〔Article〕

On the Potential for Increasing the Use of Digital Technology via Podcasts in English Language Learning in Japan

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Abstract

Digital technologies for use in education are becoming more sophisticated and easier to use in the 21st century. At the same time, students spend much of their time interacting with the world through digital media, suggesting that digital technologies would be welcomed by students. One technology, that of podcasting (audio or video), appears to have great potential in the foreign language learning environment, particularly in an EFL environment like Japan. However, podcasts are relatively unknown in Japan. This paper explores the potential for podcasts in a university setting, and discusses the initial results and reactions of university students to a project investigating the possible value of podcasts as a means of promoting English language learning.

Introduction

The Internet and all that comes with it has become a commonplace in modern society. For better or worse, using social media applications, such as Line, Facebook, Instagram, etc. seems to be ubiquitous among young people. One result of this is that students are now spending more of their time online, whether interacting with friends, accessing information and entertainment or engaging in study activities, than has been the case in past years. This is a new paradigm which has led many to reconsider what pedagogical approaches are most appropriate in the 21st century (e.g. Beetham & Sharpe, 2013; Voogt, *et. al.*, 2013).

Concurrently, recent years have seen an extraordinary increase in the availability of technology for use in education. It is rare nowadays to find a university classroom in Japan that is not equipped with computers, projectors or audio equipment for use by instructors. Many institutions now use online learning management systems, and other electronic applications to interact with and track students. There are also now many institutionally independent, education-oriented applications for educators to use, such as Socratic or Edmodo, or applications specifically aimed at language learning, such as Quizlet or Memrise, and many more. The challenge before us now is to find ways to use the technology available to make improvements in the way education is done.

One of the greatest problems facing learners of English in an environment such as Japan is the lack of opportunities to use English in daily life (Kikuchi & Sakai, 2009). Although not unique, it is a

fact that in Japan most learners will need, of their own volition, to create situations or reasons to use English outside of structured academic contexts. In an EFL environment such as this, it is important for educators to provide learners with ways to take English beyond the classroom door. New technologies may provide one possible solution.

In recognition, the Ministry of Education, Culture, Sport, Science and Technology (MEXT) has for many years been looking to develop more technologically capable, internationally-minded students, specifically calling for educational approaches which promote ICT (information and communications technology), approaches such as blended learning, flipped-classes, and approaches which will develop a knowledge-based society and global human resources (MEXT, 2003; 2008; 2010), and specifically calling for improved English language education in response to globalisation (MEXT, 2014). The Ministry recommends that 'for undergraduate education, we should promote activities to change the quality of education, such as active learning (learning in which students proactively find issues and solutions), interactive lectures, practice, and experiments' (MEXT, 2013).

Podcasting, a relatively new technology, is growing in importance in education around the world and may offer a unique and flexible approach to engaging with students to deliver academic content in the digital age. This paper describes a preliminary attempt in a specific context to use podcasting technology in English language education with Japanese university students.

On Podcasts

The term 'podcast' is a portmanteau of the words *iPod* (an mp3 player produced by the Apple company) and *broadcast.* A podcast itself is an audio or video file which is available to be downloaded from the Internet and consumed on devices such as smart telephones, computers, tablets, mp3 players or other suitable devices. Podcasts are similar in many respects to traditional radio or television broadcasts, though more flexible for the consumer. Generally speaking, radio and television programmes can only be consumed at the time of broadcast (although there are newer technologies providing more options in this area), while podcasts can be downloaded from the Internet at any time there is a connection and subsequently consumed at a later date, whether the user has an Internet connection or not. There are now quite literally thousands of podcasts available, the majority produced in the English language. Edison Research, estimates that approximately 124 million people in the USA alone, some 44% of the population, have listened to a podcast at least once and that 48 million listen to a podcast weekly (Edison Research, 2018).

A potentially important aspect of podcasting technology is the opportunity it provides to students to have control of what, when and how they listen to English, and to be able to listen to language learning materials in a non-threatening atmosphere. The nature of podcasts means that a listener can start, stop, pause, rewind or replay podcasts in full or part at will, giving students control over something that would typically be controlled by their teacher. Managing their own listening environment may alleviate the stress or sense of intimidation students often feel when expected to

produce answers to listening activities on the spot in a classroom (Kavaliauskiene & Anusiene, 2009).

The sheer number of podcasts available also creates many possibilities for English language educators to use authentic materials in their syllabi. However, in most cases podcasts have been created for native speakers interested in a particular topic, and as such may prove difficult, linguistically or lexically, to be used as educational tools for EFL learners of English, such as is the case in Japan. There are also various legal issues surrounding copyright restrictions which can complicate the use of podcasts created by third parties for use in education (Hawke, 2010). Further, even if a podcast of an appropriate level of difficulty without legal constraints could be found, the topic may not necessarily be of interest to learners. Podcasts which are aimed at language learners do exist, however these may suffer from a similar problem as mass-produced text books: one size fits all. Every institution, department or faculty has different needs and goals that are not necessarily addressed by such resources. On the other hand, the technology for creating podcasts is now reasonably mature and as audio and video editing software and applications are now accessible to most people, producing podcasts for use in specific environments is a relatively simple process, which means that selecting and using digital materials simply because they are the only materials available no longer needs to be the sole option for educators.

Though podcasting is a relatively recent technological development, research into their use in education has been undertaken for several years, with the overall view of the literature appearing to reflect positively on podcasts. Two recent general reviews of the literature, Kay (2012) in a review of the use of video podcasts in education, and Hasan and Hoon (2013) on podcasts in language learning found that most studies reported favourable results.

With regard to video podcasts, the majority of studies saw positive results regarding student affective and cognitive attitudes, and some of the studies reviewed also noted improvements in study behaviours (Kay, 2012). Greene & Crespi (2012) reported that students found creating video podcasts in business classes to be both educationally valuable and enjoyable. Copley (2007), found that the majority of university students reported very positive experiences and considered podcasts as very useful in preparing for assessments, for note-taking, and for reviewing classes and lectures they had missed.

In language learning, Hasan and Hoon found several studies which 'claim that the integration of podcasts in learning can improve academic performance, enhance motivation, and promote learning' (Hasan & Hoon, 2013: 132). In one example of student satisfaction, Kavaliauskiene & Anusiene (2009) found that students reported that it was preferable to listen to podcasts outside of class rather than listening to authentic materials in class time. Al Qasim & Al Fadda (2013) claimed podcast use resulted in improved listening skills and motivation among university students, and Bamanger & Alhassan (2015) found students highly motivated by podcasts, which led to improved writing performance.

The Study

Before embarking on this study, a survey of Japanese 1st and 2nd year university students, including the students involved in the study reported on here, showed that 77% (n=180) had never heard the term 'podcast', and of those that had few were able to define it accurately. In the same survey, after students were provided with an explanation of what a podcast is, they were asked if they would be interested in using them in English language learning. 82% of students (n=177) responded that they were. This suggested that the use of podcasts in an EFL environment such as Japan may well be a resource with the potential to aid learners of English.

Accordingly, a project was conceived to investigate whether or not podcasts might be useful for university level Japanese learners of English. Several original audio podcasts were created on various topics to be used in English classes with first year students at a liberal arts university in Japan. None of the students involved in this study was an English major, and all can be described as being at the A1 or A2 level of the CEFR[1], meaning they were English learners at a relatively introductory level of proficiency, a situation which is quite common in Japan (Negishi & Tono, 2014).

The aims of this initial project were to gather general information about students' attitudes to and perceptions of audio podcasts, both in terms of English language learning and in their general enjoyment of the podcasts, and also to understand how students accessed the podcasts, i.e. when, where, and with what kind of device they listened to the podcasts, etc. A website was created (www.juepod.libsyn.com) to host podcasts, and students were given instruction on how to access them, either directly via the website page or via RSS syndication[2].

The themes or topics used in the podcasts were Finance, Business English, Soccer, and the News. Each podcast was written, recorded and produced by teachers at the university, all of whom were native speakers of English, except in the case of the Finance podcast, which was recorded by a native speaker together with a non-native speaking expert in the field, and the Soccer podcast, which was recorded by a native speaker and a non-native speaker with a deep interest in the topic. While 23% of students in the initial study had heard of podcasts and just 18% said they were not interested in using podcasts, the respective figures for the cohort in this study (n=45) were 4% (two students, neither of whom could describe what a podcast is) and 31% (14 students, few of whom gave a reason why, although three students said it was because they did not know what a podcast was, and one student said that it was because it seemed difficult). Given that close to a third of students had expressed a lack of interest in using podcasts, they were deliberately created to be short – no more than five minutes – so as not discourage students with overly long or difficult subject matter.

Each podcast was accompanied by a one or two-page worksheet, which could be prepared in

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1) Level 4 or 5 of Eiken – 英検 4 , 5 級
2) RSS is an acronym for 'really simple syndication', which allows consumers to automatically receive new podcasts or episodes of podcasts they are interested in without having to search for them.

advance by teachers to be distributed in class or downloaded as a pdf file by students from the dedicated website. Worksheets typically consisted of three sections: before listening; while listening; and after listening. The 'before listening' section asked students to use a dictionary to look-up words which would appear in the podcast and which may have been unfamiliar to them. This was designed to both activate their cognitive skills and to make comprehending the content somewhat easier. The 'while listening' section usually consisted of three or four multiple-choice or short-answer questions, although there was at least one occasion when students were asked to complete a Venn diagram while listening to the podcast. The 'after listening' section requested students to think more deeply about what they had heard, by looking for more examples of something from the podcast, expressing their opinion on something in the podcast, or preparing for discussion in future lessons.

Research Questions

As this was a preliminary attempt to use podcasts in English language with learners who are relative beginners in the language, it was, by definition, an exploratory study. That is to say, the aim was to try to shed light on possible relevance of using podcasts in this environment and to try to understand some of the characteristics of podcasts which might prove to be attractive to these students. If podcasts are to become a useful addition to educators' toolkits, it is important to understand what factors might motivate students to listen to podcasts of their own volition, and not merely as compulsory class assignments.

Specifically, the following research questions were formulated:
1. Which topic or topics will students find most interesting?
2. What will students think of the characteristics of the podcasts in terms of length, speed, and difficulty of English?
3. When and where and with which kinds of devices will students listen to podcasts?
4. How often will students listen to the podcasts?
5. Would students be interested in using podcasts more often after this initial experience?

In order to elucidate students' perceptions of these issues, two questionnaire surveys were conducted: one at the beginning of the course and another at the end of the first semester, approximately three months later. A total of 45 students took the initial survey, and 43 responded to the second survey.

Results

As has been noted above, the students in this study were not English majors and could reasonably be classified as having a relatively low level of proficiency in English. That, however does not necessarily mean they are uninterested or unmotivated. All but two students had studied English for six years or more (one for three years, and one for five years), with six students reporting English study of 10 years or more. While in many cases this seems not have been very beneficial in terms of

their ability to use the language, they had still decided to enrol in an English class at university[3]. In fact, the majority of students in this study claim to like studying English (see figure 1). The profile of the responses to this question shifted slightly in a positive direction after listening to podcasts, however it is impossible to say whether this is directly attributable to the introduction of podcasts. In moving from high school to university, students experience many changes in their lives and study circumstances, of which the introduction of listening to podcasts in English was just one.
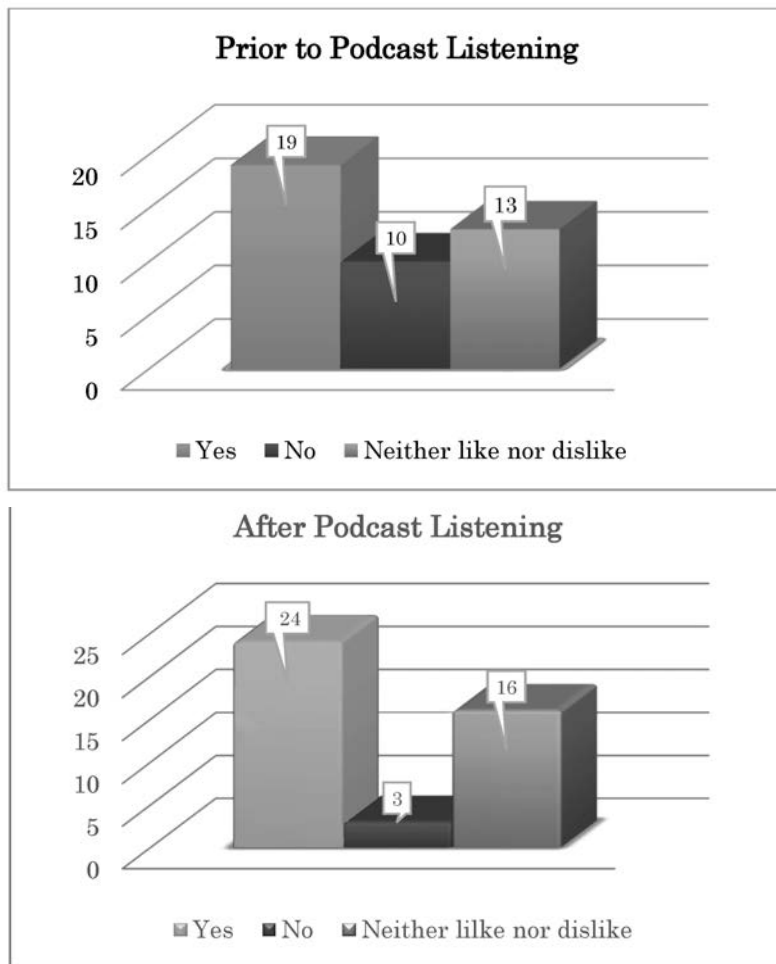

Figure 1. Do you like studying English?

This in itself was encouraging in so much as it indicated at least a willingness on the part of most students to engage with the language. Additionally, all student students indicated in the first survey that they considered listening and speaking skills more important than reading and writing skills, which was also encouraging for the introduction of audio podcasts. Interestingly, in the second survey

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3) Students are required to take a foreign language in the first year of their study, but this need not be English. Other languages available for enrolment were Chinese, Korean, German, Spanish and French.

five of the 43 students claimed that they thought reading and writing skills were more important than listening and speaking skills. Unfortunately, no reasons were given for this change and this may be a subject worthy of deeper investigation.

With regard to Research Question 1 (Which topic or topics will students find most interesting?), students were asked to rank the podcasts in order of interest, from 1-4 (see table 1). In this ranking, the podcast on soccer were rated most highly, perhaps reflecting the fact that the faculty in which these students are enrolled has a Sports Management department, with a large number of students with an interest in sport. On the other hand, it may simply be that soccer, which is highly popular in Japan, is a topic more accessible to students.

Table 1. Average rank of podcasts by topic.

Soccer	Business English	Finance	News
3.33	2.4	2.2	2.06

However, the choices were limited to four topics, and it may be that other topics would also prove interesting to students. Eight students, 19%, expressed an interest in listening to podcasts in English on other topics (suggested topics were travel, world food culture, basketball and baseball), giving researchers an indication of what other topics might be appreciated by students.

Regarding Research Question 2 (What will students think of the characteristics of the podcasts in terms of length, speed, and difficulty of English?), students were asked to rank podcasts on the following criteria: speed of the spoken English, the overall length of the podcasts; and the degree of difficulty of the English (see figure 2). As has been mentioned, the podcasts were designed with a particular group of students in mind as the target audience. The responses to this question suggest that the speed, length and degree of difficulty were pitched at a reasonable level. It is probably fair to suggest that if students had felt that these criteria were not fast enough, or not long enough, or too easy it is unlikely that much real educational value would have been attached to the podcasts.

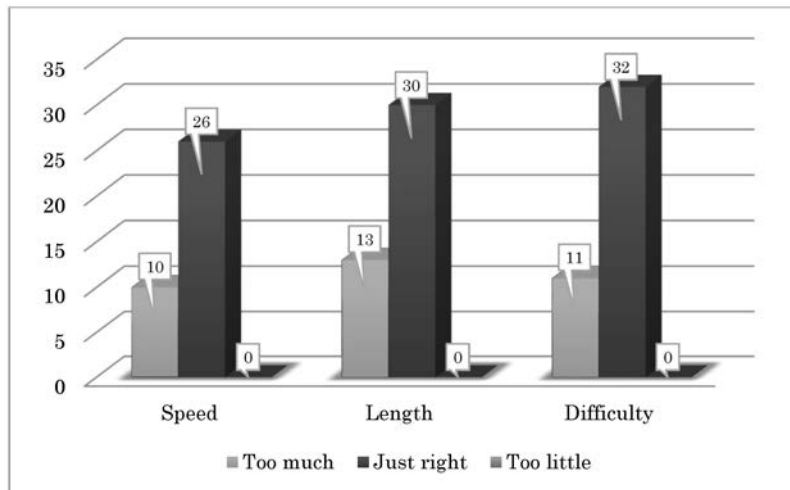阪南論集　人文・自然科学編　　　　　　　　　　　Vol. 54 No. 2

Figure 2. Rank podcasts according to ...

With regard to Research Question 3 (When and where and with which kinds of devices will students listen to podcasts?), although it was expected, based on observed student behaviour, that students would prefer to use their mobile phones to listen to the podcasts, the reality was that all students used *only* their mobile phones. Though the university provides campus-wide wi-fi and several places (including the library, computer equipped classrooms and a student-centred common room) with computers or tablets, they were not utilised.

Only two students reported encountering any problems with technical issues related to either downloading or listening to the podcasts, reflecting the maturity of stability of this technology. One of the two students said that she or he had trouble downloading the podcasts, while the other student did not elaborate on what problem (s) occurred.

While the fact that students used only their mobile phones to listen to the podcasts seemed to indicate that the essentially mobile aspect of podcasts (i.e. download when an Internet connection is available and listen later anywhere) was being utilised, in fact the most common place where the podcasts where listened to was at home (see figure 3)
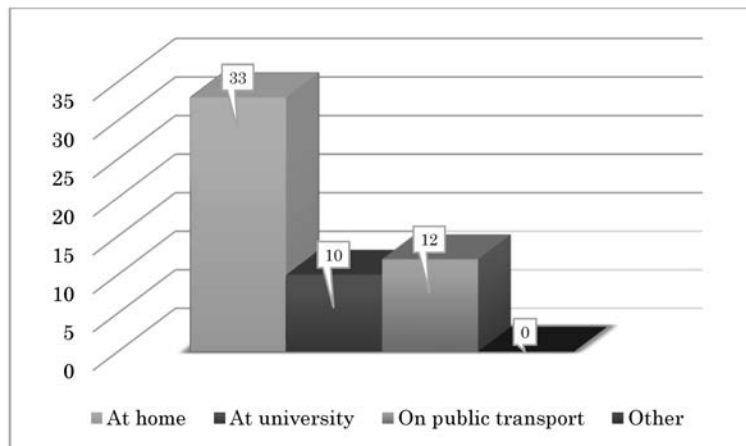
Figure 3. Where did you listen to podcasts?

Students were also asked to rank in order from 1-7 the most likely time for them to listen to the podcasts. The two most likely times were in the evening and before school (see table 2), as might be expected given that the most common place to listen to the podcasts was at home.

Table 2. When did you listen to podcasts?

Before school	At school before class	Lunchtime	During other classes	At school after class	Travelling to/from school	At night
4.77	4.25	4.15	2.05	3.85	3.62	5.48

Slightly worryingly, it appears that some students may have taken the opportunity to listen to the podcasts while attending classes or lectures for other subjects, although this option was the least, or second least, likely option to be chosen by most students.

Regarding Research Question 4 (How often will students listen to the podcasts?), students were asked how many times they listened to the podcasts before turning in their homework, with the majority listening more than once (see figure 4). Again, this is encouraging, as typically students rarely engage with English after class. However, this is somewhat offset by 82% of students reporting that they would not have listened to the podcasts if they had not been set as homework.
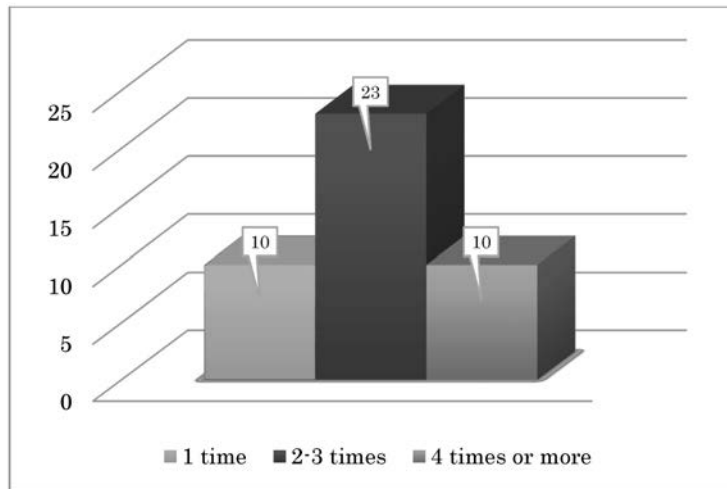
Figure 4. How many times did you listen to podcasts before handing in homework?

With regard to Research Question 5（Would students be interested in using podcasts more often after this initial experience?）, students were asked several questions about their impressions of using podcasts and future listening intentions. Eighteen students, or 42%, responded that they would like to listen to more podcasts similar to those they listened to for this study and seventeen students, or 40%, felt that they would be interested in continuing to use podcasts in English language education. Only one student used this experience to search for other podcasts in English, on the topic of English conversation. As has been mentioned above, eight students（19%）expressed an interest in listening to podcasts in English on other topics such as travel, world food culture, or other sports.

Discussion

The results of this preliminary study on the use of podcasts in English language education in Japan are encouraging to the proposition that podcasts can be of value to English language learners. The students in this study had next to no experience with podcasting technology prior to this but were able to access and download podcasts with very few problems – for most with no problems whatsoever. This is due to the fact that the technology underlying the study has progressed within a short period of time to the extent that, as with many other digital technologies, it has become very stable and accessible to users. As little as a decade or so ago, numerous technological issues were noted by researchers（e.g. Lee & Chan, 2007; Monk, *et. al.*, 2006）in the use of podcasts in education. Cheaper prices and developments in various technological factors, such as the quality of video and audio recording equipment, improvements in editing software including more accessible user interfaces, and more numerous and better organised podcast hosting and distribution sites mean that creating podcasts is no longer solely the domain of specialists or enthusiasts. Certainly, there is a learning curve involved, but this is now a technology which can be adopted and applied by educators and students at most institutions in Japan.

Generally, students appear to have reacted to the podcasts in a positive manner, in terms of interest and use. While that was not universal, the results of this study at the very least suggest that podcasts have a role to play in English language education in Japan in the 21st century. Further studies in this area should begin to focus on what tangible benefits in language learning, if any, can be attributed to the use of podcasts – quantitatively in various language related areas, such as listening comprehension, vocabulary development and enhancement, pronunciation as so on, but also in affective areas such as willingness to communicate and motivation to learn English.

The podcasts used in this study were short – deliberately so given the profile of the listener-students – and only focussed on a small number of topics. It is possible that some learners with a higher degree of proficiency may find them trivial for that reason (though equally that may not be that case and is a proposition still to be tested). However, with a small amount of ingenuity, educators could adapt or expand the worksheets associated with each podcast in ways which are more suitable to their own context, or, as has been suggested, use the same technology to produce purpose-made podcasts for their own learners and institutions.

The most common time and place for the students in this study to listen to podcasts was in the evening and at home. It had been theorised that many would use the time they spend on public transport for doing these homework tasks. Perhaps filling in homework worksheets on crowded buses and trains precluded that option for most students at the institution where this study was undertaken, but it may not be the case for the majority of students in all contexts. This gives educators and researchers a starting point for considering how future podcasts could or should be developed. If students are listening to these materials at night and at home, there may be affective factors at play which mean they prefer slightly different characteristics in a podcast than if they were to listen at a different time and location, such as while at school between classes or in the morning on the train. To the extent it is possible, affective factors like this ought to be investigated.

While many students expressed an interest in using podcasts in their English language learning, only one from a group of 45 took the autonomous step of looking for more podcasts. Ultimately, if podcasts are to be of value to learners of English, ways of making them attractive enough to students that they will download and listen to episodes even when not allocated as homework or classwork assignments, or to search for podcasts which meet their own personal interests will need to be devised. Consequently, further research into the factors (for example, a focus on topics of interest to students; the use of humour, music and sound effects; peer-produced podcasts; the use of video podcasts; etc.) which might contribute to that objective also ought to be an area of further investigation.

Acknowledgements

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