

Learning Vocabularies through WeChat: A Case Study of Chinese Lower-proficiency Students

Chunlin LEI^{a*}, Yuyang CAI^b

^aShanghai University of International Business and Economics, China

^bShanghai University of International Business and Economics, China

*leichunlin@sui-be.edu.cn

Abstract: WeChat is an extremely popular social medium among Chinese students. This study designed and examined a WeChat-based environment in support of students' English vocabulary learning. In a *Comprehensive English* class, a group of 21 Year-1 lower-proficiency college students were required to use new vocabularies to make sentences and post them to WeChat moments (friends circle) for others to share and learn. It is hoped students' WeChat learning activities can consolidate their vocabulary learning. The data sources of this study included students' WeChat logs, vocabulary tests during mid and end of instruction, and interviews with focus groups of students. The results showed all students participated in the online vocabulary learning tasks and their achievement on vocabulary tests maintained over time. However, students' levels of engagement varied. The interview data revealed a number socio-cultural factors contributing to (or undermining) the students' engagement and improvement, for example, good personal relationship, a growth mindset and a need to show off (or oppositely, a lack of trustworthiness and a concern for losing face). The implications of the study are discussed at the end of the paper.

Keywords: WeChat, vocabulary learning, lower-proficiency students, engagement

1. Introduction

The importance of vocabulary learning and teaching in English-as-a-foreign-language (EFL) context has long been recognized (Nassaji & Tian, 2010; Rassaei, 2020), and the case is even more pressing for lower language proficiency students. These students need to start with vocabularies and to be more exposed to foreign language environments in order to build up confidence and step toward success (Zimmerman & Schunk, 2011). With the widespread of information technology in education, many technology-based tools and methods have been utilized in vocabulary learning and achieved fruitful results (see meta-analysis, Abraham, 2008; Bax, 2011).

WeChat, known as “微信” in Chinese, is an Internet-supported social medium, which has garnered over 1150 million monthly active users by June 2019 (Tencent, 2020) and is extremely popular among Chinese people. WeChat has deeply changed people's lives (Gan & Li, 2018); it has been used to facilitate communication with friends, understand various kinds of news (Gan & Wang, 2015), and support teaching and learning (Wang et al., 2017; Wang, 2018). Students' playing with WeChat through smartphones seems ubiquitous on university campuses, and teachers often find it a distraction to classroom teaching and learning; however, it is neither practical nor feasible to forbid students from using phones and a more constructive idea may be to exploit opportunities of WeChat in support of students' learning, be they in formal (in class) or informal (out of class) learning settings. It is against such background, this study intends to design and examine a WeChat supported learning environment through which students can make sentences, interact with one another, and improve their vocabulary and language learning.

2. Literature Review

Mobile-assisted language learning has emerged to be a new research strand in recent decades (Warschauer & Kern, 2000). In its early stage, the most frequently used function of mobile phones is

message texting, which has been used to assist students in their vocabulary learning. With technology development and popularity of smartphone apps, new approaches of learning with the help of internet and apps have been widely adopted (Lu, 2008). In learning vocabularies, researchers have rigorously designed and investigated mobile-based vocabulary learning activities (Abraham, 2008; Stockwell, 2007, 2010). For example, Stockwell explored the impact of smartphone on Japanese students' vocabulary learning, and focused on a comparison of time spent on the task via mobile phones or computers (2007) as well as learners' usage patterns of mobile platforms (2010) respectively. The results indicate that mobile phones have the potential to enlarge students' vocabularies through some sophisticated vocabulary learning activities. In mainland China, Yang (2012) explored mobile technology in college English vocabulary learning and proposed that the method had transcended the limits of time and space and performed better than the traditional method. In a more relevant study, Wang (2018) has taken advantage of a quasi-experimental design to investigate the use of WeChat group and English Learning Apps in support of students' vocabulary learning. The results showed different achievement groups had different preferences towards mobile learning and their performances on vocabulary assessment were different. Although mobile assisted language learning has generally demonstrated educational benefits in research studies, the mechanisms behind the benefits are still under-investigated and studies shall not only focus on the affordances of technology but also the constraints (Reinders & Stockwell, 2017).

WeChat is a widely adopted social medium across China and even all over the world; however, most of the studies on WeChat have focused on users' behaviour changes (Peng, Zhao & Zhu, 2016) and premised on gratification theory (Gan & Li, 2018), and there is a dearth of research on the use of WeChat in support of academic learning. In view that WeChat is not specifically designed for classroom learning; application of WeChat in vocabulary learning may bring about both opportunities and challenges. In addition, students of lower proficiency may lack skills and motivation, and employ strategies such as avoidance and self-defence in learning (Zimmerman & Schunk, 2011). To what extent they may feel motivated to use WeChat to learning needs further exploration.

This paper addresses two research questions: (1) how do the students participate in the WeChat-supported vocabularies learning activities and perform in the subsequent vocabulary tests; (2) what are the factors that affect students' engagement in WeChat vocabulary learning environment?

3. Research Method

3.1 Research Context

This study was conducted in a Sino-British joint educational program at a business-and-economics-oriented university in Shanghai, China. The learners of the Program were lower-proficiency students because they were not formally recruited through China's Matriculation System (or Gaokao). Most of them failed the Chinese Gaokao, and then relied on the "3+1" joint Program (3-year study in Shanghai and 1-final-year study in Britain) to continue their study in higher education. Upon successful completion of the Program, the student could obtain a BA degree from the British university. Participants of this study included a group of 21 Year-1 students (M=10, F=11), aged from 17 to 20. The teacher is a young, novice teacher with 2-year teaching experience.

3.2 Instructional Design

The students were registered in a course entitled *Comprehensive English*, a foundational course aiming at strengthening students' ability in vocabulary, grammar and English reading literacy. The course was delivered in a 90-minute lesson everyday from Monday to Friday across an 18-week length semester. As vocabulary learning was one of the primary tasks of the course and the students used their smartphones quite often in and outside the class, the teacher required the students to make use of WeChat as a supplementary tool for vocabulary learning. Specifically, students were equally (except for one group) divided into five groups and each member of the group was supposed to use three new vocabularies that he/she learnt from the class or textbook to make sentence(s) and post those sentences in their WeChat moments (friends space). Since WeChat moment is an open space where all friends

(including classmates, teachers, even parents and relatives) have access to, students were therefore, encouraged not only to complete the sentence-making tasks but also to read and give comments to their classmates' sentence-making. Through these online activities (usually after class), it was hoped that students could better understand the meaning of the words, the contexts of the words when used; and more importantly, they could learn from one another.

3.3 Data Collection

The data sources of this paper included (1) students' posts in the WeChat moments (sentence-making, comments, responses, click of liking – a way to show appreciation to others' posts, etc.) throughout the semester, which provided a holistic picture of students' engagement in the environment; (2) two vocabulary tests during mid (Week 9) and end (Week 18) of the semester; each test consisted of 60 vocabulary questions which were carefully selected and designed by the teacher and the researcher in line with the textbook, students' WeChat posts, and degree of difficulty (e.g. Word List, Coxhead, 2000); and (3) focus group interviews with the students of high (n=4), middle (n=4), and low (n=4) engagement in WeChat environment (selection based on students' vocabulary tests scores, their WeChat logs, and the instructor's observation); the interview transcripts helped to shed light on the socio-cultural factors that affected students' engagement in the WeChat environment.

4. Findings

4.1 Students' Participation in the WeChat-based Learning Activities

The mobile phone logs were kept to track the students' participating behaviors in the WeChat environment. As WeChat is used more as a social medium and the posts are much diversified (including pictures, texts, hyperlinks, etc.), this paper only focuses on the entries relating to vocabularies and sentence-making. Since sentence-making was a required assignment for students registered in the course, all the students did it accordingly. However, their posts vary in number, length and quality.

Some students deliberately put three vocabularies into one sentence thus made only one entry each time; while other students preferred to use one or two vocabularies in one sentence and thus made two/three sentences/entries each time. In total, 21 students made 571 sentences, with a Mean value (M) of 27.19 and a Standard Deviation (SD) of 8.84.

One big incentive to use the tool was to promote students' online interaction or peers' comments and responses pertaining to sentence-making. The dataset showed students received 99 pieces of peers' comments (such as "A good sentence", "awesome, buddy", "The clause is wrong"), excluding those of the instructor's. The M and SD were 4.71 and 5.58 respectively. Similarly, students gave out 99 comments, and the M and SD were 4.71 and 5.26, respectively. These results suggested students generally had limited interactional behaviours in the WeChat vocabulary learning environment and they differed greatly in participating in the learning activities as well.

4.2 Students' Performance in Vocabulary Tests

Two vocabulary tests were administered during Week 9 and Week 18 respectively. The results are shown in Table 1. A paired test showed there was no significant difference between the two tests, $T(20) = 1.49, P=0.15 > 0.05$. However, students' performance varied dramatically across individuals if we put the M, SD, highest and lowest scores into consideration.

Table 1: Students' Performance in Two Vocabulary Tests

	Number of participants	Mean (Max=60)	Standard deviation	Highest score	Lowest score
Week-9 test	21	29.1	14	51	11
Week-18 test	21	26.5	10.6	49	10

4.3 Factors Affecting Students' Engagement and Vocabulary Achievement

As explained in data collection part, 12 students representing high, mid and low achievers in the group were invited semi-structured interviews, which delved into their feelings, experiences and behaviours when working on the WeChat environment. The transcripts were analysed using a thematic approach; and the themes or factors contributing to students' sustained engagement in vocabulary learning activities (as well as the factors hindering students' participation and efforts) were identified as follows.

4.3.1 Factors Promoting Student Engagement

Good personal relationship. "Relationship" or Guanxi is an element deeply rooted in Chinese culture, which is usually interpreted as a dyadic connection based on mutual interest and benefit. Usually, people are willing to offer a favour or help to those with whom they share good relationships. Ten of the 12 interviewees, explicitly or implicitly, expressed their willingness to participate in the online assignment/activities because they enjoy some good and sustained relationship with the class instructor (Miss Anny). For example, "*Anny is gentle and nice to me [Excerpt #1, ZM]*"; "*She is patient, just like my big sister, I sometimes leave other teachers' assignments undone, but I never failed hers [Excerpt #2, XJT]*". In addition to student-teacher relationship, good student to student relationship also encouraged engagement. "*I only follow (give feedback to) friends of good relationship, although all classmates are within WeChat moment, we have different relationship ... [Excerpt #3, LY]*".

A growth mindset. Interview results also revealed students' beliefs about learning, especially their strategies adopted to cope with difficulties and challenges are important predictors of their engagement and improvement. A positive mindset helps students seek opportunities to learn and make learning an interesting endeavour. For example, Student WQH, a relative high-achiever among the group of lower-proficiency students, mentioned "*In choosing vocabularies to make sentences, I will deeply reflect on what I have done the whole day or recently; and fit the words in sentences describing my life or the current scenarios [Excerpt #4]*". Another student ZM, who enthusiastically interacted with her classmates on the WeChat, explained that "*... I don't mind Prof. ZH (teacher of another course and happens to be ZM's WeChat friend) pinpointed my mistakes in sentence-making in the WeChat moment... no shame at all in the (online) public place. Instead, I feel grateful to him... People who know me will see I am making progress bit by bit ... [Excerpt #5]*". Obviously, a growth mindset, or accepting mistakes and seeing it as a springboard for stretching her existing abilities, motivated ZM for her active participation.

A pragmatic showing-off need. A typical feature of WeChat is its openness and the interview data indicated that showing off one's abilities or efforts in public could be a strong motivator for students' participation and interaction in Wechat moments. The case is especially true with students possessing relatively good academic records, for example, WQH mentioned "*I often read my classmates' sentences, and it is not difficult for me to spot out their mistakes, mainly grammar... I feel aha (being proud)... I can tell them now [Excerpt #6]*". Such a sense of pride (stemming from identifying others' mistakes) is coupled with a need to make a show of his own ability as WQH continued in his remarks "*... I hope what I wrote could act as the model of the class [Excerpt #7]*". In another case, Student WSJ who is only a mid-achiever in the class, also expressed the need to show-off, not amid her teachers or classmates but her parents and relatives, enhanced her WeChat activities. "*My parents used to complain not knowing what I was doing on campus ... when I publish sentences on WeChat, they quickly realize I am studying (a decent endeavour)... that is important! [Excerpt #8]*".

4.3.2 Factors Undermining Student Engagement

Lack of trustworthiness. Although WeChat acts as a social medium and the moments are supposed to contain circle of "friends" only, the actual situation is more often that one "added or enlisted" many people who are not necessarily his/her true friends. Even within the classroom boundary, some students still feel unsafe to give feedback to others in public. "Although we are classmates and WeChat friends, isn't it embarrassing to give comments to someone with whom I am not very familiar? [Excerpt #9, WZR]". Other manifestations of untrustworthiness include students' scepticism about using WeChat as

a learning tool or their doubt on the classmates' abilities. "WeChat is a place where you show food, travel, and your life ... and relax...how can you share some strange stuff (English sentence-making) in the WeChat moment? [Excerpt #10, LY]"; "As you know, we joint program students are weak students; I don't think it fruitful to read the sentences made by the students...[Excerpt #11, LHY]".

A concern for losing face. Face value is an important concept in the Eastern culture and Chinese people usually have a strong consciousness towards face. Being afraid of face-losing in public is a big factor that hindered students' WeChat activities. For example, Student ZT said she only finished her task and never commented on other students' posts because she could not afford to lose face, "I am not sure what I say is correct or not, if I say something wrong, that's a loss of face in public [Excerpt #12, LHY]. In addition, Student SRY even avoided a click of "liking" (an easy usual behaviour showing agreement or appreciation on WeChat) because he was afraid if he clicked liking while there were problems in the sentence-making, "it would still look a bit foolish" and the best thing for him to do is to "do nothing" [Excerpt #13].

5. Discussion

This study took advantage of a popular social medium, WeChat, to support vocabulary learning among a group of lower-proficiency students in China. The results showed that the students were able to participate in the platform tool and accomplish their sentence-making tasks. In the design, there demonstrated some novelty effects of technology as some interviewee students expressed they "*had never thought of using WeChat to learn English vocabularies and felt intriguing*". Such phenomena are quite common when technology is first introduced to students in support of learning. This study made some good efforts to facilitate students' vocabulary learning. Sentence-making is perhaps a good strategy to use. As we can see in the study some students "associated the sentence-making with their life scenarios and contexts and showed them to the public", which coincides with principles of foreign language learning; for example, "learning in authentic situations" and "meaning-based, output-oriented learning (Wen, 2015)". However, it is still difficult to draw a conclusion regarding the effects of the WeChat vocabulary learning environment. The affordances and constraints co-exist. For example, students did two vocabulary tests and the results were quite similar, in a way it could be interpreted as students' performance sustained over time (mid- and end of instruction); however, students' correction rates of vocabulary tests were still low (46.9% and 44.2% respectively) and the score even dropped a bit at the second time. Therefore, future longitudinal studies or quasi-experimental design involving a comparison group may provide more convincing pictures of the learning effects.

This study using WeChat did overcome the traditional limits of time and space in learning (Yang, 2012); however, each tool has certain functions that may work or fail depending on their alignment with the pedagogical or socio-cultural dynamics in context. With WeChat's pervasiveness, convenience and a public space (moments), students have more opportunities to be exposed to learning materials and learning could informally happen even during social interactions. However, such practice worked with some students but not all the learners. There are a lot of contextual factors coming into play, for example, the relationship between teacher to students and students to students, students' beliefs about learning and about themselves, and their needs to show-off or concern about losing face. All these factors, if not handled properly, are very likely to constitute the constraints of mobile assisted technology (Reinders & Stockwell, 2017). For example, students in this study showed uneven participation and engagement patterns. Some students avoided WeChat-based learning activities because of insufficient confidence and trust. To make technology-enhanced environment more effective for learning, it is suggested fostering a democratic, trustworthy atmosphere in class or a learning culture is essential (Lei & Chan, 2018).

This study has shed some lights on how to deal with students of lower proficiency. These students are usually featured by handicapping learning strategies and low motivation (Zimmerman & Schunk, 2011). It is therefore reasonable to tap every opportunity to motivate them to learn. Utilizing an existing technology (smartphone app) to help students learn is better than suppressing students from using the technology (sometimes a distraction to classroom learning). However, when the *openness* of social media is intertwined with learning, we need to be very careful in the design. For example, the weak students can be very vulnerable and sensitive to losing face in public (WeChat moments or friends

circle). Therefore, the class instructor needs to provide scaffolds to these students, for example, modelling of making mistakes in public, in order that they develop a growth mind-set and understand making mistakes is commonplace in learning and a necessary path to success and improvement. On the other hand, the relatively good students in the group, when equipped with some showing-off needs, should be properly guided so that their efforts can be encouraged and sustained, and they can help others to grow.

The limitations of the study include small sample size, a lack of explanations of the instructor's role in the study, etc. Future research will address these issues and provide more holistic landscapes of the socio-cultural dynamics.

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