12 Digital pedagogy and language teaching and learning – from research to practice

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Introduction

While digital pedagogy is by no means a new endeavour, its role in language education – and education more generally – has grown considerably in recent years. Much of the most recent, accelerated growth can be attributed to the mass movement of education to online spaces during the Covid-19 pandemic. However, Covid-19 notwithstanding, arguably, the changing winds and shifting sands that have perennially shaped English language teaching practices (Marckwardt, 1972) were likely guiding educational technology and language education to continue to evolve together and shape one another (Carrier and Nye, 2017).

Critiques of digital pedagogies during the Covid-19 pandemic argue, quite rightly, that many organisations, teachers, and students were not prepared to make the transition to digital teaching and learning. As such, many practices in digital pedagogies at this time reflect a crisis-response to digital pedagogy that is not built upon established and research-informed educational practices (Adedoyin and Soykan, 2020). Therefore, it becomes important to disentangle crisis practices from research-informed practices and reflect upon how to best support and deliver impactful digital language pedagogies. To this end, this short chapter brings together different perspectives on teaching and learning a language with technology.

What is this chapter about?

This chapter aims to:

- highlight the synergetic relationship between pedagogy and technology
- point to guiding principles that can support effective practices in digital language pedagogy
- offer useful points for reflection to guide personalised teacher development in this area.

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Teaching and learning language with technology: unpacking a complex relationship

Teaching and learning language with technology draws on research from many fields, such as data-driven learning (Pérez-Paredes, 2019), educational technology (Thorne and May, 2017) and (I)CALL – (intelligent) computer-aided language learning (Curry and Riordan, 2021). What transcends these various foci is a strong consideration of the relationship that exists between pedagogy and technology. That is to say, there is a consistent consideration of how teachers are guided to merge their pedagogical approaches with their technological practices.

In earlier work on blended language teaching, teachers are guided to use technology to replicate effective practices that occur in the analogue teaching world (McCarthy, 2016). Similarly, Selwyn (2011) calls for a deep consideration of the goodness of the fit between technology and pedagogy, arguing that technology will not automatically enhance language teaching and learning. Echoing such views, a typical argument encountered in discussions of digital pedagogy, and one I have made myself (Curry, 2018), is to 'put the pedagogy first'. Largely, this is well meaning and aims to support teachers by encouraging them to draw on their existing knowledge of language teaching and learning to inform their use of technology as they develop an awareness of what might be termed 'digital language pedagogy'. This perspective is well espoused in the literature (cf. Fox, 2003; Fullan, 2013) and largely serves to guide teachers to treat technology like any other resource, e.g. a coursebook.

In attempting to visualise this model of the relationship between technology and pedagogy, Figure 12.1 presents the teachers' knowledge as including their understanding of language pedagogy, which, in turn, contains within it a knowledge of using technology to facilitate language learning.

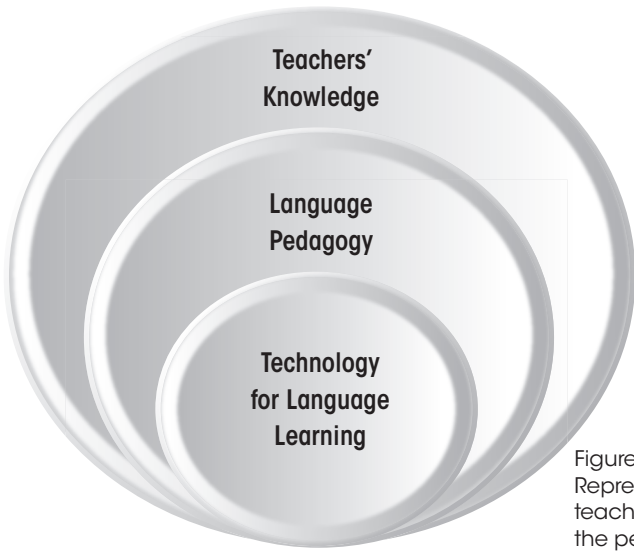

Figure 12.1: Representation of teachers 'putting the pedagogy first'

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However, a recent paper by Tsui and Tavares (2021) problematises this widely held view, positing that one ought not to consider the relationship between pedagogy and technology as a dichotomous and unidirectional one. For them, such a view blurs the truly complex relationship between language pedagogy and technology, which they argue is synergetic, iterative and multidirectional in nature. In this way, pedagogy and technology can shape and be shaped by one another. It may seem obvious that technology should facilitate pedagogy; however, technology can also develop pedagogies by offering new ways of differentiating content, for example, where the speed of videos could be changed to slow down or speed up recordings in mixed-ability classrooms. Following this logic, the relationship between pedagogy and technology is one of co-construction, varying according to curricular, environmental and contextual stimuli, such as classroom constraints and learning objectives, as Figure 12.2 indicates.

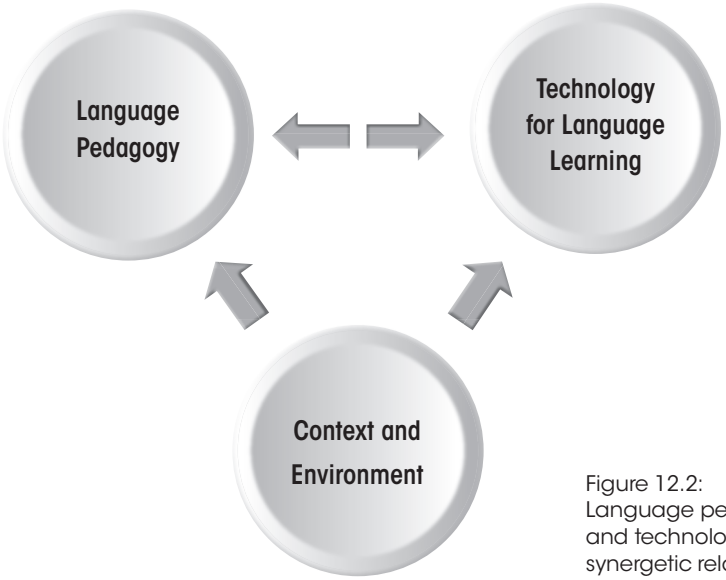

Figure 12.2: Language pedagogy and technology as a synergetic relationship

Of course, Tsui and Tavares (2021) recognise that a focus on pedagogy is of critical importance. However, they argue that the openness to allow technology to reframe and reimagine pedagogy is important, as this is one of language technology's key affordances. As such, to develop language teachers' practices, it may be more beneficial to accept that the relationship between pedagogy and technology is a complex one. In doing so, the multidirectional ways pedagogy and technology shape each other can be explored more deeply. With this discussion in mind, the following section offers guiding principles for developing an iterative approach to digital language pedagogy.

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Towards an iterative digital language pedagogy

In developing a digital pedagogy, research offers a number of valuable guidelines. For example, research suggests that digital language learning ought to: engage and motivate learners (Gao and Ma, 2020); develop autonomous learners (Niinivaara and Vaattovaara, 2018); facilitate interactive, socialised and collaborative learning (Thorne et al., 2009); and create spaces for self-regulation and self-development (Matsuoka, 2014). However, to inform digital language teaching practically in this way, there is a need for local and contextualised efforts and commitment. Without the appropriate infrastructure and support, and depending on the student body, digital pedagogies remain inherently variable.

In developing an approach to digital pedagogy, consideration must be given to contexts, students and shared language learning aims. In working with technology, the goal to facilitate teaching and learning can be met by drawing on the field's collective expertise in language education. This is expertise that is also not static, but dynamic and ever-evolving. As such, keeping up-to-date with developments is an obstacle to be overcome. However, further challenges emerge. Not only is there a need to develop an awareness of current knowledge and practices in the field, there is also a need to develop them by continuing to innovate and experiment with technology and share experiences of doing so. In this way, working within the complex systems that govern language pedagogy and technology, new and innovative practices can emerge that fit well within a range of digital teaching contexts.

A localised and iterative digital pedagogy allows us to draw on macro themes in educational research and use them to guide teaching practices. For example, knowing that learners learn effectively in social contexts, one could argue that the use of social media and the internet can effectively realise pedagogical goals of facilitating authentic social engagement (Chapelle, 2003). Moreover, in letting technology guide pedagogy, using learner engagement data – such as that available in tools like Write & Improve (Curry and Riordan, 2021) – to inform teaching, can allow for the development of data-driven learning objectives. In such ways, one can develop a robust and reflexive approach to digital language pedagogies.

Closing remarks and points of reflection

In engaging in a brief discussion of digital pedagogy and language teaching and learning, this chapter aimed to draw attention to the challenges of developing digital pedagogies during a crisis, such as the Covid-19 pandemic, and the importance of disentangling crisis and digital pedagogies. Recognising the inherent value that research affords the informing of research-led digital pedagogies, the teaching and learning of language with technology was discussed.

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This discussion centred on the complex relationship between technology and language learning and offered guidelines for the development of a digital pedagogy.

Though there are often efforts to systematise teaching and learning, it is not a science *per se*. Rather, it is an extremely variable practice that is universal and global, yet heavily and deeply localised. In engaging with research to inform digital language pedagogies (or any pedagogies for that matter), caution is required. There is a need to be cautious of depending too much on heavily localised research to inform practices in very different contexts, and of considering such research as irrelevant simply because it does not entirely reflect specific contexts. A more fruitful practice would be a critical one, which affords a deep engagement with research to foster experimental approaches that may lead to new, creative, and innovative practices. With this in mind, the following self-reflective guide offers a means to develop critical practices for digital pedagogies.

Reflections

Reflecting on digital pedagogy for language teaching and learning: Part 1

Use this first question to identify and understand your own practices in order to find a means to develop them.

1. Think back to your first experiences with digital pedagogy. How has your approach changed over time?

Reflecting on digital pedagogy for language teaching and learning: Part 2

Next, think about why the changes you identified have occurred.

2. To what extent do you 'put the technology first'? Or do you take a more synergetic view of language pedagogy and technology as shaping one another?

Reflecting on digital pedagogy for language teaching and learning: Part 3

Now, consider the following question to look forward and rationalise your decisions and practices.

3. How will you determine if the changes you make / do not make to your practices have a positive impact on your teaching?

Reflecting on digital pedagogy for language teaching and learning: Part 4

Finally, reflective practices are ongoing and we should not consider this the endpoint. Therefore, the final reflective question offers scope for sustained and future development.

4. Looking forward, how will you continue to develop your approach to digital pedagogies?

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