

EFL learner use of podcasting resources: a pilot study

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This article investigates English as a Foreign Language (EFL) students' use of iPod technology to develop target language awareness. Structured as a pilot study, this research is the first part of an ongoing project to report on the effect of video MP3 technology on target language exposure. The data were collected over one academic semester at Tohoku University from two advanced learners of English. The data collection included a daily diary questionnaire, two in-class student demonstrations, and semi-structured interviews. The evidence indicates that students own prior viewing skills and are therefore able to use video MP3 playing technology to independently gain exposure to the target language outside of class time. This article aims to inform educators that allowing students' autonomy with the technology is possible and beneficial.

Introduction

iPod technology is receiving more attention from both the private sector as well as the education and training industries. While schools are considering banning iPods inside examination rooms (Boone, 2007), companies are giving new recruits iPods filled with company information, ranging from office staff member details to safety procedures (AAP, 2007). Any subscriber can access a variety of audio-visual resources available for free from iTunes, an online a service provided by Apple. Through this service, subscribers can upload and download a wide range of authentic material ranging from audio books, films, animations, and music resources for subscribers to download on their computer and synch to their iPod.

Increasingly the goal of some universities is to present educational resources to learners who enjoy studying at their own pace, using various technological devices, while living in distant places (Weber, Yow, & Soong, 2005). To meet this goal, Godwin-Jones (2005) reports how educators have attempted to provide learners with technology-based experiences, from Computer-Mediated Communication, to iPod file sharing and gaming. Godwin-Jones describes some examples of universities supplying learning material on iPods. Most notable is the iPod-assisted Spanish learning program at Duke University (Godwin-Jones, 2005; Chinnery, 2006). A student from Duke University explained that he could listen to his performance or teacher advice without being in class. Whereas in the past learners used to carry laptops, they can now carry MP3 devices anywhere, to learn at their own pace. Nevertheless, iPod use in educational settings still needs to be investigated to provide further evidence of the learning benefits for students.

This article focuses primarily on Japanese undergraduate students' use of iPods, and in-

investigates whether or not it is feasible for teachers and students to capitalize on this technological opportunity. Constructed as a pilot study, this action research-structured project addresses the question: How do individual EFL learners use audio-visual MP3 technology to develop their target language awareness? The data collection process included observations, questionnaires and semi-structured interviews. The task required participants to independently select and watch videos. The aim of the study is not to report on students' linguistic gains, but rather to collect evidence about students' autonomous use of iPod technology, and the educational benefits of this technology in the EFL classroom.

Literature Review

Access to Audio-visual Resources

There is a collection of articles describing video resources such as educational films or movie trailers being used by language teachers to expose students to both subject matter and content such as science and mathematics, or cultures and societies. Of these, there are a number of articles that suggest using video resources as teaching material, either as part of a virtual learning environment (Couture, 2004; Hummel, Pass & Koper, 2004; Watts & Lloyd, 2004) or as an extra learning aid (Ellis, Marcus & Taylor, 2005).

While the majority of the research promotes the use of video for exposing students to selected content, these approaches place emphasis on teacher control over the video equipment. Gruba (2004) explains the process for selecting and creating audio-visual test items. In terms of personal electronic devices such as the iPod, Stanley (2006) suggests that teachers guide students to download pre-selected audio-visual resources (see also Wagner, 2007). Such teacher strategies are preferred in some cases, such as that Volle (2005) describes, where "real media video files were created by the instructor/researcher to correspond to pronunciation topics" (p. 150). Therefore students often have limited control over the selection of the content and this may have an effect on motivation and target language retention.

The presence of iPod technology and the *iTunes* service, this article argues, can give greater control to students in the selection of content that they wish to study. Robin (2007) concurs with this opinion, stating that first the presence of authentic materials available online "has implications for the demands learners make of themselves and the tasks that they choose," and these students "use off the shelf-technology to best facilitate their own learning in their own learning style" (p. 109). To validate this opinion, the article positions iPod use within a sociocultural theoretical framework to document that technological artifacts can become useful tools to disseminate knowledge and consolidate acquisition. The article then discusses issues pertinent to students' visual skills and how they affect research investigation on the use of iPods in the language classroom.

Learning with Video Resources

In an extensive research paper on the use of video resources as learning material, Gruba (2004) explains the construction of video resources to rationalize the selection of certain audio-visual items for his research project. Gruba then proceeds to explain that twelve university Japanese language learners were informed to watch a news broadcast from beginning to end without pausing. While participants viewed the clip they were to comment on what they observed (p.

61). His research documents the cognitive process that participants relied upon to develop an understanding of the 56-second news clip and to decode the content into comprehensible input. Following on this experimentation, Gruba (2006) applies the above findings to investigate what affects the cognitive decoding process of a news clip. The difference with the previous study is that participants were allowed to operate the video player's remote control. Gruba concludes that the opportunity to go back and forth in viewing the news clip does enhance participants' listening/viewing comprehension. Gruba comments that giving students access over the viewing control "may be more effective with our students than trying to explain the cognitive processes" (p. 87).

Another experiment concerning students' use of audio-visual resources was conducted by Wagner (2007). This author argues that little evidence reveals the "extent to which L2 listeners actually watch the video monitor" (p. 67). Instead they prefer to attend to the audio information than to respond to test items. Participants in Wagner's experiment were provided with a test booklet and a video which contained six teacher-selected and arranged video segments. A narrator guided the students through the whole process. Wagner's findings reveal that on average participants oriented themselves toward the video 69% of the interaction test time. Wagner does point out that one of the limitations is the inability to assess whether or not video orientation led to better comprehension or was simply a distraction method (p. 77).

In their respective research studies, Gruba (2006) and Wagner (2007) do not address the possibility that students have prior experiences with visual artifacts and therefore already possess the ability to understand how, when and why they decide to use the remote.

Thus beginning with the premise that students already possess viewing skills, the aim of this pilot study is similar to that of Gruba's (2004, 2006) reported evidence; to provide greater autonomy to students in the decision making process involved with viewing authentic materials. Also, while Gruba (2006) and Wagner (2007) use a video player and carefully selected news clip items, this pilot study provides students with iPods and offers them control over the material they wish to view. This article argues that iPod technology can provide learners with the opportunity to select audio-visual resources of interest to them, as well as grant them greater autonomy.

Research Questions

Whereas Gruba (2004, 2006) and Wagner (2007) reported on in-class observations of students' viewing comprehension skills of teacher-selected items, the main research question of this pilot study is: How do learners use technology to develop their target language awareness? In the process of answering this question, the following variables emerge: students' selection of *iTunes* video podcast resources, use of iPod technology outside of class time, and viewing strategies. These variables guide the construction of the research method applied and are addressed in this article.

Methodology

Activity Theory

The overall objective of this pilot study is to observe, understand and eventually formulate a description of the viability of using iPod technology to develop and enhance learners' target

language and cultural awareness. It is anticipated that the device will engage participants to consider self-assessed suitable audio and/or audio-visual resources that they can use to improve their language comprehension skills.

The concept of activity theory addresses the objectives envisioned in this research. Firstly, because activity theory stipulates that the activity is the unit of analysis (Thorne, 2005). Secondly, this engagement in an active process is stimulated by the device, or mediating tool. It is through their involvement with artifacts that learners can engage in thinking (Lantolf & Thorne, 2006). Thirdly, the interaction between learner and mediating artifact allows the learner to shift from what he/she knows to an area of exploration into concepts which are not yet known but will be discovered through the activity (Vygotsky, 1978).

The *iTunes* service and iPod technology provide learners access to resources which are authentic, free and otherwise not easily accessible in Japan. These resources engage learners to think about the content they are accessing, and through this anticipated, continuous activity, learners consolidate their prior knowledge of the target language, are exposed to new lexical items and/or develop an interest in learning more about a particular issue or topic of interest to them. Hence through the technology and the motivation it may incite, participants scaffold their language learning development.

The Course and its Participants

The course selected for this research was the Advanced English Multimedia course at Tohoku University. It is an elective course catering to a generally mixed group of students, in gender, age, and ability, who come from different departments (Economics, Education, or Engineering). Participants usually have suitable comprehension and speaking abilities conducive for conducting research. At the time of writing, this class had two students: one male from the Education department, with a TOEIC score of 750, and one female from the Electronics department with a TOEIC score of 739. The class met for 90 minutes once a week during the course of a 15-week term.

The Task

During Week 1 the teacher explained the purpose of the course. In Week 2 students were exposed to the assessments they have to complete in order to graduate. They then received an 80-gigabyte iPod video player. They were informed to use it as they saw fit and to fill in a daily questionnaire (see Appendix A). Every week the questionnaires were collected by the teacher who handed out new questionnaires for students to complete. Students were informed that the questionnaire was a non-assessable activity that formed part of a research project on the use of iPod technology for language learning.

Data Collection

Addressing survey design in academic research, Ozok (2008) explains that researchers can delineate the structure of their surveys based on previous research. Since there is limited evidence concerning the use of iPods in the classroom, limited data collection strategies are available. Therefore the first step of this pilot study is to design a data collection approach.

The literature on action research recommends that the evidence be collected systematically

and described in terms of planning, implementation and reflection (Dick, 2005). It is possible to use surveys or observations and a selection of testing methods ranging from open-ended and closed tests to recall and interview tests, assert Seliger and Shohamy (1989, p. 176).

In order to assess the “play” hypothesis, Gruba (2006) relied on a “retrospective verbal report” data collection approach (p. 81). Cohen (1994) describes this method not as a “research method but rather ... a variety of techniques for gathering data about the thinking or cognitive processes people use during learning tasks” (p. 679). Thus, in addition to the daily questionnaire, classroom tasks and observations, a retrospective verbal report to conduct open-ended interviews is applied.

Table 1: Description of task and research goals

Activity	Research goals	Task
Show-and-Tell – What is on your iPod? (Week 4)	Impromptu and prepared speech (Celce-Murcia, 2001; Hughes, 2003; Luoma, 2004; p. 48; Mason, 2002).	Students bring their iPods to class. The teacher explains the task and students begin the activity. Students select a video file for discussion. Similar to a show-and-tell, students explain why they selected a particular video and how the video assists them in learning the target language.
iPod Operation Activity (Week 8)	Learner-iPod interaction (Chapelle, 2003) Observations (Seliger & Shohamy, 1989; Wagner, 2007) Semi-structured interview (Burns, 2000; Richards, 2003)	In session one, students select a video podcast and view it as they would normally do at home. Thereafter participants complete a brief open-ended questionnaire which aims to elicit student recollection of the video's content. In session two, students select another video podcast to view at their own pace and are allowed to “stop, move, or replay a video text” (Gruba, 2006, p. 81). During this stage they can take notes and answer the second open-ended questionnaire. At the end of both sessions, students participate in an open-ended interview; the aim is to engage participants in explaining their iPod viewing experience.
Questionnaire	Survey (Burns, 2000)	Students complete seven questionnaires per week to demonstrate their daily use of the iPod.

As Table 1 shows this pilot study is organized into three parts; a show-and-tell conducted in Week 4 of the course, a class-based iPod operation activity conducted in Week 8 and a daily questionnaire to be completed every week. In the first part of the research students participat-

ed in a show-and-tell about what is on their iPod. During this activity students also completed a "learning strategy for iPod viewing" questionnaire. Items on this questionnaire were selected from Oxford's (1990) "Strategy Applications Listed According to Each of the Four Skills" (pp. 317-330). The aim was to collect preliminary and general evidence about participants' "perception of themselves, [...] and other experiences" with iPod technology and services (Burns, 2000, p. 425).

In Week 8, a classroom activity was designed to determine how students used the iPod to learn the target language, and to observe if peer-to-peer observation during the show-and-tell session influenced the type of resources students viewed.

The iPod operation task replicates Gruba's (2006) experiment in order to collect students' opinions about self-guided studies via iPod technology. This task was divided into two parts. The first part involved observing students' independent operation of their iPod device. In this session students selected a video podcast and viewed it as if they were at home. The second part involved observing students' performance. In this experiment, students selected a video podcast and viewed it at their own pace and were allowed to "stop, move, or replay a video text" (Gruba, 2006, p. 81). During this stage they could take notes and answer the second open-ended questionnaire. At the end of this second session, students participated in another open-ended interview; the aim was to engage participants in explaining their iPod viewing experience. After each viewing session, participants were interviewed using the retrospective verbal report.

The final part of the data collection was to collect evidence concerning students' use of the iPod outside the classroom. Students were provided with questionnaire sheets that they must complete every day.

These three activities are designed to observe and understand whether or not students can use iPod technology to study the target language independently. The data collected through these three activities is discussed below. First the show-and-tell evidence is outlined followed by the iPod operation task. The findings section concludes with a reflection on the evidence gathered from the daily questionnaires.

Data Analysis

This research utilizes in-class observations and interviews, as well as outside of class questionnaires for students to fill in on a daily basis. The observations and interviews provide qualitative data as regards to students' opinions about the technology and their decision for using their iPod selection. The questionnaires provide quantitative data in terms of regularity, locality and frequency of use (Seliger & Shohamy, 1989). The data categorizes the information provided during the interviews and observations to understand how students use the technology and whether or not their opinions concur with feedback provided in research by Gruba (2004, 2006) and Wagner (2007).

Findings

Show-and-Tell – What is on your iPod?

In Week 4 the lesson required that students bring their iPod to class to display and talk about the types of videos they enjoyed viewing. The female student revealed that she was viewing old

Disney cartoons, including "Casper the friendly ghost". She explained that although she could not understand what the ghosts were saying, she could understand the narrator of the story. She indicated that the speed was slow and the pronunciation was clear enough for her to be able to understand the content. In contrast the ghosts used different speed, pitch and dialects when they spoke (for example an old ghost, a working class ghost, and a nervous ghost). During her show-and-tell session, it became clear that she had used the Japanese language feature display and that she was not familiar with certain functions of the iPod such as rewind.

The male student began his show-and-tell by revealing that he listened to CNN student news. He admitted that he could not understand the podcast, but since he was interested in learning the target language, he persevered with the podcasts. He explained that the video items were too long and the newscasters spoke too fast. He wanted to know how he could improve his language skills so that he could understand the video items.

In order to answer the male student's question, a discussion ensued. The teacher asked the female student to explain why she had selected cartoons instead of news items. She proceeded to show another video podcast. This video was a cooking show. She explained that it was very visual and that the chef used the terms of all the items he used in his show, "For example, he says 'knife' and I can see him pick up the knife". She also explained that the titles of the videos were very descriptive, "At first I did not know what poached salmon was, but by the end of the video I knew."

Students apply different methods for learning a language (Brown, 1980; Oxford, 1990). Thus it is not surprising that the learning strategy questionnaire revealed that differences existed between each student's study approach. The learning strategy sheet applied a Likert-style questionnaire from which students selected "always", "often", "sometimes", "rarely" or "never". For the sake of brevity, responses which indicated either "always" or "often" will be referred to.

Both students often watched their iPods either in their study room or in their dining room. Both students often used a dictionary when studying, but rarely used pens, pencils, notebooks, study books or English books. Both students always studied in quiet rooms and often studied when they had time. Instead of listening and taking notes at the same time, the male and female student preferred to listen to the selected item with their eyes closed. Later they would write down the new vocabulary items. They also listened to their iPod while doing something else, such as eating or cleaning their apartment.

Should the video resource be too difficult for their ability, the students indicated that they would often simply give up watching it. When the video was appropriate to their level, they mentioned often matching what they heard with what they saw. Once they finished viewing iPod video material both students often studied the new vocabulary items they collected and they tried to memorize the vocabulary and the content of the video. Finally both students indicated that they needed time to understand the content and if they could not, they often guessed what they had heard.

By the end of this lesson it became apparent that students were able to use their iPods satisfactorily and that they would be able to select appropriate audio-visual resources from the iTunes catalogue.

iPod Operation Activity

A two-part test replicating Gruba's (2006) data collection approach was designed and conducted during a 90-minute lesson. First students were asked to exchange iPods so that they would be using videos that they were not familiar with. Students sat at a distance from each other and a video camera was placed behind them to record their viewing process.

In the first task, the students were asked to view the video from beginning to end without the possibility to rewind the selected item. The male student took 10 minutes to view his video compared to the female student who viewed her video for 25 minutes. Once they finished viewing the video they were given a questionnaire to answer. The male student completed the questionnaire in 5 minutes compared to the 10 minutes needed by the female student.

The video recordings of students viewing videos on their iPods revealed that while the male student paused the video 5 times, the female student paused the video 15 times.

The reason for this difference could be due to the fact that from the video recording, the female student had selected a CNN student news video podcast which was lengthy and difficult. Both students were able to provide sufficient information about their selected video.

The second task required that students watch a different video. However this time they were able to rewind, fast forward or pause the video any time at their discretion. Also, students were encouraged to speak aloud to explain the reason for using the control features of the iPod.

The male student selected a video and began watching it. He had good control of the iPod features; he could easily navigate the selected video. The main reason for pausing or rewinding the video was due to the fact that the main character regularly said "this is important", so the male student took note of everything that was important. The video was paused only twice to seek clarification of lexical items, such as "texture" and "James Bond secret". The male student completed the whole task in 15 minutes and took enough notes to answer the questions appropriately.

The female student completed the whole task in 27 minutes, a time similar to her first viewing. She took a lot of notes first, and then once she felt confident she completed the questionnaire in six minutes. At first she could not operate the viewing control feature of her iPod. Each time she attempted to rewind the video she returned the video to the beginning. The researcher had to demonstrate how to fast forward and rewind the video without stopping it. The female student stopped the video many times, and her reasons were that she wanted to get an "idea at the beginning of the general purpose of the video". Towards the end of the video she rarely stopped it to take notes. She was able to provide sufficient and appropriate answers on the questionnaire.

The researcher asked the students to participate in an interview which was conducted in 20 minutes. From these interviews, it was apparent that, out of the two videos, the male student enjoyed the first video most. Both videos were about food and the speed of the main character was the same, however the content of the first video was easier to understand and more interesting. The male student enjoyed taking notes while listening to the video, but he commented that it took a lot more time. He also pointed out that the visual cues were helpful to assist him with his understanding of the video.

In contrast the female student preferred the second video. The first video was a news program which was long and the speaking speed of the newscasters was too fast. The second video

was more interesting, shorter and the topic did not change. She found that the opportunity to go back and forth while viewing the video was extremely helpful.

When asked if they would apply this viewing strategy, both participants responded negatively. First because it took time to take notes and they did not want to study per se, but wanted to enjoy the content. While the male student explained that he wrote down unfamiliar words, he did not write down full sentences about the story. However the female student preferred to view the whole movie first before delving into its content.

In the second activity students needed to use think aloud method to explain why they chose to pause or rewind the video. Both students indicated that this was strange since they did not need to justify to themselves the reasons for pausing a video, they just did it. Also they did not really think about whether or not the visual display was actually a distraction. The female student commented that the visual cues were very helpful, because they helped her imagine the content.

Both students also did not think that watching foreign podcasts gave them the feeling of "being in the country" (Gruba, 2006, p. 86) since they were surrounded by sounds which reminded them of where they were, for example, peers talking in the corridor. They also expressed that they did not know what types of sounds were audible in an English-speaking country. The male student explained that he had heard a bird and it reminded him he was in Japan.

Finally while Gruba's experiment was conducted in the first language, students in this project completed the test in the second language. When asked if this affected their performance, both students responded negatively. The female student explained that if the test had been in the first language she might have been confused since she would have had to translate the content of the video to match the Japanese questionnaire as well as for her responses.

Daily Questionnaire Responses

Students were provided with seven daily questionnaires which they had to complete every day starting from Week 2 until Week 14. Students did not always complete all seven sheets per week. Reasons provided were that either they did not use their iPod on a particular day because they traveled on holidays or were busy with other social events. The average weekly return rate was four surveys for both students. Thus fifty-two surveys per student were returned; a total of 104 surveys. These were returned every week and the teacher recorded the data on the *OpenOffice* suite *Calc* software.

Students looked for audio-visual resources twice a week ($n=52/104$) or once a week ($n=40/104$). Students seldom searched for podcasts more than three times a week ($n=11/104$). Data for Weeks 2 and 4 reveals that at first students spent 60 minutes per week looking for suitable podcasts ($n=23/104$). The number gradually shifted to 30 minutes per week ($n=26/104$) and settled at 15 minutes per week ($n=51/104$). Students rarely spent 90 minutes searching for audio-visual resources ($n=4$). A potential reason why students spent less time searching for podcasts could be due to the automatic podcast update function available on *iTunes*.

In relation to daily use of iPods, students' responses indicated that they viewed or listened to resources once a day ($n=51$). Sometimes they used their iPods twice a day ($n=31$) or three times a day ($n=17$). Very infrequently, they used their iPods more than four or more times per day ($n=5$).

Students preferred to use their iPods for less than an hour per day (30 minutes, n=86). Sometimes they used their iPods for an hour (n=13) but rarely for more than an hour; 2 hours (n=1); 3 hours (=1) and more than 3 hours (n=1).

Among the locations where they used their iPods, students indicated that they used their iPods the most when traveling to and from the university (n=50). Other preferred times for iPod use were upon waking up (n=37), before sleeping (n=13) and while waiting for friends (n=4).

When traveling, the male student indicated that he used his iPod most when cycling (n=77), walking (n=20) and sometimes when traveling by train (n=7). In contrast, the female student said that she rarely used her iPod when traveling on the bus (n=6) and while walking (n=8).

The next section of the survey sought to understand what types of podcasts students listened to most. The survey offered seven options: English education programs (n=40); TOEIC (n=5); Business English (n=3); English conversation (n=5); CNN (n=14) and BBC News (n=13) as well as sport-related (n=1) podcasts. Also of interest to students were cooking shows (n=6); animations/cartoons (n=8); science (n=5) and French language learning shows (n=4).

Students rarely listened to the same podcast more than once. For example the options more than three times (n=9) and three times (n=8) indicated little variance. Students did view or listen to a program twice (n=27), but the most preferred option was to access a resource only once (n=60). During discussion time students mentioned that they viewed or listened to an item more than once if it was either interesting or of importance to them as in it related to their field of study.

In terms of technical issues, students did not report any technical difficulties. This confirms the ease of use of iPod technology, since no in-class demonstrations were provided about downloading *iTunes* or syncing resources on the iPod. However the programs students accessed were at times difficult to comprehend (n=20). In the space provided students indicated that either the speaking speed was too fast (especially with news items) or they could not decipher the pronunciation of lexical items. For example, one student wrote "I can't hear 'make me smile' in the song. I think it is 'maybe smile.'"

Students were encouraged to write down any vocabulary that they were not familiar with. Students averaged one new word per day. Examples of new words were "pick out", "rice pilaf", and "claim!"

The evidence collected from the survey reveals that students did eventually develop a preferred pattern for using the iPod at times that were most convenient for them. They were able to decide which time of the day was most suitable for starting a regular habit of use. The other interesting observation is that once students shared their videos in class, they were able to open up their viewing spectrum.

Discussion

Concerning the feasibility of integrating iPod technology as a language learning device in the EFL classroom, this article raised several questions. The main research question investigated students' use of iPod technology to develop their English language knowledge base. During the research structure design, three variables were considered: students' selection of *iTunes* video podcast resources, use of iPod technology outside of class time, and viewing strategy.

How do students select iTunes video podcast resources?

The show-and-tell activity revealed that the male student experienced some difficulty selecting appropriate video podcasts suitable for his level of listening comprehension. The opinion offered by his peer enabled him to consider more reasonable podcasts.

Based on the female student's ability to select suitable video resources, appeared that these students were able to develop a criterion for selecting video resources on par with their English comprehension ability. Mostly students evaluated podcasts based on their narration speed and clarity, the image-to-spoken story connection and simple vocabulary they could decipher with few guesses.

How do students use iPod technology outside of class time?

This research collected sufficient evidence to reveal that students were able to independently select suitable video resources and that they did use the device and its resources outside of class time. The feedback provided by students' daily diaries revealed that they spent approximately two to four hours per week listening to or viewing English resources. The daily diary also revealed that students eventually developed a behavioral preference for setting aside enough time to enjoy and focus on the content of the video items they had selected. However, as this article explained above, it appears that students need to develop viewing skills awareness so that they can capitalize on their viewing time.

How do students view videos?

Students did not have any particular strategy for maximizing their podcast viewing sessions. Mostly they used the iPod as an entertainment device and did not spend much time taking notes.

The class-based iPod operation activity revealed that students used the device without any clear purpose, except to listen to the content. Observations during the first stage of this activity indicated that they navigated through a video to clarify any lexical item they could not comprehend. In the second stage, students felt awkward about explaining aloud their process for navigating through a video.

At this stage of the research, evaluating how students view videos appears challenging, because although students can watch and appreciate the videos, they are not necessarily aware of the skills they are using to appreciate such resources. Further research in practical training in the use of iPod technology for EFL students is necessary.

How do learners use technology to develop their target language awareness?

At the start of this pilot study the main research question was concerned with understanding how students would use iPods to develop their target language awareness. However as the research progressed, certain variables presented themselves. While these were discussed above, what remains to be reported is the students' use of the technology to develop their awareness of the target language.

By searching and understanding the types of *iTunes* audio-visual resources available to them, students were able to use the technology to develop their awareness of the target language. Also by viewing and understanding the appropriateness of the content and the language level

accessibility, they could select suitable resources to enhance their language comprehension skills. They paid attention to the speaking speed, the use of dialects and expressions. The length of the content selected was brief and this helped them remember visual and audio cues more effectively.

Students were able to select appropriate viewing items of interest to them either because it related to their field of study or to their personal interest. These interests guided the students in using *iTunes* and the iPods more effectively. They relied on visual and audio cues to discern whether or not the video would catch their interest. The *iTunes* interface allowed students to reduce the selection time and increase their viewing time. This revealed that once they were satisfied with particular podcasting items, they simply enjoyed viewing them.

The portability of the iPod affords students greater accessibility to learning. The evidence revealed that students used their iPods to learn during periods that were conducive to their independent learning approach. The evidence generated through this pilot study indicates that students used audio-visual iPods in order to develop their target language awareness.

Limitations

This article acknowledges that certain limitations in this research exist. First, the sample size is small and the validity of the daily questionnaire remains to be tested. Second, the iPod device is expensive for a small research budget, which means it is difficult to replicate without having students use their own devices or without some financial aid. Third, since this research is a pilot study, its main focus was on students' abilities to use the technology rather than on their linguistic progress made through the use of iPods. Therefore it is hoped that findings emerging from this study will stimulate interest among educators with more substantial budgets to consider further research in the benefits that iPod technology offers to learners of English as a foreign language.

Conclusion

This article first asserted that Gruba's (2006) and Wagner's (2007) research seemed to place constraints on their subjects' viewing skills. The evidence generated from this research, however, revealed that students have the necessary viewing skills to select audio-visual resources appropriate for their needs, and to operate an iPod to gain exposure to authentic content target language. Therefore from the evidence gathered, it would appear that iPod technology and its *iTunes* service are suitable tools to engage EFL learners to become responsible for their own learning and development.

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