Voice Recording in second language outside the classroom: Process and product

Thinh Le

University of Canterbury, New Zealand

Abstract

In Vietnam, English is a foreign language. Therefore, students do not have many opportunities to practise speaking outside the classroom. Inside the classroom, teachers focus on teaching grammar explicitly. To enable students to practise their speaking skills, Facebook closed groups were employed as a learning platform. Seventeen students were asked to record their speech on suggested topics, post them on Facebook closed groups and comment on their friends' works within six weeks. The first and final recordings were employed to analyse in terms of fluency and complexity. These students were also interviewed after the course. They supposed that voice recording enabled them to have opportunities to practise their speaking skills. The first and final recordings showed that students improved their fluency and lexical complexity but not for syntactic complexity.

Keywords: Technology, speaking, Facebook, voice-recording, second language

Introduction

Vietnamese high school students are incapable of communicating in English after seven years of learning English at high school and two years at tertiary education (Hoang, 2010). In other words, the required level for students is B1. However, most students are at A1 or A2 (Le, 2013). Therefore, they are unable to maintain basic conversations in English. Students' lower level of proficiency in English can be explained by the following reasons. First, teaching English in the classroom is orientated towards exams (Le, 2011; Nguyen, 2013; Nguyen, 2011). Because the national university entrance examination

is very competitive, and a university degree is regarded as a passport into a better life (Nguyen, 2011), students and parents pursue this exam. However, the national examination focuses on forms especially vocabulary, grammar, pronunciation and reading comprehension while the government's macro-strategy is to equip students with communicative skills.

Language production has been proved to have effects on language acquisition (Swain, 1995, 2005). However, students in the EFL setting do not have opportunities to practise their English skills outside the classroom (Hsu, 2016; Sun, 2009, 2012). Besides, the overcrowded classroom and time constraints lessen students' chances to

practise their English inside the classroom (Huang, 2015; Sun, 2009). Therefore, voice recording can be advantageous because it creates a channel for practising speaking the target language outside the classroom (Huang, 2015; Sun, 2009). This study aims to explore the process of voice recording, e.g. how students practise their language when recording their voice and the effects of voice recording on student language proficiency, especially fluency and complexity.

Literature Review

Skehan (1996) presents three main goals of language learning: complexity, fluency and accuracy. Complexity, fluency and accuracy have been used to measure learners' language proficiency (Housen, Kuiken, & Vedder, 2012). Complexity refers to the use of more complex structures and vocabulary (Skehan & Foster, 1999). Fluency is related to the processing time (Schmidt, 1992). Accuracy is defined as the ability to produce 'error-free language' (Housen et al., 2012). According to Housen et al. (2012), there are three different types of complexity regarding to second language performance: propositional complexity, discourse-interactional complexity and linguistic complexity. Regarding fluency, Skehan (2009) points out three types in oral performance: speech fluency, breakdown fluency and repair fluency (Housen et al., 2012).

Several studies (Hsu, 2016; Huang, 2015; Shih, 2010; Sun, 2009, 2012) have investigated voice blogging for extensive speaking practice outside the classroom. These studies can be classified into two groups. Group 1 examined the process of voice-blogging, and students' experiences and their self-perceived progress. Group 2 addressed the objective effects of voice-blogging on students' speaking proficiency.

Voice-blogging was perceived individualize the learning process and improve students' language skills. In an early study, Hsu, Wang, and Comac (2008) investigated students' experiences in audio blogs. The students had to set up the blog and record their voice. Then they had to upload the sound file to a shared blog. The study concluded that students expressed that audio blogging could be a good facilitator for their language learning process. Students perceived that they improved their pronunciation, and that the recordings enabled the instructor to individualize the feedback delivery; however, it was challenging for the instructor to have enough time to give feedback to each student. Similarly, Pop, Tomuletiu, and David (2011) conducted a study exploring the potential of an online voice forum to let Romanian university students practise speaking. Students reported that they had more opportunities to practise their English in a less anxious environment. However, these two studies did not examine that when students had more opportunities to practise speaking English, they improved their language proficiency.

Similarly, Sun (2009) documented students' experiences on voice-blogging at a university in Taiwan. Participants (n = 49) from an oral English class were asked to record and post their voice blogs. Each student was required to post 30 voice blogs and 10 comments on other friends' blogs by the end of the semester. A pre-and postquestionnaire and interview were employed to investigate students' experiences of voice blogs. The results demonstrated that students followed five main steps such as conceptualizing, brainstorming, articulating, monitoring and evaluating during their voice blog process. Students perceived that voice blogs could enable them to learn language and increase their social networking. However, they did not space their voice blogs over the

semester but waited for the deadline and posted their blogs all at once. The study did not examine whether recording their voice resulted in student language progress. In the same vein, Huang (2015) examined students' (n=74) experiences of voice blogging at a university in Taiwan. Each student was asked to make eight blogs and comment on 40 other students' blogs. Students were encouraged to read online articles to get ideas for their posts. The findings showed that students followed four stages: reading to get ideas, planning, recording, and sharing their videos. Students perceived that their English skills improved especially their speaking, reading and pronunciation. Besides, they had opportunities to construct knowledge together and enhanced their social networking. However, they also faced some technical problems and a time constraint. Shih (2010) examined forty-four tertiary English major students at a university in Taiwan with blended learning. The results showed that peers' and instructor's feedback was highly appreciated, and students were satisfied with the video-blogs because they could learn public speaking effectively. The above studies examined students' process of voice blogging and their perceived improvement. However, the studies have not examined whether voice-blogging has any effects on students' speaking proficiency.

Hsu (2016) and Sun (2012) investigated whether there was any improvement due to voice blogging in student speaking in terms of complexity, fluency and accuracy. Sun (2012) examined 46 students at a university in Taiwan. Students participated in voice-blogging for one semester (18 weeks). Students were all non-native English speakers and in a public speaking class. Three first and final blogs were rated by two raters: the teacher-researcher and another examiner. The study concluded that there was no improvement in students' pronunciation, language complexity,

fluency and accuracy. However, students perceived that their speaking proficiency improved. Sun supposed that one semester was not long enough to see any improvement. He explained blogs were a free environment; therefore, students focused more on the content without paying attention to language complexity. One of the negative aspects of this study is that human raters may be biased in their assessment or students' improvement might be too subtle to be recognized by human raters. Similarly, Hsu (2016) also compared the effects of online blogging of students (n = 30) enrolled in an English course at a university in Taiwan. These students had limited time opportunities for practising speaking outside the class. Students were asked to record and post their recordings via a shared class blog to supplement the limited time in class. Each student was requested to listen to another student's post and give comments each week for 15 weeks. Students' recordings in week 1, 2 and week 14, 15 were analysed and compared. The study concluded that the language fluency and accuracy did not show improvement while syntactic complexity improved because students could produce longer clauses. The shortcoming of this study was that the study did not employ a control group to compare the effects of voice-blogging group with a group without voice-blogging.

Findings from the above studies showed that voice-blogging gave more opportunities to practise English outside the classroom and students had to prepare and practise before recording their voice. They perceived that their language improved especially fluency and pronunciation. Findings on the effects of voice blogging had mixed results. While Sun (2012) found that Taiwanese university students did not show any progress in their speaking skills in terms of language complexity, accuracy and fluency, Hsu (2016) pointed out that

Taiwanese university students improved their syntactic complexity because they could produce longer clauses. Therefore, more studies should be conducted to see how students practise their speaking skills and what effects does voice-blogging have on the development of student speaking skill, i.e., their oral fluency, and complexity.

Objectives of the study

This study aims to investigate how students practise their speaking skills through voice recording and examine whether there is any progress in term of language in the first and the final recordings uploaded on Facebook groups. The study seeks to answer the following questions:

- 1. What are students' experiences in voice recording?
- 2. What are the effects of voice-blogging on students' language fluency and complexity?

Methods

Research Design

The study employed both the quantitative and qualitive approach. The qualitative approach used the interview to investigate students' experiences before and after six weeks of voice recording while the quantitative approach employed the first and the final recordings to analyse students' speaking performance. The quantitative data explored the difference in students' speaking performance between the first recording and the final recording in terms of language complexity and fluency. The study was not an experimental study without a control group; therefore, it did not aim to compare the effects of students' performance in voice-recording activities with those who did not participate in voice recording. Its purpose was to examine the process and products of voice recording activities in a closed Facebook group.

Participants

Participants were 16 high school students from three different high schools in a district in Vietnam. The researcher went to each school and introduced the project. These students volunteered to participate in the online course. All students were 16 vears old and were atGrade 10. These students were divided into three different closed Facebook groups. Students were asked to make one recording in week 1 and week 6. From week 2 to week 5, they had to make two recordings with suggested topics per week. In total, students made 10 recordings. The topics were mainly around two main themes: family and friendship. The first and the final recordings were transcribed for analysis. After 6 weeks, students were asked to participate in the interview to explore their experiences in making the videos or audios.

Procedure

According to Hubbard (2004), students should be well-prepared to work in the computer assisted language learning (CALL) environment so that they can use CALL materials effectively. Lack of technical support can constrain the success of CALL activities (Jones, 2001). A number of studies (Hubbard, 2004; Winke & Goertler, 2008) have pointed out the necessity of technical training for learners to work in the online environment. Following Hubbard's model, technical training in this study consisted of giving students instructions how to register for their accounts online as well as how to install software or use it effectively. These students were trained how to record their using their telephone soundcloud.com before sharing in the closed Facebook group.

The training section was also explained in Vietnamese so that the participants could fully understand. The training schedule was as follows:

Application	Technical training
Facebook	 Accept the researcher as a friend in their Facebook friend list Accept the invitation to join closed Facebook group Make a trial first in the group.
Soundcloud.	 Account registration Download and install the software Activate the account Open and close the application Make a trial recording with the new application

Analysis

In this study, language complexity and language fluency are the main focus because students had extensive practice of grammar at school. In addition, communicative language teaching emphasizes on the fluency, not accuracy; therefore, accuracy especially grammar analysis was not taken into consideration. As mentioned in the literature review section above, there are three types of fluency; however, the only speech fluency is employed because Kormos and Dénes (2004) pointed out the strong correlation between the speech rate and perceptions of fluency. Other two measures are not used because while students recorded their own speech, they prepared scripts beforehand. They tried to fix all the pause and

breakdown before posting on the Facebook closed group. In addition, linguistic complexity is employed to see any differences in students' use of language. Many measures have been used to address the language complexity such as syntactic, morphological, lexical analysis (Housen et al., 2012). In this study, the two main measures applied are lexical measures and syntactic measures. For lexical measure, type and token ratio is employed while the length of the utterance is used for syntactic complexity.

The pre-interview and post-interview were employed to compare students' experiences. For qualitative data, Charmaz (2006) qualitative analysis was used to analyse the transcripts of pre-and post-interview were reviewed before they were coded. Then open coding was applied to the interview transcripts. The iterative process continued until the key themes were identified.

For the quantitative data, students' recordings for the first recording and the final recording were employed for comparison. Thirty-two recordings from the first and final recordings were transcribed. In transcribing students' speaking in the recording, some sounds could not be understood, and these sounds To investigate any were omitted. advancement in terms of vocabulary, students' transcripts were put into the online application "Compleat Lexical Tutor" to analyse the quantity and the quality of their lexical use. Compleat Lexical Tutor gives the number of academic words, the total number of words, the type and token ratios. Percentages of the number of academic words in the first and final recording would be counted to examine the quality of the vocabulary while the type and token ratio was employed to see the lexical diversity. For syntactic complexity, utterance length was used to compared between the first and final recordings. To

evaluate students' fluency, the speech rate (syllables per minute) in the recordings was calculated. The paired-samples t-test with the alpha level at .05 was employed to see the differences between the first and the last recordings.

Mean length of utterance in words is the total number of words divided by the number of utterance (Parker & Brorson, 2005).

Type token ratio is the number of different types of words to the total number of words (Johansson, 2009).

Regards fluency measurement, speech rate is used to see any difference between students' performance in the first and the final recordings.

Speech rate is the total number of syllables divided to the number of seconds and multiplied by 60.

Results

Two main themes emerged from the interview data.

Insufficient opportunities for speaking in class

The interview results show that students did not have enough chances to speak English in their regular classes or to present their ideas due to the time constraint as the time allocation for speaking in a week was limited.

Example 1: Dear teacher, there was not enough time in the class (Pre-course interview – student J).

Example 2: Yes, not many opportunities to speak, Teacher (Pre-course interview – student L).

One student perceived that the speaking class was so short that he felt that teachers wanted to finish as quickly as possible.

Example 3: Speaking lessons were very short. For example, it passed in 10 minutes (Precourse interview – student B).

Although the time was limited, teachers spent time presenting grammatical items at the beginning of the lesson; therefore, the students felt that they did not have enough time to speak English in the class. Moreover, the overcrowded classroom also limited their opportunities to speak English.

Example 4: *Mainly (we) learnt structures, more structures, so speaking was very little* (Pre-course interview – student E).

Example 5: *I did not have opportunities to speak, there were no opportunities for every student to speak* (Pre-course interview – student D).

Only confident students who raised their hands to speak in front of the class would be called on to speak, while other students who were not confident enough to put up their hands kept quiet in their seats.

Example 6:It was very plain, if anyone often raised his/her hand, he/she would be called. For us, we were rather shy, so we were afraid to stand up (Pre-course interview – student I).

In summary, students believed that they did not have enough opportunities to practise speaking in the class due to lack of time. Another reason was that teachers spent a lot of time presenting structures and, in any case, students were afraid of speaking in front of the class. This is consistent with findings by Nguyen (2013) who found that Vietnamese high school teachers only conducted two steps: presentation and practice in the three Ps model (presentation, practice and production). Teachers did not organize free

speaking activities for students to work in groups and pairs for free language production.

Students' speaking practice in the online course

Students perceived that recording their voice gave them more opportunities to practise speaking skills.

Example 7: *I had more chances practising speaking English* (Post-course interview – student I).

Example 8: Yes, Teacher, the course gave opportunities to speak English with friends more because as usual, we did not speak English like this (Post-course interview – student L).

Students perceived that voice-recording enhanced their opportunities to practise speaking English outside the classroom. This finding is consistent with findings from previous studies (Huang, 2015; Pop et al., 2011; Sun, 2009) that online voice-blogging can complement the time constraint in the classroom. Students could take advantages of the online environment to practise their speaking. Students tried to prepare their speaking by finding ideas and writing down their ideas before they started their own recording. Some of them even wrote a script before they started their recordings.

Example 9: Usually I wrote down in advance, then I spoke but I did not speak according to the script, so I had to redo it according to the script but I still found something wrong and I did it again (Post-course interview – student D).

It is interesting that some students deliberately practised their pronunciation and fluency before they recorded themselves. They also prepared the pronunciation of some uncommon words before they recorded themselves.

Example 10: For some difficult words, I looked up the online dictionary, then I practised pronouncing the words, teacher (Post-course interview – student I).

After they were well-prepared for their speech, they tried to rehearse a few times ahead or record many times until they were satisfied with their work.

Example 11: *Before recording, I read a few times, then I recorded, teacher* (Post-course interview – student I).

Example 12: *I recorded until I felt tired, then I stopped recording* (Post-course interview – student D).

During the practice process, students also had the following steps to complete their recordings: planning, practising, recording, and uploading. This finding is in accordance with Huang (2015) who also found that the students followed steps in making their recordings. Similarly, Sun (2009) found that students had to follow 5 main steps such as conceptualizing, brainstorming, articulation, monitoring and evaluating during their voice blogging process.

Students reported that they tried to correct their pronunciation and grammatical mistakes while recording. One student reported that for the first recording, she tried to record thirty times because her mother checked and asked her to redo it to correct her grammatical mistakes and pronunciation.

Example 13: *I made mistakes and my mother asked me to rerecord, but I made mistakes and my mother asked me to rerecord, I recorded 30 times* (Post-course interview – student G).

Even when there was some background noise, or they mispronounced some words, they tried to record their sound files again.

Example 14: Yes, for example yesterday when I recorded, there were some background noises, so I had to record again. The second time when I read there were some words, I suddenly forgot their pronunciation.... so I had to do it again (Post-course interview – student K).

Besides, in order to make recordings to upload on the closed Facebook group, students spent a large amount of time practising until they felt their pronunciation was correct. They attempted to correct their word pronunciation as well as the pronunciation of final sounds which were one of the challenging features that Vietnamese learners had (Cunningham, 2013). Students practised these features by looking up the words in online dictionaries and trying to imitate the pronunciation.

Example 15: *Yes, perhaps, I practised the final sounds a lot* (Post-course interview – student I).

Example 16: Before I spoke, I checked the pronunciation of some words with 's' but when recording, I found that I mispronounced, it was not good, I recorded again (Post-course interview – student D).

However, if after his best attempts, one student could not pronounce the word, he would speak with his Vietnamese accent.

Example 17: *If it was easy I could correct (my pronunciation), but if it was too hard, I just spoke like Vietnamese* (Post-course interview – student O).

Students practised many times before they recorded their own sound files, or they recorded many times until they felt satisfied with their final sound file before uploading on the closed Facebook group. They also tried to pronounce the word correctly by

looking up the online dictionaries. They corrected their final sounds by imitating the native speaker accents.

Students' perceived progress after the online course

Students believed that their fluency increased significantly because they rehearsed many times before they could record themselves. Besides, online speaking practice via Skype also enabled them to speak English more fluently than before the course.

Example 18: Perhaps it was more fluent than before the online course (Post-course interview – student G).

After the course, students believed that their pronunciation was better because they were able to recall the pronunciation of the word as well as its spelling.

Example 19: Thanks to that I could remember their pronunciation and more words (Postcourse interview – student O).

Interestingly, one student even compared the pronunciation which she heard from the website to her teacher's pronunciation to see the difference, and she tried to imitate the Google translation voice in order to attempt a native-like accent.

Example 20: Yes, it was different from the teacher's pronunciation; some words were similar, but some were not (Post-course interview – student O).

Students also had some problems when recording their own files. For the first weeks, some students did not know how to record their files via SoundCloud and they had to ask me for help. However, they kept sending me the files through Facebook

messages although they were trained how to use this digital tool. One of the reason was that they did not confirm the account by email. Huang (2015) also found out students in his study had some difficulties in using digital tools and they had to struggle.

Students perceived that their speaking skills improved in terms of fluency and pronunciation because they deliberately practised their pronunciation and fluency when they tried to imitate the accent of the native speaker. They also tried to learn some new vocabulary. The following subsection will analyse the pre- and post-course speaking tests to see whether students developed their speaking skills in terms of lexical, syntactic complexity and fluency.

Effects of online speaking practice

The first and the final recordings were employed to compare student speaking skills regarding language complexity and fluency before and after the course. The result showed that students produced higher lexical density in the final recording compared to the first recording. The ratio between the number of word types and the total number of words (tokens) increased from 0.41 (SD = .106) in the first recording to 0.52 (SD = .054) in the final recording. The p value being .002 indicates a statistical significance in terms of lexical density.

Figure 1 shows that more than 80% of the students had higher type-token ratio after the course, which means that students employed more content words than function words in their final recording and the lexical density increased in the final recording.

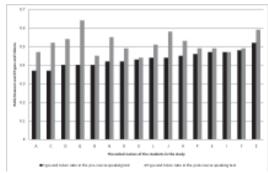


Figure 1. Comparison of type-token ratio in first and final recordings

In this current study, mean length of utterance was employed to measure syntactic complexity. The longer the mean length of utterance is, the more complex language students were able to use. The findings from this current study showed that the average mean length of utterance did not change between the first recording

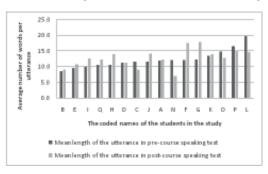


Figure 2. Comparison of mean length of utterances in the first and final recordings

In the current study, speech rate is employed as an indicator to measure student fluency. The finding indicated that the speech rate also increased from 91.9 syllables per minute to 113.4 syllables per minute. The paired-samples t-test showed a statistically significant difference (p=.047) between the first and final recordings.

Figure 2 illustrates that more than half of the students had a higher speech rate in the final recording. It means that students were more fluent in their speaking in the final recording.

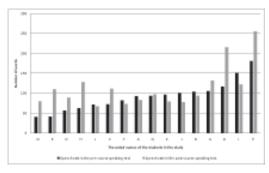


Figure 3. Comparison of speech rate in the first and final recordings

The findings from this current study are different from the previous studies (Hsu, 2016; Sun, 2012) which reported no progress in students' language complexity regarding vocabulary use. One possible explanation is that students in this study spent their time practicing many times, and most of them prepared their manuscript before they recorded their own voice; therefore, they had time to select better vocabulary.

Discussion

Students reported that they did not have opportunities to practise their speaking skills in the class because teachers did not organize free language production activities, focussing instead on presenting language structures. This finding is consistent with findings from previous studies (Huang, 2015; Pop et al., 2011; Sun, 2009) that online blogging could complement the time constraint in the classroom.Students perceived that their speaking skills improved especially fluency and pronunciation because they tried to imitate the accent of the native speaker. These findings are in line with the previous findings by (Sun, 2012) who found that students perceived their language improvement.

During the practice process, students also had the following steps to complete their recordings: planning, practicing, recording, and uploading although they were not trained to follow these steps. This finding is in accord with the findings by (Huang, 2015) who also found that the students did follow steps in making their recordings. Similarly, Sun (2009) found that students had to follow 5 main steps such as conceptualizing, brainstorming, articulation, monitoring and evaluating during their voice blogging process. However, it is interesting that students deliberately practiced their pronunciation and fluency before they recorded themselves.

Findings showed that students progressed in fluency and advanced their vocabulary but not their syntactic complexity. This is in line with previous findings by Sun (2012) who found that students perceived a language improvement, although their post-speaking test showed no improvement in terms of language complexity, fluency and accuracy. On the other hand, Hsu (2016) also found that language complexity improved after 15 weeks of voice-blogging, but fluency did not show any changes although Hsu (2016) used the number of syllables per minute to measure language fluency which is similar to measurement employed in this current thesis. Hsu (2016) explained that development of language complexity was traded off for language fluency. However, in this current study, language complexity did not improve while language fluency advanced. The findings support the assumption that constant output practice leads to less progressing time (Gass & Mackey, 2007). Students' advancement in vocabulary and fluency could be explained in their reported practice since they tried to prepare their speech and rehearsed it many times before they recorded it to upload. Second, they deliberately tried to learn vocabulary to include in their speaking; as a result, their lexical complexity improved while they did not

mention trying to use more complex structures.

The result showed that their speaking skills improved in terms of their lexical complexity and fluency but not for syntactic complexity. One of the explanations was that students volunteered to participate in this course were highly motivated to improve their English skills. Therefore, they did prepare carefully and practise many times before they uploaded their recordings. At the end of the course, they were still motivated to record their voice while participants in the study by Hsu (2016) were discouraged and made shorter recordings at the end of the course. The third reason is that students did read from a prepared transcript; therefore, they might make more corrections on their transcript and choose more advanced vocabulary to perform as well as they could.

Conclusion

Voice blogging could enable students to organize their speech through planning, practising, recording and posting. Besides, the empirical data showed students' L2 performance progressed in terms of lexical variety and fluency. Students perceived that online blogging could help them improve their speaking skills, especially fluency and pronunciation. Therefore, voice blogging could be a good channel for students to have extensive speaking practice outside the classroom as well as interacting with other people in a virtual environment especially in the context where students do not have many changes to practise their English-speaking skills.

Although the study shows some positive preliminary results about students' L2 performance in speaking especially the language complexity and fluency, the current study only investigated a small number of students for a short period of

time (6 weeks), so the result could not be generalized. Besides, this study only examined the students' improvement in terms of language complexity and fluency without analysing language accuracy. More studies should be conducted to measure students' accuracy with voice blogging.

In addition, students who volunteered to participate in the study were highly motivated and they tried to improve their English-speaking skills. The future study should be conducted in a larger scale with higher number of students in intact group in a longer time to see whether there is any progress during their extensive speaking online.

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Contributor

Thinh Van Le has graduated from the University of Canterbury with a PhD degree. He has taught English for international students for more than 10 years. He has employed different digital tools to enable students to have extensive practice outside classroom. His research interest is computer-assisted language learning (CALL) and second language acquisition.