

Listening diary in the digital age: Students' material selection, listening problems, and perceived usefulness

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The current study reports on a group of Taiwanese college students' first-person diary accounts of their private, transactional listening activities outside the classroom. Issues related to students' material selection, listening problems, and perceived usefulness of keeping a listening diary were explored. It was found that most students chose audiovisual materials to listen to, and the most frequently chosen material was TED talks. In their diaries, the most frequently reported listening problems were unknown vocabulary and speed. Most students perceived the experience of keeping a listening diary positively. It was found that keeping a listening diary facilitated the development of future study plans, linguistic knowledge, listening and writing skills, and self-confidence. Data also suggest that students need to take more responsibility of their own learning to be able to benefit from the abundant resources available in the digital age. The study concludes with a set of recommendations to further the research on using listening diary as a pedagogical and research tool.

Introduction

Listening is an important language skill in our daily life. Gilman and Moody (1984) estimate that adults spend 40-50% of communication time in listening. Compared to speaking, writing, and reading, listening is the most performed language skill on a daily basis (Rivers, 1981). According to Field (2008), listening is also "the principal means by which learners expand their knowledge of the spoken forms of the target language" (p. 334). Yet, despite its importance, Vandergrift (2007) asserts that listening is the "least understood and the least

researched skill" (p. 191; also see Kemp, 2010). Much still needs to be learned to unveil the development of this skill.

The recent advances in technology have made much information easily and instantaneously available to language learners who try to master the skill of listening. Guided by the same philosophy of extensive reading, students are now encouraged to engage in extensive listening, defined by Renandya and Farrell (2011) as "all types of listening activities that allow learners to receive a lot of comprehensible and enjoyable listening input" (p. 56; also see Chang & Millett, 2014; Reinders & Cho, 2010). The current study attempts to utilize a listening diary as a tool to understand students' listening activities which they engage in during their private time. Students' first-person accounts from their diary entries will be analyzed to understand the types of listening materials they chose to listen to and their perceptions of these materials. Their experiences of keeping a listening diary will also be explored to further understand the feasibility of incorporating a listening diary into English-as-a-foreign-language (EFL) listening courses.

This study expands on previous research on extensive listening by investigating how students who have grown up with digital technology select and engage in extensive listening in their private time. The findings will also shed light on using a listening diary as a research tool to probe into students' listening processes as well as a pedagogical tool to raise students' awareness of their listening problems.

Literature review

Since the late 1970s, entries recorded in students' and teachers' diaries, or journals, have been used to study the process of language learning and teaching (e.g., Bailey, 1990, 1983; Bigelow & Ranney, 2005; Campbell, 1996; Carson & Longhini, 2002; Halbach, 2000; Lotherington, 2007; Numrich, 1996; Schmidt & Frota, 1986). This type of research is known as diary study, defined by Bailey (1990) as a "first-person account of a language learning or teaching experience, documented through regular, candid entries in a personal journal and then analyzed for recurring patterns or salient events" (p. 215). Like think-aloud procedures and stimulus recall, diary study is an introspective method of data collection, with *introspection* defined as "the process of observing and reporting on one's own thoughts, feelings, motives, reasoning process, and mental states" (Nunan & Bailey, 2009, p. 285). Nunan (1992) urges language researchers to make use of learner diaries, as they can offer many insights into the learner's inner world. Likewise, Dörnyei (2007) argues that journals can serve as a powerful research tool to provide a candid account of the participants' feelings and thoughts.

The use of diaries in classrooms also finds strong support from Kolb and Kolb's (2009) *Experiential Learning Theory* (ELT) in which learning is conceptualized as a four-stage cycle consisting of *experiencing*, *reflecting*, *thinking*, and *acting*. To be specific, ELT defines learning as "the process whereby knowledge is created through the transformation of experience" (Kolb & Kolb, 2009, p. 44). The process is further described in these words:

Immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences. (Kolb & Kolb, 2009, p. 44)

reflected upon the experience by keeping a listening diary (*reflecting*). Next, the learner attempted to find explanations for what was observed from their diaries (*thinking*). Finally, the learner tried to test the explanations in upcoming events (*acting*).

As mentioned in the beginning of this section, diaries have been used extensively to study to process of language learning and teaching. In the area of language learning, one of the most comprehensive diary studies was conducted by Schmidt and Frota (1986) in which the first author's attempt to learn conversational Portuguese while living in Brazil for a period of five months was carefully documented and analyzed. This study was rather ambitious in its scope, as it covered Schmidt's linguistic development in several aspects, including vocabulary, grammar, conversational ability, pragmatics, and formulaic speech. From the collected data, a theoretical insight – “notice the gap” (i.e., learners need to notice new target language forms before they can acquire them) – emerged. Although diary studies, like other introspective data collection methods, may be criticized for the status of the data (i.e., do the diary entries really reflect what was going on at the time of recording?) and its lack of external validity (i.e., how can conclusions based on a small number of subjects be generalized to other people?), Nunan (1992) contends that it is difficult to see how the rich data yielded by diaries, such as those seen in Schmidt and Frota's (1986) study, could be collected otherwise. These first-person accounts, as Bailey and Ochsner (1983) argue, often unveil facets which are “normally hidden or largely inaccessible to an external observer” (p. 189).

Unlike writing and speaking, listening comprehension involves a series of mental processes which are mostly invisible to outsiders (Goh, 2000). Although a puzzled look or immediate silence may signal a comprehension breakdown, it tells us very little about what the problems really are (Goh, 2000). By analyzing students' self-reports, researchers can gain access to the listeners' mental worlds and better understand the mysterious process of listening comprehension. As for classroom teachers, these introspective reports should help them make informed decisions on what listening sub-skills (e.g., the identification of words in connected speech) and strategies to focus on in their instruction. Students also benefit from keeping a listening journal because they become more aware of their learning process (Rost, 2002). The advancement of this awareness, often referred to as one's *metacognitive knowledge* or *metacognition* in the literature (Godwin-Jones, 2011; Hossein, 2014), has been shown to be an important contributing factor in the development of interlanguage and learner autonomy (Goh, 1997; Vandergrift and Goh, 2012; Wenden, 1998). To sum up, a diary is a useful tool for researchers, teachers, and students to better understand the listening process.

In the realm of L2 listening research, Goh (2000) was one of the first researchers to use learners' listening diaries as a research tool to identify possible obstacles to listening comprehension. In her pioneer study (Goh, 2000), 40 tertiary-level students from China were asked to keep a weekly listening diary as part of their listening course. Once collected, the diary entries were carefully read by Goh, who looked for any mention or description of a listening problem. When such information was identified, Goh (2000) summarized it in a short statement such as “Do not recognize words they know” or “Cannot chunk streams of speech.” Each statement was then put into one of the three categories (*perception*, *parsing*, and *utilization*) in Anderson's (1990) comprehension model. This cognitive model was first proposed to explain first language comprehension. It sees listening comprehension as involving breaking phonemes from continuous speech (*perception*), combining syntactic

and sematic information to create a mental representation of the message (*parsing*), and finally connecting the message with one's world knowledge (*utilization*).

Goh (2000) believed that using Anderson's cognitive framework would help to pinpoint the places where comprehension broke down. From her students' diaries, she was able to identify ten major listening problems. Among these problems, 5 were low-level perception problems, including *Do not recognize words they know*, *Neglect the next part when thinking about meaning*, *Cannot chunk streams of speech*, *Missing the beginning of the text*, and *Concentrate too hard or unable to concentrate*. Goh (2000) suggested that this finding, along with others, bears important implications for selecting listening strategies to be taught in class. One way to help these students is to demonstrate top-down processing and to emphasize "the importance of monitoring and directing their attention so that they could continue to receive input in spite of some temporary setbacks" (p. 70).

Since Goh's pioneer studies (Goh, 1997, 2000), some other studies have also used listening diaries as the primary research tool to look into students' extracurricular listening activities. Kemp (2010) found that from writing a Listening Log, EFL students studying in a British university developed independent learning skills, including monitoring their own performance and progress, making decisions on their learning, and acting upon them. For the teacher, the Listening Log in the study also served as a form of formative assessment, "providing an opportunity for individual guidance and feedback, as well as ideas for class input and discussion" (pp. 394–395). In another study, Galloway and Rose (2014) asked their Japanese students to record their experiences with different varieties of English. It was found that keeping a listening journal increased students' exposure to global Englishes (GE) and motivate them to reevaluate personal prejudices against certain varieties.

In terms of material selection, it can be seen from Kemp (2010) and Galloway and Rose (2014) that technological advancements have made many listening materials widely available to students. Young students have grown up with technologies and resort to the Internet to find listening materials for the purposes of entertainment and education. More studies are needed to understand students' online activities as well as devise effective ways of turning students' online listening into learning opportunities. There is also a need to look into the feasibility of incorporating the listening diary as a pedagogical activity and to examine the kinds of learning support needed to help students to use listening diaries effectively. This study is designed to shed some light on these issues.

The current study

The current study required learners to engage in one-way, message-oriented transactional listening (Richards, 1990) in which they listened to English materials in their spare time. After their private listening, learners were asked to reflect on the listening process by keeping a listening diary. The research questions are:

1. What listening materials did students choose to listen to?
2. What were students' perceived problems when listening to these materials?
3. How did students perceive their experiences of keeping a listening diary?

Findings from the first research question will help researchers to better understand what types of listening materials students chose to listen to during their private time. Finding out their self-reported listening problems can provide important information to researchers and teachers alike. Finally, students' overall evaluation of their experience of keeping a

listening diary can shed some light on the feasibility of using a listening diary as a research tool. For interested teachers, they can also use these findings to consider whether to use a listening diary with their students and the steps that may be involved in its implementation.

Participants

The participants were 14 English majors from a class which the researcher taught in a university in Taiwan. The original class actually consisted of 24 students, but only those who completed the requirement of keeping a listening journal during the course of the semester (see later) were included in this study. Among the 14 students, one was male and 13 were females. These students, aged between 18 and 20, shared a first language (Mandarin Chinese) and were learning English as a foreign language. In terms of their English proficiency levels, 8 of the 14 students reported a TOEIC score (listening and reading sections) between 695 and 725, with an average of 710 and standard deviation of 10; one reported she scored 845, and another scored 945. The remaining four students reported that they had not taken any standardized test, but were planning to do so in the upcoming summer to fulfill the graduation requirement of their school. Judging from their scores on class written tests and class projects, these four students had lower English proficiency than the other students. As a group, students' English proficiency levels ranged from low-intermediate to advanced.

Methodology

As part of their listening course, the participants were asked to keep a listening journal in which they recorded their private listening experiences, with details including the names of the materials they listened to, any difficulties they experienced while listening, possible reasons for such difficulties, actions they undertook to deal with the problems, and any other thoughts. Figure 1 delineates the data collection procedures. Students were told at the beginning of the semester that keeping a listening diary was part of the course assessment which accounted for 20% of their final grade.

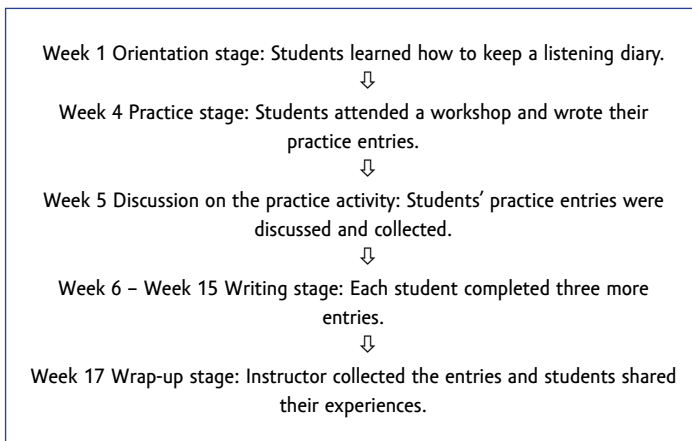


Figure 1. Data collection process **87**

Since keeping a listening journal might be a new experience for students, the researcher, who was also the instructor of this course, allocated the first period of Week 1 class meeting (approximately 50 minutes) to explain the expectations of this task. To help students begin the task, they were also given a guideline sheet (Appendix A), which included the requirements for keeping the diary as well as recommended online services (Godwin-Jones, 2011). They were told that the purpose of the study was to better understand their private listening activities and any difficulties they encountered. As can be seen from the guideline sheet (Appendix A), students were allowed to use some Chinese in writing the diary, hoping that this would encourage them to express themselves more clearly. The guideline sheet also contained a few suggested websites to introduce students to some resources they could consider listening to. However, they were reminded to be as versatile as possible when they chose their listening materials.

In Week 4, an opportunity arose for the students to attend a workshop led by an English native speaker. The topic was about time management, and it lasted for an hour. Students were requested to attend the workshop and then recorded their reflections by following the guidelines they were given in Week 1. With students writing about the same listening event, this activity served as a practice activity for the students and a pilot study for the researcher to ensure that students understood the requirement of keeping a listening diary. In Week 5, they brought their entries to class and shared them with their classmates and teacher; these entries were then collected and read by the teacher/researcher.

In Week 6, after reading students' diaries about the practice activity, the teacher provided another set of reminders (Appendix B) because she felt this set of diaries was mostly written with unsatisfactory quality. Apart from failing to record the basic information about the talk (which would be essential for the researcher to know what they chose to listen to in later listening activities), many students spent most space on summarizing what the guest speaker said and how motivated they felt after the speech (see Appendix C for a student sample). In fact, only a few students remarked on the listening process.

The second set of reminders (Appendix B) begins with questions which Kemp (2010) used to orient her students to the task of keeping a listening diary; the purpose is to remind students that they needed to keep a detailed account of their listening activity. From reading students' practice entries, the researcher found that students did not seem to know how to describe their listening experiences/difficulties in more concrete terms. Therefore, she decided to include the top ten listening problems students in Goh's (2000) study experienced to guide students to focus on not just what was said, but also on how the listening activity progressed. Each of the problems was explained and illustrated with examples provided by Goh (2000). A sample journal entry written by a student was provided at the end of the document (Appendix B) to show students that they needed to reflect on the listening event, not just report what they listened to.

Before the end of the semester, each student needed to submit three entries. They could hand in their entries anytime between Week 6 and Week 15 (Figure 1). Excluding the entries based on the workshop, a total of 42 entries were collected from the 14 students who completed the journal project and these served as the main data source for this study. In Week 17, a group discussion was conducted by the instructor/researcher to understand students' general feelings about writing their listening diaries (RQ #3). The researcher also used this opportunity to ask students to further elaborate on some of the remarks they had written earlier (e.g., "When you wrote..., did you mean...?"). The discussion was audio-recorded and later transcribed by the researcher.

Data analysis began by reading students' diary entries and tallying the types of listening materials students listened to. The classification often involved searching online to determine the source of a particular listening material. Following Goh (2000), the entries were then read to look for any mention or description of listening problems. Once I detected such reports, students' descriptions were highlighted, and a short statement (e.g., "couldn't understand the vocabulary") was written in the margin. After going over all the entries, I then tallied all the problems mentioned and put them into seven categories (see later).

To answer the last research question, the same coding method mentioned above was adopted. Any mention of students' perceptions of the experience of keeping a listening diary were highlighted in student diaries and the transcript of the group discussion. These highlighted remarks were then put into 8 categories (see later). The coded results were shown to an experienced researcher in the field of language teaching; he agreed with my coding. The findings will be presented in the next section.

Findings

RQ (1): Students' choices of listening materials

Appendix D summarizes the types of listening materials students said they listened to and the number of times each type of listening material was mentioned by students. Except for the BBC oral reading of *Frankenstein* and *60-second Science*, all the other materials were audio plus visual ones. TED talks were students' first choice, and 30 out of 42 diary entries were about TED talks which students listened to on VoiceTube, YouTube, or TED's own website. In the group discussion, students were asked to provide reasons for their preference for TED. They gave the following reasons: (1) TED is trendy; (2) it is easy to find TED videos; and (3) a lot of TED videos are captioned.

As far as content is concerned, except for the sitcom episode, *The Ellen Show*, and oral reading of *Frankenstein*, all the other materials contained know-how information or motivational talks (Appendix D). These materials also covered a wide range of topics, varying from *How to Become a Rapper* to *3 Ways to Speak English*.

The website VoiceTube (<http://tw.voicetube.com/>) deserves some discussion. It is a Taiwan-based website which collects a wide range of videos for English learning. In addition to providing English and Chinese subtitles for most videos, the website also supplies information about the speaker's accent and language level for each video. Registered users can also choose to slow down the speech rate and use an online dictionary to check unknown vocabulary. The instructor introduced this site to students during Week 6 (Figure 1), after she explained the second set of guidelines.

RQ (2): Students' perceived listening problems

The second research questions aims at unveiling students' self-reported listening problems when listening to or watching the materials of their choice. It should be noted that not all students wrote about their problems in their diaries, despite the researcher's efforts to encourage them to do so. The most frequently mentioned problems were *unknown vocabulary* and *idioms* ($f = 12$) and *speed* ($f = 9$). Five other problems were mentioned by students: *unable to recognize known words in speech* ($f = 3$), *accent* ($f = 3$), *linking sounds* ($f = 2$), *homophones* ($f = 2$), and *loss of concentration* ($f = 1$).

RQ (3): Students' perceptions of keeping a listening diary

In the group discussion, which took place in Week 17, most students stated that they enjoyed the experience of keeping a listening diary. As shown below, in their diaries, four students (Students #1, 3, 7, 10) stated that they enjoyed the experience:

Student #1 (second diary): I really enjoy doing listening diary. It not only helps me learn vocabulary, but also helps me gain a lot of knowledge by watching English videos. I can also learn how to keep a diary and improve my English writing skills. This activity should be kept doing by students.

Student #3 (first diary): I really enjoy doing this activity because I can learn many new things and develop vision.

Student #7 (third diary): Although this is my final diary, I won't give up listening to English regularly. I am so glad that I can finish this by myself, and it gives me a great sense of achievement. I enjoy this project very much.

Student #10 (third diary): I feel I am getting better at listening and writing. Using English to record my learning in the diary is enjoyable.

Many students also wrote about the benefits they received from keeping a listening diary. The most frequently mentioned benefit in students' diaries is that it enabled students to formulate their future study plans ($f = 12$). Other benefits mentioned by students included *gaining new knowledge* ($f = 4$), *improving listening skills* ($f = 3$), *becoming more confident* ($f = 2$), *improving English writing* ($f = 2$), *learning new words* ($f = 2$), *identifying learning problems* ($f = 1$), and *learning how to keep a diary* ($f = 1$).

Discussion

The primary goal of this study is to document students' self-reported, out-of-class transactional listening experiences which they recorded in listening diaries. With regard to material selection (RQ #1), it was found that students often engaged in multimedia or multimodal listening (Leveridge & Yang, 2014; Perez, Peters, Clarebout, & Desmet, 2014) which involved processing verbal as well as visual content simultaneously (Cross, 2011). Compared to Goh's (2000) study which predates the explosion of free online audiovisual materials, this study involved learners whose daily environment is flooded with online information and audiovisual resources. They no longer listen to audio material with their radio or CD player. Instead, they are used to receiving information at a fast speed and having free access to resources like captions and online dictionaries. Even the two audio materials (oral reading of *Frankenstein* and news report in *60-second Science*, see Appendix D) come with downloadable transcripts for students to engage in further self-study. In the group discussion, students also mentioned their preference for learning resources with detailed transcripts. This preference can be a subject for future research. For example, researchers can look into how students make use of transcripts in their listening process.

90 Although this study did not set out to examine the effectiveness of these "help options" on language learning (Cárdenas-Claros & Gruba, 2014; Cross, 2011; Grgurović & Hegelheimer,

2007; Leveridge & Yang, 2014; Perez et al., 2014), numerous accounts of how learners made use of these support tools can be found in students' diaries, and they provide a glimpse into students' online learning behaviors and preferences. It was found in this study that when viewing captioned videos, students typically began by viewing their choice of video without any caption. In the second viewing, they would turn on the English subtitles; this was also when many students wrote down the vocabulary they were not familiar with. The last phase typically involved viewing the video with Chinese captions which offered students an opportunity to check their overall comprehension of the video content. Some students reported that they would view the video again without any caption to double check their comprehension. Student #2 reported viewing the same TED talk six times (Diary 2-3) in two hours.

In the group discussion session, some students commented on the "user-friendliness" of the Taiwan-based website VoiceTube and said that they had been using it even after they completed all the diary entries. Students' approval of the design features of VoiceTube suggests the fact that students enjoy having control over different help options when they engage in online learning. Future studies can look into how different help options are utilized by students and whether such utilization enhances comprehension (Matsuura, Chiba, Mahoney, & Riling, 2014). In the group discussion, two students also commented that it was easier for them to navigate a Chinese-based learning website. One possible implication is that before pushing students out of their comfort zone, teachers may consider helping students to select a well-designed online resource which they can navigate easily in their first language.

Because of students' preference for choosing audiovisual materials and their utilization of help options during the process, the problems reported by the students in this study were vastly different from those of Goh's (2000) participants. Anderson's (1990) three-phase comprehension model which Goh (2000) used to analyze learner diaries cannot explain the comprehension of multimodal listening in which most students chose to engage in this study. Given the fact that 30 out of 42 diary entries were about TED talks which cover a vast range of topics on technology, entertainment and design, it is not surprising that students reported *unknown vocabulary and idioms* as their most frequent problem. The best solution for this problem seems to be engaging in intentional vocabulary learning (Barcroft, 2009).

As discussed earlier in the findings section, other problems identified by students included *linking sounds, homophones, and inability to recognize known words in speech*. While linking sounds is probably linked to lexical segmentation (Field, 2003), students can benefit from learning more phonological knowledge of newly learned or less familiar English vocabulary. One basic step is to sound out new words repeatedly during the vocabulary learning process. With regard to *accent and speed*, more practices seem to offer a solution. In fact, some students reported that as they listened to more online materials, they became less distracted by these issues. Teachers can allocate time to address these problems and demonstrate effective strategies and learning resources to combat them.

The problem of *losing one's concentration* deserves some discussion. In Goh's (2000) study, it was one of the top ten listening problems. In this study, it was mentioned only once in a total of 42 diary entries. The student wrote, "The speech took a long time. I can't concentrate for a long time when I listen to English" (Diary 4-2), implying that she had lost her attention during the listening process. The fact that this simple remark is the only one record of loss of concentration in the data does not mean this is not an issue for students of the digital age. Because they often perform multiple tasks at the same time, whether by choice or

accidentally, and there was no immediate consequence if they could not comprehend their chosen materials, the students in this study probably did not feel that loss of concentration was an issue or problem. To better capture what goes on in every listening activity, screen recorders like Camtasia, with students' permission, probably need to be installed in every learner's computer to catch screen movements of the learner (see Xu & Ding, 2014 for an example). Students in the study also rarely remarked on their psychological state, such as tiredness or loss of interest (Kemp, 2010), in their dairies. There seems to be a need for such documentation for outside investigators to better understand the learner's emotional state during the listening process, and future research can pursue this issue.

The third research question concerns students' perceptions of keeping a listening diary. Besides the benefits discussed in the findings section, there is ample evidence to suggest that reflective writing promotes noticing or learner awareness (Kemp, 2010) among some students in this study. One issue which certainly got students' attention was the different varieties of English. As with many other students in Taiwan, the students in this study were less familiar with the British accent. Upon noticing her difficulty in comprehending a speaker with a British accent in a TED talk, Student #3 searched the Internet for differences between the American and British accents. Therefore, in this case, the listening event did more than allowing the learner to notice the differences; it prompted her to engage in subsequent self-study. Another student listened to a TED talk about a North Korean person's escape from her country (Diary 7-2). Due to her inability to understand the North Korean accent, she described the listening experience as "disappointing." After several viewings and with the help of subtitles, she finally understood the points the speaker tried to make. She concluded her diary by writing, "Not every English speaker speaks with standard accent, so I think I will try to listen and watch more wide-ranging materials" (Diary 7-2). Again, this diary project triggered the student to notice the different varieties of English (Galloway & Rose, 2014).

Keeping a listening diary also raises students' awareness of choices open to them as autonomous learners. After listening to an oral reading of part of the novel *Frankenstein* on the BBC English learning website, Student #11 wrote that she downloaded the audio file and transcript to her smartphone so that she could listen to the story again whenever she wanted. Her action is proof of how mobile technology has changed learners' ways of utilizing resources (Burston, 2013; Kim et al., 2013). Like some of Kemp's (2010) learners, Student #11 was found to become motivated and involved in her own learning. Her experience also illustrates the full cycle of ELT which consists of *experiencing*, *reflecting*, *thinking*, and *acting* (Kolb & Kolb, 2009). This student was also a reserved and quiet student. Her journal entries enabled the researcher to gain important knowledge about her listening process and to know her more as a student.

One issue which emerges from the data is learner autonomy. The origin of this topic can be traced back to the 1970s, with Henri Holec's work for the Council of Europe (Benson, 2001). Over the years, researchers have come a long way to argue that students need to develop the necessary skills and mindset to succeed in self-directed language study (Godwin-Jones, 2011). With regard to skills, one important skill to foster successful self-study in the digital age is material selection. Students may feel at loss when facing a huge amount of information and resources; Student #2 of this study remarked that she had to spend two hours just trying to decide which material to listen to (Diary 2-1). According to Murray (1999), in the face of unlimited digital resources, unguided self-study may in fact prevent learners from taking more responsibility for their learning. Therefore, one role which

teachers need to play to foster learner autonomy is “to provide students with guidance on recommended online tools and services” (Godwin-Jones, 2011, p. 5). The researcher of the study also worked as the participants’ instructor. As delineated in the methodology section, she did try to provide guidance to monitor students’ progress.

However, a possible drawback, and therefore a potential limitation of this study, is that students failed to explore as many resources as they could because they were bound by the materials recommended by the teacher. Although they were reminded that they needed to try to view a wide variety of resources (Kemp, 2010; see Appendix B), it was found that about three-fourths of the diary entries were about TED talks, and 10 students (out of 14) listened only to TED talks. In other words, TED talks were by far the most popular listening material for the participants of this study. This popularity is understandable, as TED talks have been viewed by millions of viewers around the world and they are described as a “science communication phenomenon” (Tsou, Thelwall, Mongeon, & Sugimoto, 2014); in bookstores can be found books which were written to teach the public how to talk like TED speakers. However, if the primary goal is to improve students’ listening ability, learners should probably try to listen to a wide range of materials (Kemp, 2010). In fact, the first guideline Kemp (2010) provided to her students when keeping what she called the Listening Log is the question, “Do I do a variety of listening activities? What else could I do/include?” (p. 388). Students need to be guided to be more versatile in their material selection, as TED talks, in spite of their popularity, represent only one speech variety.

The ten students who did not complete the diary project deserve some discussion. Among the ten students, two dropped out of the class. Five of them did not participate in the practice activity and follow-up discussion. The remaining three students submitted one or two diary entries and did not complete the requirement. Because it was essential for students to engage in the entire learning process of orientation, doing, discussion and sharing, the researcher decided not to include their data in this study. It should also be noted that among the 14 students who managed to complete the required three entries, a few students handed in rather careless work. Given the fact that students already knew that their listening diaries would be graded and accounted for 20% of their final grades, some students’ careless attitude was rather alarming. This finding brings up the other core constituent of the concept of learner autonomy – mindset, or attitude (Godwin-Jones, 2011; Rost, 2014).

Student attitude plays an important role in determining the success of autonomous language learning; as Godwin-Jones (2011) puts it, “the student needs to have the proper motivation for independent study” (p. 4). Based on his years of study on the relationship between technology and self-learning, Lai (2013) argues that attitudinal factors – including *language learning motivation* and *perceived usefulness of technology for learning* – play an important role in fostering successful self-directed use of technology outside the classroom. From learners’ diary entries, it seems that the participants did perceive technology as useful for their language learning. The problem remains to be motivating students to take more responsibility for their learning. One way to encourage and enable learner autonomy is a peer network (Godwin-Jones, 2013).

For Godwin-Jones (2013), the social dimensions need to be foregrounded in the development of autonomous language learning. Being autonomous does not mean being alone or “secluding oneself in a cork-lined room with a mountain of learning materials” (Godwin-Jones, 2013, p. 6). In fact, a bulk of research on CMC has shown that peer interaction through CMC helps to foster self-confidence and autonomy (Lai & Li, 2011; Lee, 2011). What the instructor needs to do is to provide opportunities, whether online or face-to-face, for

reflection and peer dialogues to take place. A possible extension of the current study is Leni Dam's idea of a sharable e-log in which students record the learning events for a period of time (Godwin-Jones, 2013) and then share with their peers.

Conclusion

The findings of the current study help to advance our understanding of students' autonomous, outside-classroom L2 listening (Cross, 2013) by documenting students' self-reports on selection of listening materials, perceived listening problems, and perceptions of keeping a listening diary. Although learners can easily find many resources in the digital age, the findings of this study suggest that they need to be guided to be more versatile in their material selection. With regard to the listening problems reported by students, teachers can try to address them in their instruction and monitor students' progress in these problematic areas. All in all, these findings demonstrate the usefulness of using listening diaries to unveil the process of students' private listening.

This study also addressed students' perceptions of keeping a listening diary. Although students seemed to enjoy the experience, there is still room for improvement in the quality of their entries to make the listening diary a truly reflective tool. To truly benefit from the wide array of resources available online and the experience of keeping a listening diary, teachers need to provide more autonomy support (Lee, Pate, & Cozart, 2015) for students by giving them choices, rationale, and opportunities for personalization. The need for such provision stresses the idea of autonomy as interdependence between teachers and learners as well as among learners themselves (Benson, 2011; Godwin-Jones, 2011).

Because keeping a listening diary is likely to be a new experience for students, more pedagogic scaffolding or learner training (Godwin-Jones, 2015) needs to be in place. This scaffolding can take the form of teacher-student conferences in which the teacher uses this opportunity to talk to students on how to improve the quality of their listening diaries before the project ends. In the initial stage of the project, the teacher can also demonstrate how to keep a listening diary by listening to or watching online material with students and then modeling what to write by using the think-aloud technique.

This study is exploratory in nature. It is limited by its small sample size, and the findings may not be readily generalizable to the larger population (Mackey & Gass, 2005). Moreover, the first guideline (Appendix A) might have had the effect of leading students to listen to TED talks. The teacher's introduction of VoiceTube might have also encouraged students to listen to more TED talks, as this site features many TED talks. For future studies, researchers need to design their guidelines with more cautions. Another possible drawback was that students did not report their perceptions anonymously. In other words, they might write the positive comments to please the teacher/researcher. From examining students' diaries and feedback from group sharing sessions, the teacher/researcher felt that students' words were rather candid. The anonymous semester-end teaching evaluation also contained some positive comments on the diary project, suggesting that these students felt positive towards the experience of keeping listening diaries. In the future, researchers can consider collecting anonymous comments through additional research instruments such as questionnaires.

To refine this line of research, stimulated recall interviews, in which learners are further interviewed based on what they have written in their diaries (Lai, 2010; Nunan & Bailey, 2009), can be conducted to collect more in-depth data from students. Future research can also look into the strategies learners use to solve their listening problems and whether they

are effective or not. Finally, the social dimensions of learner autonomy can also be considered in future studies. As mentioned earlier, peer network is also an important component in the development of effective learner autonomy (Godwin-Jones, 2011). Peer talks, either online or face-to-face, can be a powerful addition to a personal tool like listening diary. It is hoped that more studies will be conducted to unveil the potentials of learner diary as a research and pedagogical tool.

References

- Anderson, J. (1990). *Cognitive psychology and its implications*, 3rd ed. New York: W. H. Freeman and Company.
- Bailey, K. M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In H. W. Seliger and M. H. Long (eds.), *Classroom oriented research in second language acquisition* (pp. 67–102). Rowley, Mass.: Newbury House.
- Bailey, K. M. (1990). The use of diary studies in teacher education program. In J. C. Richards & D. Nunan (Eds.), *Second language teacher education* (pp. 215–226). Cambridge: Cambridge University Press.
- Bailey, K. M., & Ochsner, R. (1983). A methodological review of the diary studies: Windmill tilting or social science? In K. M. Bailey, M. H. Long, & S. Peck (Eds.), *Second language acquisition studies* (pp. 188–198). Rowley, MA: Newbury House.
- Barcroft, J. (2009). Strategies and performance in intentional L2 vocabulary learning. *Language Awareness*, 18, 74–89.
- Benson, P. (2001). *Autonomy in language learning*. Essex: Pearson Education Limited.
- Benson, P. (2011). What's new in autonomy? *The Language Teacher*, 35(4), 15–18.
- Bigelow, M. H. & Ranney, S. E. (2005). Pre-service ESL teachers' knowledge about language and its transfer to lesson planning. In N. Bartels (Ed.), *Applied linguistics and language teacher education* (pp. 179–200). New York: Springer.
- Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning & Technology*, 17(3), 157–225.
- Campbell, C. (1996). Socializing with the teachers and prior language learning experience: A diary study. In K. M. Bailey & D. Nunan (Eds.), *Voices from the language classroom: Qualitative research in second language education* (pp. 201–223). Cambridge: Cambridge University Press.
- Cárdenas-Claros, M. S., & Gruba, P. A. (2014). Listeners' interactions with help options in CALL. *Computer Assisted Language Learning*, 27, 228–245.
- Carson, J. G., & Longhini, A. (2002). Focusing on learning styles and strategies: A diary study in an immersion setting. *Language Learning*, 52, 401–438.
- Chang, A. C-S. & Millett, S. (2014). The effect of extensive listening on developing L2 listening fluency: Some hard evidence. *ELT Journal*, 68, 31–40.
- Cross, J. (2011). Comprehending news videotexts: The influence of the visual content. *Language Learning & Technology*, 15(2), 44–68.
- Cross, J. (2013). Promoting autonomous listening to podcasts: A case study. *Language Teaching Research*, 18, 8–32.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Feyten, C. M. (1991). The power of listening ability: An overlooked dimension in language acquisition. *The Modern Language Journal*, 75, 173–180.

- Field, J. (2003). Promoting perception: Lexical segmentation in L2 listening. *ELT Journal*, 57, 325-334.
- Field, J. (2008). *Listening in the language classroom*. Cambridge: Cambridge University Press.
- Galloway, N., & Rose, H. (2014). Using listening journals to raise awareness of Global Englishes in ELT. *ELT Journal*, 68, 386-396.
- Gilman, R. A. & Moody, L. M. (1984). What practitioners say about listening: Research implications for the classroom. *Foreign Language Annals*, 17, 331-334.
- Godwin-Jones, R. (2011). Emerging technologies: Autonomous language learning. *Language Learning & Technology*, 15(3), 4-11.
- Godwin-Jones, R. (2015). Contributing, creating, curating: Digital literacies for language learners. *Language Learning & Technology*, 19(3), 8-20.
- Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal*, 51, 361-369.
- Goh, C. C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55-75.
- Grgurović, M., & Hegelheimer, V. (2007). Help options and multimedia listening: Students' use of subtitles and the transcript. *Language Learning & Technology*, 11(1), 45-66.
- Halbach, A. (2000). Finding out about students' learning strategies by looking at their diaries: A case study. *System*, 28, 85-96.
- Hossein, B. (2014). The role of metacognition in the development of EFL students' listening skill. *International Journal of Listening*, 28, 149-161.
- Kemp, J. (2010). The Listening Log: Motivating autonomous learning. *ELT Journal*, 64, 385-395.
- Kim, D., Rueckert, D., Kim, D-J., Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology*, 17(3), 52-73.
- Kolb, A. Y., & Kolb, D. A. (2008). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. In S. J. Armstrong and C. V. Fukami (Eds.), *The Sage handbook of management learning, education and development* (pp. 42-68). London: Sage.
- Lai, C. (2013). A framework for developing self-directed technology use for language learning. *Language Learning & Technology*, 17(2), 100-122.
- Lai, C., & Li, G. (2011). Technology and task-based language teaching: A critical review. *CALICO Journal*, 28, 498-521.
- Lai, S.-I (2010). Online references as writing tools for college students in Taiwan. Unpublished doctoral dissertation. National Taiwan Normal University, Taiwan.
- Lee, L. (2011). Blogging: Promoting learner autonomy and intercultural competence through study abroad. *Language Learning & Technology*, 15(3), 87-109.
- Lee, E., Pate, J. A., & Cozart, D. (2015). Autonomy support for online students. *TechTrends*, 59(4), 54-61
- Leveridge, A. N., & Yang, J. C. (2014). Learner perceptions of reliance on captions in EFL multimedia listening comprehension. *Computer Assisted Language Learning*, 27, 545-559.
- Lotherington, H. (2007). Diary of an edu-tourist in Costa Rica: An autoethnographical account of learning Spanish. *TESL Canada Journal*, 24, 109-131.

- Mackey, A., & Gass, S. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum.
- Matsuura, H., Chiba, R., Mahoney, S., & Riling, S. (2014). Accent and speech rate effects in English as a lingua franca. *System*, 46, 143–150.
- Murray, D. E. (1999). Access to information technology. Considerations for language educators. *Prospect*, 14(3), 4–12.
- Numrich, C. (1996). On becoming a language teacher: Insights from diary studies. *TESOL Quarterly*, 30, 131–153.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge: Cambridge University Press.
- Nunan, D., & Bailey, K. M. (2009). *Exploring second language classroom research: A comprehensive guide*. Boston: Heinle.
- Perez, M. M., Peters, E., Clarebout, G., and Desmet, P. (2014). Effects of captioning on video comprehension and incidental vocabulary learning. *Language Learning & Technology*, 18(1), 118–141.
- Reinders, H., & Cho, M. Y. (2010). Extensive listening practice and input enhancement using mobile phones: Encouraging out-of-class learning with mobile phones. *TESL-EJ*, 14(2). Retrieved from <http://www.tesl-ej.org/wordpress/issues/volume14/ej54/ej54m2/> Retrieved on May 28, 2014.
- Renandya, W. A., & Farrell, T. S. C. (2011). “Teacher, the tape is too fast!” Extensive listening in ELT. *ELT Journal*, 65, 52–59.
- Rivers, W. (1981). *Teaching foreign language skills*. Harlow, UK: Longman.
- Rost, M. (2002). *Teaching and researching listening*. Harlow: Pearson Education Limited.
- Rost, M. (2014). Listening in a multilingual world: The challenges of second language (L2) listening. *The International Journal of Listening*, 28, 131–148.
- Schmidt, R. W., & Frota, S. N. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 237–326). Rowley, MA: Newbury House.
- Tsou, A., Thelwall, M., Mongeon, P., & Sugimoto, C. R. (2014). A Community of curious souls: An analysis of commenting behavior on TED talks videos. *PLoS ONE* 9(4): e93609.
- Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, 40, 191–210.
- Vandergrift, L., & Goh, C. (2012). *Teaching and learning second language Listening: Metacognition in action*. New York: Taylor & Francis.
- Wenden, A. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19, 515–537.
- Xu, C. & Ding, Y. (2014). An exploratory study of pauses in computer-assisted EFL writing. *Language Learning & Technology*, 18(3), 80–96.

Appendix A

Guidelines for keeping your listening journal

1. You should write three entries this semester. There is no set length for each entry. However, you need to aim at providing a detailed account when you write an entry.

2. You should try to write the journal entry mainly in English. However, you are allowed to use some Chinese if you find yourself unable to express yourself clearly in English.
3. You should write an entry as soon as you finish your listening activity. To begin each entry, write down the time, place, and name of the material/program you were listening to. Then, write about (a) any problems/difficulties you experienced while listening, (b) possible reasons for these problems/difficulties, and (c) any actions you took to try to solve them.
4. You are encouraged to listen to a wide variety of materials (e.g., aural, aural plus visual). There are many materials available on the Internet. You should make your listening experiences not only enjoyable but also educational (Watching a music video is probably not a good idea). The following is a list of suggested websites. Remember, the sky is the limit:
 - (a) TED: <http://www.ted.com/>
 - (b) CNN Student News <http://edition.cnn.com/studentnews/>
 - (c) BBC Learning English: <http://www.bbc.co.uk/worldservice/learningenglish/>
 - (d) Voice of America: <http://www.voanews.com/>
 - (e) Ignite: <http://igniteshow.com/>
 - (f) 60 second science: <http://www.scientificamerican.com/podcast/60-second-science/>
 - (g) TV series of your choice
5. Feel free to ask me questions during the process of completing your listening journal. Have fun and enjoy your listening adventure!

Appendix B

Second set of guidelines for keeping your listening journal

1. You are encouraged to think about the following ideas when writing your diary (Kemp, 2010):
 - a. Do I do a variety of listening activities? What else could I do/include?
 - b. Was the activity easy/easier? (More) difficult? Why?
 - c. Was it the vocab/accent/speed/background noise/ my tiredness/(lack of) interest/ the speaker's (lack of) clarity, etc.?
 - d. How did I respond? Did I do something which made the situation worse/better?
 - e. Was the activity useful? Enjoyable? Will I do it again? Why (not)?
 - f. What can I do to help me/improve the situation next time?
2. In Goh's (2000) study, she found that the ten common listening problem experienced by her Chinese students are as follows:
 - a. Do not recognize words they know.
 - b. Neglect the next part when thinking about meaning.
 - c. Cannot chunk streams of speech.
 - d. Miss the beginning of texts.
 - e. Concentrate too hard or unable to concentrate.
 - f. Quickly forget what is heard.
 - g. Unable to form a mental representation from words heard.
 - h. Do not understand subsequent parts of input because of earlier problems.
 - i. Understand words but not the intended message.
 - j. Confused about the key ideas in the message.

- a. Remember, you are not just reflecting on the CONTENT of your listening material. You are also recording and reporting the whole listening experience.
 - b. If you find yourself unable to express yourself clearly in English, switch to Chinese. The most important goal is to document your listening activity in a detailed and candid manner. I would still encourage you to eventually try to express yourself in English.
4. A sample entry from one of your fellow students:
 Listening Journal
 Cindy Ju
 Name of the program: Confidence and Motivation
 Time: 2014/10/8 10:10 am – 11:00 am.
 Place: Room 308

Main point

We attended the presentation last Wednesday, and the main point is how to achieve the goals. The instructor said that the first step is to have confidence and motivation, and he gave us lots of quotes from successful and famous celebrities. Like “If you’re going through Hell, keep going.” from Winston Churchill. I think this activity is really helpful to young people like us.

Problems and difficulties

However, during the presentation, I really paid attention to know every sentence that the instructor said, but I still just understood about 70%–80% of it, and don’t sure whether my understanding is correct or not.

Reasons

I can always know that Chinese speak English, but I can’t know completely about American speaking. I think the reason is not only the lack of vocabulary but also the American English Pronunciation. And I’m not familiar with their linking sounds so that I’m not sure what they say.

Solutions

My solution is that we should listen to American speaking English every day. And the content must have subtitles. If there are any problems of the content, we should find it out, and listen again and again until we understand. And before listening we can search the Internet to find the ways to know about the pronunciation. But the most important of all is that we need to develop the habit of listening English every day. It cannot only develop the ability of listening but also increase our vocabulary.

Appendix C

Sample student diary entry from the practice activity

Place: class 308
 Time: 10:10–11:00

Listening the speech from a foreign teacher is so fantastic that I can learn something special. **99**

Today's topic is "Great things come to those who don't wait." That means we can't wait to happen. We must set a goal and practice. We should do some meaningful in our life and not hesitate to do that. Although we would fail, there is nothing to give up. As far as I am concerned, I also have the aim and want to make it better.

I studied hard, and my English didn't improve well at that moment. I said "that was just a process and I can overcome it." I got depressed because there was nothing changed a little. After that, I was accompanied by my friends. They gave me some advice and encouraging me much. During the summer vacation, I was recognized by myself because of TOEIC. That is my experience which proves "I can accept failure, everyone fails at something. But I can't accept not trying again."

It's a good learning to talk with foreign people. Sometimes, I want to say something, but I don't know what to say.

Appendix D

Types of listening materials and the numbers of times they were mentioned

Type of listening material	Number of times
1. Sitcom episode (1) Modern family	1
2. The Ellen show (1) Interview with Zony & Yony	1
3. BBC oral reading of Frankenstein (http://www.bbc.co.uk/learningenglish/english/course/lower-intermediate/unit-11/session-5)	1
4. 60-second science (http://www.scientificamerican.com/podcast/60-second-science/) (1) Summer teen job cut violence	1
5. Video on umano.net (http://umano.me) (1) Wasting time on the Internet	1
6. Non-TED videos on VoiceTube (https://tw.voicetube.com/) (1) Can you erase bad memories? (2) Weird lies all couples tell each other (3) Why do we gossip? (4) How to be a rapper (5) Things men don't know about their clothes	5
7. TED talks on VoiceTube (1) Why I am not a vegetarian? (2) Live life the real way (3) My father, locked in his body but soaring free (4) Color blind or color brave (5) The 12 lessons I learned from Steve Jobs (6) Looks aren't everything. Believe me, I'm a model (7) 5 techniques to speak any language	7

8. TED talks on YouTube or TED website	23
(1) How to make hard choices	
(2) How to succeed? Get more sleep	
(3) Don't insist on English	
(4) How do you define yourself?	
(5) The death penalty on the street	
(6) Failure is part of the learning	
(7) Gaming can make a better world	
(8) In our baby's illness, a life lesson	
(9) Pimp my...trash cart?	
(10) How autism freed me to be myself	
(11) The Marshmallow test and why we want instant gratification	
(12) The courage to tell a hidden story	
(13) I am the son of a terrorist. Here's how I chose peace	
(14) Try something new for 30 days	
(15) A-rhythm-etic. The math behind the beats	
(16) How your working memory makes sense of the world	
(17) 5 dangerous things you should let your kids do	
(18) My escape from North Korea	
(19) 8 traits of successful people	
(20) Please, please people. Let's put the "awe" back in "awesome"	
(21) 3 ways to speak English	
(22) Your body language shapes who you are	
(23) How to make stress your friend	
8. Non-TED talks on YouTube	2
1) The single life: The science of love	
2) How bad do you want it?	