Exploring a curriculum app and a social communication app for EFL learning

Bin Zou, Hui Li & Jiaying Li

To cite this article: Bin Zou, Hui Li & Jiaying Li (2018): Exploring a curriculum app and a social communication app for EFL learning, Computer Assisted Language Learning, DOI: 10.1080/09588221.2018.1438474

To link to this article: https://doi.org/10.1080/09588221.2018.1438474

Published online: 23 Feb 2018.

Submit your article to this journal

Article views: 3

View related articles

View Crossmark data
Exploring a curriculum app and a social communication app for EFL learning

Bin Zou, Hui Li and Jiaying Li

Language Centre, Xi’an Jiaotong-Liverpool University, Suzhou, China; Shandong Liming Polytechnic Vocational College, Jinan, China; University of Durham, Durham, UK

ABSTRACT
Mobile apps are broadly used by students in and after class to improve their language skills. This study aimed to investigate how a curriculum app and a social communication app can be integrated into English language teaching and learning and what sorts of tasks can be employed to enhance learners’ EFL learning. A curriculum app was created by the researchers and integrated into English teaching and learning in and out of class. Meanwhile, a social communication app used on mobile phones was also established for communication between students and the teacher. Questionnaires and interviews were conducted so as to explore students’ perceptions of these apps. The findings indicated that mobile learning can be adapted in EFL lessons and learners’ self-study. The apps providing sources connected to lessons and opportunities for communication offered additional support to students to practice English in and after class. Participants provided positive comments on the two apps for mobile learning.

KEYWORDS
Mobile apps; EFL learning; social networking

Introduction
During the past few decades, technology has developed at an impressive rate, making it possible for portable devices to be equipped with Wifi access, and enabling the fourth generation (4 G) or even 5 G service to pave the way for the technology-oriented teaching model. Mobile learning has been a key issue in the investigation of E-learning (Jeng, Wu, Huang, Tan, & Yang, 2010). It can be seen that enhancement in the mobility and connectivity of mobile devices helps to create a new way for students across different cultures to learn English (Kim, Rueckert, Kim, & Seo, 2013). The current young generation can be considered as the ‘Mobile Generation’ because they are more accustomed to using mobile devices than any other generation. Mobile learning is one of the significant tools by which learners can learn English without the restriction of time and place (Donnelly, 2009). Mobile devices are used not only for communication, but also to provide users with various functions, a
personal studying atmosphere and freedom to download and access learning materials (Cheng, Hwang, Wu, Shadiev, & Xie, 2010). As such, mobile learning may enhance autonomous learning (Chen & Wang, 2016; Reinders & White, 2016). Therefore, this study intends to explore how mobile apps, specifically, a curriculum app and social communication app can reinforce learners’ EFL learning.

**Literature review**

As access to mobile devices increases worldwide, many researchers have emphasized the considerable potential for mobile devices as the next generation of learning delivering tools to help realize the long-held dream of one-to-one language instruction (Egbert, Akasha, Huff, & Lee, 2011; Stockwell, 2010; Wang, Zou, & Xing, 2014). Wireless and advanced communication technology opens new opportunities for independent interaction between students and teachers and thus for efficient learning anytime and anywhere (Egbert et al., 2011). EFL learning also benefits from such opportunities. With regard to the technological features, the evolution of mobile devices will continue to make them a better fit into the classroom. Dramatically different from the technological state in the last decade, mobile devices have become much more powerful, effective and smarter to support pedagogical practices. Viswannathan (2012) has elaborated the development trajectory of mobile devices with networking systems from 1 to 4 G to identify the differing impacts given by various devices upon learning. She further pointed out that many features of the latest devices, such as network connectivity, data storage and powerful computing, can effectively facilitate language learning beyond the classroom. Mobile learning can make the concepts of learning anytime and anywhere into a reality. Learning content thus can be accessed in a variety of areas in daily life, despite limits of space and time. Mobile devices enable learning to be carried out, no longer as a stable procedure conducted at a fixed time and place, but have transformed it into a spontaneous, ubiquitous and pervasive education process (Boyinbode, Bagula, & Ngambi, 2011).

Meanwhile, it is also attested that using mobile devices as a learning tool may increase students’ enthusiasm and motivation (Bibby, 2011; Viswanathan, 2012). If students choose mobile sources themselves for EFL learning, mobile-assisted language learning (MALL) may be a potential motivator (Godwin-Jones, 2017). However, while students in some areas may have high motivation for MALL, students in other areas may have low motivation in MALL due to the relative economic development in different cities (Zou & Yan, 2014). Despite this, the increasing use of mobile technologies could motivate innovation in English learning and help educators to realize their pedagogical goals more effectively (Kim et al., 2013). Mobile technologies can provide opportunities for EFL learners to practice various language skills on their smart mobile phones or tablets, e.g. listening practice (Fuente, 2014). Researchers also discovered that mobile-based business vocabulary learning benefited students more, compared...
to traditional paper-based learning, suggesting that mobile technologies can effectively influence students’ vocabulary learning performance, and students have a positive attitude towards mobile learning (Zhang, Song, & Huang, 2014). Liakin, Cardoso, and Liakina (2017) found that students can use mobile devices to improve their pronunciation, particularly with teachers’ instruction. Mobile technologies, therefore, may enhance EFL teaching and learning (Chang & Hsu, 2011). Teachers should encourage students to use diverse mobile technologies for EFL learning and facilitate mobile learning (Viswanathan, 2012).

Furthermore, a substantial number of applications (apps) for English learning are being designed to keep up with the trend in mobile learning. For example, a large number of mobile apps for foreign language learning are available in app stores. Studies have demonstrated that mobile language apps can effectively stimulate learners’ creativity and extend their understanding of target language (Petersen, Procter-Legg, Cacchione, Fominykh, & Divitini, 2012) and can help learners practice vocabulary (Stockwell, 2010; Sweeney & Moore, 2012).

However, researchers also argued that students learning performance in MALL contexts may be lower than students in non-MALL context because frequent use of mobile devices may disrupt their concentration when engaged in learning activities (Kraushaar & Novak, 2010; Kuznekoff & Titsworth, 2013). Hsu (2013); Wei, Wang, & Klausner, 2012 found both positive impacts upon students’ learning experience and outcomes in MALL contexts, and negative attitudes towards mobile learning from students in different countries. In addition, many previous MALL studies had flaws in a number of ways, for example, they only focused on vocabulary or drill-based exercises, or there was a lack of communicative exercises (Burston, 2014a; Sung, Chang, & Yang, 2015) and did not integrate into the curriculum (Burston, 2014b). Many MALL studies were conducted in a short period of time (Burston, 2014a) and only examined MALL in class rather than MALL after class, but students may be engaged in informal learning including using language learning apps (Godwin-Jones, 2017). Some MALL studies had simple research designs, for instance, only a questionnaire was used, or there were only a few participants, and as such, their positive results in students’ learning outcomes might be limited (e.g. Chang & Hsu, 2011; Hsu, 2013; Aydin, 2013; Ma, 2017).

Although learning via portable devices has tremendous potential, developing new teaching and learning methods could still be a barrier for educators to put this into practice. In addition, students’ lack of self-control could be another obstruction for mobile learning. For the majority of students, mobile devices are mainly used for entertainment and communication (Kim et al., 2013). Furthermore, the majority of existing apps have not yet been very pedagogically useful, due to the possible knowledge gap between the apps developers and language teachers, and as such, it may be a predicament that mobile app developers have insufficient knowledge of pedagogy and language teachers who comprehend the pedagogy are not interested in mobile learning (Sweeney & Moore, 2012). Consequently, students need guidance in
finding good sources to avoid being overwhelmed by the huge amount of online information (Hoven & Palalas, 2011). Moreover, social communication should be taken into account because social networking apps are widely used for communication on mobile phones every day (Khaddage, Müller, & Flintoff, 2016). For example, Xu, Dong, and Jiang (2017) and Xu and Peng (2017) explored using a social communication app for communicative purpose in foreign language learning. They found that students had positive attitudes towards teachers’ feedback on a social communication app used on their smartphones. However, their studies only focused on teachers’ feedback on students’ oral performance and there was a lack of student-student communication.

Teachers should also adopt appropriate strategies to facilitate students’ mobile learning to improve learning efficiency, otherwise, mobile learning may not be as effective as expected (Liu, 2016). Despite this, not many apps are directly connected to EFL classes or curriculum which may make it hard for EFL teachers to use them in class. Additionally, the problem of catering to multiple different operating systems (e.g. Android, iOS and Windows mobile devices) should be taken into consideration. Thus, educators would need to update resources and content regularly. This could cost both substantial human resources and money. Students’ lacking self-control in the mobile environment is another issue worth mentioning. The ability to use smartphones for entertainment and socializing with friends might affect the usefulness of mobile based learning activities. Further, not all mobile-based resources or services are free, hence, students might have limited access because they may have to pay the source and service fee. Therefore, EFL apps and use of social communication apps on mobile devices which are related to classroom teaching should be developed to match the specific class to reinforce teaching and learning, while, integration into the class content should be taken into account in a MALL context.

Accordingly, this study aimed to investigate how a curriculum app and a social communication app can be integrated into English language teaching and learning and what sorts of tasks can be employed to enhance learners’ EFL learning. The researchers designed an app to help students access English for academic purposes (EAP) class materials at anytime and anywhere conveniently and investigate students’ perceptions of the app, aiming to integrate the app into curriculum. This is also because creating apps will increase interest in finding ways to evaluate different approaches to mobile learning (Godwin-Jones, 2017: 12). At the same time, in order to avoid the limitations in previous studies for lack of communicative activities (Burston, 2014a; Sung et al., 2015), a class forum used on mobile phones or tablets based on a mobile social communication app- WeChat was established for communicative activities among teachers and students. It aimed to explore the user experience of the designed app as well as communication in the social networking system and whether the curriculum app and social networking are beneficial for EAP learning inside and outside the class. Finally, to overcome the limitation of short time research among many
MALL studies, as pointed out by (Burston, 2014a), this study lasted for four months in one semester. There were two research questions:

What are students’ motivations in using the curriculum app for mobile EFL learning?

What are students’ perceptions of using a social communication app on mobile phones for EFL learning?

The study

Participants

84 sophomore students majoring in economics or marketing from four classes at a university in China participated in this research. Respondents were from China, Korea, Indonesia, Iran and Greece who were taking an EAP course. Their English level of proficiency is between B1 and B2 with respect to the Common European Framework of Reference for Languages (CEFR), which has been formally integrated with EAP assessment in this university. Ages ranged from 18 to 21 and all respondents fully completed the survey. There were approximately 59% females and 41% males.

Materials

In the absence of an alternative such as Google+ or Google Class, the researchers created an EAP app to enhance EAP classroom teaching and students’ self-study after class. The curriculum app contained a variety of sources including class handouts and self-study materials. Figure 1 shows weekly sources in this curriculum app from Weeks 1–14 in one semester. Students can click any week to access class materials. The teacher uploaded class sources every week. Sometimes the teacher adopted a blended learning strategy in class, that is, asking students to read class materials on the app in or out of class, then, conducting group or pair discussions in class based on the content on the app. Sometimes the teacher asked students to access handouts on the app rather than providing paper-based handouts. Figure 2 demonstrates a sample handout used in class.

General resources which can help students practice general EFL skills were also provided in the app including reading, listening, writing and speaking. Students are encouraged to access this app on their mobile devices to practice their English after class. Students can access different sources by clicking the bottom buttons on the app.

At the same time, again since Google+ or Google Class is not available in Mainland China, a class forum based on the social communication app—WeChat was set up for each class in order to help students communicate with peers and the teacher. WeChat, similar to WhatsApp, ICQ or LINE for users’ communications by text, voice or video, is a social communication app created
in China and used by more than 650 million people globally (Xu & Peng, 2017). WeChat users can share messages, photos and videos and can be used with any type of mobile devices including Android, iOS or Windows. All participants joined in the WeChat class forum for their classes. Figure 3 shows several class forums on WeChat. As can be seen in Figure 3, a WeChat group, China and France, was also established between the participants and a group of college students from France. This was because the first author of this paper discussed a collaborative project with an EFL teacher in France at an international conference, and then they decided to carry out this project on WeChat forum. The aim to set up this forum was to utilize social networking to encourage communication between EFL learners from the two countries so that they can use English
to communicate and complete tasks together assigned by teachers (Hartwell & Zou, 2014).

Procedure

Questionnaires and interviews were conducted in English so as to explore students’ perceptions about the apps. Two questionnaires asking respondents’ opinions about the curriculum app and social communication app were allocated to each participant (see Appendixes 1 and 2). The app questionnaire contained 14 ‘Yes/No’ and multiple choice questions and the social communication questionnaire contained 25 Likert scale and two open-ended questions. All 84 students completed the questionnaires. Additionally, 28 students were selected randomly to conduct interviews by providing more details for the curriculum app as well as the WeChat groups in order to obtain further understanding of students’ mobile learning experience. These results were combined and compared with the questionnaire responses to gain more insights. Questions such as what students think about the curriculum app as well as the social communication app and the frequency and efficiency of utilizing these apps were asked to evaluate their merits and shortcomings. The answers of each participant were recorded on a digital recorder and then were transcribed into written texts. The interviewees were coded as S1, S2, S3... .

Data analysis and discussion

RQ1: what are students’ motivations in using the curriculum app for mobile EFL learning?

In the first section of the student questionnaire, students were asked whether they were motivated to carry out their work on mobile apps for EFL learning. Data from the questionnaire shows that 75% accepted blended learning in class,
e.g. reading on mobile devices and doing tasks on paper. They also did some reading practice on the curriculum EAP App or WeChat class forum on their mobile devices after class. Data in Table 1 shows the percentage of several perceptions towards mobile apps for English learning. It can be seen that most of students (84%) had used mobile apps to practice English. The overwhelming majority of them (90%) held the view that mobile apps are helpful for English learning. 68 percent of the students indicated that they liked to use mobile apps to practice English skills, with everyday frequency or at least 3 times a week. This means that most of the students were motivated to use apps for mobile language learning because they think the apps useful and they like to use them. Furthermore, an interesting phenomenon was found in the questionnaire that female students are more likely to use mobile apps to learn English than male students, with the percentage of 73% compared to 28%, respectively. This indicates that female students may have higher motivation than male students in using mobile apps for English practice.

However, some negative factors were also found from the questionnaire. Some students preferred to read from paper handouts rather than on mobile phones. They indicated several negative factors, including ‘not convenient’, ‘not comfortable to read on mobile devices’, or the limited WiFi access on their mobile phones.

Interview data illustrate details for students’ experience in mobile learning. High accessibility and convenience are two main reasons for students liking to use mobile apps to practice English. For example, according to S2: ‘I take my phone with me all the time. English learning apps on the phone will be more accessible than other devices.’ S1 even said that he improved reading skill because English news is available on the EAP app for him to read on his mobile phone and he could read it frequently. Further, interviewees stated that reading on mobile devices and doing exercises was convenient, similar to reading a paper. For example, S17 said that she liked to read articles on her iPad, rather than paper in class because of convenience. This suggests that some students were using tablets, not smartphones, because the larger screen size of tablets could influence student willingness to read on screen as opposed to on paper. Similarly, S18 agreed with her peers: ‘Yes. It’s more convenient than paper. It’s easy to read and I don’t need to carry a lot of paper.’ These results suggest that the participants liked to use mobile devices for English practice due to accessibility and convenience. They do not have to always rely on paper-based sources to practice English.

<table>
<thead>
<tr>
<th>Students’ perceptions</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students think mobile apps are helpful for English learning</td>
<td>88</td>
</tr>
<tr>
<td>Students like to use mobile apps to practice English skills</td>
<td>68</td>
</tr>
<tr>
<td>Students have used some apps to help learn English</td>
<td>84</td>
</tr>
</tbody>
</table>
As with questionnaire results, however, several students provided negative feedback regarding the use of mobile learning. Two of the respondents held the view of ‘never’ for mobile learning. One reason is that it is too tiring to read on the mobile phone. Another two reasons are that students are not in the habit reading on their mobile phones and no suitable apps are available. This result echoes Hsu (2013) and Zou and Yan’s (2014) studies on both positive and negative attitudes towards MALL among students.

The results above suggest that most of the students are willing to use mobile learning as a means of developing their English skills. They accept blended learning on their mobile devices in and after class because mobile learning is convenient and make it easy for them to access learning sources. These findings echo previous studies such as Kim et al. (2013) and Zou and Yan (2014) in learners’ willingness in using mobile learning. In addition, the finding shows that students liked to practice English skills on their mobile devices after class, indicating an enhancement of autonomous learning and students’ engagement in informal learning, which is consistent with Chen and Wang, (2016), Reinders & White’s (2016) and Godwin-Jones’s (2017) claims.

In terms of the curriculum app—the EAP app that the authors created for classroom teaching, the researchers conducted three measurements to examine students’ attitude towards the EAP app and the outcomes were quite optimistic (see Table 2). Around 63% of the participants agreed that the EAP app is really helpful and an even greater number of students (73%) indicated that they would like to integrate the EAP app into their English learning. Moreover, no one held any negative view about the EAP app with 0% disagreement. Regarding the improvement that students made when using the EAP app however, the majority of the students (64%) held a neutral attitude, and only around 32% strongly agreed. This implies that although participants liked the EAP app and perceived that it was convenient, they might not make a good improvement, which could be measured from assessments.

In the interview, more details about students’ integration of the EAP app into their study were found. Half of the students said that they used the EAP app to preview or review their class materials because of the convenience and rapidity. The tutor usually uploaded the materials used in class on the EAP app so that students could access these materials in or out of class. A substantial number of respondents (50%) said they were more likely to use this app in class with the guide of the teacher, suggesting the necessity of the teacher’s guidance in

<table>
<thead>
<tr>
<th>Students’ perceptions on EAP App</th>
<th>(strongly) Agree</th>
<th>Neutral</th>
<th>(strongly) Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think the EAP App is really helpful</td>
<td>63.63%</td>
<td>36.36%</td>
<td>0%</td>
</tr>
<tr>
<td>I like to integrate EAP app to my English learning</td>
<td>72.73%</td>
<td>27.27%</td>
<td>0%</td>
</tr>
<tr>
<td>I have improved my English skills through EAP app</td>
<td>31.82%</td>
<td>63.64%</td>
<td>4.55%</td>
</tr>
</tbody>
</table>
adopting mobile learning. Students who learned English with the help of the EAP app used EAP course materials and general EAP sources. EAP course materials were the most frequent item students liked to use to prepare for EAP class. Students also commented that apps should have a comprehensive function to combine English learning with social contact to enable the users to share their knowledge, as would have been the case if programs like Google+/Google Class had been available in China. Moreover, they suggested that the sources in the EAP app should be related to what they learn in class. As S4 said: ‘It is better that the app can connect to our study, such as knowledge we learnt in EAP class.’ In the EAP app, both course materials and non-class or general sources for EFL learning were provided. This means that students can enjoy course materials on the app to develop their English skills if teachers can upload class materials onto the app because these materials are directly relevant to their study, but they may not like non-class and general EFL learning materials in the app. Hence, creating a curriculum app which is relevant to class content as in the EAP app could stimulate learners’ interest and willingness in mobile learning. Non-class or general sources for EFL learning in the app can be removed since students can access these materials in other places.

The results demonstrate that time-saving and convenient features were valued most by the respondents. The majority of the students revealed that learning via handheld devices had become an indispensable part of their lives and thus, they enjoyed working on mobile EFL learning. Additionally, resources for EAP learning are believed to be beneficial to academic study by the majority of the subjects although this may not translate into a big improvement in English skills. For a successful curriculum app, thus, it is important to enhance its convenience and its function to save time, and to ensure high-quality and relevant resources for the learning context. The results also indicate that participants prefer to receive teachers’ guidance for mobile learning. This means that the teacher should provide guidelines and support to facilitate students’ mobile learning. This finding echoes Liu’s (2016) study regarding the need of pedagogical strategies in the mobile learning environment.

**RQ2: what are students’ perceptions of the use of social communication app for EFL learning?**

In this study, a class forum based on social communication app-WeChat was utilized for student-student and teacher-student interaction in order to motivate students to learn English on their mobile devices. The purpose of student-student interaction was for students to discuss in English class materials, ask questions and share understanding of learning. The aim of teacher-student interaction after class was to deal with students’ questions and provide further guidelines and suggestions on EAP learning, homework, exam information, reminder or explanation of homework. Figure 4 shows a sample screen of
student-student interaction in one of the WeChat class forums and Figure 5 illustrates teacher–student interaction in another WeChat class forum.

The findings from the questionnaire suggested that, in general, more than 80% of the students frequently used WeChat as a communication tool to have a chat with friends or classmates. In the WeChat class forum, students were encouraged to ask questions. The result indicated that 84% of participants asked questions in English in the WeChat class forum. 81% of them read English messages in the class forum. Meanwhile, apart from the teacher’s feedback to questions, students were also encouraged to reply to peers’ questions in English. The findings revealed that 81% confirmed receiving feedback from peers in the class forum and 78% found peers’ feedback in class forum useful. Regarding interaction with the teacher, 72% felt it was easy and comfortable to talk with the teacher in the class forum on their mobile devices. 78% found the teacher’s feedback in the group chatting useful. Further, 64% commented that the group chat in English on the social networking on their mobile phones was helpful for their English practice. 76% remarked that language skills can be improved through various tasks on WeChat. For example, 79% felt that there was a great potential for a WeChat group to develop speaking skill by various speaking tasks.

Data from the interview was consistent with results from the questionnaire above. All of the interviewees mentioned that they asked questions and got the feedback in the WeChat class forum. The majority commented that WeChat was useful, fun and provided instant feedback, and as such, improved their

Figure 4. Student–student interaction.
English skills. They could develop speaking and listening skills with mobile learning; but some of them also noted that chatting in English on the WeChat class forum was challenging for them. Students were happy with the feedback given by peers and tutors if the questions were answered immediately and useful. S5 highlighted this point: ‘I find it very helpful to use WeChat because once you post a question or a topic, you will get the feedback very quickly and also you can discuss with the classmates and the teacher to have deeper conversations.’ Moreover, the majority of the respondents chose WeChat to receive messages from the teacher because it is more frequently used than e-mail, so that important messages would not be missed. Furthermore, students pointed out that they felt more relaxed when communicating with the teacher through WeChat. As S4 noted: ‘Chatting with the teacher on WeChat will not make me nervous, otherwise chatting face-to-face with teacher makes me nervous.’ In addition, several students highlighted their preference for group chat. As S13 indicated: ‘I think chatting in English in a group helps me improve my speaking skill.’ S17 agreed in this regard: ‘Um... I think chatting in English in a group can improve my speaking strategy and it’s very interesting.’

As mentioned in the previous section of this paper, a WeChat group between the participants in this study and a group of students from one university in France was also set up (see more details in Hartwell & Zou, 2014). They either chatted by typing words or by voice to discuss tasks assigned by the two teachers in China and France, as shown in Figures 6 and 7. Students provided positive
comments on this intercultural communication. In the questionnaire, 79% enjoyed chatting with a foreigner in English. 64% of the students thought voice chat helpful for speaking skills and 60% would like to try video chat with a foreigner. In the interview, similarly, students suggested that chatting with a French student helped improve their speaking skills. As S16 said: ‘I think I can chat with people who are in foreign countries and I think it’s more helpful for my English.’ S14 also said: ‘Sometimes from the beginning I feel the chat is awkward, but after some time I chat several times, I feel that’s great and we can share ideas with each other.’ Several students said that they enjoyed talking with French students because they found it interesting and they valued the opportunity to increase their culture awareness. S17 affirmed: ‘I think it can be a very exciting experience.’ However, there are still some obstacles in the communication between the two countries such as a heavy French accent or different time zones. One student (S15), however, raised his concern: ‘It’s fun, but I might be very cautious because I don’t know their culture and they don’t know mine. So I’m afraid of saying something wrong.’ This finding indicates that participants enjoyed communications with French students on WeChat. Thus, using a social networking app may foster EFL learners’ communication and development of their language skills from the two countries. The social format on mobile devices may provide convenience for EFL learners to facilitate intercultural communication at anytime and anywhere. This differs from desktop-based communication for which learners have to sit in front of a desktop in a room.

The results above suggest that it is easy and comfortable for students to communicate in a class forum on the mobile social networking-WeChat with the
teacher and local students as well as with students from another country. Students felt more confident discussing lessons in English in the social networking environment. Using the WeChat social networking forum could stimulate students’ interest in mobile EFL learning. Therefore, using a social communication app may increase interactions among students in and after class or from another country because it is one of the good ways/channels for EFL learners to practice English. This result corresponds with the findings of Khaddage et al. (2016) in using social networking in mobile learning. Our findings on student-student interaction based on a social communication app expanded on Xu et al. (2017) and Xu and Peng’s (2017) studies on student-teacher interaction only.

Conclusion

This research investigated the impact of a curriculum app and a social communication app on college students’ English learning activities, in order to understand the current and future potential of mobile learning in general, and the design criteria for good English learning apps in particular. The findings suggested that the majority of the participants held a positive attitude towards the curriculum app and social communication app, and many of them frequently conducted a variety of learning practice on their mobile devices. The majority of the participants enjoyed the two apps, as demonstrated by their motivation in carrying out the relevant activities on the apps. It also proved that using mobile devices as a learning tool can motivate students’ enthusiasm. Convenience and high-quality contents were considered as significantly important features for a good curriculum app. More importantly, based upon participants’ comments on the class materials and non-class materials in the EAP app, the app should
closely connect to the curriculum and classroom teaching context so that learners can directly benefit their EFL learning from the app in or after class. There is no need to put non-class materials in the app. Finally, due to highly positive comments on the WeChat class forum from the participants, establishing a class forum accessible to mobile devices based on any social communication app, such as WeChat, LINE or WhatsApp, should be taken into consideration and is strongly recommended to supplement students’ learning because students find it convenient, comfortable and useful. It can be set up in one class or multiple classes, and even with a class from another country. Social communication on mobile devices may benefit students’ communication skills with peers, teachers or learners from other countries.

However, there are a few limitations in this study. First, the findings were only based on students’ perceptions. There are no pre- and post-tests to assess students’ actual improvement or possible change of attitudes. Second, there was no control group to compare and contrast the differences and similarities between the experiment and the control groups. Therefore, further research needs to be conducted to investigate the improvement that students can achieve in the use of mobile apps and social networking app system.

Acknowledgments
We are grateful to the reviewers for their kind comments and suggestions on this paper.

Disclosure statement
No potential conflict of interest was reported by the authors.

Notes on contributors
Dr. Bin Zou received his PhD degree in TESOL from the University of Bristol (UK). He has taught EAP to undergraduate students at the Language Centre, Xi’an Jiaotong-Liverpool University, China, since 2008. His research interests include CALL, ELT, EAP and corpus. He has published many papers in international journals and edited several chapter books. He is the Editor-in-Chief of the International Journal of Computer-Assisted Language Learning and Teaching http://www.igi-global.com/ijcallt.

Hui Li is an English teacher at Shandong Liming Polytechnic Vocational College, China. Her research interests include ELT and medical English.

Jiaying Li is an MA student at the University of Durham, UK. Her research interest includes English and marketing.

ORCID
Bin Zou http://orcid.org/0000-0002-4863-0998
References


Appendixes

Appendix 1: Questionnaire one for EAP app

When completing this questionnaire, you have agreed to use your responses for this research project on EAP app using at XJTLU. You can stop at any time if you don’t want to do it. Your name will be anonymous in this project and for any publication or conference presentation.

1. Your gender is: A. Male  B. Female
2. Your age is
   A. 18–19  B. 20–21  C. 21–22  D. 23 or above 23
3. Your major is ___________
4. Do you think mobile apps are helpful to your English learning?
   A. Yes  B. No
5. Do you like to use mobile apps to practice your English skills?
   A. Yes  B. No
6. Have you used any Apps to help you learn English?
   A. Yes  B. No
7. How often do you use mobile Apps to learn English?
   A. Everyday  B. 3 times a week  C. Once a week  D. Never
8. Which English skill can you develop when using mobile apps?
   A. Listening  B. reading  C. speaking  D. writing  E. vocabulary
9. How often do you use EAP App?
   A. Every day  B. 3 times a week  C. Once a week  D. Never
10. When do you usually use this App?
    A. In class  B. After class  C. Both A and B  D. Never
11. Will you use EAP App when there is no teacher to guide you?
    A. Yes  B. No
12. I think the EAP app is really helpful.
    A. Strongly Agree  B. Agree  C. Neutral  D. Disagree  E. Strongly Disagree
13. Which section do you like most in the EAP app?
    A. EAP course materials  B. General EAP  C. Association & Club
14. Which channel do you like to access class materials?
A. ICE  B. EAP APP

15. I like to integrate EAP APP into my English learning.
   A. Strongly Agree  B. Agree  C. Neutral  D. Disagree  E. Strongly Disagree

16. I have improved my English skills through EAP App.
   A. Strongly Agree  B. Agree  C. Neutral  D. Disagree  E. Strongly Disagree

17. Would you like to introduce this app to other XJTLU students?
   A. Yes  B. No

18. What do you think this EAP app can be improved in the future?

Appendix 2: Questionnaire two for the communication app

When answering questions below, you have agreed to use your responses anonymously for this research project on Mobile learning. You can stop at any time if you don’t want to do it.

Your name will be anonymous in this project and for any publication or conference presentation.

Please choose (tick √) the relevant number to indicate:
① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree

<table>
<thead>
<tr>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>Your gender: Male ( ) Female ( )</td>
</tr>
</tbody>
</table>

Communication on mobile devices via WeChat

1. I use WeChat as a chat tool frequently.
2. I have chatted in English in my Class WeChat group.
3. I have asked questions in English in my Class WeChat group.
4. I have read English messages in my Class WeChat group.
5. I feel it easy and comfortable to talk with peers on WeChat in English.
6. I feel it easy and comfortable to talk with my teacher on WeChat in English.
7. I can get feedback from peers in Class WeChat group. 81%
8. I find peers’ feedback in my Class WeChat group useful for my study.
9. I can get feedback from my teacher in Class WeChat group.
10. I find the teacher’s feedback in my Class WeChat group useful.
11. My enthusiasm of using WeChat to chat in English has increased.
12. I find it more fun to chat in a group in English compared with chatting with a single person in English.
13. I have enjoyed chatting with a foreigner in English on WeChat.
14. I find the messages in WeChat group useful.
15. I feel the group English chatting helpful for my English.
16. I think voice chat will be helpful for my speaking skill.
17. I would like to try video chat with a foreigner.
18. I feel my language skills can be improved by through various tasks in WeChat.
19. I feel there is a great potential for WeChat group to develop speaking skills by various speaking tasks
20. How long do you use your mobile phone for reading, listening or watching movies every day? (Not including phone calls) (Select the best answer)
   A. Less than half an hour  B. 0.5–1 h  C. 1–2 h  D. 2–3 h  E. over 3 h

(continued)
21. How long do you use your mobile phone for English learning every day?
   A. None.  B. 5–15 min  C. Less than 30 min.  D. 0.5–1 h  E. 1–2 h
22. How long do you use your mobile phone to talk to others on WeChat every day
   (Not including phone calls)
   A. Less than half an hour.  B. 0.5–1 h  C. 1–2 h  D. 2–3 h  E. over 3 h
23. Where do you usually use WeChat? (You can select several answers)
   A. At home  B. At campus  C. Cafes  D. on the way home or campus.
   E. Other places ______
24. How often do you check your e-mail?
   A. Every day  B. Every two days  C. Twice a week  D. Once a week
   E. less than once a week
25. How often do you check your WeChat message?
   A. Several times a day  B. Every day  C. Every two days  D. Twice a week
   E. Once a week  F. less than once a week  G. Never

How do you find it helpful getting feedback from your teacher in WeChat group in English?

Do you have any suggestions for mobile learning including APP program?

Notes: This is a study on mobile learning, and we would like to interview some participants to collect more details. If you are willing to take the interview, please leave your phone number, e-mail, or WeChat account, so that we can contact you. Your names and answers will be anonymous.

Your contact details: _________________________________.

Thank you!