

## Investigating Effects of the iPad on Japanese EFL Students' Self-Regulated Study

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### Abstract

*In the current information society, regardless of their chosen fields, Japanese university graduates are facing rapidly growing demands to have reasonable practical English communication skills, in addition to specialisation in their majors, before entering the workforce. However, as shown in a Koike's study (2010) many have difficulty satisfying their needs within the limited class hours during their undergraduate years. Other shortcomings are also observed within the current language curriculum structure in non-English major discipline areas. With an aim to meet these needs, many educators suggest implementing mobile technologies in their English language courses as well as in other discipline areas. This is due to mobile technologies' mobility, utility, flexibility and their facility of allowing access to authentic materials.*

*The aim of the research outlined in this paper is to investigate in what ways integration of tablet technology changes learning outcomes and attitudes toward Japanese students' English language learning. In the present study, the participants are 20 Japanese undergraduate students who are taking part in general English language classes as a part of their degree requirements. Over one semester, the students are provided with one iPad each for their self-regulated study within and outside the university. In this preliminary qualitative case study, the students' learning is examined using data including proficiency test scores, reflective journals, online surveys, observation, and interviews with participants. The results will be presented at the conference.*

*The paper concludes with some critical reflections on the improvement of pedagogical practice for EFL using tablet technology. The findings contribute to both the ESL and the EFL teaching communities.*

### Introduction and context

Despite six years of English language education at junior and senior high school in Japan, at university many students still lack sufficient English ability. The lack of acquisition of sufficient English ability is of increasing concern. In 2003, The Ministry of Education, Culture, Sports, Science and Technology released an action plan to cultivate "Japanese with English Abilities" [1] [2]. The problems of lack of student motivation and poor language learning environment are considered major contributing factors; students don't feel a strong need to communicate in English, or they have few opportunities to do so [3]. These problems at university level are in part due to the style of English language education at high school level. Due to language education in Japan being extremely focused on university entrance examinations [4], grammar lessons are at the core of the curriculum. As a result, a lack of interest and knowledge in teaching advanced communication skills at high school level remains an outstanding problem [5].

Despite these unsolved problems, in the current information society, regardless of their chosen fields, Japanese university graduates are facing rapidly growing demands to have reasonable practical English communication skills, in addition to specialisation in their majors, before entering the workforce. Many students have difficulty satisfying their language acquisition needs within the limited

class hours during their undergraduate years; the shortcoming is observed especially for language curricula in non-English major discipline areas. Since the introduction of the iPad in 2010, educators have realised that its mobility, utility, and flexibility, have the potential to change the users' access to authentic materials for learning the English language. Many have high expectations for the device as its access to countless cost-free Apps may allow EFL learners and teachers to realise new approaches to learning and teaching.

## Literature review

Self-regulating one's learning means having the ability to choose what, when and where to learn [6]. Clearly the statement defines that learners take control of their learning, including the setting of their learning activities as well as goals. However, we also tend to consider Self-Regulated Learning (SRL) to be when learners are doing tasks which have been set by others. When individual learners can take responsibility for setting, managing and assessing their own learning and learning activities, this also can be defined as Self-Directed Learning (SDL) [7]. In regard to the current project, although all the participants have been setting their own learning activities and goals individually, they have still conducted their learning as a part of this research project, hence I use the concept of SRL, rather than SDL, as it is more appropriate for describing their learning behaviour.

The potential of SRL in Technology-Enhanced Learning Environments (TELEs) has caught many educators' attention. Bernacki, Aguilar, & Byrnes [8] reviewed 55 related empirical studies and concluded that TELEs can promote SRL. Also, in regard to iPad use, a few investigations have been conducted into in what ways integration of the iPad changes learning outcomes and attitudes. The graduate school of digital content [9] conducted comparative research: students who enrolled in the same digital content creation subject were divided into two groups, one with iPads and one without. The article shows that students in the group with iPads achieved higher scores, and in addition their self-study time was double that of the group without iPads. Their understanding of the content was greater; 85% of students in the iPad class said they fully comprehended the content but only 46% said so in the class without iPads. The key factor in the high achievement of the iPad class was the increased study time. The result shows that students in the iPad group spent more time in their preparation and review study than did their counterparts. Although the report did not mention SRL explicitly, as we can see from the increase in study time, integration of the device influenced the students' SRL. Two other studies have been conducted into the impact of tablet technology, focussing on the iPad [10] [11]. Whereas both studies express positive perceptions regarding the integration, the results are still not conclusive regarding whether the new medium has made a change to learning.

Despite all the expectations and enthusiasm from educators, there is still no direct study which has investigated in what ways the use of the iPad has impacted language learning in support of learners' SRL. More research is needed to determine to what extent Japanese EFL students' SRL can be improved with tablet technology.

## Research questions

In order to investigate in what ways the use of the iPad impacts on language learning in support of SRL, this empirical study sets the following research questions:

1. How can the iPad support the promotion of SRL tendencies in Japanese EFL students?
2. In what ways can the iPad enhance Japanese EFL students' learning?

## Methods

Participants in this study are 20 Japanese undergraduate students who do not major in English but are taking classes in general English language as a part of their undergraduate degree requirements. Ethical guidelines for research drove the volunteer recruitment and selection process.

The duration of the initial stage of this seed project is 6 months. The project officially started in April 2011 and is due to finish in September 2011. After two lengthy introductory technical sessions, investigating functionality, navigation, and setting up of the iPad, all the participants were provided with one iPad each for their English language study within and outside of the university. These iPads are wifi models, which can only connect at their university, home or other public wifi connections.

In this empirical study, the participants' learning is examined using data from regular proficiency test scores, online surveys and individual interviews. The students took a proficiency test, the online TOEIC (the global standard for assessing English proficiency for business, taken by EFL students widely in Asia: <http://www.ets.org/toeic>) at the start of this study, and every two months during the project in order to measure their progress. In order to monitor their study activities, all the participants submitted individual feedback via an online survey every two months describing their learning experiences. In addition, all the participants were required to "tweet" on twitter every time they studied using the iPad. Their tweets were kept as a record of their study. When the iPad was used for their learning outside a network environment, they were allowed to tweet as soon as they were back online. For the data analysis, the Zimmermann process model SRL, which consists of cycles of *forethought*, *performance or volitional control*, and self-reflection [12], has been used to investigate SRL tendencies.

## Results and discussion

Completion of the data collection is scheduled for September, hence the results and discussion for this study will be presented at the conference.

## Concluding remarks

Bernacki, Aguilar, & Byrnes' study [8] states that TELEs is most suited to learners who have skills for self-regulating their own learning. My preliminary result also indicates that providing an iPad itself did not enhance SRL. During the 6 month duration of the study, various support systems for the students' learning – for example, using Twitter as a tool to record and share their study logs within a group, and group study meetings for exchanging information for "good learning Apps" among their peers – needed to be implemented in order for students to maintain their motivation and continue their study. As our preliminary data shows, when participants were given effective support, they could maintain their regular learning routines with the new medium. As a result, they continued their study, were able to select suitable authentic materials with digital content and Apps as needed, and could actively pursue their language study inside and outside the classroom. In this project, in order to bring out the best use of the device for SRL, the institution of systematic support systems was the most crucial factor for learners.

As mentioned, Japanese university graduate students are required to acquire English language skills. Currently, many leading Japanese companies set English language requirements for new recruits, and some have made the decision to make their official language at work English – they use English for meetings and official documentation. To meet these needs, it is inevitable that the future EFL curriculum in Japan be integrated with a system to support SRL, and careful implementation of mobile

learning seems promising for the enhancement of learners' SRL. The present study is limited to small samples; we need therefore to gather more data from a larger variety of sources and participants. One key area to explore is how learners in mobile learning with the tablet technology use it to enhance their study. As Brand & Kinash [10] notes, this area needs further research in order to document detailed learning outcomes and determine the impact on learning. In terms of language learning, longitudinal investigations are needed in order to show the effectiveness of EFL learning with tablet technology for development of SRL.

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