The exploration of the functions of technology in English learning and teaching in Chinese colleges

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Abstract

Previous studies have proved the significance of technology in language teaching and learning. However, in Chinese colleges, teachers usually pay little attention to integrating technological products (e.g., mobile applications) in English as a foreign language (EFL) teaching, and thus students tend to show low skills to use technology to enhance their EFL learning. Meanwhile, considering the weakness of EFL education in Chinese universities, this argumentative essay aims to improve Chinese educators’ attention to realise the functions of technology on improving the effectiveness of EFL education. With this focus, this essay will discuss the role of technology through four aspects, namely, language, culture, difference and identity. In this regard, four arguments will be presented: 1. language as ‘a representation system’ could transfer and acquire linguistic knowledge in multiple ways through technology; 2. technology could establish a shared meaning map (culture) for enhancing college students’ English communication competence; 3. technology as a medium could distinguish and group linguistic information; 4. identity could be expressed by digital literacies in an information-shared website for language learning.

Keywords: technology; language; culture; identity; difference; Chinese colleges; English as a foreign language

Introduction

With the rapid socio-economic development in China, English as a foreign language (EFL) has received increasing attention from Chinese educators and students (Hu, 2005; Li & Siu, 2009). Identifying and highlighting the proficiency of English as an invaluable asset (Jin & Cortazzi, 2002), it can support college students to acquire a lucrative job or receive higher education in future (Haidar & Fang, 2019; Hu, 2002). However, He (2017) argues that college students usually show weakness
to apply what they have learned in class to a real-life situation. For example, they tend
to feel anxious and unconfident to communicate with others in English (He, 2013, 2017).
This is because, in teacher-centred English lessons in China, college teachers
are inclined to dominate the class and select the primary learning materials. As a consequence,
students have less time to practise English in class, as acknowledged by Gao (2010).

Fortunately, the arrival of technological products, such as an individual
computer, internet access and mobile applications (apps) (Stockwell, 2016), could provide
a platform for EFL students to explore and acquire linguistic knowledge (Shi, Luo, & He, 2017;
Yang & Chen, 2007). For example, given that internet technology could help global people
to share extensive learning information, EFL students would have opportunities to obtain
valuable language resources (Golonka, Bowles, Frank, Richardson, & Freynik, 2014;
Yang & Chen, 2007). Meanwhile, in comparison with the traditional learning
approach in China, in which students are used to enhancing their English skills through
rote memorisation (Li & Cutting, 2011), numerous online resources could encourage language
learners to tailor their learning methods in the way for arousing their learning interests
(Golonka et al., 2014; Sulaiman & Kassim, 2011). For example, the arrival of Web 2.0/3.0
technology would make social media available for Chinese students to feel free to chat with
English speakers and thus improve their English communication skills (Wong, Sing-Chai, & Poh-Aw, 2017).

Apart from the advantages of technology for English learners, from the perspective of
language teachers, computer-assisted language learning (CALL) has become increasingly
popular in foreign language teaching progress (Golonka et al., 2014; Salaberry, 2001). For instance,
the application of multimedia classrooms can help teachers to support students with a rich
learning environment, in which they may combine diverse forms of pedagogical materials
such as audios, movies, and imagines in one presentation, as argued by Golonka et al. (2014).
Meanwhile, web-based distance education can offer opportunities for teachers to transfer
linguistic knowledge to students who may not be physically present in school (Ushioda, 2005).
For example, given the emergence of Coronavirus disease 2019 (Covid-19), Chinese students
are limited to their home to study due to the lockdown (Bao, 2020). However, with the
convenience of technology, they can receive education by distance teaching, as highlighted by Bao (2020).
Acknowledging the positive effects of technological integration in language learning and
teaching, including evoking students’ learning interests and making pedagogical resources
attractive (Golonka et al., 2014; Sulaiman & Kassim, 2011), the application of technology in
language class has been widely encouraged by numerous scholars (Golonka et al., 2014;
Salaberry, 2001; Yang & Chen, 2007).

However, in Chinese colleges, teachers and students usually undervalue the advantages and
functions of technology, such as smartphones, the internet, and social media, in supporting
English learning and teaching, as argued by Wang and Yang (2015). Based on this phenomenon,
I am interested in the extent to which technology can benefit English learning and teaching
in Chinese colleges, which also guides the research in this study. In order to achieve this aim,
after the introduction, the functions of technology that could be used by the EFL learners and
language teachers will be explored in terms of the theoretical framework that highlights
four concepts, namely, language, culture, difference and identity. Then, based on the investigation
through these four aspects, this article will conclude the reasons for encouraging the integration
of technology in English learning and teaching in Chinese colleges, as well as provide
suggestions for further research.

Theoretical Framework in Terms of Language, Identity, and Difference

Language, culture, identity, and difference are connected with each other. Culture could be regarded
as a shared meaning map, in which humans could construct their common understandings about the
world (Fischer, 2009; Hall, 2013b). Then, language could be seen as a representation system to reflect culture by conveying meanings, which are stored in individuals’ conception maps (Kramsch, 1998). Identity, infused with meaning, would be produced by representation and language to promote students to realise who they are and who they will become in future (Hall, 2013a). Meanwhile, Woodward (1997) argues that identity could be marked out by difference, which would facilitate humans to differentiate their own identities from others. Additionally, differences in different cultures and languages make the world heterogeneous and interesting (Woodward, 1997). Based on the relationship in language, culture, identity and difference, this section will explore how technology can help EFL students in Chinese colleges to understand a new linguistic system, to build a shared meaning map with other English speakers, to realise their identities in English learning progress, as well as to distinguish and group linguistic information, respectively.

**Language: Multiple ways of transferring and acquiring linguistic knowledge**

Language can be seen as a representation system in which meaning is constructed, as stated by Hall (2013b). In other words, students can link their conceptual maps, including thoughts and opinions about the world with specific linguistic signs (e.g., words and sounds) to carry meaning (Kramsch, 1998). Based on this point, in order to encourage Chinese students to encode their conceptions through a new linguistic system, in which they can apply the target language (English) to exchange and communicate their ideas, this section seeks to explore in what ways technology can assist English teachers in transferring language knowledge to students in China, as well as to what extent college students can apply technological products in the autonomous English learning process.

**Technology for effective language teaching**

In this part, the functions of technology on language teaching will be explored through three levels, namely, planning teaching materials before class, transferring linguistic knowledge in class, and supporting students’ language study after class. At the outset, technology can help language teachers to design their pedagogical instructions through numerous online resources (Golonka et al., 2014; Salaberry, 2001). For example, in order to help EFL students feel accessible to acquire the linguistic materials and enable them to be actively involved in the learning progress, the emergence of the World Wide Web could guide teachers to apply this technological wonder in preparing teaching resources, like content-related videos or pictures, which would be used for students to familiarise the background information (Yang & Chen, 2007).

Apart from designing teaching materials before class, technology could be exploited by college teachers to promote students to effectively interpret linguistic codes for connecting linguistic signs with their conceptions in class. Compared with the traditional pedagogical method through a blackboard to transfer learning materials, the model of CALL, as the product of technology, is more efficient for language teaching (Golonka et al., 2014; Salaberry, 2001), highlighting that multimedia classroom could facilitate students’ multiple intelligences to acquire language information (Berk, 2009). According to Gouws (2007), students should engage in varieties of intelligent approaches to study, such as verbal-linguistic intelligence, logical-mathematical intelligence and visual-spatial intelligence. In this way, learning progress could become dynamic and active, and thus students are inclined to be involved in the thinking process to develop their cognitive competence for possessing learning information effectively (Berk, 2009; Gouws, 2007). For example, when facing abstract and complicated English materials, teachers could play a relevant video for students to visually build a knowledge framework. In this way, visual-spatial intelligence could assist students in understanding linguistic codes for mastering language knowledge. Due to the benefits carried by technology in language education, in China, a multimedia classroom under the CALL pedagogical approach has
drawn more attention from educators in recent years (Gan & Zhong, 2010).

Besides the application of technology in English class, it could also help teachers to continually support students’ language learning after class. Considering that during the limited time in class, students might not be able to master all learning information, teachers could through electronic mail (e-mail) share their teaching resources (e.g., a PowerPoint presentation) with their students to guide them to address the learning areas that they might feel confused (Saeedi, Meihami, & Husseini, 2014). Meantime, when EFL students encounter learning problems, they could also send e-mails to their teachers. In this way, teachers would understand students’ learning needs and tailor their teaching methods (Bloch, 2002; Saeedi et al., 2014). Additionally, shared files from google drive could create a space in which students would exchange their opinions about English learning materials with their teachers and their peers, and thus they could acquire teachers’ feedback to deepen their language understandings, as proposed by Slavkov (2015). Unfortunately, considering that college teachers in China could not realise the importance to encourage their students to integrate technological products into their EFL learning journey after class, some scholars highlight this awareness should be raised so as to enhance Chinese students’ English skills through technology (Gan & Zhong, 2010; Wang & Yang, 2015).

Technology for the autonomous language learning

In Chinese colleges, given large class sizes with more than 50 students, it is challenging for teachers to prepare their teaching instructions to satisfy each student’s learning needs (Wang, 2006). Especially for English teachers in Chinese colleges, they will face students coming from various majors with different EFL learning objectives in the same English class (Deng & Chen, 2010). Under this situation, college students in China are more likely to pose different questions about their English learning materials, which might not be able to be solved in a teacher-centred class, and thus they may feel confused about how to undertake self-study after class. For example, even though students could understand the meaning of an English word, they might struggle to use it for communication in appropriate contexts (Chen & Chung, 2008). At this point, they could not comprehend the linguistic codes to translate their conceptions into linguistic signs (e.g., words), as argued by Hall (2013b). In this way, language might lose the function of expressing individuals’ opinions and thoughts. When facing this issue, through technology like online dictionaries, language learners could search a particular word to explore how other users apply it in sentences to convey their ideas. Through this approach, technology could be regarded as the medium of scaffolding for students to interpret the codes of linguistic signs for demonstrating their conception maps.

However, in spite of input linguistic knowledge, language skills would be enhanced when EFL learners could frequently practise English, as highlighted by Ma and Wang (2009). In light of this, on the one hand, technology could stimulate language learners’ motivations to expand their linguistic knowledge (Golonka et al., 2014; Sulaiman & Kassim, 2011). For example, Gao, Li, and Cui (2010) argue that online resources like English movies could motivate Chinese students’ interest in English learning and benefit the enhancement of their listening competence. Even though they might not understand what the performers say in English movies, students could see the subtitles with both Chinese and English to exploit their home language to translate and make sense of the video content (Gao et al., 2010). In this way, videos can be seen as the scaffolding to assist Chinese students to accumulate linguistic knowledge in authentic learning environments. On the other hand, due to the development of technology, their learning locations would not be limited in school. For example, despite that the Covid-19 prevented Chinese students from engaging in a face-to-face class, they could acquire online courses to study, as proposed by Bao (2020). In terms of these two points, technology could facilitate college students in China to learn and practise English autonomously.
Culture: Establishing a shared meaning map for enhancing college students’ English communication competence

Culture could be regarded as a shared meaning map, as highlighted by Fischer (2009). Accordingly, learners in the same cultural group could build a common conception to interpret and figure their world by language (Hall, 2013b). However, while college students in China have opportunities to acquire English knowledge such as vocabulary, grammar and pronunciation in class, it is challenging for them with the oriental culture to use English to communicate with other English speakers with the western culture, as proposed by Zhao and Coombs (2012). In this regard, when EFL students could not construct a shared meaning map with other English speakers, these two-group people, without common conceptions to make sense of items (e.g., objects), might feel challenged to apply the same language (English) in expressing their ideas successfully.

In light of this, on the one side, culture liberates humans from the unpredictability of the world, while, on the other side, it constrains people to translate this world by constructing principles, which would hinder them from creating meanings by language, as stated by Kramsch (1998). These two side effects of culture will be expressed in three ways- social, historical and imaginable (Kramsch, 1998). Based on this point, for EFL students in China, in order to improve their English communication skills, they should understand the culture of other English speakers. Therefore, this section will explore how technology could provide a crucial medium for Chinese students to establish a shared meaning map with other English speakers from these three layers, namely, social, historical and imaginable, as follows.

Understanding culture from the social level through technology

From the perspective of the social plane, when Chinese students have realised that they belong to a specific social group (e.g., an EFL learning group), they are more likely to adopt similar ways to interpret the world when communicating with other members in the same society (see Hall, 2013b). In this regard, culture would be constructed by virtue of sharing opinions and thoughts through using the same linguistic system, as argued by Kramsch (1998). In light of this, during the English-learning journey, college students in China should establish a new conceptual map that can be shared with other English speakers. In this way, they can make sense of how to use English to convey meaning in order to make others understand.

In order to achieve this aim, technology could help Chinese students to establish this new shared meaning map, as highlighted by Lim and Yang (2008). As the technology matures, mobile apps downloaded in a smartphone, like WeChat (similar to Facebook), could facilitate Chinese students to build social relationships with others by video calls, texts or voice calls (Shi et al., 2017). In this way, through the medium of WeChat, EFL learners could find other English speakers to seek assistance for improving their spoken English skills. For example, in WeChat, there are lots of language exchange groups between Mandarin Chinese and English, in which EFL students in China could find English speakers who want to learn Chinese (Wang, Fang, Han, & Chen, 2016). Thus, during the communication process, these two-group people could share their understandings about the world with each other to build common conceptions in the online community.

Interpreting culture from a historical layer through technology

With respect to the historical level, culture could be shaped by its histories and traditions (Kramsch, 1998). In this regard, Bakhtin (2010) suggests that in order to comprehend the meaning of any single
linguistic item deeply, language learners should explore the historical contexts of its usages. This could be achieved by internet search engines, including Google and Baidu, as acknowledged by Abdur, Islam, Hessainc, & Jiang (2019). For example, when Chinese language learners would translate and interpret the English word ‘renaissance’, it might be necessary for them to clarify its meaning by understanding the history behind this vocabulary.

However, Chinese teachers might undervalue the functions of culture, particularly at a historical level, during English teaching progress (Wang, 2012). As a consequence, even though they could transfer language information (e.g., phrases) to college students, they would not shape their conception map to facilitate EFL learners to comprehend the historical (cultural) meanings of target language materials, as stated by Wang (2012). Focused on this obstacle in the English learning process, the CALL pedagogical approach should be encouraged in China to assist college students in interpreting culture by using web search engines to realise the ways of applying linguistic items in the recurrent historical contexts.

**Making sense of culture from an imaginational level through technology**

Apart from language learning in the sociocultural contexts, culture, with regard to the imaginational layer, could be expressed by members in discourse communities to share their common imaginations about the future, highlighting both achieved and unachieved dreams (Kramsch, 1998). As stated by Kramsch (1998), these imaginations shaped by culture would be expressed by the linguistic system through communication. However, in Chinese colleges, except in English class, there are fewer opportunities for students to use the target language to chat with others. Meanwhile, their language knowledge is mainly focused on the academic level to acquire desired scores in English exams, as argued by Peng (2014). Therefore, the understanding of culture based on an imaginational level through communication with other English speakers could not be achieved in Chinese colleges.

In line with this issue, the conception map in terms of the imaginational plane could be effectively constructed by technology. For example, TV programmes, like BBC “Future of New”, could predict whether Covid-19 would have a continuing implication on humans’ living environments (Henriques, 2020), through expressing ideas and opinions in English. With the dissemination of these resources, EFL students could establish their conceptions to see how English speakers would anticipate and comprehend this world for making sense of their culture. In this way, by understanding a metaphor of cultural reality (Kramsch, 1998), college students in China would build common thoughts to communicate with other English speakers to enhance their spoken English skills.

**Difference: Technology as a medium to distinguish and group linguistic information**

Identifying the difference between different cultures as mentioned above, difference, which constructs the binary oppositions, is crucial for students to interpret linguistic signs (Hall, 2013b), as well as classify and position items (e.g., objects) in different groups (Woodward, 1997). Given the importance of difference on language learning, this section will explore how technology could help college students in China to realise the differences demonstrated in the English learning progress through two approaches—distinguishing different linguistic signs and grouping different linguistic resources, for enhancing their language skills.

**Distinguishing meanings between different linguistic signs**

Difference plays a significant role in defining language meanings. This is because the meaning of each linguistic sign partly relies on the connection with other different signs, as explained by Hall
(2013b). For instance, students might interpret the meaning of ‘woman’ by its distinction from the word ‘man’ (Woodward, 1997). In this regard, Sun (2010) proposes that during new language learning progress, it is necessary for EFL learners in China to realise different meanings behind different linguistic signs, vocabularies in particular. This could be more effectively and conveniently achieved by electronic dictionaries, compared with printed dictionaries, as highlighted by Koyama and Takeuchi (2003). For example, there have been various mobile apps with similar functions to electronic dictionaries in China, including BaiCiZhan and Youdao (Zhang, 2018). These apps could download the crucial vocabularies that would be frequently used in academic writing or interpersonal communication, and thus college students, through typing the words in the searching box, would understand and distinguish their meanings more efficiently.

Apart from the convenience of electronic dictionaries for students’ self-learning process, Kahoot, as an online game-learning platform, is performed as an educational technology, which has been applied in teaching progress, as recommended by Plump and LaRosa (2017). This technological invention could help language teachers to customise multiple-choice questions, and thus test whether their students have understood vocabularies that they might feel confused (Taylor & Reynolds, 2018). In this way, Taylor and Reynolds (2018) state that Kahoot, seen as an interesting learning activity, could stimulate students’ motivation to review the differences of the meanings in their previous learning vocabularies. However, since this educational technology- Kahoot, has not been allowed to be employed in Chinese colleges, Qi and Liu (2018) suggest that language teachers should realise its advantages and popularise its applications in class in future.

**Grouping (categorising) linguistic resources**

Difference could promote language learners and teachers to position linguistic resources in different groups based on the learning themes (Gan & Zhong, 2010). According to the information-processing theory, when received learning information could be grouped in terms of their connections and differences, students would efficiently possess, organise and master this input learning information (Zhou & Brown, 2015). In this regard, under the content-based instructions (CBI) guided by the standards-based education in Chinese colleges, the pedagogical program encourages language teachers to design their teaching instructions based on different learning topics (Gan & Zhong, 2010). In other words, through the CBI education model in China, language teachers should prepare teaching materials surrounded by a particular topic to develop students’ language skills from information input- listening and reading, to knowledge output- writing and speaking. In order to focus on these four aspects, college teachers tend to apply the World Wide Web in searching and classifying pedagogical resources, with respect to the content-based English learning materials, to achieve their teaching aims (Gan & Zhong, 2010).

**Identity expressed by digital literacies in an information-shared website for language learning**

Identity could be marked out by difference, which would facilitate people to differentiate their own identities from others (Woodward, 1997). Due to the maturity of technology, an information-shared website published on the World Wide Web like weblog could provide spaces for language learners to explore, to voice and to realise their identities (McGinnis, Goodstein-Stolzenberg, & Saliani, 2007). In this way, identity, infused with meaning, would be expressed by digital literacies to promote individuals to understand who they are (e.g., nationality, race and gender) and whom they want to become in future, as argued by McGinnis et al. (2007). For language learners, Peirce (1995) suggests that their different identities could arouse their multiple desires for investment in second language acquisition. Based on this point, this section will explore how technology could encourage college students in China to express their identities to facilitate their English learning desires. In order to
achieve this aim, two aspects will be explored: 1. digital literacies through an information-shared website for helping students to show their identities. 2. identities carried with various desires for investment in the EFL learning process.

**Digital literacies for helping students to show their identities**

As stated by Hall (2013a), identity could be expressed by language, including pictures and words. With the development of technology, digital literacies such as streaming videos, audios and images, could facilitate people to demonstrate their multiple identities in an information-shared website- blog (McGinnis *et al*., 2007). In this way, by using these digital linguistic resources, Tang (2008) states that students in China would feel free and comfortable to express their real thoughts and opinions towards the world, and meantime realise who they are in their social contexts. This is similar to the traditional diary content to reflect their understanding of their social lives, as stated by McGinnis *et al*. (2007).

However, different from traditional diaries, when online users could convey their narratives and ideas through the weblog, they would receive their audiences’ comments (Sulaiman & Kassim, 2011). In this way, audiences, based on the information published in individuals’ weblogs, could realise these people’s identities, as stated by Sulaiman and Kassim (2011). In connection with the Chinese context, college students are more likely to use Weibo, similar to the social media tool Facebook, to use varieties of linguistic forms to create, write and describe their multiple identities in recent years (Yi, 2011). In this way, their identities would not only be shaped by themselves, but also be noticed by their audiences.

**Identities with multiple desires for investment in the EFL learning process**

After language learners realise their different identities, these identities would arouse their various desires to practise the target language and thus satisfy the social needs in their particular contexts (Peirce, 1995). In China, college students are required to learn English, since, with high proficiency in English, they are more likely to achieve the role that they want to become in future (Hu, 2002). In this regard, as highlighted by Peirce (1995), when humans are inclined to learn a new language with the motivation given their different identities, they tend to spend more energy and time on improving their language skills.

Based on this point, technology could be regarded as a crucial medium for encouraging college students to devote their investment to English learning. This is because, with the globalisation, social media, as an interactive computer-mediated technology (Walther, 1996), would provide the platform for teens from different nations to build connections with each other, and thus these adolescents could construct and share the content on their online spaces through self-initiated digital literacy practices (McGinnis *et al*., 2007). In this way, Chinese students have more opportunities to find other English speakers through their published digital literacies and chat with them by typewriting or video calls to practise their English. This online conversation could help EFL learners with low proficiency in oral English to reduce their nervous and uneasy feelings since in face-to-face communication, they usually feel anxious when they need much time to transfer previous language knowledge to output messages.

**Conclusion**

This essay has critically discussed the issue of the functions of technology on EFL learning and teaching in Chinese colleges, based on the literature. The results reveal that technology could be
employed to enhance college students’ English competence and improve teachers’ teaching effectiveness, through the exploration from four aspects, namely language, culture, identity and difference. From the culture stage, social media, including Facebook and WeChat, search engines (e.g., Google and Baidu) and TV programs (e.g., BBC) could provide a platform for college students to explore the conceptions of English speakers and thus build a shared meaning map. Otherwise, without common thoughts about the world, Chinese students might feel challenged to apply English in expressing and sharing their ideas in the way that other English speakers could understand. However, teachers in China usually ignore the importance of culture on students’ English learning progress. Accordingly, the communication skills of most college students are still at a low level. In light of this issue, EFL learners in China should be encouraged to exploit technological products for establishing common conceptions with other English speakers.

Apart from the construction of a shared conception map, with respect to language, EFL students should link their visions and thoughts about the world with particular linguistic signs (e.g., words and sounds). Given each linguistic system with a particular approach to encoding the world, when learning a new language-English, college students should master the codes, which construct the bridge between their conceptions and linguistic signs. In this regard, from the angle of language learners, online resources like English movies could facilitate college students to comprehend the codes of linguistic signs (e.g., vocabularies) in an authentic learning environment. From the perspective of teachers, Web 2.0/3.0 could help them to design their pedagogical instructions to satisfy students’ learning needs. For example, language teachers should prepare a relevant video for learners who could efficiently master new language information by their visual-spatial intelligence and thus make linguistic materials accessible and understandable.

Meanwhile, in order to help Chinese students to encode their visions about the world through a different linguistic system by the application of target language (English), difference, with the establishment of binary oppositions, could not only promote students to interpret the meanings of different linguistic signs, but also assist language teachers in positioning their teaching resources in different groups based on the learning topics. In line with this, technology could play a crucial role in English learning and teaching. From the angle of language learning, mobile apps like BaiCiZhan (similar to the electronic dictionaries) and educational technology-Kahoot could facilitate college students to collect, distinguish and review vocabularies that they might feel confused about their different meanings. Then, for language teaching in Chinese colleges, due to the encouragement of the CBI curriculum program on English class, teachers could, through Web 2.0/3.0, search and group relevant pedagogical materials in terms of the topic-based learning content to assist students in categorising linguistic messages according to their connections and differences.

Additionally, identity could be marked out by difference, which would promote individuals to differentiate their own identities from others. Given the development of technology, an information-shared website like weblog could provide an area for language learners to establish, to voice and to realise their identities. In this way, identity, infused with meaning, would be expressed by digital literacies (e.g., streaming videos and images) to facilitate humans to understand who they are and who they want to become in future. After EFL learners in China realise their different identities, these identities would awaken their multiple desires to practise English and thus satisfy their social needs in their particular contexts.

However, even though technology has positive implications on language learning and teaching in terms of these four aspects-language, culture, identity and difference, it is still challenging for college teachers to apply it in English class effectively. On the one side, given the long-time traditional teaching model, Chinese teachers tend to dominate the class and transfer the main
learning materials. As a consequence, they usually pay less attention to designing learning activities by using educational technology (e.g., Kahoot) to promote students’ learning interests and motivation for them to study in an active and comfortable learning environment. On the other hand, teachers might lack skills of transferring linguistic knowledge through the way of computer-assisted language teaching. Based on these two main points, the following research should provide detailed suggestions about how to integrate technological products into the English teaching process in Chinese colleges.

References

Abdur, R. M., Islamb, M. S., Hossainc, S., & Jiang, J. (2019). Exploring and learning English: An analysis of Baidu and Google translation. *International Journal of Linguistics, Literature and Translation (IJLLT)*, 2(5), 275–284. https://doi.org/10.32996/ijllt.2019.2.5.32

Bakhtin, M. M. (2010). *The dialogic imagination: Four essays*. Austin, TX: University of Texas Press.

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113–115. https://doi.org/10.1002/hbe2.191

Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. *International Journal of Technology in Teaching and Learning*, 5(1), 1–21. Retrieved from https://sicet.org/main/wp-content/uploads/2016/11/ijttl-09-01-1_Berk.pdf

Bloch, J. (2002). Student/teacher interaction via email: The social context of internet discourse. *Journal of Second Language Writing*, 11(2), 117–134. https://doi.org/10.1016/S1060-3743(02)00064-4

Chen, C. M., & Chung, C. J. (2008). Personalized mobile English vocabulary learning system based on item response theory and learning memory cycle. *Computers & Education*, 51(2), 624–645. https://doi.org/10.1016/j.compedu.2007.06.01

Deng, Y. P., & Chen, P. R. (2010). Professional-stratification-based college English teaching on the basis of social needs analysis. *Foreign Language Research*, (4), 123–126. Retrieved from http://rls.hlju.edu.cn/manage/upload/2013514/2013514154548296.pdf

Fischer, R. (2009). Where is culture in cross cultural research? An outline of a multilevel research process for measuring culture as a shared meaning system. *International Journal of Cross Cultural Management*, 9(1), 25–49. https://doi.org/10.1177/1470595808101154

Gan, J. F., & Zhong, L. (2010). Duomeiti he wangluo huanjing xiaide CBI daxue yingyu jiaoxue moshi [CBI teaching mode for college English under multimedia and network environment]. *The Science Education Article Collects*, (28), 86–87. Retrieved from http://www.cqvip.com/qk/87947x/201028/35685178.html

Gao, C. P., Li, H. Y., & Cui, L. J. (2010). Zhongyingshuangzimu yingyu yuanshen dianyingyu daxuexeshen yingyu cihuixuxiu [English movies with Chinese and English subtitles for college students' English vocabulary learning]. *Cinematic Literature*, (4), 160–161. Retrieved from http://www.cqvip.com/qk/80322x/201004/33520836.html

Gao, X. (2010). *Daxue yingyu ketang hudong cihui jiaoxue moshi de shizheng yanjiu [An empirical study on interactive vocabulary teaching model in college English classroom]* (Master's thesis). Retrieved from http://cdmd.cnki.com.cn/Article/CDMD-10497-1011058648.htm

Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70–105. https://doi.org/10.1080/09588221.2012.700315

Gouws, F. E. (2007). Teaching and learning through multiple intelligences in the outcomes-based
education classroom. *Africa Education Review*, 4(2), 60–74. https://doi.org/10.1080/18146620701652705

Haidar, S., & Fang, F. (2019). English language in education and globalization: A comparative analysis of the role of English in Pakistan and China. *Asia Pacific Journal of Education*, 39(2), 165–176. https://doi.org/10.1080/02188791.2019.1569892

Hall, S. (2013a). Introduction. In S. Hall (Eds.), *Representation: Cultural representations and signifying practices* (pp. 1–11). London: Sage Publications.

Hall, S. (2013b). The work of representation. In S. Hall (Eds.), *Representation: Cultural representations and signifying practices* (pp. 13–64). London: Sage Publications.

He, D. (2013). What makes learners anxious while speaking English: A comparative study of the perceptions held by university students and teachers in China. *Educational Studies*, 39(3), 338–350. https://doi.org/10.1080/03055698.2013.764819

He, D. (2017). How to cope with foreign language speaking anxiety effectively? The case of university students in China. *Electronic Journal of Foreign Language Teaching*, 14(2), 159–174. Retrieved from https://e-flt.nus.edu.sg/wp-content/uploads/2020/09/he.pdf

Henriques, M. (2020). Will Covid-19 have a lasting impact on the environment. Retrieved from https://www.bbc.com/future/article/20200326-covid-19-the-impact-of-coronavirus-on-the-environment

Hu, G. (2002). Recent important developments in secondary English-language teaching in the people's republic of China. *Language Culture and Curriculum*, 15(1), 30–49. https://doi.org/10.1080/07908310208666631

Hu, G. (2005). English language education in China: Policies, progress, and problems. *Language Policy*, 4(1), 5–24. https://doi.org/10.1007/s10993-004-6561-7

Jin, L., & Cortazzi, M. (2002). English language teaching in China: A bridge to the future. *Asia Pacific Journal of Education*, 22(2), 53–64. https://doi.org/10.1080/0128789020220206

Koyama, T., & Takeuchi, O. (2003). Printed dictionaries vs. electronic dictionaries: A pilot study on how Japanese EFL learners differ in using dictionaries. *Language Education & Technology*, 40, 61–79. https://doi.org/10.24539/let.40.0_61

Kramsch, C. (1998). The relationship of language and culture. In C. Kramsch (Eds.), *Language and culture* (pp. 3–14). Oxford: Oxford University Press.

Li, B., & Siu, I. (2009). Developing students’ affective attitude in primary English foreign language classrooms in the People’s Republic of China. *Pedagogy, Culture & Society*, 17(2), 221–236. https://doi.org/10.1080/14681360902934467

Li, X., & Cutting, J. (2011). Rote learning in Chinese culture: Reflecting active Confucian-based memory strategies. In L. Jin & M. Cortazzi (Eds.), *Researching Chinese learners* (pp. 21–42). https://doi.org/10.1057/9780230299481_2

Lim, J., & Yang, Y. P. (2008). Exploring computer-based multilingual negotiation support for English–Chinese dyads: Can we negotiate in our native languages?. *Behaviour & Information Technology*, 27(2), 139–151. https://doi.org/10.1080/01449290601111135

Ma, G., & Wang, J. (2009). A study of theme-based approach in the effect of language output under multimedia and network environment. *Technology Enhanced Foreign Language Education*, (4), 63–69. Retrieved from http://www.eqvip.com/qk/90522x/200904/31289486.html

McGinnis, T., Goodstein-Stolzenberg, A., & Saliani, E. C. (2007). “Indnpride”: Online spaces of transnational youth as sites of creative and sophisticated literacy and identity work. *Linguistics and Education*, 18(4), 283–304. https://doi.org/10.1016/j.linged.2007.07.006

Peirce, B. N. (1995). Social identity, investment, and language learning. *TESOL Quarterly*, 29(1), 9–31. https://doi.org/10.2307/3587803

Peng, S. (2014). Analysis of perceived difficulty rank of English skills of college students in China. *Studies in Literature and Language*, 8(3), 15–21. http://dx.doi.org/10.3968/5128

Plump, C. M., & LaRosa, J. (2017). Using Kahoot! in the classroom to create engagement and active
Zhang: Functions of technology on English learning in China

learning: A game-based technology solution for e-learning novices. Management Teaching Review, 2(2), 151–158. https://doi.org/10.1177/2379298116689783

Qi, Z. H., & Liu, Y. (2018). Kahoot: Youxihua xuexi pingtai jiqi jiaoxue yingyong [Kahoot: Game based learning platform and its teaching application]. China Education Info, (4), 86–89. Retrieved from http://www.cqvip.com/qk/98487c/201804/674602516.html

Saeedi, Z., Meihami, H., & Husseini, F. (2014). E-mail platform and its effects on providing corrective feedback to EFL students. Journal of Modern Research in English Language Studies, 1(2), 41–65. Retrieved from http://jmrels.journals.ikiu.ac.ir/article_570_ab353a6dc3b6a33b7bb8b8f51e2b2f22.pdf

Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A retrospective. The Modern Language Journal, 85(1), 39–56. https://doi.org/10.1111/0026-7902.00096

Shi, Z., Luo, G., & He, L. (2017). Mobile-assisted language learning using WeChat instant messaging. International Journal of Emerging Technologies in Learning (iJET), 12(2), 16–26. Retrieved from file:///Users/duxiaoyang/Downloads/6681-21394-1-PB.pdf

Slavkov, N. (2015). Sociocultural theory, the L2 writing process, and google drive: Strange bedfellows?. TESL Canada Journal, 32(2), 80–94. Retrieved from https://files.eric.ed.gov/fulltext/EJ1083966.pdf

Stockwell, G. (2016). Mobile language learning. In F. Farr & L. Murray (Eds.), Language learning and technology (pp. 296–307). London and New York: Routledge.

Sulaiman, A. N., & Kassim, A. (2011). The use of weblog in language learning: Motivation of second language learners in reading classroom. Themes in Science and Technology Education, 3(2), 45–61. Retrieved from http://earthlab.uoi.gr/theste/index.php/theste/article/view/50

Sun, L. Y. (2010). Research on the learning strategies of college English vocabulary. Journal of Changzhi University, 27(4), 73–74. Retrieved from https://www.airitilibrary.com/Publication/alDetailedMesh?docid=16732014-201008-201010260078-201010260078-73-74

Tang, X. M. (2008). Blog: Wangluo shidai de ziwo biaoshu [Blog: Self-expression in the internet age]. English and American Literary Studies, (1), 306–321. Retrieved from http://www.cqvip.com/qk/71403x/200801/1005459454.html

Taylor, B., & Reynolds, E. (2018). Building vocabulary skills and classroom engagement with Kahoot!. In D. E. Shaffer (Eds.), The 26th Korea TESOL international conference (pp. 89–92). Retrieved from https://koreatesol.org/sites/default/files/pdf_publications/KOTESOL.2018--Extended.Summaries..pdf#page=89

Ushioda, E. (2005). The role of students' attitudes and motivation in second language learning in online language courses. CALICO Journal, 23 (1), 49–78. Retrieved from https://www.jstor.org/stable/24156232

Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. Communication Research, 23(1), 3–43. https://doi.org/10.1177/0010413596023001001

Wang, H. Y. (2012). Jiyu kuawenhua jiaoji de daxue yingyu jiaoxue moshi yanjiu [College English teaching model based on cross cultural communication] (Doctoral dissertation). Retrieved from http://cdmd.cnki.com.cn/Article/CDMD-10487-1012361198.htm

Wang, L. L., & Yang, F. (2015). Research on the reform and development of college English teaching under the background of "Internet +". Heilongjiang Research on Higher Education, (8), 159–162. Retrieved from http://www.cqvip.com/qk/80625x/201508/666052647.html

Wang, X. (2006). Daban shouke xiaoban xiaoguo liyong jisuanji wangluo jishu tujin daxue yingyu jiaoxue gaige [Using computer network technology to promote college English teaching
改革。《教育技术》(4), 25–26. Retrieved from http://www.cqvip.com/qk/88017x/200604/21573139.html

Wang, Y., Fang, W. C., Han, J., & Chen, N. S. (2016). Exploring the affordances of WeChat for facilitating teaching, social and cognitive presence in semi-synchronous language exchange. *Australasian Journal of Educational Technology*, 32(4), 18–37. https://doi.org/10.14742/ajet.2640

Wong, L. H., Sing-Chai, C., & Poh-Aw, G. (2017). Seamless language learning: Second language learning with social media. *Comunicar. Media Education Research Journal*, 25(1), 9–20. https://doi.org/10.3916/C50-2017-01

Woodward, K. (1997). Concepts of identity and difference. In K. Woodward (Eds.), *Identity and difference* (pp. 8–50). London: Sage Publications.

Yang, S. C., & Chen, Y. J. (2007). Technology-enhanced language learning: A case study. *Computers in Human Behavior*, 23(1), 860–879. https://doi.org/10.1016/j.chb.2006.02.015

Yi, X. M. (2011). Weibo xingqi beijingxia daxuesheng sixiang zhengzhi jiaoyu xiade tiaozhang yu yingdui [Challenges and countermeasures of political education of college Students with the development of Weibo]. *Studies in Ideological Education*, 2(5), 49–52. Retrieved from http://www.baiyunu.edu.cn/upfile/2012/11/28/wlydjk29.pdf

Zhang, Y. Q. (2018). *Yingyu xuexi APP ziyuan fenxi ji yingyong yanjiu [Analysis and application of English learning app resources]* (Doctoral dissertation). Retrieved from http://cdmd.cnki.com.cn/Article/CDMD-10270-1018215362.htm

Zhao, H., & Coombs, S. (2012). Intercultural teaching and learning strategies for global citizens: A Chinese EFL perspective. *Teaching in Higher Education*, 17(3), 245–255. https://doi.org/10.1080/13562517.2011.611874

Zhou, M., & Brown, D. (2015). *Educational learning theories* (2nd ed.). Retrieved from https://oer.galileo.usg.edu/education-textbooks/1/

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