and learning. It is hoped that this study will generate fresh insight into the use of social media in language instruction by providing a review of the research carried out in the last five years and contribute to the wider integration of social media into education. It is clear that there are many ways of utilizing social media tools in language classrooms, which could include but not limited to the ones suggested by the research reviewed in this study, and language professionals will need to experiment with these ways themselves to see what fits their teaching contexts best. Needless to say, it seems that social media will continue to attract the attention of researchers, teachers and learners as new platforms for language teaching and learning in the years to come, and further research will be needed as long as social media keeps changing various aspects of our lives, including how we teach and learn languages.

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