

KOTESOL Proceedings 2017

Why Are We Here? Analog Learning in the Digital Era



Proceedings of the 25th Annual KOTESOL International Conference — PAC 2017 Seoul, Korea, October 21—22, 2017

Korea Teachers of English to Speakers of Other Languages (Korea TESOL / KOTESOL)

T.E.A.C.H. – Technology Education Academia Combined Here: An Examination of the Digital Literacy Issue for Undergraduate Students in Japan

Rab Paterson Toyo University, Tokyo, Japan

> This paper provides a background to the need for student instruction in digital literacy and for a digital pedagogy to be adopted when teaching this type of content. As many university courses in Japan lack these classes, a detailed explanation of the causative factors for their relative absence from academia in Japan and a rationale for their inclusion are necessary. After such a background introduction of the educational technology issue in Japan, this report then highlights the digital literacy approach taken by the author in introducing this content into his classes. Particular attention is paid to the range and type of digital literacy tools and the actual techniques taught to contribute to creating a learning community of students as well as to the pedagogy and methodology that underpinned this approach. Finally, recommendations for the future implementation of these types of courses and content are given.

INTRODUCTION TO EDUCATIONAL TECHNOLOGY IN JAPAN

In the period since the public popularity of the Internet in the 1990s, educational technology has been on an exponential curve of growth in terms of the range, power, and types of tools available. However, easy availability of technology has not always lead to its adoption by schools and universities in Japan, a country notorious for its rote-based learning (Rohlen & LeTendre, 1998, p. 7). Given the high numbers of universities in Japan on a per capita basis, 783 universities in a country with approximately 120 million people compared with the UK, with roughly half the population but only 163 universities (Higher Education Statistics Agency, 2013; Tanikawa, 2013), very few make the world rankings. According to the latest Times Higher Education World Rankings the highest ranking Japanese university is the University of Tokyo at number 46 (down from 23 in 2013), followed by Kyoto University at 74 (down from 52 in 2013). That is only two universities in the top 200 according to the Times, (World university rankings 2013–2014: Times higher education, 2013; World university rankings, 2017) and not a good advertisement for the quality of Japanese education, given their numbers.

In 2003, the Economist Intelligence Unit conducted an e-Learning Readiness index and ranked Japan as being 23rd (Suzuki, 2009), shocking many in Japan and contributing to the changes that came as a result of the so called "Big Bang" in Japanese education under then Prime Minister Koizumi (Eades, Goodman, & Hada, 2005). This did not result in any major changes as by 2009 Japan was still

only ranked 22nd, this despite being ranked 2nd in 2007 in the Digital Opportunity Index, which measures digital connectivity of societies (International Telecommunications Union, 2007, p. 36). Even now non-Japanese employers (and some forward-thinking Japanese employers) frequently complain about the lack of information technology (IT) and information communication technology (ICT) skills in their newly hired, newly graduated Japanese employees (Otoshi, quoted in Bachnik, as cited in Eades et al., 2005, p. 276). Here, these corporations are seeing the results of the "blank slate" graduates preferred by traditional Japanese corporations in the recent past (Aspinall, 2010, p. 10; McVeigh, 2002, pp. 123-147). This has not prompted any major rush to improve as Japan has only stated it will introduce things like tablet devices in elementary schools by 2020 (Ministry of Internal Affairs and Communications [MIC] Japan, 2013) when that date was further away in the future than the length of time that iPads (the most popular tablet devices) had been in existence. So the education authorities seem more concerned with preserving the past than looking to the future, a position that Aspinall attributes to Japan being a risk averse society (Aspinall, 2010, pp. 12–17).

Traditionally the Japanese education model was referred to as "education/examination hell" (Haberman, 1988; McVeigh, 2002, Chapter 4). In the post-war period until very recently, most Japanese university students wanted to be hired by a prestigious (read "traditional") corporation, and if they achieved this, they were relatively satisfied, as employment with a Japanese corporation included generous working conditions and a job for life. However, to get hired by big name corporations meant they had to first gain admittance to a big-name university. What subjects were studied at university was relatively unimportant to employers compared to the actual rank and reputation of the university. So getting into a prestigious university was and still is all-important as *qakubatsu* (exclusive university cliques for students and former students from certain departments) had and still do have influence for graduates seeking jobs (Johnson, 1982, Chapter 2; Ramseyer, 2010, pp. 2-3).

To get into such a name university, students, in theory at least, had to pass the university's rigorous entrance examination. However, this was only rigorous in terms of the amount of data needed to be memorized to pass the test; critical thinking and creativity were not factors at all, and even today, this continues to be the case in these memory-centric entrance tests for the most part. In turn, a lucrative industry has developed whereby some juku (cram schools specializing in university entrance test preparation) have developed a reputation for preparing students to pass these tests for particular universities. However to avoid the competition of these difficult tests some students try to be accepted via the universities' admissions office (AO) route. This was only possible if they attended a prestigious high school and/or one that had an AO relationship with the university concerned. Lastly, there is the sports scholarship route, whereby athletically promising students can attend university irrespective of their academic suitability as they have the chance to raise the university's profile in the popular varsity sports circuit. The result is that in some universities as many as 50% of their students have not taken any kind of entrance test at all, and those that did have taken a test that values memory over ability (McVeigh, 2010, p. 166).

Therefore getting into these types of high schools was, and still is, an attractive option for many career-minded university students in Japan as the

numbers of school leavers entering university has grown from 23.6% in 1970 to 48.2% in 1998 according to a UNESCO report (World Education Forum, 2000). However getting into those schools was also a challenge and meant that students had to pass these schools' tests, and in turn this involved more *juku* work and of course graduating from a good junior high school and so on down the line to kindergarten, with the ubiquitous *juku* again involved. So this long and arduous process extended from kindergarten all the way to entering university.

University, therefore, was viewed as a rest period between the examination/ education hell and the hard work that came afterwards as a corporate samurai salariman (a corporate businessman usually paid by monthly salary). As universities were seen as a place to have fun (Ellington, 2002, p. 142), students tended to focus more on their club activities at university rather than their studies. Indeed many students rely on the old-boy network of their university clubs to try to gain employment rather than their grades and qualifications. As part of this educational "simulation" (McVeigh, 2002, Chapter 6), universities were traditionally not expected to give too much work, or to try to shape the thinking or character of their students. That was seen as the domain of the employers and many Japanese employers preferred their newly graduated employees to be "blank slates" that they and they alone could mould, into the corporate image and the type of worker they desired (Urata, 1996). This was the "educational" model that was in place during Japan's so-called economic miracle period from the 1960s to the mid 1990s and afterwards. However that economic period is now over, and Japan's educational model needs to change as the demographic problems in Japan have meant that standards for the entrance tests and AO suitability levels have had to drop to enable many universities to stay in business. Even this has not been enough to stop 46% of universities operating at less than full capacity, and 40% of them are operating and making a loss (Tanikawa, 2013). However, in Japan old habits die hard.

Japanese universities in general now have a large number of older, tenured professors that are there until retirement age. Although this is 55 years of age for government employees (Aschwanden, 2004), it is 60 for universities and in some cases 65 now (Cyranoski, 2000), with 67 for part-time employees. Many of these teachers are not up to speed with modern teaching methodologies, pedagogies, and technologies as they were hired when such things were relatively unimportant, given the "blank slate" model in play when they were hired. Even now, it is not uncommon when walking down university corridors to still see paper sign-up sheets on professors' doors for students to use when requesting meeting times with their professors and supervisors, and they are mostly blank! Also, many more professors were never held accountable for the quality of their classes as under the old system this never mattered, and in many universities the teachers themselves hand out and collect the student satisfaction surveys in paper form, and teachers are responsible for handing them in to the office – a less than ethical practice. McVeigh covered much of this in detail when he talked about "simulated schooling" in reference to his time teaching at universities in Japan (McVeigh, 2002, Chapter 6). Others (Eades et al., 2005) also examine many of the diverse challenges facing Japanese universities in the 21st century, and for the most part, show how they are not rising to these challenges; and one of my own papers (Paterson, 2008) looks at how students can be treated as mere

commodities by many universities in the current economic and demographic climate in Japan, with little attention paid to teaching quality.

That this low quality of teaching is still ongoing is not just seen from insider teacher experiences like mine as even relatively recent generalist books on Japan mention this well-known phenomenon (Ellington, 2002, p. 142). It is further borne out by the many complaints regarding recent graduates coming from their employers in Japan. The OECD even remarked on this in the conclusion to their report on education in Japan in 2009:

We believe that the pressures for continued change are unlikely to abate. For Japan's research universities, global competition for highly skilled graduate students and faculty will not diminish in the years ahead, and global league tables of research performance, however unwelcome, will not recede in importance. Demographic pressures now bearing hard on private universities and junior colleges cannot be deterred, nor can state intervention be expected to diminish the financial challenges they pose. New generations of students, more concerned about the link between their studies and working life and newly empowered by a shifting balance of demand and supply, may press tertiary institutions for wider flexibility in provision and greater relevance in teaching than they have heretofore. And, the nation's business establishment and political leaders appear to expect continued movement in the direction of greater agility, openness, and resourcefulness from its tertiary institutions. (Newby, Weko, Breneman, Johanneson, & Maassen 2009, p. 99)

These "new generations" of students are not enough in number to keep the universities in business as normal, so there is also a demand from universities for foreign students, yet in general, foreign students only make up around 3.3% of all students in Japan, less than half the OECD average (Newby et al., 2009, p. 80).

These university failings are particularly acute in the educational technology field as already described above (International Telecommunications Union, 2007). In addition some big-name universities still do not have a campus wide Wi-Fi network in place; some only have Wi-Fi in some rooms and in some buildings only, and frequently without any guest access. Other universities that do have a Wi-Fi network have less than robust ones, which are not suitable for large-scale deployment, whereby if many students use it simultaneously, the system runs slow, or crashes. This is the type of prevailing infrastructure that lead to Japan scoring so low on the e-Readiness Index (Suzuki, 2009).

DIGITAL LITERACY APPROACH

To date there has been a great deal of research conducted on the importance of digital literacy in the modern world (Jones & Hafner, 2012; Knobel & Lankshear, 2007; Kress, 2003; Lankshear & Knobel, 2008), and in the English-speaking world, there have been calls for formally integrating digital literacy into the curriculum at schools (Gee & Hayes, 2011), calls that the international schools in Japan seem to have heeded, while the universities have not. Furthermore, it is not just educational technology-minded teaching staff that are making complaints. I previously had conducted an action research project on digital literacy classes while I was teaching at International Christian University in the English for Liberal Arts program, as ICU's own internal student surveys of graduating senior students showed prior dissatisfaction with their IT/ICT skills (ICU, 2005) and the general information literacy weaknesses of students in these areas has also been identified at other universities (Burke, 2012; Kolowich, 2011). Other ICU students (non-seniors) also rated their IT/ICT knowledge and satisfaction lower than all the other categories surveyed as confirmed by ICU's self-study and evaluation report (ICU Self-Study Committee, 2009) in a later survey, and these provided the impetus for me to start my research project in the area of digital literacy.

The importance of digital literacy for English language learners has, however, not attracted as much attention when compared with digital literacy in general, with the advanced English learners sector at university receiving even less attention. One of the few studies addressing advanced learners (not specifically English or university-based learners though) advocates "bridging activities" (Thorne & Reinhardt, 2008) that combine language learning with new media and technology. So in response to this while teaching at ICU, I piloted the introduction of a course using these bridging techniques in my advanced English classes to examine students' reactions to this approach. This paper highlights my thought process behind that action research experiment as bridging activities have not been researched to any great degree in English in Japan, both because of the scarcity of such high-level English students in universities here, and the low levels of educational technology integration in education in Japan in general. In addition my students were kikokushijo (Japanese children who have received a substantial part of their education outside Japan) returnees for the most part, so they were very different from the vast majority of Japanese university students (and these are the type of internationally minded students that Japan needs to attract if their universities are to survive their demographic problems). As these types of students are a very under-researched group, especially in terms of their university experiences with educational technology content, this justified my research on the project.

Many educators have also written about collaborative or participatory-based learning (Lewis & Allan, 2004; Nicosia, 2013, Chapter 3), but these have not been addressing the case of internationally educated, advanced English language learners in Japan as my research project did. Here my research (in this case surveys and interviews) was designed to get feedback on the student reactions to these collaborative multimedia project-based work from just these types of students. The projects themselves were set up according to Salmon's five-stage model for blended learning (Salmon, n.d.). While this is a general design, I wanted to explore its suitability for internationally educated, advanced English language learners in Japan.

Overall then, the course I created and was researching aimed to utilize a modern digital teaching pedagogy along the lines of the "bridging activities" approach as advocated by Thorne and Reinhardt (2008) for Internet communication and tools for advanced language learners in general. However, I wanted to investigate how suitable this approach is for teaching internationally educated, third-culture, advanced English language learners in Japan. Therefore, the pedagogical approaches I used were those developed to leverage advances in educational technology for teaching digital/multimedia content as these seemed best suited to the bridging theory.

There are four categories in the bridging approach (Thorne & Reinhardt, 2008, pp. 536–566). These are "instant messaging" and "synchronous chat," and here Thorne and Reinhardt were more interested in the linguistic conventions used by students, whereas I was more interested in whether students used them at all, and if so to what extent, which tools and why. Thorne and Reinhardt also looked at "blogs" and "wikis" and were interested in whether students differentiated between types of blogs, and blogs and other reflective writing, and did not mention wiki's much except for citing Wikipedia as a model. By contrast, I was interested in how useful and interesting students found the act of writing a blog and reading others' blogs as part of a community of learners. I also examined their feedback on their collaborative efforts as part of their project was to build a collaborative multimedia website as an e-portfolio host for their coursework output. This leads into Thorne and Reinhardt's third category: "remixing." They describe this using an example of fanfiction quoting Black (2006, 2007, as cited in Thorne & Reinhardt, 2008, p. 565) as describing it as

A practice by which enthusiasts of various media such as books, movies, television, comics, and video games borrow elements of these popular cultural texts, such as characters, settings, literary tropes and plotlines, to construct their own narrative fictions. Fans often remix these various media, combining multiple genres languages and cultural elements; for example, Black describes English as a second language learners inserting Japanese terms and Asian cultural references into Japanese animation or anime-based fanfiction that is written in English and set within a North American context. (Thorne & Reinhardt, 2008, p. 565)

Here there were examples of this in one of the introduction videos my students made for their websites as they blended English language singing/song writing, human beat-box/hip-hop dancing, and shamisen (a traditional Japanese stringed instrument) playing in a musical piece that connected the three research themes of those students; namely, the negative effects of corporate influence on music in general, its changing of hip-hop style, and lowering of interest in traditional Japanese music due to U.S. cultural imperialism. These three students agreed to present this at an academic conference on educational technology in Japan with me in February 2014 (Paperless - http://paperless2014.weebly.com/) permission for Google to use their website at the BETT and gave (http://www.bettshow.com/) conference in London in January 2014, so giving the URL here poses no ethical problems. The video is on the landing page of their project site (https://sites.google.com/site/hiptomusic/). The fourth area Thorne and Reinhardt (2008) examined is "multiplayer online gaming." This played no part in my study as my course had no gamification component, as it was unlikely such a fun-looking component would have been accepted in my syllabus by the largely conservative minds of the Japanese university administrators!

My students, however, were not so conservative, being the so-called digital natives (Prensky, 2001), and although Prensky draws broad conclusions in his "digital natives/digital immigrants" thesis, and accordingly has been critiqued for not taking into account the older (immigrant) technology-capable researchers that built the Internet or the financial divide (rather than age) that underpins the

technology gap in many areas, his ideas do have some utility in terms of a generational approach to technology concepts rather than actual usage. For digital usage, work has been done on Japanese university students' computer knowledge and information literacy (Lockley, 2011; Murray & Blyth, 2011). Murray and Blyth found that students were much more experienced and proficient at using smartphones than computers (Murray & Blyth, 2011, p. 313). However, these were not internationally educated Japanese students, nor were they advanced English learners, they were *jun-Japa* students educated in Japanese schools that are low-tech to no-tech environments, as many ban the possession of mobile phones ("Ishikawa OK's kid cell phone ban," 2009), and non-English majors. So my course involved a group that has not been studied before in Japan (at least not in this way in this area) to determine their reactions to being taught digital/information/multimedia/visual literacy content using a digital pedagogy and as part of an online learning community.

As I recognized the importance of journaling by students as a reflective device (Finley, 2010), I started using online blog journals instead of paper-based journals to help address this "flipped learning" checking problem (Paterson, 2014, p. 4). In my approach, students posted blog entries with their reactions to the "flipped" readings or videos conducted at home, not just the class activities, and this has lessened the traditional paper journaling problems of timeliness (Paterson, 2014, pp. 5–6). These blogs had another benefit over paper journaling as it created an online community audience for the blogs, and this has been mentioned by students as being beneficial over the years I have been using this approach. This is an example of an emerging learning community (see the PLE section below) and, in this case, was a "Small Core of Active members – Closed Group" type of learning community (Lewis & Allan, 2004, p. 21) as the membership remained constant: the class members and me. So I wanted to expose the students' to being members of this 'community' and to have them sharing their blogs as this was new to most of them.

Building on blog usage, I adapted the Just-in-Time teaching approach to my course needs (Paterson, 2014, pp. 6–7). This is a theoretical teaching approach that borrows from the business/management/manufacturing theory of just-in-time production made famous by Toyota in the 1990s (Just-in-Time, n.d.), where supplies are only ordered when needed to maximize efficiency and reduce costs. The educational variation on this is for teachers to give comments and feedback "just in time" and when needed to maximize learning and memory retention. Therefore, I attempted to replicate this approach as much as possible in my course via blogs. In this way, I was using the blog journals to replicate the more hi-tech JiTT pre-class survey systems like i-Clicker (https://www1.iclicker.com/ student-response-devices) that were not suitable for my course, given the technology limitations at ICU.

With the blogs being public and shared, I wanted the other apps and tools to also offer a group function to emphasize the collaborative aspects of learning as I was aiming to examine the "community of learners" issue. Therefore, Google Apps and Zotero were featured prominently as they both possess these functions over and above their basic usage (Firth & Mesureur, 2010). These social aspects of the tools also enabled the students to contact each other and their teacher (me) at any time, and given the ubiquity of smartphones, they could be reasonably sure of a quick response from each other and me. This is the Expanded Classroom (Shaw, 2013) where technology enables community-based learning to take place everywhere, essentially making the wired (or wireless) world the classroom if students connect for classwork via their community. "Expanding the classroom' seemed the obvious way to go as it would enable me to have greater contact with the students via email, online chat, Google Groups, and blog comments. These, then, are the overarching theories and approaches that underpinned the work I did in this research project, the pedagogical strategies I used, and the tools, techniques, and skillsets I covered for the purposes of evaluating how well the bridging activities worked for my (currently) relatively unique and underresearched type of students in Japan.

CONCLUSIONS

My initial research project was designed to examine how a relatively unusual group of Japanese university freshmen students – in this case, the *kikokushijo* advanced English language students in my course – reacted to a course covering digital content and taught using a digital pedagogy. More specifically, it was to also examine how they adapted and related to the idea of being part of an online learning community of enquiry (Lave & Wenger, 1991; Lewis & Allan, 2004) and to what extent that impacted their learning experiences. In addition, this study also attempted to see if the "bridging activities" theory (Thorne & Reinhardt, 2008) used for other advanced language learners was also relevant in this digital type course setting.

From detailed interactions with the students over a period of eight months (including interviews and surveys over and above coursework and blog reading), my students gave an overwhelmingly positive response to this type of class, content, and delivery. A few comments here from the anonymous end-of-course survey will help illustrate just how well they rated these classes:

- Student Response 2 the tech-tools are something we can use for a lifetime, thus, i think the classes were relevant for our education.
- Student Response 4 That was awesome!!!! There are times I think back on our classes and it's a major relief to know that I can actually contact anyone whenever I come up with a cool idea or sth [something]. It's like class is still presuming in your phone.
- Student Response 6 enjoyed every bit of it, it was so stimulating to be with many bright, talented, classmates, the content of the class was always pushing me which was great!
- Student Response 9 The collaborative learning using Google and other technological tools was very useful and enjoyable. I think that Rab should hold an independent class just on those things.
- Student Response 11 (these) classes were the only classes this term where I did not feel the urge to sleep during class.
- Student Response 15 Best classes I've taken in my life. Amazing quality, new insight, integrating technology, just fantastic classes.
- Student Response 19 I never thought classes could be this fun interesting, and challenging.

Student Response 21 – These days, it should be NORMAL to have classes in rooms filled with computers. Technology plays a huge role in our lives today, and I don't see why it should be the same in classrooms.

Therefore, with technology playing a larger part of people's lives every day, especially in the younger generation's lives, education has to also evolve with these changes to remain relevant to succeeding generations of learners, as teachers cannot teach students the way they were taught and expect automatic student engagement to happen. Therefore, it is my recommendation that more universities in Japan implement these kinds of courses, and sooner rather than later, given how long it takes to get teachers up to speed on using these approaches and getting them able to use the tools properly. This is especially important if Japanese universities wish to attract internationally minded/ internationally educated students to offset the decline in student numbers in Japan due to the infamously low birth-rates in Japan. It is my prediction that this is indeed what will happen and some of the more forward-thinking Japanese universities are already starting this approach now.

So let me finish with this very apt quote:

We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world. (Warlick, 2006)

THE AUTHOR

Rab Paterson is Principal Instructor for Toyo University's Center for Global Education, Director of the Asia Association for Global Studies, Fellow of The British Royal Asiatic Society and The Royal Society for the Encouragement of Arts, Manufactures and Commerce, an Apple Distinguished Educator, Apple Certified Teacher, Google Innovator, Google Trainer, Google Certified Educator, and Google Educator Group Leader. He has a BA (Hons.) in Pacific Asian history and an MA in Pacific Asian studies from London University (SOAS), a Certificate of Educational Technology and Information Literacy and an MS in multidisciplinary studies from SUNY (Buffalo), and he's a doctoral candidate at University College London's Institute of Education. Email: paterson@toyo.jp

REFERENCES

- Aschwanden, C. (2004). Putting professors out to pasture. *Sage Crossroads*. Retrieved from http://sagecrossroads.com/node/293
- Aspinall, R. W. (2010). Education reform in Japan in an era of internationalization and risk. Retrieved from http://libdspace.biwako.shiga-u.ac.jp/dspace/handle/10441/8890
- Black, R. W. (2006). Language, culture, and identity in online fanfiction. *E-Learning*, 3(2), 170-184.
- Black, R. W. (2007). Digital design: English language learners and reader reviews in online fiction. In M. Knobel & C. Lankshear (Eds.), A new literacies sampler, Vol. 29 (pp. 115–136). New York, NY: Peter Lang.

- Burke, D. R. (2012, April). *Technological literacy in the foreign language classroom*. Conference presentation presented at the 5th International Symposium on Digital Technologies in Foreign language Learning, Kyoto University. Retrieved from http://digitallanguagelearning.wikispaces.com/
- Cyranoski, D. (2000, October 5). Age wins as Tokyo revamps retirement rules. *Nature*, 407(6804), 550. doi:10.1038/35036724
- Eades, J. S., Goodman, R., & Hada, Y. (Eds.). (2005). *The "Big Bang" in Japanese higher education: The 2004 reforms and the dynamics of change*. Melbourne, Australia: Trans Pacific Press.
- Ellington, L. (2002). Japan: A global studies handbook. Santa Barbara, CA: ABC-CLIO.
- Finley, T. (2010). *The importance of student journals and how to respond efficiently*. Retrieved from http://www.edutopia.org/blog/student-journals-efficient-teacherresponses
- Firth, M., & Mesureur, G. (2010). Innovative uses for Google Docs in a university. *JALT CALL Journal*, 6(1), 3–16.
- Gee, J. P., & Hayes, E. (2011). Language and learning in the digital age. Abingdon, UK: Routledge.
- Haberman, C. (1988, April 10). Japan's "Examination Hell." *New York Times*. Retrieved from http://www.nytimes.com/1988/04/10/education/japan-s-examination-hell.html
- Higher Education Statistics Agency. (2013). All students by HE institution, level of study, mode of study and domicile 2011/12. Retrieved from http://www.hesa.ac.uk/dox/ dataTables/studentsAndQualifiers/download/institution1112.xls
- ICU. (2005). *International Christian University: Program self-study report*. Retrieved from https://w3.icu.ac.jp/dean/selfstudy/selfstudy.htm
- ICU Self-Study Committee. (2009). *International Christian University: University* self-study and evaluation report (Self Study and Evaluation Report No. AY 2009) (p. 364). Retrieved from http://www.icu.ac.jp/english/info/policies/pdf/Self-study_ Report.pdf
- International Telecommunications Union. (2007). *Digital opportunities index (DOI)*. Retrieved from http://www.itu.int/ITU-D/ict/doi/index.html
- Ishikawa OK's kid cell phone ban. (2009, June 30). *The Japan Times Online*. Retrieved from http://www.japantimes.co.jp/news/2009/06/30/news/ishikawa-oks-kid-cell-phone-ban/
- Johnson, C. A. (1982). *MITI (Ministry of International Trade and Industry) and the Japanese miracle: The growth of industrial policy, 1925-1975.* Stanford, CA: Stanford University Press.
- Jones, R. H., & Hafner, C. A. (2012). Understanding digital literacies: A practical introduction. Abingdon, Oxon, UK: Routledge.
- Just-in-Time. (n.d.). Retrieved from http://www.toyota-global.com/company/vision_philosophy/toyota_production_system/just-in-time.html
- Knobel, M., & Lankshear, C. (2007). A new literacies sampler (Vol. 29). New York, NY: Peter Lang.
- Kolowich, S. (2011, August 22). What students don't know. Retrieved May 21, 2012, from http://www.insidehighered.com/news/2011/08/22/erial_study_of_student_research_habits_at_illinois_university_libraries_reveals_alarmingly_poor_information_literacy_and_skills
- Kress, G. R. (2003). Literacy in the new media age. London, UK: Routledge.
- Lankshear, C., & Knobel, M. (2008). *Digital literacies: Concepts, policies, and practices*. New York, NY: Peter Lang.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Lewis, D., & Allan, B. (2004). Virtual learning communities: A guide for practitioners. New York, NY: Open University Press.

- Lockley, T. (2011). Japanese students' experience of ICT and other technology prior to university: A survey. *The JALT CALL Journal*, 7(1), 93–102.
- McVeigh, B. J. (2002). Japanese higher education as myth. New York, NY: East Gate Books.
- McVeigh, B. J. (2010). The state bearing gifts: Deception and disaffection in Japanese higher education. Lanham, MD: Lexington Books.
- Ministry of Internal Affairs and Communications (MIC) Japan. (2013). *Future school promotion project*. Retrieved from http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Japan-13/documents/Sess5-2 FutureSchool Kobayashi.pdf
- Murray, A., & Blyth, A. (2011). A survey of Japanese university students' computer literacy levels. *JALT CALL Journal*, 7(3), 307–318.
- Newby, H., Weko, T., Breneman, D., Johanneson, T., & Maassen, P. (2009). OECD Reviews of Tertiary Education: Japan. OCECD Publishing.
- Nicosia, L. M. (2013). Educators online: Preparing today's teachers for tomorrow's digital literacies. New York, NY: Peter Lang.
- Paterson, R. (2008). Education in Japan: The school as a business, teachers, and students as commodities. *Biztek Journal of Management and Social Sciences*, 4(2), 89–103.
- Paterson, R. (2014). The learning technologists toolkit: An overview of digital pedagogies for 21st century teaching. *International Christian University's Language Research Bulletin*, 29(1–10). Retrieved from http://lrb.info.icu.ac.jp/Paterson%20Vol29.pdf? attredirects=0
- Prensky, M. (2001). Digital natives, digital immigrants Part 1. On the Horizon, 9(5), 1-6.
- Ramseyer, J. M. (2010). Do school cliques dominate Japanese bureaucracies: Evidence from supreme court appointments. *Washington University Law Review*, 88(6), 1681–1711.
- Rohlen, T. P., & LeTendre, G. K. (1998). *Teaching and learning in Japan*. Cambridge, UK: Cambridge University Press.
- Salmon, G. (n.d.). *Five-stage model*. Retrieved January 21, 2014, from http://www.gillysalmon.com/five-stage-model.html
- Shaw, J. (2013, March). *The expanded classroom: The impact of technology in a connected world*. Retrieved from http://www.slideshare.net/JonathanShaw2/ cu-expanding-classroominted2013final
- Suzuki, K. (2009). E-learning in Japan: Past, present, and future. In 2009 KAEM and the 4th BK21 GGRTE international conference: Technology and future learning space, Proceedings (pp. 9–17). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/ download?doi=10.1.1.394.2809&rep=rep1&type=pdf
- Tanikawa, M. (2013, February 25). Japan's hope: If you build it, they will come. *The New York Times*. Retrieved from http://www.nytimes.com/2013/02/25/world/asia/25iht-educlede25.html
- Thorne, S. L., & Reinhardt, J. (2008). "Bridging activities," new media literacies, and advanced foreign language proficiency. *Calico Journal*, 25(3), 558–572.
- Urata, N. (1996). Evaluation issues in contemporary Japanese universities. In R. Hayhoe & J. Pan (Eds.), *East-West dialogue in knowledge and higher education* (pp. 177–191). Armonk, NY: M. E. Sharpe.
- Warlick, D. (2006, May 22). Curriculum is dead [Web log post]. Retrieved from http://2cents.onlearning.us/?p=420
- World Education Forum. (2000). *The EFA 2000 assessment: Country reports Japan*. Retrieved from the UNESCO website: http://www.unesco.org/education/wef/ countryreports/japan/rapport_1.html
- *World university rankings.* (2017, August 18). Retrieved from https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking
- *World university rankings 2013–2014: Times higher education.* (2013). Retrieved from http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ran king

KOTESOL Proceedings 2017

