iPods in English Language Education:

A Case Study of English Listening and Reading Students

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Between 2002 and 2005 Nagoya University of Commerce and Business (NUCB) became one of the first institutions in Japan to develop the infrastructure of the wireless university to promote the use of mobile learning. In addition to a wireless campus, all students were given iBook computers and faculty encouraged to develop online courses via the Blackboard Learning System and an Internet-based Enrolment Management System. Following Osaka Jogakuin College and Duke University, April 2005 saw the distribution of Apple's entry-level digital audio player, the iPod shuffle, to all freshmen. Faculty in the Department of English Communication were encouraged to develop courses that required use of the shuffle to support autonomous language learning in the Self-Access Centre (SAC). The use of the shuffle was particularly evident in English reading and listening courses, where undergraduate students were required to use it for assignments on learning materials that would appear in their final examinations. This article is based on a survey of students' experiences in the iPod project. It examines whether the project has been effective in promoting increased exposure to English listening resources within a mobile learning context.

Apple's range of iPods has been described as the first great icon of the twenty-first century (Moss, 2005). They are portable, easy to use, and have a clear purpose: to facilitate the effective production, transfer and dissemination of digital audio and video, thereby replacing the reliance on analogue devices, and dramatically improving on the quality and inflexibility offered by cassette and video-tapes. Allied to the fundamental changes they have prompted in the music industry through the development of the iTunes Music Store, iPods have promoted increased consumer choice, access and mobility. Tellingly, this iconic cultural status – Apple has sold in the region of 40 million worldwide – has given rise to ideas that their designers might never have seriously imagined, especially in what Apple is now profitably calling iPod Education (Adenekan, 2005; Lederman, 2005).

Supporting these developments is the popularity of *podcasting*, voted word of the year 2005 by the American Oxford English Dictionary. Apple has been skilled in promoting a word which foregrounds an attachment to its own product, even when in fact any digital audio player or computer now on the market can facilitate podcasting activity. In the space of two years, podcasting went from obscurity to 87,600,000 hits on the Google search engine in June 2006. Not surprisingly perhaps, the global university sector has also latched onto these ubiquitous devices in the attempt to woo freshmen, and a number of institutions such as Duke University in the USA and Osaka Jogakuin College in Japan are offering iPods where once they might have offered book vouchers to new students. In April 2005 Nagoya University of Commerce and Business gave the 512MB iPod shuffle to all freshmen English-major students in the context of the wireless laptop university (Thomas, 2005a). The device provides storage for approximately 120 four-minute audio tracks, and also acts as a USB data storage device. As with the Duke iPod initiative (Bugeja,

2005), instructors in the Faculty of Foreign Languages and Asian Studies were set the objective of incorporating the shuffle into curricular activities, in this instance, to support English language learning. This article discusses the attempt to use the devices as aids to instruction and to develop a series of structured tasks that are designed to enhance student learning in listening and reading.

What follows is divided into four sections: an overview of mobile learning and the existing literature on iPod Education; how iPods were integrated into the language program; an analysis of a survey based on student reaction to the project; and conclusion and recommendations.

iPods, Mobile Learning and Personalized Learning

While a number of projects have used iPods in language education, few have as yet reported their findings in substantive studies. In his recent discussion of podcasting, McCarty (2005) seeks to overturn the claim to ascendancy given to Duke University in the USA in being widely credited as the first to give freshmen iPods for pedagogical purposes. Noting that Duke distributed the 20GB iPods to freshmen in Fall 2004 (Read, 2005), he points out that his own institution, Osaka Jogakuin College, had already distributed 15GB iPods to two hundred and ten incoming freshmen six months previously. In fact, Internet research suggests that Georgia College and State University in the USA (GCSU) in partnership with Apple Education was the first to distribute iPods in 2002 (Sellers, 2002), with the explicit intention that pedagogical initiatives be developed to integrate them into existing courses. In this case 50 iPods were given out. Since then a number of its courses have sought to incorporate the devices into the curriculum, as well as develop their potential to play audio books, and permit students to listen to lectures, collect survey data, and promote their use by the university's exchange students around the world. Though all three projects use iPods, they require students to capture digital audio content from their university's servers, rather like downloading audio from the Internet. There is a difference, however, between downloading digital audio content and podcasting. The latter refers to a push-technology in which users subscribe to a site, and then automatically receive the latest content when they open their chosen podcasting software, such as iTunes or iPodder (Meng, 2005).

Much has been made in the last few years of the growth and potential of mobile or m-learning (Keegan, 2004; Kukulska-Hulme & Traxler, 2005), though mainly in the context of open and distance learning (Keegan, 2005). Currently, language learning – and English language education in particular – is seen as offering one of the most fertile areas for the development of m-learning (Keegan, 2004; Levy & Kennedy, 2005; Lewis, 2002).

Though no studies to our knowledge have as yet explicitly made such a connection, iPods may also be meaningfully viewed as m-learning tools, because they are also 'portable, lightweight devices that are ... small enough to fit in a pocket or in the palm of one's hand' (Kukulska-Hulme, 2005, p.1). Other examples include Personal Digital Assistants (PDAs), Tablet PCs, mobile phones, and laptop computers. Unlike iPods, however, the latter devices are wireless; iPods must first be connected to a wireless iBook in order to access the Internet.

Findings from the Duke University project provide perhaps the most thorough feedback to date on the subject of iPods in education, and suggest that they could be used effectively in four main areas:

Course content dissemination tool

iPods provide portable access to a range of course content such as lectures, songs and historical speeches. Content can also be distributed for foreign language courses in various ways, including podcasting.

Classroom recording tool

Students indicated that using the Belkin voice recorders to capture lectures, class discussions, guest

speakers, and give and receive verbal feedback was their most effective feature.

Field recording tool
Students in a variety of disciplines arranged projects that used the iPod to capture field notes, interviews, environmental sounds, and other audio data.

Study support tool
The iPods were mostly used in academic disciplines in which audio content is already the dominant medium. This was especially evident in language learning classes such as Spanish, where iPods were useful for repeated listening and repetition of audio content.

In all four areas, the Duke evaluation recorded that increased student mobility resulted (Duke University, 2005, p. 2). Students were able to listen to content outside of their normal study periods while traveling to and from campus, or moving between activities. It also reports that increased student motivation was noticed by faculty, primarily as a result of higher levels of student independence promoted by the technology. The Duke report also notes an 'enhancement for individual learning preferences and needs' (p. 2); however, it is not clear if this relates to the use of the technology or to the quality of learning and learning outcomes. The conclusion of Duke's report is positive, but no concrete data is provided to support these anecdotal claims about motivation, student independence or learning preferences and needs.

iPod Problems
Faculty and students indicated that the project initially suffered from an approach that emphasized 'install first, think about the pedagogical consequences later'. On the technical side, the device's short battery life remained an issue, as well as problems related to sharing files between different iPods. Other areas of resistance derived from the need to secure permission for copyright, and sometimes as an alternative, poor quality audio material was used. These problems led to a reevaluation of the project and the decision to target the use of iPods in the second year at courses that could justify their use.

These problems are particularly evident in the response by Duke's students in their campus newspaper. *The Chronicle Online* Editorial of April 11, 2005, put it like this:

> Although the iPod program has appeared to be a PR move from the beginning, this seems to reaffirm the fact that the University is not interested in education as much as it is interested in its image. Duke is giving away iPods, even after the iPod program was a failure, because it will put it in the national spotlight again and because it hopes to use the iPods to lure a strong freshman class.

Clearly, Duke's experience reinforces the need for an approach to the integration of educational technology that synchronizes evaluation *and* planning (Thomas, 2005b). As Kukulska-Hulme further suggests, 'the task of designing such activities and appropriate learner support is complex and challenging' and the 'impacts of the new mobile technologies need to be appraised and evaluated' (2005, 1).

Jochems, van Merriënboer and Korper (2004) provide criteria for such an evaluation, arguing that three factors should be considered by any such process:

1. Pedagogical
2. Technological
3. Institutional

In addition, they suggest that the introduction of e-learning should not be viewed merely in terms of an addition to existing instruction, but as a real innovation, that demonstrates how it can become a lasting part of the educational infrastructure, and exhibit a 'value-added' dimension. In order to achieve this level of integration, these three dimensions must establish a harmonious interrelationship:

> ...organizational, pedagogical and technological aspects have to be managed in harmony in order to solve an educational problem adequately. For example, the implementation of an instructional approach will be much more powerful if it is to be anchored in both the organization and the technological instrumentation. For the same reason the introduction of e-learning will have far more impact on education if it is able to support the organizational and instructional concepts that courses are based on. (2004, 7)

The cynical reaction from Duke's students, on the other hand, suggests that they were never consulted about the project.

In his discussion of the potential of m-learning, Keegan (2004) argues that the acceptance of mobile phones as a 'personal technology' for communication purposes is based on five points:

1. Trust in the technology
2. Frequent use
3. Easy to use
4. Cheap
5. Fashionable

While for Duke's students points 2 to 5 were generally supported, point 1, the question of trust, was not convincingly present when students' residual association of the iPod with entertainment was challenged by its appearance in an educational context. Building trust with all stakeholders – in this instance, students and instructors – must be achieved. This would enable the transition from entertainment-based technology to technology appropriate for productive education based on an evident enhancement of the learning experience and measurable by identifiable learning outcomes.

In order to counter this, Jochems, van Merriënboer and Korper argue for the introduction of what they call a 'design perspective', which focuses on improving the learning environment. Importantly, this perspective should give rise to what they call 'integrated e-learning':

> We use this term to indicate that we need a variety of coherent measures at the pedagogical, organizational and technical levels for the successful implementation of e-learning in combination with more conventional methods. ...Integrated e-learning therefore typically tries to combine elements from face-to-face teaching; distance education and training on the job. Thus it is a media mix, that is to say, a mix of methods, each having certain characteristics in terms of cost, availability, effectiveness, efficiency, appeal and so forth on the one hand, but a coherent one in the sense that the specific combination of methods is the result of a systematic design procedure on the other. (2004, 5)

This paper contributes to Kukulska-Hulme's call for an evaluation of e-learning projects, using Jochems, van Merriënboer and Korper's concepts – 'innovation', the 'design perspective', and 'integrated e-learning' – as criteria to examine the iPod project at Nagoya University of Commerce and Business in more detail.

Integration into the Language Program

Mandatory Student Assessment

The iPod shuffle has been integrated into the Department of English Communication (DEC) according to the underlying precept of the language education program as a whole: mandatory student assessment. This notion plays a central role in the success of any learning-based input in the English language curriculum. It was evident in the foundation of the university's Self-Access Center (Monk & Ozawa, 2002), and it is also to the fore when new instructional technology such as the iPod shuffle is identified. Because of its significant financial investment in instructional technologies, the university has always wanted to see results in terms of student learning outcomes. Much of what is done in the language program, therefore, is centered on the assessment system. Without this form of assessment-based coercion, students have repeatedly shown that they will not make effective use of the learning materials available (Monk & Ozawa, 2005). From April 2005 the assessment factor has again been used in relation to the introduction of the iPod shuffle project.

Learning Resources for General Use

To encourage general student use of the iPod, over 600 hundred sound files have been made available on the Student Server. Over half of these also have audio scripts. The files come from two main sources, Voice of America (www.voa.com) and Breaking News English (www.breakingnewsenglish.com). Both Internet sites encourage the dissemination and use of their learning materials, and there are consequently no copyright issues involved. The chosen files are categorized in Table 1 below.

Table 1. Topics used from VOA and Breaking News

No.	*Topic*
1.	Agriculture
2.	American History
3.	Arts and Entertainment
4.	Development
5.	Economics
6.	Education
7.	Election of 2004
8.	Environment
9.	Events in America
10.	Health
11.	Human Rights and Law
12.	International Incidents
13.	People in America
14.	Science
15.	Society
16.	The Iraq War
17.	Past university speech contests

Assigned Material for Specific Courses

Selected iPod material has also been introduced as an integral part of the freshmen English listening and reading courses. The material is assessed through the mid-semester and final examinations of the courses English Listening I and English Reading I in the first semester, and English Listening II and English Reading II in the second semester of the academic year. The introduction of material into these courses has been relatively straightforward as both courses are centrally coordinated, in that each course has a course coordinator and a team of instructors who follow the same lesson plans toward the same examinations.

At the beginning of the academic year five listening files and their written texts from Voice of America

broadcasts were placed on the university's internal Student Server, and students were given guidance about how to access them while on campus. In each of the listening and reading examinations one iPod text is tested. Two additional texts are added after each set of mid-semester and end-of-semester examinations. By the end of the second semester, there were a total of eleven texts on the Student Server.

As each text is only used once in any examination, the students are in fact only required to work on five texts at any one time. Also, so that students do not find this work too onerous, bilingual vocabulary lists have been made available to accompany the sound files. In anticipation that the level of the Voice of America texts would be too difficult – they are also currently used for Year 3 listening students – for many of the students, Breaking News texts were used as a viable alternative. These texts are set at two levels of difficulty – 'easy' and 'hard' – and the easier level has been selected in all cases.

Table 2 shows a list of the eleven texts that were chosen and placed progressively on the Student Server as iPod materials during the academic year 2005/2006.

Table 2. The Source of Listening Files and their Examinations

No.	Title and Source	Examination
1.	Social Security (VOA)	English Reading I, May 2005
2.	Tsunami Survivors (VOA)	English Reading II, October 2005
3.	New Warnings about Tobacco Smoke and Children (VOA)	English Listening II, November 2005
4.	World Aids Day (VOA)	English Listening I, June 2005
5.	Syria and Lebanon and the Killing of Rafik Hariri (VOA)	English Reading II, January 2006
6.	Study Suggests Laughter is Good for the Health (VOA)	English Reading I, July 2005
7.	Putin Calls for Changes in Russia's Political System (VOA)	English Listening I, July 2005
8.	Japan's Koizumi Reelected in Landslide Win (BN)	English Listening II, January 2006
9.	Hurricane Katrina Kills Hundreds (BN)	
10.	Half of Europe's Citizens are Bilingual (BN)	
11.	Global Warming Threatens Arctic (BN)	

Next to each text are details of the source, Voice of America (VOA) or Breaking News (BN), and the course and test in which the text was examined. In the selection of the texts, topics were chosen that would be of general educational interest to freshmen students.

The English Listening I and II courses now use the following material:

- *New Interchange 1 Video Activity Book* (Richards, 2000)
- *New Interchange 1 Video* and worksheets
- *Realistic English* grammar drills and worksheets
- iPod sound files/texts (iPod Box)

All freshmen English listening classes take place in dedicated multi-media classrooms, which have integrated computer (G5 iMac), video, DVD and language laboratory facilities. Students watch the video and practice the language material by completing worksheets and language laboratory drills based on the video units. They also practice grammar drills using the language laboratory's recording facilities. The grammar drills concentrate on systematically revising the English tense system.

The course video, audio-cassette and oral drills used in the classes are also available to students in

the Self-Access Center where they are able to revise and practice the material using recording facilities identical to those used in the classroom language laboratory. Additional worksheets from this course are also available for students to use in the SAC or to take home to practice and revise.

Students are expected to work on the iPod sound files as independent listening assignments either in the SAC or at home. Students' knowledge of this material will be tested in both the English Listening I and II and English Reading I and II examinations. An iPod Box has been located on the counter of the Self-Access Center since the beginning of the academic year. This resource contains hard copies of the eleven sound files and texts on the Student Server.

The freshmen English Reading I and II courses use the following texts:

- *Reading Power, Third Edition* (Mikulecky & Jeffries, 2005)
- Set texts
- Worksheets based on the set texts
- Reading Box
- iPod sound files/texts (iPod Box)

The current set texts that students read during the year are:

- *Love or Money?* (Akinyemi, 2000)
- *The Elephant Man* (Vicary, 2000)
- *New Yorkers Short Stories* (Henry, 2000)
- *The Phantom of the Opera* (Bassett, 2000)
- *Sherlock Holmes Short Stories* (Doyle, 2000)
- *The Death of Karen Silkwood* (Hannam, 2000)

Reading Power is the core textbook used in the course. Each lesson is divided into two parts, silent reading and reading aloud. During the silent reading students prepare exercises from the textbook while the teacher checks that the homework on the set texts or book reports has been completed. During the reading aloud section of the lesson students are actively engaged in pair and small group work, going over the exercises they have prepared earlier from the textbook. They also ask and answer questions based on the set texts. Students listen to the first chapter of each set text with their teacher in the class, but are required to complete the majority of the set-text preparation work in the SAC, where the books and audio-cassettes are available.

In the Reading Box, available to students at the SAC counter, can be found texts from the freshman conversation textbook, *New Interchange 1*, speed-reading texts and TOEIC-type texts. Like the iPod texts, some of the texts from the Reading Box will form part of the mid-semester and final reading examinations (Monk & Ozawa, 2005). As in the listening course, work on the iPod texts is completed as an independent activity either in the SAC or at home. In this way students are being actively encouraged to work on the iPod material and at the same time develop their independent study skills through mobile learning.

Currently, each English listening examination comprises cloze tests based on the video worksheets practiced in the classes and a cloze test based on one iPod text. The reading examinations comprise texts from the textbook, questions on the set texts, texts from the Reading Box and one text from the iPod Box, which is tested with multiple-choice questions.

Although the iPod question in each examination represents no more than 10 per cent of the final score, students very quickly become aware that this can be the difference between passing and failing both

the examination and the course. Consequently, the iPod texts are actively studied, especially in the period immediately prior to examinations.

Student Support

In April at the beginning of each academic year, freshmen students are given a general orientation to the Self-Access Center. During the orientation they are shown the equipment and how it functions. They are also given details of the learning materials that are available to them. Integration of the Self-Access Center into the language program as a whole and into specific courses in particular is also explained. SAC attendance is mandatory. All first-year and second-year year students have a compulsory SAC period during each week of the semester. Failure to attend the required number of periods and hours deprives students of their right to take the final examinations in both the listening and reading courses (Monk & Ozawa, 2005).

The content of the initial SAC orientation session is reinforced throughout the year on an individual basis by the SAC staff - currently one full-time SAC Coordinator and one part-time member of staff. They are always available to give further help, advice and encouragement.

With the introduction of the iPod at the beginning of the academic year 2005/2006, a separate iPod Seminar was introduced for all freshmen students. This is conducted in groups during the compulsory SAC period. Instructions on how to download materials from the Student Server to the iPod were given. An explanation of these materials and their role in various courses was also provided. In order to reinforce the importance of this information, a reference sheet in Japanese reviewing the key functions was distributed to the students during the seminar (see Appendix A).

A seminar on Podcasting, covering the definition of the term and how it could be useful for supporting students' English listening, was introduced later in the year to help students master these additional skills.

Student Reaction

Method

The assessment of the use of iPods by 169 freshmen students in the Department of English Communication was gauged by an initial questionnaire that was administered at the end of November 2005. Instructors distributed the questionnaires to students near the end of their weekly class sessions, ensuring that all of those in attendance completed and returned them before leaving. This method secured the high completion rate of 86% of all freshmen, a significantly higher figure than would have been recorded had a more voluntary method of data collection been used. The questionnaire contained 15 questions (see Appendix B) and was written in Japanese to improve the ease and quality of student feedback.

Students participating in the survey are enrolled in a four-year English Communication program. As a cohort, their mean TOEIC (ITP) score was 284 points in a test taken prior to the start of the academic year 2005/6. By the end of the academic year, their mean had risen to 387 points.

The questionnaire was designed to focus on four specific areas of iPod use:

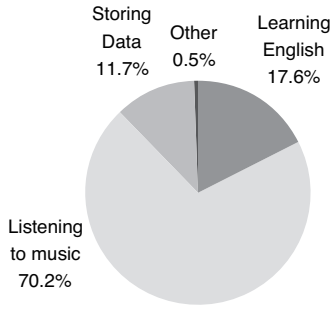
- How students use their iPod shuffle
- Effectiveness of current use in learning English
- Future uses
- Other issues

How students use their iPod shuffle

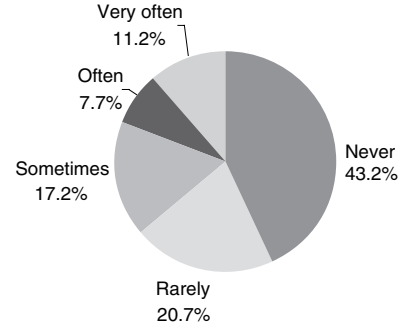
In the answers to question 1 we found that despite the emphasis that is being placed on use of the iPod

to learn the English language, the majority of students (70.2%) said that they primarily use the iPod to listen to music rather than for language learning. Only 17.6% of the students confirmed that they use the iPod to learn English.

This was further underscored in responses to Question 2 where students were asked if they used their iPods to listen to English while traveling to and from campus. The vast majority chose never (43.2%) or rarely (20.7%). Only 7.7% chose often and 11.2% chose very often. This begs the question as to the frequency with which students bring their iPods to university.

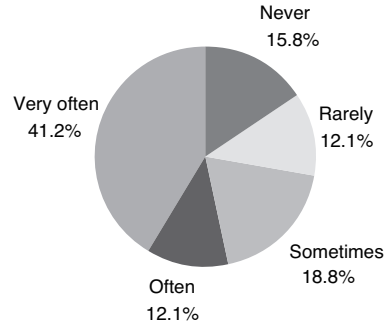


Q1. I have mainly used my iPod shuffle for:



Q2. I use my iPod while traveling to and from school for listening in English.

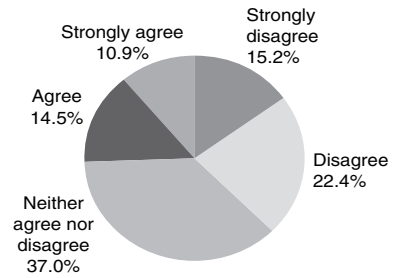
In answer to Question 9, 41.2% of students confirmed that they did in fact bring their iPods to campus very often, with a further 12.1% bringing them often. At the other end of the scale, 15.8% of the students stated that they never brought their iPod to school. While more research could be done on the duration and method of commuting to campus, it is evident that although 63.9% of students did not use their iPods for listening to English while traveling, 72.1% do carry them. These high figures suggest that a potential to encourage some sort of 'bite-sized' or 'short-burst learning on the move' clearly exists (Thomas, 2006b).



Q9. I bring my iPod to school with me.

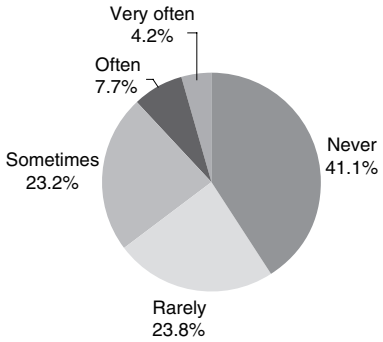
Effectiveness of current iPod use in learning

As stated above, listening resources have been made available to students on the Student Server as part of the listening program. Orientation seminars have also been given to students to help them make use of these resources. However, when students were asked in Question 3 whether teachers had made listening resources available that are suitable for iPod use, over one third of the students (36.2%) chose disagree or strongly disagree. The largest group (42.8%) chose neither agree nor disagree. Only about a fifth of the students seemed to be really aware of the resources available.

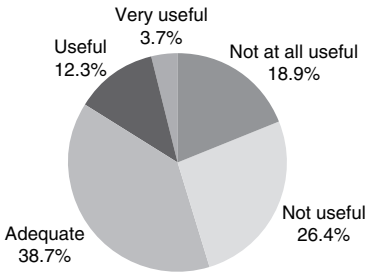


Q3. Teachers have made English listening resources suitable for my iPod.

This lack of awareness was further confirmed by responses to Question 4, which asked students to assess how often they had made use of the English audio resources available on the Student Server. The data indicate that 41.1% had never used them and a further 23.8% had rarely used them. Only 7.7% had used them at all and only 7 students or 4.2% of those asked have used them very often.

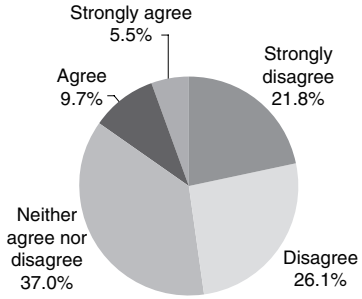


Q4. I have used the English audio resources available on the SS.

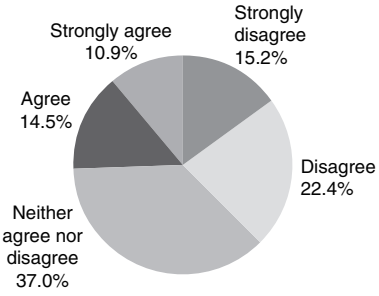


Q5. I have found the English audio resources on the SS

Question 5 asked how useful students had found the English audio resources on the Student Server. Students' responses tended towards the not useful end of the scale with the largest number (38.7%) choosing the middle ground and a further 74 students or 45.4% of those questioned choosing not useful or not at all useful. Only 6 students or 3.7% chose very useful.



Q12. The iPod has been effectively used for language learning by my teachers.

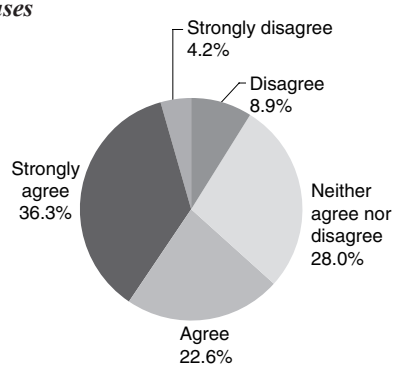


Q6. Using iPod has improved my exposure to English listening resources

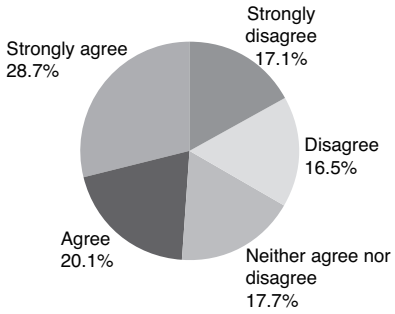
These figures were reflected in responses to question 12 when students were asked whether iPods had been effectively used for language learning by their teachers. 37% neither agreed nor disagreed with the statement but 79 students or 47.9% of those questioned disagreed or strongly disagreed. Only 9 students or 5.5% chose strongly agree.

Question 6 asked if the iPod had improved students' exposure to English listening resources. In response to this, 37% neither agreed nor disagreed. 37.6% disagreed or disagreed strongly, and 25.4% agreed or strongly agreed.

Future uses



Q8. My iPod would be much more useful for English language learning if it had a voice recorder

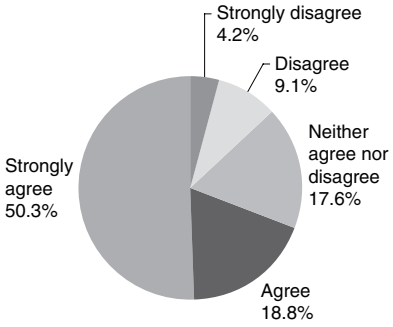


Q10. I would like to be able to record my voice in English and listen to it

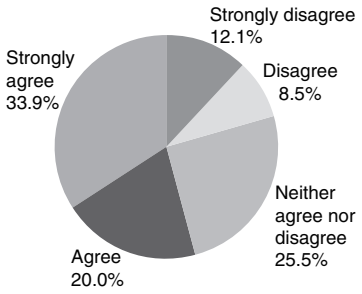
The survey was also interested in the students' feelings about the current limitations of their iPods and how they would like to improve and to expand their use in the next academic year. Question 8 asked if students considered that their iPods would be more useful for English language learning if they had voice recorders. This time responses tended towards the agreement end of the scale. 36.3% chose agree strongly and 22.6% agreed. Only 7 students or 4.2% strongly disagreed.

Question 10 asked if students would like to be able to record their own voices in English and listen to them later. Most, 28.7% strongly agreed and a further 20.1% agreed with the statement, however, 17.1% strongly disagreed.

Question 11 asked if students would like to be able to record their classes and listen to them later. Very strong agreement with this statement was recorded with over 50% agreeing strongly. Only 4.2% disagreed strongly.



Q11. I would like to be able to record my classes in English and listen to them later.

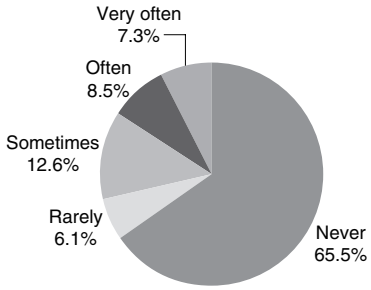


Q13. I would like to upgrade my iPod shuffle to an iPod with a voice recorder in year 2.

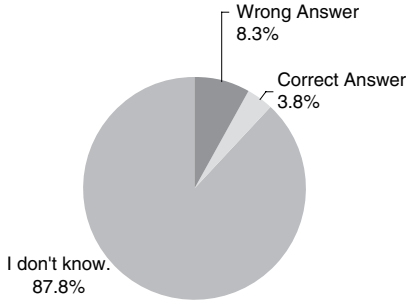
Given that students are interested in the possibilities of a voice recorder, Question 13 asked if students would like to be able to upgrade their iPod shuffle to an iPod with a voice recorder in their second year. Again the trend was towards agreement, with over a third agreeing strongly. A fifth of the students disagreed or strongly disagreed.

Other issues

Questions 7, 14 and 15 dealt with a number of other points. Question 14 asked if students had used the iTunes Music Store for buying audio. The majority, 108 students or 65.5% of those asked, had never done so. Only 15.8% have done so often or very often. This tendency may be largely determined by the low level of credit card possession and/or usage by this age group.



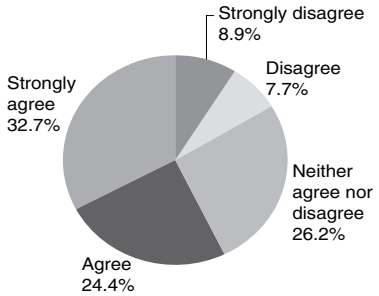
Q14. I have used the iTunes Music Store for buying audio.



Q15. I know the difference between Podcasting and downloading audio from the Internet

Question 15 examined students' knowledge of relevant iPod-related terminology. Students were asked if they know the difference between podcasting and downloading audio from the Internet. Most, 87.7% said that they did not know the difference. Of the 19 students who said that they knew, 13 gave wrong answers when asked to briefly describe the difference. Only 6 students gave correct definitions.

Bearing in mind students' opposition to the iPod Initiative at Duke University, question 7 polled student opinion on the university's motives for providing iPods. Students were asked if the iPod was given to first-year students to attract them to study at NUCB rather than to help them learn English. Again the trend was towards agreement with the statement. This result was in line with responses to a similar question posed to freshmen in a survey at Duke University.



Q7. The iPod was given to first year students to attract them to study at NUCB rather than to help them learn English.

Monk and Ozawa (2005) argued that instructors have to remain responsive to students' needs in the areas of encouragement and training so that they make effective use of the available resources in a SAC and continue to benefit from them as much as possible. It is equally evident in the current survey's findings that students have not accessed many of the learning materials and resources that were made available on the Student Server in the initial stages of the iPod project. The overabundance of untargeted material on the server was primarily a response to the short time period allowed between the announcement of the project and the requirement that resources be made available.

Data also confirm the limited nature of the iPod shuffle. Both Duke University and Osaka Jogakuin used the larger 20GB iPod Photo, which can be combined with a voice recorder. Other digital audio players in the price-range of the iPod shuffle in fact offer additional features, such as an FM radio or internal voice recorder. However, the choice of an appropriate device for language learning was not discussed, and a hasty

acquisition process clearly targeted the recruitment of students with a music player rather than a device that could also function more flexibly and with a greater range of pedagogical uses in an educational context. In general, there was a lack of a 'design perspective' in the project prior to its introduction, and teachers were neither trained nor given their own iPod shuffle. These inadequacies resulted in new features being added to the project as the semester progressed in what is best described as a reactive than proactive strategy.

Despite these inadequacies it can still be argued in relation to Jochems, van Merriënboer and Korper's (2004) concept of 'innovation', that the NUCB iPod project clearly represented an addition to the program in that it encouraged mobile learning outside the classroom. Nevertheless, the impact of students' use of the iPod shuffle has to be determined in terms of measurable learning gains. In this respect, this article provides a preface to a second study in which students' final examination and TOEIC scores will be correlated with their use of the iPod shuffle.

Recommendations for the future development of the iPod project

The following recommendations are suggested to improve the iPod project:

1. In order to improve students' computer literacy, all students will do a compulsory computer literacy course in Japanese on entering the university.

2. In addition, at the start of the academic year 2006/2007, explanation of certain key areas such as downloading from the Student Server to the iPod will be explained more fully. This is to be done in English in the freshmen English Computer Applications course.

3. It is intended that the Self-Access Center iPod Seminars will further develop and reinforce the computer skills that are being practiced in the classroom.

4. Furthermore, the iPod Box in the Self-Access Center will be removed. The availability of hard copies of the iPod materials in the SAC during the past year has given students an alternative to downloading them. In the coming year, students will be forced to download the course-specific materials from the Student Server to their computers and iPods themselves.

5. The instructors and Self-Access Center staff have learnt that there is a need to be more selective when assigning material beyond the compulsory and course-specific. An approach emphasizing quality rather than quantity of learning materials will be adopted. A few well-selected Podcasting sites rather than a plethora of materials might have more success in promoting general independent study and mobile learning.

6. The iPod shuffle is an entry-level device and does not support a voice recorder. It is recommended that students be issued with the iPod Photo plus voice recorder or a transition be made to the iPod Video, for which voice recorders may be available later. The use of iPods with integrated audio recorders can aid pronunciation practice, data collection, and reading skills (Duke University, 2005). More research is required on available digital audio players prior to purchase.

7. In order to promote an integrated e-learning approach, a project team should be established with representatives of the university administration, computing centre, 1st year coordinator and English listening and English reading course coordinators. The project's aims and objectives, responsibilities, timeline, and criteria for the evaluation of teaching and learning outcomes should be clearly established.

8. The most important finding of this precursory study – to our knowledge the first of its kind to engage with empirical data focusing on the iPod and English language learning – is the need to harmonize innovations in educational technology with sound pedagogical practice.

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Appendix A
Information sheet used in the iPod seminars
～外国語学習教材のiPod shuffleへのダウンロード方法～

iPod shuffleは外国語トレーニング用に最適のデジタルプレーヤーです。実践的な外国語に必要なのは、知識を運用する能力。知識は授業で得ることができますが、運用能力は秀でたスポーツ選手、演奏家、料理人などが実践しているトレーニングの繰り返しによってのみ習得が可能になります。この軽量・小型のiPod shuffle で“音”を持ち歩き、通学途中、散歩やジョギング、授業の合間などを利用して外国語運用能力の加速的アップに役立てて下さい。

現在iPod shuffle用に作成された外国語学習教材（英語、中国語、韓国語、タイ語、ベトナム語）は200タイトル以上あり、以下の方法でダウンロードすることができます。

1. 「移動」メニューから「サーバへ接続」を選択。

2. サーバ名で「ss」と入力して接続。

3. ゲストで接続。

4. 「iPod」の項目を選択。

5. デスクトップにマウントされた「iPod」から必要なファイルをコピー。

6. iPod shuffle本体をコンピュータのUSBポートに直接差し込み、個々の学習教材を “ドラッグ＆ドロップ”すると聞くことができるようになります。

Appendix B
iPod questionnaire

英語学習におけるiPOD SHUFFLEの使用状況について

2005年に入学した英語コミュニケーション学科の学生全員にiPod shuffleが配られ、その使用状況について伺います。
以下の質問に答えてください。

1. iPod shuffleの主な使用目的は何ですか。
   英語学習　□　　音楽を聴く　□　　データ保存　□
   その他（具体的に）

2. 通学途中、英語学習にiPod shuffleを使いますか。
   非常によく使う　　全く使わない
   5　4　3　2　1
3. リスニングの教材はiPod で勉強しやすいものになっていると思いますか。
   思う　　思わない
   5　4　3　2　1
4. 学生サーバーにある英語のオーディオ資料を利用しますか。
   とてもよく利用する　　全く利用しない
   5　4　3　2　1
5. 学生サーバにある英語のオーディオ資料は役に立っていますか。
   大変役に立つ　　全く役に立たない
   5　4　3　2　1
6. iPodによってリスニングの勉強がしやすくなりましたか。
   とてもなった　　ならない
   5　4　3　2　1
7. 1年生全員へのiPod配布は英語学習よりも、むしろ本学に入学する魅力を高めるものだと感じますか。
   そう思う　　そう思わない
   5　4　3　2　1
8. もし音声録音機能があったらより英語学習に役立つと思いますか。
   そう思う　　そう思わない
   5　4　3　2　1
9. iPodを学校に持ってきますか。
   よく持ってくる　　全く持ってこない
   5　4　3　2　1
10. iPodに自分の声を録音して聞くことができたらいいと思いますか。
    いいと思う　　思わない
    5　4　3　2　1
11. iPodに英語の授業を録音して、後で聞くことができたらいいと思いますか。
    いいと思う　　思わない
    5　4　3　2　1

12. 教員は語学学習にiPodを効率的に取り込んでいると思いますか。

思う　　思わない

5　4　3　2　1

13. ２年生になったら今持っているiPod shuffleを録音機能のついたものにアップグレードしたいと思いますか。

思う　　思わない

5　4　3　2　1

14. iTunes Music Storeを利用したことはありますか。

よく利用する　　利用したことがない

5　4　3　2　1

15. ポッドキャスティングとインターネットからのオーディオのダウンロードの違いはなんですか。

_____

_____

わからない　□