

The suitability of types of digital learning for a situation such as the Covid-19 crisis, with reference to both Japan and overseas.

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1: Introduction

2020 brought a health crisis which has been unprecedented in recent history, with most comparisons needing to go back to the ‘Spanish Flu’ almost exactly a century ago. Although the severity of the latter was greater and it has been described by Barry (2020) that, “Before that world-wide pandemic faded away in 1920, it would kill more people than any other outbreak of disease in human history.” (p.4), the Covid-19 pandemic has had a wide range of repercussions, many of them severe, including on education. As with repercussions in other areas of society, changes which have resulted are, to some extent, seen as accelerating existing developments. This paper will consider the effects on foreign/English language education (FLT/ELT). First, it describes how online modes have developed from early foundations, followed by discussion of the impacts of the present situation. Then, the focus moves to the relative benefits and disadvantages of various methods of delivery. Responses from students who were faced with this changing situation are introduced and finally ramifications for the future will be considered.

2: The development of digital learning

As Dudeney and Hockly (2012) indicate, “The integration of technology in ELT has undergone a dramatic shift in the past 25 years.” (p.533) They

refer to three eras in this development. The first is 'computer-assisted language learning' (CALL), followed by 'technology-enhanced language learning' (TELL) and finally, at least at the time when they were writing, 'information and communication technologies' (ICT). They see a long history when writing that, "The history of CALL clearly does not begin in the 1980s, yet it was around this time that CALL began to see real traction in language education." (p.534) Much of the latter part of this paper will concern learning and teaching at tertiary level and Henry and Li (2005) considering postgraduate study, refer to Morse (2003), and thus see 1994 as a date from when computer mediated communication (CMC) came to be in increasing use at tertiary level. (p.4)

Even the terms used in the previous paragraph give an indication of the changes in capability spurred by technological advances. Among these advances, probably the greatest change has been the capability to link users achieved by the networking capability of the Internet, a stark contrast to the limitations of early offline capabilities. Additionally, the wider range of devices available for use, no longer purely computers, but also more mobile devices such as tablets and smartphones, makes the term 'digital learning' most appropriate presently, as used in the title of this paper. As Carrier (2017) writes, this term "serves as an umbrella term to refer to the tools, techniques, methodologies, and activities we have inherited from the researchers and practitioners of previous disciplines." With that, he effectively means the stages of development described in the previous paragraph. (p.1)

3: The suddenness of Covid-19

As can be seen from the above section, there has been steady development in the opportunities provided by technology and its educational utilisation, with a defining change being the opportunity to

move from use offline to online. At a point when this development had reached its present state in 2020, Covid-19 developed and soon had major effects as it progressively affected an increasing number of countries, starting with its outbreak in China.

These effects presented major challenges to education, including two in particular. First, its suddenness. While it might be considered that the resulting need to move to remote teaching and learning would be welcomed by practitioners with strong commitment to, and lengthy experience of technology use, that is not necessarily the case. As Hodges et al. (2020) stress, “What we know from research is that effective online learning results from careful instructional design and planning, using a systematic model for design and development.” However, in a fast changing learning and teaching environment such as in this scenario, such care may not always be possible, but rather leads to rushed approaches that could actually undermine the gains made by previous experience based on well thought through planning and implementation. As they also write, it is thus necessary for experienced proponents to somewhat distance themselves, “the distinction is important between the normal, everyday type of effective online instruction and that which we are doing in a hurry with bare minimum resources and scant time: emergency remote teaching.”

Secondly, a long established issue reasserted itself, the ‘digital divide’. This is a situation where, largely due to financial challenges, there is a gap in access to technology based both on relative advantages or disadvantages between countries and also within countries. While the country where the writer is teaching, Japan, has the third largest economy in the world, as with other countries to varying extents, it also has distinct disparities in wealth which result in differing access to technology. As the head of a NPO in a Tokyo suburb reported, “Educational disparities have increased due

to prolonged school closures. They (school students) can't study at home unless they are extremely motivated," and that, "The effects of having no classes for three months are huge." (Disadvantaged families) In writing the latter, he is referring to the general suspension of school classes in Japan from March 2020 until May 2020. However, the response to such closures was not purely limited by financial restrictions. Provision to enable a rapid change to remote learning and teaching was largely not available, although it was achieved to a greater extent at private schools. Albeit almost a decade before, Selwyn (2011) states that, "it should be clear to all but the most zealous technophile that the much-heralded technological transformation of schools and schooling has yet to take place." (p.5) This is particularly the case in Japan. As a 2018 O.E.C.D (Organization for Economic Cooperation and Development) showed, "Japan had the lowest percentage for which schools believed their teachers had the necessary skills to integrate digital devices in teaching." In addition, it indicated that, "Japan ranks lowest when it comes to using information and communication technology outside of school for schoolwork, and Japan is below the OECD average both for access to computers for school work and quiet places to study." (A shift to digital forms of teaching)

Obviously, there are variations in use based on the level of education related to age, both with provision and connections to the suitability of technology for learning. In addition, in relation to this Covid-19 induced 'emergency remote teaching' environment, it was suggested that the possibility of infection and spread of infection varied according to age. For example, responding to both of these factors, in the case of schools in the U.K., generally there was a greater priority put on children at primary (elementary) school returning to school earlier. However, as previously indicated, this paper, reflecting the writer's teaching environment, is

mainly concerned with teaching and learning at tertiary level and I now move on to this area.

4: The tertiary response and types of delivery

Naturally, the responses of universities varied, both within Japan and globally. However, globally there were widespread interruptions to traditional on campus 'face to face' classes. To take two countries as examples, Pu describes how, "In January 2020, the Ministry of Education in China announced the postponement of the 2020 spring semester for all schools and colleges, and issued guidelines for online teaching and learning as temporary measures to bridge the gap until schools could reopen" (p.345). Harvard University in the U.S., indicated that it would not reopen for on campus classes for the new academic year in September 2020 for the first time in 384 years and, as with many other U.S. institutions, its campus was largely closed to students from March 2020.

Universities, including those in Japan, basically had three choices for course delivery, in the sense of how to respond to, and mitigate, the situation which they were faced with: continuing 'face to face', live online (synchronous), 'on demand' (asynchronous), or a combination of two or all three of those. Here, I largely concern myself with the latter two. How well do each deal with the challenges which Peachey (2017) sees from studying online, which, "include a sense of isolation, the need for self-discipline, and developing technical literacy?" (p.143) There are advantages for either. As Hodges et al. (2020) show, students may be under pressure in other aspects of their lives, so that, "Instructors and administrators are urged to consider that students might not be able to attend to courses immediately. As a result, asynchronous activities might be more reasonable than synchronous ones." Dealing with the challenges of Internet connectivity, which may involve temporary interruptions, can also be seen as an

advantage of asynchronous delivery. Echoing age-related factors referred to above, Hodges et al. also indicate that age is likely to play a role in suitability when they state that, “adult learners require more flexibility, so asynchronous is usually best, perhaps with optional synchronous sessions, whereas younger learners benefit from the structure of required synchronous sessions.” Where exactly do university students fit, in the sense of students at the ‘regular’ age for university rather than older ‘mature’ students? I would say that they are actually somewhere between the ‘adult learners’ and the ‘younger learners’ who Hodges et al. refer to. They can thus benefit from the greater structure provided by the fixed time slots of synchronous delivery, which can help to avoid the procrastination which can occur when there is greater time flexibility. However, this could be combined with asynchronous elements, to allow more time for reflection and reduce the pressure resulting from being ‘in the spotlight’ a pressure which can be experienced in synchronous delivery methods, especially with video conferencing.

While synchronous delivery may result in the drawbacks referred to above, a distinct advantage is indicated by Meskill (2011), with her dichotomy between teaching which is what she calls ‘humaned’, as opposed to teaching which is ‘automated’ (p.250), with the latter being “pre-programmed and devoid of human contact”, while the former is “dominated by rich social interaction using the language and steered by the underlying culture that is the target of learning.” (p.249) However, for Meskill, such a dichotomy does not actually strictly align with the contrast of synchronous and asynchronous delivery. For example, she is positive about the latter as one element of ‘effective, online language instruction’, when she writes that, “language educators find – especially in asynchronous environments – that they have many more fruitful opportunities to respond to teachable moments online as compared to the

frantic give and take of the live classroom.” (p.250) However, that depends on teachers actively engaging with students in such asynchronous environments, otherwise students may feel unable to deal with points which they do not understand.

Responses from students undertaking my courses during the period of ‘emergency remote teaching’, as described above, relate to arguments concerning the relative efficacy of these contrasting types of delivery and will be addressed in the next section. In addition, I will consider this key factor, reported by Academic Partnerships in 2013 and quoted by Peachey (2017), that, “Building rapport and establishing relationships are critical to the success of an online course.” (p.145)

5. Observations from students

I now consider how university students reacted to the situation and how that relates to issues which have been described above. During the first semester of the 2020-1 academic year (April to August), I taught six weekly courses at two institutions, with 16 meetings in all courses, plus one further course which was shared with a number of other faculty. The latter was also the only ‘on demand’ (asynchronous) course which I was involved with. The others were largely taught synchronously using ‘Zoom’ video conferencing, although homework assignments and other additional activities were delivered asynchronously, using a learning management system (LMS) at one institution and ‘Microsoft Teams’ at the other institution. Finally, a relaxation of restrictions on campus entry enabled one class each for three courses to be given face to face on campus.

Responses referred to are from students participating in one of the courses, a course which is termed ‘Eigo (English) Communication 2’ and involved 2nd year students. The main two opportunities for responses were

at different stages of the semester. The first was as part of a homework assignment in week 4, which asked various questions about the students' relationships to technology, including the question focused on here: "How do you feel about online lessons?" The second was when students gave feedback reflecting on their performance (after week 16 at the end of the course). In both cases, although the responses are considered valuable as part of reflecting on the changed learning and teaching environment resulting from Covid-19, that was not the original main aim of asking students for these responses. In the case of the first group of responses, 33 students were surveyed. Not all gave responses to the question (How do you feel about online lessons?) related to the present discussion and more than one response could be given. I have grouped them into categories as shown in Figures 1 and 2 below:

Figure 1: Basically positive responses

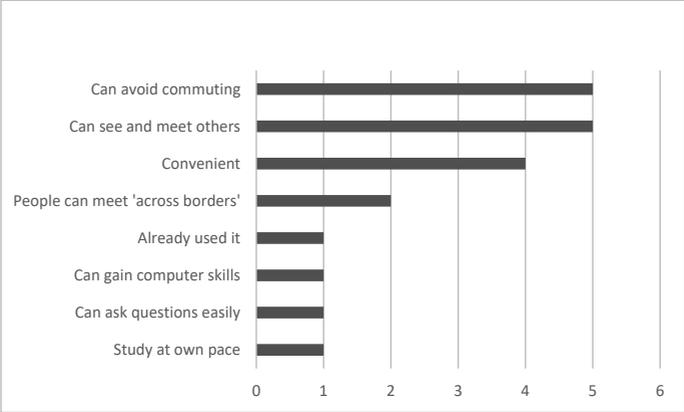
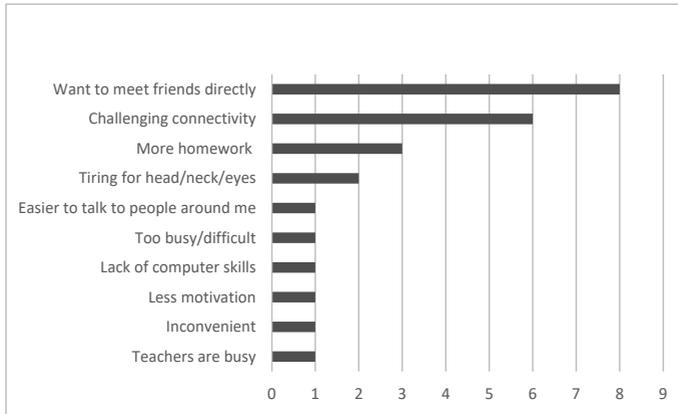


Figure 2: Basically negative responses



Among the answers shown in Figure 1, three can be seen as particularly illuminating for the present discussion. First, it would seem to clearly indicate that synchronous delivery has been used and appreciated when students have been able to, “see and meet others.” Secondly, two students specifically refer to a wider interpretation of this when they indicate that, they “can meet ‘across borders’”. This relates to the fact that the delivery mode (video conferencing) enabled participants who I termed ‘virtual visitors’ to join. In fact, during the semester, a total of ten visitors from seven countries joined on thirteen different occasions at one institution and three visitors, each from a different country, on one occasion at the other institution. (Note 1) It replicated the previous involvement of visitors ‘in person’ in my classes (see Robins (2010) and Robins (2011)), but at a greater frequency. This allowed a diversity which was missing due to the absence of most international students as a result of travel restrictions, seen in my own situation and generally in tertiary institutions in Japan (How Japan’s border closures have affected international students). I also felt it was positive, as the visitors could join on ‘equal terms’ rather than such visitors joining an otherwise ‘face to face’

class online. Finally, one student indicates the possibility to “ask questions easily” Obviously, this would not be impossible if asynchronous delivery was being used, but immediacy could be lacking.

Answers in Figure 2 again show responses which address issues in remote learning more widely, but do indicate that even synchronous delivery through video conferencing can be seen as lacking when compared with on campus ‘face to face’ classes. Students are shown as feeling lonely and still desiring to “meet friends directly.” As one indicates, it is “easier to talk to people actually around me.” This mirrors reports, both in Japan and elsewhere, which have focused on mental health issues. As a survey at Kyushu University found, during this period with a lack of ‘face to face’ classes, 40% of students surveyed reported feelings of loneliness and 58% had had no or little chance to speak directly to professors. (Students at SW Japan university experience health issues)

The second group of responses, from 31 students in the same group, are from when students were asked to reflect on their performance and progress at the end of the semester. As with the first group of responses, not all students addressed the experiences involved in online learning. Therefore, in a purely qualitative rather than quantitative approach, certain responses related to the present discussion are indicated here and discussed.

Many students indicated that they had had the chance for participation and also referred to ‘eye-contact’ and it is particularly comments such as these which show that the learning environment would be difficult to replicate by asynchronous delivery:

“I communicated with my friends during group discussion by listening with a smile.”

“I was able to look (into) the other person's eyes.”

“I can talk with my friends in break out room. The conversation was so fun...” “The class was fun because we can see friend’s and teacher’s face and talk with friends and native speaker.”

However, as one student indicated, such synchronous delivery still left something to be desired:

“I enjoyed Eigo Communication class because I talked a lot with my classmates by Zoom. It was interesting for me to listening classmates’ episode. I wish I (had) taken your class by face-to-face. I hope we can go to university and meet each other in late (second) semester.”

From the responses, it can again be seen that the ability through course delivery by synchronous video conferencing to at least somewhat replicate the visual environment of a traditional physical ‘face to face’ teaching and learning environment has a strong appeal for the students. It can be seen to have at least somewhat ‘solved’ the situation which Pu describes, which is, “For learners who have been *isolated* at home temporarily, online learning is a major part of their *social communication*.” (my italics) (p.347) and has reduced their ‘sense of isolation’, referred to be Peachey (see above) and to have helped make the learning and teaching more ‘humaned’, to use Meskill’s term (see above).

6: Implications for the future

As has been indicated, the teaching and learning situation created by the Covid-19 pandemic has resulted in a need to consider the methods best suited for delivery, by considering their merits and demerits. More widely, while being aware of the multitude of challenges it has created, not least the financial issues with provision in developing countries, as Devine (2020) has written, “there has been one positive that has come from the

period of online teaching – teachers and students have had a crash course in educational technology and digital literacy. the amount of enforced professional development and student upskilling over the past few months is unprecedented.” Online ‘delivery’ can also help students who are not able to be physically present at the campus, for reasons such as work or family commitments. While already present in tertiary education in many locations, the capabilities were brought to greater attention in Japan, which had been slow to adopt such modes of delivery. One of the two institutions where I teach and which I referred to earlier, intends to continue the provision of online delivery for graduate courses.

As it continues at the time of writing, it can only be hoped that the pandemic will come to an end at as early a date as possible. In the case of the writer, the majority of classes returned to ‘face to face’ in the second semester of the 2020-1 academic year (October to February), even though the Covid-19 pandemic was far from abating. The majority of students expressed positive attitudes to the return to ‘face to face’, although a number of classes were ‘hybrid’, with students joining by video conferencing, partly as a result of benefits previously experienced, including avoiding commuting or when they had other appointments scheduled. However, it is important that lessons learned can be built on and that there is not merely a return to ‘the status quo’. Related to the methods of delivery discussed above will be the continuing negotiation of how this may impact the relationship between teachers and students. As Dudeney and Hockley (2012) wrote some years before Covid-19, in spite of technological changes, “the teacher’s role has remained constant to a certain extent: that of facilitating and guiding our students in the language learning process, providing them with the best possible materials and approaches that are currently within our reach.” (p.542)

New approaches have been created and developed, as a result of the

period of 'emergency remote teaching', to use the term indicated earlier in this paper. Throughout the history of the use of technology in language learning and teaching, advances in such technology have allowed a wider and wider range of activities. Peachey (2017) sees this continuing with the rise of modes such as immersive 3-D technologies and virtual reality. As he writes, "With the development and integration of these new technologies and a greater understanding of the ways students and teachers interact and develop online, we could finally see, after thousands of years of dominance, the place of the physical classroom finally being challenged." (p.153) Finally, to take one more student's comment from the responses to the questionnaire at the end of their course (see previous section), he wrote, "I felt a new era through the lessons conducted using a convenient content called zoom.... I was wondering if the class on the PC would be difficult at first, but I didn't have to worry."

Note

1: Details of 'virtual visitors' can be found at: <http://www.kokusai.aichi-edu.ac.jp/2021/v6.html>

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