The iPad as a Tool for Developing Korean EFL Digital Literacy

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I. Introduction

Digital resources play an increasing role in Second Language Acquisition (SLA), especially in EFL L2 Digital Literacy. I elsewhere identify three key factors that impact contemporary SLA (2007a, 2008a):

- 1. The predominant use of English by non-native speakers is increasingly in communication with other non-native speakers, rather than with native speakers.
- 2. The emergence of English as a global language has meant that desired online resources and discourse are mainly in English.
- 3. A critical and profoundly symbolic threshold is fast approaching whereby the majority of interpersonal communications worldwide will have become computer-mediated, rather than face-to-face.

As elsewhere argued (Meurant 2009b, 2010c), these three factors indicate that the predominant use of English by non-native speakers will be:

- 1. in navigating English language digital resources, locating, editing, and contributing to online content;
- 2. in computer-mediated communication with other non-native speakers of English.

Both of these envisaged predominant uses of English by non-native speakers are computer-mediated, which has profound implications for EFL, especially in Korea. For Korea to be competitive in the global economy, we should in EFL nurture and develop L2 Digital Literacy in English. But how best to do this?

II. Korean Educational Computing Facilities

Korea enjoys an enviable status as the most wired nation on the planet, with the fastest Internet connections in the world. But computer facilities in Korean educational institutions sorely need reorganization. The opportunities for computer-mediated second language learning need to be vastly increased. Fixed desktop computer labs need to be replaced with the provision of multimedia capable, mobile web solutions that put the Internet firmly into the hands of all students and teachers.

Existing computer labs are mainly designed for class use in learning computer applications, where students do not interact with one another, but focus attention on their individual screen. This arrangement discourages face-to-face collaboration and networking, whether structured or unstructured, as would commonly take place in the workplace, and which is usual in L2 classrooms where pair and small group activities are commonly held, or where teacher-student or student-student interactions are demonstrated. Fixed computer labs should therefore be complemented with a comprehensive ICT solution that provides:

- 1. comprehensive Wi-Fi networked campuses with <u>any</u> campus space able to act as a wireless classroom,
- 2. a teacher's computer console in almost <u>every</u> classroom with high-speed Internet access, OHP, and classroom printer, and,
- 3. systems that provide <u>all</u> students with adequate computing facilities, anywhere, anytime. This last critical provision of ubiquitous computing is now feasible through providing <u>each and every</u> student, on enrollment, with a Wi-Fi+3G enabled Apple iPad, to be used in tandem with student smartphones.

III. Introduction of the iPad

In January 2010, Apple announced the iPad tablet, intended to put the Internet into the hands of the public. It features a 9.7-inch, 1024 x 768 display with 16-, 32-, and 64-GB capacities. The 13.4mm thin 0.68kg iPad is available in either Wi-Fi only, or in Wi-Fi+3G-capable models. The iPad, designed for using fingers on a touch screen rather than with physical keyboard and mouse as with PCs, will likely revolutionize education. This will become particularly evident in language education, because of the sudden availability of integrated multimedia and telecommunications features that have particular application to language learning. I address the impact the iPad could have on Second Language Acquisition, through putting L2 English use of the Internet into the hands of Korean EFL learners.

IV. Computing in Education

In the US, Warschauer has consistently noted the increasing importance of mobile computer-mediated language learning, as American schools create one-to-one classroom environments through connecting laptops wirelessly to the Internet (2004). Computers and the Internet, he argues, are highly disruptive technologies that require extensive organizational restructuring and professional development for successful use (2006). Progressive universities such as the Abilene Christian University provide students with free iPhones, and integrate the iPhone into their curriculum. Web apps are used to turn in homework, look up campus maps, watch lecture podcasts and check class schedules and grades; and for classroom participation, polling software allows shy students to make choices without risking embarrassment. In 2008, Oklahoma Christian University provided mandatory MacBooks to incoming freshmen and faculty. At Francis Tuttle Technology Center, pilot projects use iPhones and Kindle e-readers, and computer mobility is regarded as being key and critical to the future, providing ways to get people access to learning content, no matter where they are. iPhones and iPod touches are being evaluated to carry medical reference books electronically. In 2009, all 550 of Aoyama Gakuin University's students, and some staff, received free iPhone 3G's, which also track attendance through their inbuilt GPS.

V. Computing in Korean Education

While Korea enjoys a high level of broadband Internet penetration, with extensive 3G coverage and the provision of free Wi-Fi hotspots (e.g. Starbucks, Lotteria) the use of computers in class is constrained:

- 1. Institutional computer facilities are limited, and demand, particularly at exam time, may exceed supply.
- 2. Where computer labs are available, these tend to be desktop computers in fixed arrangements, likely springing from dated administrative perceptions that computing is a special kind of education, separable from general education, that takes place statically, and primarily in individual relationship to a teacher. But fixed computer labs do not enable the flexible groupings of students that typically occur in EFL classes, where students frequently alternate between whole-class activities and diverse individual, paired and group tasks. While educational theorists such as van 't Hooft promote the importance to pedagogy of connection, collaboration and networking, the architecture of existing Korean educational computer facilities discourages hybrid online/face-to-face collaboration and the integration of computer-mediated learning with traditional learning that blended learning aims to achieve.
- 3. Few Korean students own laptop computers that they are willing to bring to class (Meurant, 2007).
- 4. While smart phone usage in Korea is high, the small screen and keyboard size, limited applications and data cost limit their intentional use in class.
- 5. Many native English-speaking teachers, faced with administrative wariness towards innovation, tend towards caution in their approach to educational technology, and lack the skills necessary to successfully implement computer-mediated learning in their classrooms. This reflects unenlightened reactionary administrative policies of failing to acknowledge Web 2.0+ thinking, as described in Meurant (2010c).

But student adoption of new digital technologies is increasing exponentially and, as argued elsewhere (Meurant, 2010a), is affecting their expectations of how teaching and learning should occur. Simultaneously, EFL textbooks are merging with digital media (Meurant, 2010b); and teachers are integrating online placement and progress tests, and web-hosted Learning Management Systems into their courses (Meurant, 2009a). The relationship to digital media in the classroom is evolving from that of a precious Internet that can only be accessed as a specialized scarce resource, to that of the taken-forgranted Internet as constant companion. The iPad completely fits this new paradigm, as it popularizes it.

VI. Implementing EFL Digital Literacy

1. Using Existing Facilities to Encourage EFL Digital Literacy

Elsewhere (Meurant, 2009c), I recommend ways to encourage EFL student digital literacy in English, through using existing facilities more creatively. I encourage teachers to move from singular use of the traditional classroom to a more blended or hybrid form of education that combines traditional classroom

instruction with computer-based language learning. Tasks can be computer-mediated, accomplished by students in their own time on computers in the university, at home, or in PC rooms, and submitted online. Classes can be held intermittently in existing computer labs. Quizzes and exams can then be set online, to be conducted in existing computer labs, using Internet-hosted exam writing and management services, but with care taken to allow for potential student cheating, server outages and loss of data. Students can be encouraged to make more intensive use of online resources in the target L2 language (e.g. using http://www.google.com and http://wikipedia.org in English). Teachers are advised to implement a computer-based Learning Management System, such as Moodle (see http://moodle.org) together with hosting services such as http://ninehub.com) and to force that LMS to use English only (Meurant, 2008b). These recommendations will all help develop desired L2 digital literacy skills in English.

2. The iPad as a Comprehensive Solution

But the release of the Apple iPad and the iPhone OS 4.0 (renamed iOS 4 in early June) has provided a potential game-changer that will likely revolutionize education, and is particularly well suited to second language learning environments. The key advantage provided by these developments is that they put computing and the Internet firmly into the hands of their users - here EFL/ESL students and their teachers. The Internet has emerged as a fast-developing powerful educational tool; but before now it has been regarded as something special, that needs to be accessed indirectly: one locates a computer, makes sure that it is connected to the Internet and is multimedia-capable, and then rather self-consciously works on the computer on the Internet. But the advent of mobile computing through smart phones like the iPhone, multitouch input, and increasingly portable laptops such as the MacBook Air, has signaled the transition to a new paradigm that the iPad fully recognizes and exploits: the Internet has already become something that is no longer special, but something that is taken for granted, that (conceptually) is always available anywhere, anytime. The stored wisdom, knowledge and experience of mankind is becoming immediately accessible, as through computer-mediated telecommunications, the distant is becoming proximal. Students should now be able to access learning content wherever they are, and whenever they want.

VII. Advantages of a Comprehensive Solution

- Dedicated computer labs, desktop computers, complex cabling or computer desks are not required.
- As blended systems develop, textbooks are rapidly evolving from hard copy physical items that have to be carried, and that become obsolete every 3 to 5 years, to e-texts. This phenomenon, which I discuss elsewhere (2010b), needs to be taken into consideration when selecting textbook series.
- Hybridized content can draw from audio, video, interactive graphics in books, magazines and newspapers, and link to multimedia digital resources and telecommunication services.
- Using the open e-Pub standard, institutions can customize, and even create their own e-texts, which can be integrated into departmental and teacher-implemented learning management systems.
- Student collaboration can be encouraged with suitable tasks that include online components, and that can be undertaken in class and informally in Wi-Fi-enabled hotspots that students frequent, e.g. cafés.
- Multimedia capability together with telecommunications means that students can engage in L2 English videoconferencing which is free using Skype video both locally and internationally.
- The iPad is simple to use. Once the student is registered with the iPhones Store, software can be installed in class by running the App Store application, which does not bother the user with choices during the installation process; no DVDs or CDs or serial numbers are needed. Pre-existing user files such as documents are installed via synchronization to stored files.
- Apps can be pre-installed by IT departments before giving the iPad to students. iOS 4, which supports the iPad and the iPhone, provides institutions with the ability to distribute applications wirelessly. Pushing applications from a central location via Wi-Fi or 3G means far less work, and less worry about iTunes being up to date or even installed. iPads can be wirelessly managed without iTunes.
- Required iPad applications are cheap so costs could be absorbed by educational institutions. A new version of Apple's productivity software suite iWork designed specifically for the iPad takes advantage of the iPad's multitouch input. The iWork for iPad apps are available at just US\$10 each.

- A benefit for students is that iPad/iPhone apps are sandboxed from one another; data from one application isn't available to other applications and storage can't be overwritten by other applications.
- The platform is simple, intuitive, and highly usable. The underlying organization and architecture of the iPad does not need to be understood the apps just work.
- Security problems commonly encountered on PC platforms such as malware and viruses are unlikely.

1. The Significance of iOS 4

The announcement of iPhone OS 4 in early April focused on seven "tentpole" features: multitasking, folders, Mail, iBooks, Enterprise features, Game Center, and iAd. The most significant feature for use of the iPad in SLA is multitasking. Apple is achieving the appearance of this through a combination of appswitching features and background processes managed by the operating system itself. This meets student productivity needs to sometimes use several apps to perform a task, and to switch rapidly between them. They are also able to perform tasks in the background: for example the push-notification scheme; background audio; VOIP - so that Skype allows conversations to continue when switching to another app and to receive incoming calls; GPS tracking of location; Local Notifications; and task completion. These features should therefore satisfy issues of app switching, streaming audio, and location awareness.

2. Student Use of the iPhone with the iPad

A limitation of the first iPads is the absence of a camera to capture still photos and video. Although this will be rectified in later releases, the portability of the iPhone and its popularity in Korea, together with the compatibility of iPhone and iPad (which both run iOS 4), mean that the iPhone camera can readily be used to capture photos and video, and upload them to the iPad. A second front-facing camera in the newly released iPhone 4.0 also favors person-to-person videoconferencing, though small groups may prefer to view images together on the larger screen of the iPad, while using an iPhone for video capture.

VIII. Conclusion

The primary uses of English by non-native speakers will increasingly - and in my opinion, predominantly - be computer-mediated. These will be for information, in the use of online resources, and for communication, in distance (and perhaps local but augmented) telecommunication with other mainly non-native speakers. Recognizing this, there is a critical need to strongly develop L2 Digital Literacy in English. Advantage should be taken of Korea's high level of broadband penetration by comprehensively upgrading Internet-connected computer facilities, to make them available to all students anywhere, anytime. This is effectively achieved by saturating campuses with Wi-Fi access; ensuring all classrooms have a teacher's computer with high-speed Internet access, OHP and printer; and providing all students on enrollment with a Wi-Fi+3G iPad tablet with Apps and e-texts that are Wi-Fi managed by IT departments. Such a strategy, which puts the immense benefits of the Internet directly into the hands of both students and teachers, would greatly enhance Korea's competitiveness in the digital global community.

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