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Tablets in Foreign Language Education and Blended Learning

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iPad

CALL m-learning blended learning

mindmapping   Puentedura SAMR

This research was aimed at clarifying ways in which tablet computing devices could be used in language education in Japanese tertiary institutions. As teachers of English classes, the researchers were excited by the possibilities of using iPads and other tablets in our own classes. Working in a humanities faculty with generally limited funding, we wanted to see how easy on a practical level and how pedagogically valuable using tablets would be. As researchers, we were interested in viewing the uses of tablets from the point of view of computer-assisted language learning and mobile learning.
We used a range of software in various classes and activities. These included: preparing and presenting presentations; conducting questionnaires. We found many uses for tablet devices following Puentedura's SAMR classification.
We consider that new users need to be presented with a menu of activities falling into all categories, and we describe some of these in an e-book to be released soon.

language learning   E-learning Blended learning MLearning

The original iPad was released in Japan in late May, 2010, and became widely available only in late summer/early autumn of the same year. As the first tablet generally considered useable and viable for general-purpose use, it attracted a great deal of attention in the education arena. At the beginning of the current project, we were fascinated by the prospect of using iPads in English classes. There were a few international examples of large-scale deployments but none at the time in Japan, and we were interested in all aspects of the process, from ordering and setup, through planning activities and actually conducting them in the classroom.

We were interested especially in small-scale tech deployments. For example, rather than equipping large rooms with fixed computers—which involves large capital outlays and locks institutions into expensive maintenance contracts and a commitment to the same technology for a number of years—we were interested in buying a modest number of iPads and taking them to classes when needed, adding to the stock or replacing old machines as necessary.

We wanted to identify classes and activities where iPads could be profitably used, to try them out and improve our conduct of the activities based on student responses and the extent to which we felt we had met our goals. We also wanted to share our experiences and lessons learned with colleagues far and wide, and to conceptualize the work in terms of relevant theories.

Our project had a practical focus, and our primary strategy was to brainstorm activities that would benefit from using iPads and then to try them out on a small scale. With activities that went well, we recorded our procedures and tried to replicate them in other classes. For activities that did not go so well, we made a judgement as to whether the activity held promise, and, if so, we devised ways of modifying the activity and tried them in class again. We kept an ongoing record of these activities and detailed procedures.

Since we both judged that iPads had great promise for language learning, we involved ourselves in the equipping of our university's Language Learning Commons (a self-access centre) with iPads, including choosing software and evangelising the iPads themselves and specific activities using them.

Our university also implemented a 10-day intensive immersion programme (English Camp), and we arranged for iPads to be placed at the centre of that program, with students learning fixed phrases, listening to stories and dialogues, and recording audio logs to document their experiences and language progress at the Camp.

To broaden the possibilities for iPad use at our institution, we also arranged for two classrooms commonly used for language classes to be equipped with lockers containing iPads for students to use.

One area where the iPad is useful and unproblematic is in use for vocabulary and grammar learning. The variety of apps available affords great flexibility in terms of catering to different levels and interests, and allows instructors to build in a sequence of activities. Most apps are wholly self-contained, so there are no network-related concerns. In most cases, also, working in pairs is an enhancement rather than an unavoidable workaround. Within the context of a whole course, too, depending on apps for a portion of the grammar and vocabulary components of courses can be an efficient way of enabling the allotment of more teacher-contact time to more interactive activities. While most vocabulary apps are iOS originals, Cambridge University Press's well-known Vocabulary in Use series of books also has corresponding apps. For EAP courses, apps focused on the Academic Word List (Coxhead, 2000) may be especially suitable. Some vocabulary apps incorporate spaced retrieval (Pyc & Rawson, 2007) to take advantage of the nature of human remembering and forgetting.

Sonaiya (1991) has pointed out the necessity for extended and detailed intentional work on vocabulary focused on distinguishing between semantically-related words, and Julliann (2000) has devised a detailed technique for generating the kinds of knowledge students will need to move from intermediate to upper-intermediate and advanced levels. iPads provide a convenient way to move to data-driven

learning. With graduate-level classes especially, we have found that iPads are ideal, because: (a) their screens are bigger than those of electronic dictionaries, and it is thus possible to see full definitions and examples on one screen; (b) it is possible to buy and install one's own selection of dictionaries, rather than accepting the manufacturer's selection; (c) iPads are much more portable and usually cheaper than paper dictionaries. In connection with (b), we note that bilingualised (Laufer & Hadar, 1997) dictionaries, generally not available on purpose-built electronic dictionaries, are easily obtainable for the iPad. In addition, some versions of the well-known Longman Dictionary of Contemporary English include the encoding dictionary (Min, 2013), Longman Activator, as well as other features that support proactive learning, such as the Longman Communication 3000 list, the Longman Defining Vocabulary (Xu, 2013), and the Academic Word List (Coxhead, 2000). In specialist dictionaries, the English Channel Companion Thesaurus is useful, being based on Princeton University's WordNet software (Crossley, Salsbury, & McNamara, 2009), a large database that elucidates semantic connections between words (and word senses).

Presentations were perhaps the most successful area of activity, though not in the ways we had anticipated. (Other initiatives also report success in this area, e.g. Chou, Block, & Jessness, 2014.) Originally, we thought that the combination of the Safari web browser for finding information, Pages or Notes for writing key points or copying important phrases for quoting, and Keynote for creating and delivering presentations would be ideal. In the end, however, we found that students' unfamiliarity with iPads, or with Keynote specifically, meant that they took considerably more time than was anticipated to create their presentations, which entailed providing planning class sessions. Working on their presentations outside of class was problematic because of file incompatibilities, and because of various instabilities in early versions of Keynote, files were often damaged between class sessions (Lavin & Yoshii, 2013).
Therefore, we switched the focus to presentation delivery. Presentations were made using PCs in Google Drive and shared or made public. In class, we used the Safari web browser to view the presentations. The size and portability of the iPads allowed students to use them as if they were large notepads to present to small groups. The collaborative nature of Google Drive enabled the creation of joint presentations. Thus, the complementary affordances of the two main technologies used made possible an activity that was familiar but also very new.

E-books on the iPad can be divided into conventional e-books, enhanced e-books, and super-enhanced e-books (Lavin & Yoshii, 2014). Enhanced e-books are e-books that are recognizably similar to their paper equivalents but have some extra features. An example is the e-books in the Oxford Bookworms series. What we call super-enhanced e-books are e-books with a large range of extra features that transform the reading experience significantly. Story Toys titles feature multilingual narration and text, charming artwork and animation, and interactive games on alternate pages. Dr. Seuss titles from Oceanhouse Media feature idiosyncratic and rhythmic narration, point-and-touch vocabulary support, and the chance for learners to record their own narration and compare it to the original narration.
These books are a perennial favourite in the university's self-access center, the Language Learning Commons.

We witnessed an interesting change over the three years in terms of students' comfort level with the technology. Hitherto, when using technology in the classroom, it has nearly always been the case that we as teachers have been experts in the technology to be used (usually PC- and web-based technologies), at least relative to the students in our class. This has continued to be the case even after the relative democratisation of technologies that came with the new century, such as the growth of blogs and wikis, and later Twitter and Facebook (Lavin, Beaufait, & Tomei, 2008; Lavin, Beaufait, & Tomei, 2011). With iPads, however, since many students these days have iPhones running the same operating system,

sometimes students are equally or more proficient. This in itself has not presented us with a problem, possibly because of the gradual nature of the change, but it is easy to imagine instructors who are accustomed to having a large degree of *de facto* control having initial difficulties adjusting.

A related issue to students' expertise is that students will often be distracted by other apps that they wish to use rather than the one that is the focus of the activity.

It is easy to forget that teachers may be quite with iPads for personal use, but may lack confidence when it comes to using it in classroom situations (Grant & Barbour, 2013). It is clear that the SAMR framework, perhaps because of its simplicity, is of enduring usefulness (Hockly, 2013; Pegrum, Howitt, & Striepe, 2013; Puentedura, 2010). Gerstein (2014) even believes it heralds a new paradigm in education. Substitution-type activities are comparatively easy to implement, and offer an undaunting entrypoint to using iPads in the classroom. Augmentation-type activities represent small steps away from Substitution-type activities, and may indeed be embarked upon without deep consideration. Instructors may implement modification and redefinition in areas where their comfort level is high and remain in the SA parts of the framework indefinitely in others.

It is also clear that institutions where high-speed and reliable wireless networking is available cross-campus, and where tablets are universally available, may take a different approach from those where iPads are loaned out as needed, where the ratio of iPads to students is less than 1:1, and where wireless connections are unreliable or limited in coverage. Thus activities are also to be classified according to their degree of dependence on connectivity and ownership. This will be especially important when we move to a stage where iPad activities come to be seen as learning objects (Taylor, Lavin, & Deutsch, 2011).

One of the promises of m-learning is anywhere-anytime learning (Chou, Block, & Jesness, 2012). In our model, where the instructor takes a number of iPads to class as needed, there is no ownership of the device on the part of students. Since the iPads are usually taken back at the end of class, we cannot instruct students to continue working on the same activity in the same way using anything stored on the device. This is no problem when the iPad is an interface to a web-based service such as Google Drive. Otherwise, it requires workarounds, such as emailing documents to oneself and finding software that will open them, and frequently these do not work.

It should also be mentioned that it was not possible to buy sufficient iPads for one-to-one provision in any but small seminar groups. Our focus was on pair and small group use, but there are many cases where individual use would be more efficient. In these cases, it would in any case be impractical for the instructor to carry sufficient iPads around campus.

If all students had iPhones, the situation might be easier, but there are issues surrounding requiring students to install specific software on a personal device to meet institutional needs. In addition, working on the comparatively small screen of even the largest iPhones can be inconvenient.

An ongoing frustration is the quality of wireless networks. In the first year of the project, we were able to persuade a kindly IT support person to set up special wireless networks in the classrooms that we used most often. These were later removed and since then there have been problems with periodic cutoffs, requiring students to re-log-in to the network. This has occasioned a renewed emphasis on apps that function on the iPad without any necessity for an Internet connection.

The equipping of some classrooms with iPads has improved the situation in some respects. The number of iPads is sufficient for each student to borrow one. A hint of the potential of universal ownership of iPads is provided by our experience in the English Camp: students kept their own iPad for close to two weeks, and were able during that time to take photos and videos as they wished, as well as read English-language e-books, and use the vocabulary and conversation apps in spare moments. This was in addition to continuing to work on presentations in the Keynote app, research websites to gather information for presentations, and record their

assigned audio logs (and listen back and re-record as necessary). It is to be hoped that we can find a way in the future to make this kind of situation permanent or semi-permanent.

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