

# Language Teaching in Japan in a Digital Age

## —Issues, Considerations and Potential Pitfalls—

デジタル時代の日本における語学教育  
—課題、思考事項と盲点—

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### 〈Abstract〉

Research and implementation of digital language learning solutions goes back decades yet language classes in Japan are still, at the time of writing of this paper (March-May 2020), mainly taught in an environment which includes the physical presence of teachers and students. The COVID-19 pandemic, announced as such on the 12th of March 2020 (WHO, 2020), brought with it an immediate need to bring digital learning to center-stage in education in Japan. This race to digital should be informed by the decades-long research and have at its core the needs, voice, learning styles and culture of the audience, the expected environment in which learning will take place, the permanence of courses, and a knowledge of the caveats of enforcing a student-centered digital approach. Students' mental health stemming from self-cognitive perception complexities should be balanced with the need for a country to educate and of a student to education. Consideration of teachers' and learners' abilities, personalities, needs, resources and goals will give essence to the principles which inform suitable language education systems, while the security and cementation of a high level of faith in certification standards may find solutions in pre-IoT quasi-contained limited-online data-push teaching and testing language systems which can be modified to today's distributed environments using, for example, private encrypted tunneling protocols. This paper concludes with a reminder that learning *of* the language is to be followed by learning *through* the language, recalling EMI, CLIL and ICHLE waves of research. The expected ROI of any language teaching environment must be identified and should be part of the chosen ICT digital learning blueprint.

### 〈Keywords〉

Digital Language Teaching, Student Centered, ICT Learning Blueprint

## 1 Introduction

The pandemic event of COVID-19 announced in early 2020 created an environment in which online and digital-based learning suddenly became dominant in many sectors of education (Lederman, 2020), although time will tell as to the extent and persistence of that dominance. In Japan there has been a “shift to digital forms of teaching” (O’Donoghue, 2020), due to nationwide school shutdowns since February 2020, with classes moving online and often using in-house Learning Management Systems (LMS) in

addition to applications available to the general public such as ZOOM, LINE and Google Drive (ibid) to name a few. Preparation for this “push to digital” has been in the pipeline for many years at almost all levels of education and for most ability strata in Japan, with examples going back a decade or more.

Early local research in Kanazawa, Ishikawa was carried out on elementary school children learning English combined with some digital aspects (Yoneda, Lynch and Woods, 2007), junior high school English learning

partially underpinned by technology was investigated in the same area (Lynch, 2011), and successful practical research into supporting low ability learners using online materials in a tertiary level compulsory English program again in the local area was also undertaken (Lynch, 2012), using the WORDREADY lexical learning software system, nominated for the ELT 2006 British Council Innovation Awards (Lexical Learning, 2019). All of the above and, in particular, the latter tertiary level online materials research program for low ability learners, were successful in achieving the goal of combining the Council of Europe Framework of Reference (CEFR) language development guidelines with a student-friendly system of traditional and digital learning.

While internet-based technology has been available for many decades now, it has become increasingly useful due to more intuitive platforms, a greater number of students who have grown up in the digital age, and the possibility of augmenting traditional learning methods with AI and other pattern recognition techniques (Lynch, 2009). In order to mitigate negative issues caused by students not being able to physically attend classes due to mandated or recommended pandemic-related lockdown in 2020, universities have raced to move traditional classes online (Harvard, 2020) and are reconsidering MOOCs or similar learning ICT platform environments to teach courses while keeping in mind the culture of the audience (as recommended in Lynch, 2015a).

Going forward, it will be interesting to see how issues such as hitherto high levels of attrition and low rates of certification (Gitinabard et al, 2018) in online courses will be tackled by program managers. It should be kept in mind that, with the pace of change to online speeding up, flipping the switch to turn what was traditional to digital can come with problems. In parallel with the move to digital, the impacts of styles preferred by the audience, the culture surrounding such an environment, and the reasons for acceptance/ rejection of an online course should be acknowledged (Lynch, 2015b).

## 2 Caveats of Forcing a Student-Centered Digital Approach in Japan

Maftoon and Ziafar (2013) find that in Japanese classrooms there exists anxiety about initiating conversations, cultural reticence, and cultural expectations that the teacher dominates the classroom. There is also

evidence that teachers, possibly in reaction to student demands or because of their own training, have tended to use a teacher-led approach to their classes (Lynch, 2015b). This is a concern for interactive online planning as the participants on both sides may be forced into a learning style with which they are not familiar or comfortable. Jiang (2020) explains how styles such as video chat (dual directional video conference teaching and learning) can be exhausting and uses the term “zoom fatigue”, referring to a popular software application as representative of the industry, ZOOM (Zoom Video Communications, 2020). Jiang refers to the views of Petriglieri at INSEAD (Institut Européen d'Administration des Affaires), and Shuffler at Clemson University, revealing that issues including increased focus demands, altered perceptions of silence, and awareness of being watched can combine with existing stressors (such as the reasons for having to have classes online, including lockdown and quarantine) to mentally tire participants, regardless of whether or not they are introverts or extroverts (Jiang, 2020) - yet another topic of which educators and policy makers should be aware.

It behooves educators and educational institutions to remember that students have different cognitive perceptions of themselves, with some people having more layers to such perception. A more complex self-cognitive perception can provide a barrier to the negative effects of stress (Linville, 1985), while the opposite, a simpler self-image leading to a higher likelihood of depression, has also been shown to be true (ibid.). It is here that we need to keep in mind both the internal and external needs of the students, including their “voice” as described in Lynch (2014), Lynch (2015c), Lynch (2015d), ensuring students see themselves as being included (Lynch, 2015e), resulting in increased motivation resulting from being made stakeholders in their own education (Lynch and McKeurtan, 2011).

## 3 ICT in Providing a Voice in Learning

### 3-1 Expectations and Reality

In contrast to the aforementioned caveats, ICT can “offer opportunities to young people for learning and skill development” (United Nations Youth, 2014) and can be useful in enabling youth participation through PBL (Project Based Learning) (Lynch, 2014) providing suitable support at their level and in their learning (Lynch and McKeurtan, 2012) and enhanced satisfaction in that

learning (Lynch, 2015d). However, in reality, when students in our location in Japan are told to proceed independently with using ICT for PBL, they eventually show poor results in terms of few attempts to engage with the ICT provided while, in contrast, teacher-organized face-to-face learning events are participated in with more enthusiasm and success (Lynch, 2015b), making investigation of this phenomenon and inclusion of findings a priority to mitigate and reverse the negative tendencies of ICT-based learning platforms.

Facing these issues is vital as, in times of disaster, ICT-based education may be the only option available and has to be embraced as the alternative of not educating for a period of time can be detrimental to the future of the country. Education is essential to the continued wellbeing of the nation (Husbands, 2013) in the face of Japan's continued economic and demographic headwinds (Lynch, 2015c). Thus, when using ICT-based learning systems, the teacher needs to, initially at least, accept the role of being the impetus of the educational events, while ways need to be found to help students become more comfortable with expressing themselves over a digital network and, as mentioned in the previous section, to express their own voice. This "voice" refers to the "self", not the simple aural voice that is expected or even demanded by the program coordinator.

### 3-2 Methods of Providing Widely Suitable ICT-Based Education

Tay, Lim and Lim (2013) found that two factors, namely technological infrastructure and teachers' beliefs and practices, were important when supporting seamless integration of ICT into the learning environment. However, their findings do not consider the students themselves. To take a wider view, the methods used to provide suitable ICT-based learning and cooperation must focus on the five aspects of abilities, personalities, needs, resources, and goals (Trampe, Quoidbach and Taquet, 2015). These refer to the teachers' and learners' abilities, their individual and collective personalities, their educational and personal needs, available resources, and the goals of the educational program. It should also be remembered that those requirements are a moving target as they can change daily, with Trampe, Quoidbach and Taquet pointing out one particularly variable factor as being human emotion. Clearly, there cannot be a single

solution to satisfy those requirements, so a range of solutions should be considered and reviewed regularly. At the risk of this paper becoming dated, concrete examples of some current solutions are discussed in the following sections.

### 3-3 Online Video-Based Open ICT Educational Applications

Online video-based solutions are not new with one example, Skype, having been available since 2003 and described at the time as having "disruptive potential in the telecom market" (Osterwalder, Ondrus and Pigneur, 2005). There is now a wide selection of such software with solutions that exist as an aside to the main text/pictorial-chat function of an application. One such system is LINE (LINE Corporation, 2020) and can be contrasted with systems such as ZOOM, mentioned earlier, that have video as center-stage. These two systems, convenient for language education, provide us with different useful environments with some background given as follows.

*LINE:* Using data from the end of January 2020, just before (and thus unaffected by) the main thrust of the COVID-19 (SARS-CoV-2) pandemic which resulted in local or national government calls for reduced physical socialization in Japan, there were 83 million active users (defined as using it at least once a month) of the LINE messaging app in the country, with the bulk of the Japanese user base being young adults aged 15 to 34 years (Statista Research, 2020). The population of Japan is circa 126.5 million people as of April 2020 (Worldometer, 2020 April 21), calculated from U.N. census-related data published 2019 July 1 using the total population on that date combined with the U.N. medium-fertility variant for the country, with other pertinent data for accuracy (ibid.). These numbers show that it is a mathematical certainty that almost all young adults are active users of the LINE application. We can also be numerically confident that almost all students (at least those over 15 years old) are familiar with using LINE and, following that, there would be a low barrier to entry in terms of training to use it in a classroom situation.

*ZOOM:* This software reflected the opposite situation of LINE above, with the number of users in Japan only breaking above 100,000 people at the end of 2019

(Momose, 2019). This means an educator cannot be confident that students will immediately understand/be familiar with its functions, meaning the creation of a plan to include software practice into their language classroom time, or as a student pre/post class task, becomes necessary.

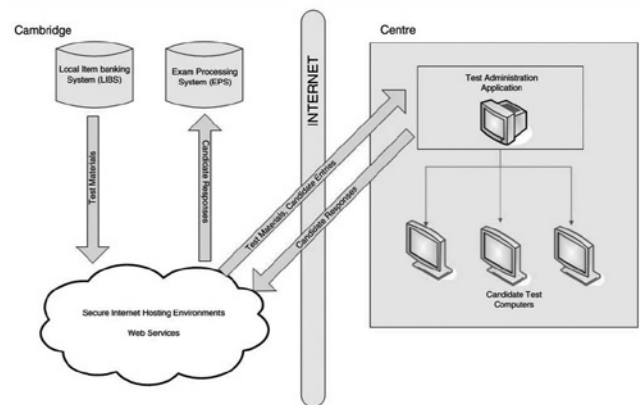
The above two systems show how decisions regarding the digital platform chosen should include expected student familiarity, which in turn informs the training likely needed. Thus, it may be the case that in a world that moves to digital distance learning for only a short, temporary amount of time, the efficient choice of software might be an application already familiar to the class body while, in the case of a longer term or permanent move, a less familiar system may be selected due to the ROI (return on investment) going beyond the breakeven point of time and effort put in versus subject material learned per average time unit.

### 3-4 Limited Connection ICT Educational Applications

The existence of IoT (Internet of Things) can seem to suggest that every device is at its most useful when it is connected to the internet. A definition includes the explanation that IoT can “operate more efficiently, better understand customers to deliver enhanced customer service, improve decision-making and increase the value of the business.” (IoT Agenda, 2020). However, there are certain situations of security that demand direct connection to the outside world be strictly limited. Such a quasi-contained system can be a limited-online testing system providing the type of security needed for international English language examinations such as IELTS or simply to ensure that the security of the educational institution is enhanced, putting more faith in certification. This contrasts with applications mentioned above (Skype, LINE, and ZOOM) which, even if network security were ensured, allow students access outside help easily, making it difficult to grade testing as the students’ own work.

The author would like to present a computer-lab based online testing system using the internationally recognized Cambridge ESOL (English for Speakers of Other Languages) CBT (Computer Based Testing) that was led with success from 2010 to 2013, when the author led the Hokuriku Cambridge Testing Centre (JP178) as chairman.

This system was the first in Japan to offer university-based computer testing of public examinations that have national visa-level security needs, as the Cambridge Examinations are used as criteria to visa allocation in some English-speaking countries including the UK, Australia and the USA (UCLES, 2020). The system used can be described as a central hub of one computer (with a mirrored backup), connected securely using the Cambridge Connect system over the Internet, with student devices only connected using a local, internet isolated LAN connection (Figure 1).



**Figure 1: Cambridge ESOL's Connect computer-based testing framework. Research notes issue 22, Cambridge ESOL. Retrieved from [cambridgeenglish.org/Images/23141-research-notes-22.pdf](https://cambridgeenglish.org/Images/23141-research-notes-22.pdf)**

Although the above setup was published and used from 2005 (Cambridge ESOL, 2005), it can be modified for modern use by implementing using more distributed devices and tunnel networks yet maintaining a similarly high level of control and content management. By using a data-push system such as the above, even the absence (or avoidance of high cost) Internet based systems will not impede student access to information or their participation in discussions and learning, and it may be carried out on the students terms and according to their preferences (such as being teacher-centered and controlled with a focus on examinations). Such a language learning system can incorporate testing and secure certification, allowing learners to gain recognised skills which they can prove to employers.

In order to be successful, however, language learning will need to quickly move beyond the learning *of* the language, and move toward learning *through* the language, meaning that students will ultimately be part of a program in which they acquire non-language skills using the target

language as a tool. This view recalls the practical and research waves of EMI (English as a Medium of Instruction), CLIL (Content and Language Integrated Learning) and ICHLE (Integrating Content and Language in Higher Education) as described by Dafouz and Smit (2016), Dalton-Puffer (2011), and Schmidt-Unterberger (2018).

#### 4 Summary and Conclusions

The selection of a digital platform for language education should include consideration of factors such as students' self-perceptions, their personal "voice", and their class expectations and needs. Their abilities must be put into the learning and teaching equation, including their ability to use the resources chosen. For this, the students' backgrounds and general trends in society are essential

data. When choosing the digital resources themselves the length of time that ICT platforms will be used is also important to consider, as whether the situation is temporary or permanent will inform the ROI of the selection and dictate whether a complex or a simple, readily available solution should be part of the ICT digital learning blueprint. Finally, the security of the setup is another important factor with integrity of students' work being as important in some applications as data encryption, firewalls, and network dependability. Some older solutions can be, in certain cases, superior to newer IoT ones in specific scenarios.

This research was written from March to May 2020, and it will be interesting to see what choices will have been made by the time it has been published.

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