

# Investigating the ICT Use and Needs of 'Digital Natives' In Learning English at a Taiwanese University

*Chao- Jung Ko, National Sun Yat-Sen University, Kaohsiung, Taiwan*

*Siew Ming Thang, Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia*

*Shu-chen Ou, National Sun Yat-Sen University, Kaohsiung, Taiwan*

---

## ABSTRACT

*This article reports key findings of a study which investigated the use of technology by 569 'digital natives' students for English Language learning and recreational purposes. Their views on the applicability of technological tools such as facebook, blogging and skype for English Language teaching and learning were also investigated. The findings showed that although the students expressed positive views with regard to the use of technologies for language learning, they seemed to use less technological tools for academic learning than for recreational purposes. Discipline differences were not a determining factor. In addition, they appeared to use similar well-established technologies rather than new and emerging technologies for both learning and recreation. Finally, they also appeared satisfied with their English instructors' teaching approaches.*

*Keyword: Computer Assisted Language Learning (CALL), Digital Native, English Teaching and Learning, Information Communication Technologies (ICT), Higher Education*

---

## INTRODUCTION

The term 'Digital Natives' (Prensky, 2001a, 2001b, 2009) has been created to identify the young people who are now studying in universities across the world. These young people, who were born after 1980, have grown up with easy and ready access to computers and the

Internet and it is further hypothesized that these "digital natives" are very technology savvy (Margaryan, Littlejohn, & Vojt, 2011) and are highly motivated to learn using ICT (Information Communication Technologies). The proponents of this idea (e.g. Dede, 2005a, 2005b) claim that the current education system needs to be reformed to accommodate the

DOI: 10.4018/ijwltt.2014040103

new needs of ‘Digital Natives’ learners. They further claim that the benefit of this reform will enable universities “gain a considerable competitive advantage in both recruiting top students and teaching them effectively” (Dede, 2005a, p.11).

However, some researchers (e.g. Bennett, Maton, & Kervin, 2008; Cheong, 2008) are skeptical about this claim. They urge the need for robust evidence to support the claim. Therefore, some empirical studies have been carried out by researchers around the world (e.g. Conole, de Laat, Dillon, & Darby, 2008; Hargittai, 2007; Margaryan et al., 2011; Nagler & Ebner, 2009; Nasah, DaCosta, Kinsell, & Seok, 2010; Jones & Healing, 2010) to understand the nature and extent of technology uptake and the role of the technology in learning. Most of these studies were undertaken in Western contexts, hence there is a need to undertake more such studies in Asian contexts.

The current study is conducted in Taiwan which has grown a long way on the back of its technology sector. Now it is one of the world’s top manufacturers of semiconductors, notebook computers, and flat-panel screens. According to a survey done by Taiwanese Ministry of Education in 2011, 79.31% of households have had Internet access. Nevertheless, little research has been conducted to explore the extent that technology is utilized by teachers and students in high education especially in the area of English Language teaching and learning. Thus, this study which attempt to do this will contribute significantly to this field.

## LITERATURE

An optimistic and promising image of the digital natives has been painted in some existing literature which describes them as innovative users of available technology and eager adopters of new technology from an earlier age. It is further claimed that their digital experiences have changed not only in terms of how they communicate, socialize, and entertain, but also the way they learn (NetDay, 2006; Prensky, 2001a; Rainie, 2006; Rideout, Foehr, & Roberts, 2010). Such belief was evinced in a study by Conole et al. (2008) who found students using technologies to support all aspects of their learning processes. It appeared that central to the organization and origination of their learning, the technologies provided them with a rich variety of interaction and communication options in terms of learning which led to their usage of different types of e-learning strategies and e-tools to meet their own learning needs.

However, some researchers (e.g. Cameron, 2005; Lei, 2009; Smith & Caruso, 2010) pointed out that the digital native may not be as techno-savvy as expected. In Cameron’s study (2005), many freshmen in an Australia university were found to be ill-prepared to work with technology. They were reported to be unfamiliar with digital devices such as mp3 player, Web design and digital video editing and they also showed resistance towards online learning. Smith and Caruso (2010) who investigated 36,950 undergraduate students’ use of

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/article/investigating-the-ict-use-and-needs-of-digital-natives-in-learning-english-at-a-taiwanese-university/113271](http://www.igi-global.com/article/investigating-the-ict-use-and-needs-of-digital-natives-in-learning-english-at-a-taiwanese-university/113271)

## Related Content

---

### Content Analysis of Wiki Discussions for Knowledge Construction: Opportunities and Challenges

Vasa Buraphadeja and Swapna Kumar (2012). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 28-42).

[www.irma-international.org/article/content-analysis-wiki-discussions-knowledge/75206/](http://www.irma-international.org/article/content-analysis-wiki-discussions-knowledge/75206/)

### MOOCs and the Art Studio: A Catalyst for Innovation and Change in eLearning Development and Studio Pedagogies

Howard Errey and Megan J. McPherson (2015). *Macro-Level Learning through Massive Open Online Courses (MOOCs): Strategies and Predictions for the Future* (pp. 61-73).

[www.irma-international.org/chapter/moocs-and-the-art-studio/128589/](http://www.irma-international.org/chapter/moocs-and-the-art-studio/128589/)

### Using Feedback in ESL and EFL Asynchronous Online Environments

Larisa Olesova and Luciana de Oliveira (2018). *Applications of CALL Theory in ESL and EFL Environments* (pp. 206-222).

[www.irma-international.org/chapter/using-feedback-in-esl-and-efl-asynchronous-online-environments/188185/](http://www.irma-international.org/chapter/using-feedback-in-esl-and-efl-asynchronous-online-environments/188185/)

### An Agent Based Framework for Personalized E-Learning Services

Larbi Esmahi (2009). *Solutions and Innovations in Web-Based Technologies for Augmented Learning: Improved Platforms, Tools, and Applications* (pp. 130-141).

[www.irma-international.org/chapter/agent-based-framework-personalized-learning/29645/](http://www.irma-international.org/chapter/agent-based-framework-personalized-learning/29645/)

### Pentexonomy: A Multi-Dimensional Taxonomy of Educational Online Technologies

Kimberley Tuapawa, William Sher and Ning Gu (2014). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 41-59).

[www.irma-international.org/article/pentexonomy/109544/](http://www.irma-international.org/article/pentexonomy/109544/)