

# Second Language Teaching in the Digital World: Why We Need Digital Technologies?

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**Abstract:** Technology and science are developing at an unprecedented pace nowadays, and digital technology in particular has largely improved the tools and ways available to investigate new pedagogical approaches. The paper demonstrates how the advent of contemporary information and communication technology has influenced second language teaching, resulting in a shift away from the conventional teacher-centered and text-bound classrooms into interactive and student-centered paradigms. Also, the large potential and unique advantages of digital technologies have been analyzed, compared with some difficulties teachers and students meet during second language learning process in traditional language classes. However, digital tools are not a panacea which also require careful design and consideration. Therefore, the paper also puts forward several practical ways to bring the largest efficacy of digital technology on second language learning.

**Keywords:** Second Language Teaching; Digital Technology; Teaching Modes; English Teaching and Learning.

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## 1. Introduction

Digital technologies have penetrated into most of aspects of human life, providing new possibilities and great conveniences. In the realm of foreign language teaching and learning, this expansion has not been overlooked. In recent years, the advent and development of technology has brought revolution to second language, especially English education. Originally, there is only one modal of teaching and learning which is learning through typical classroom teaching. But with the introduction of technology, the ways teachers teach and students learn are enormously evolving. They start to receive the information through the web, create educational materials on the internet and collaborate with others (Alam, et al., 2022). According to Chun et al. (2016), serving not only as motivational and assisting tools but also essential appliances (Al-Kadi, 2018), technology nowadays encompasses a broad range of mediational resources with improved intellectual capacity and creativity, enabling users to create meaning in a variety of ways based on complex combinations of multimodal texts.

In the era of accelerating globalization, English as lingua franca requires teachers and students to develop into skilled facilitators and engaged participants. However, under the traditional mode of English teaching and learning, students are often faced with problems to smoothly communicate though they have the necessary competency. What they know is to repeat sentence structures and single words instead of interacting with different people in different situations. It can be seen that only relying on traditional classroom teaching barely helps to develop students' language skills and applied abilities when needed in real-life situations (Alam, et al., 2022). Adding digital technologies into language teaching, undertaken properly, can provides laudable benefits to the "digital" generation (Al-Kadi, 2018).

## 2. Applications of Digital Technologies in English Language Teaching

It should be noted that English teaching methods have undergone continuous development. Every strategy and

teaching style used throughout the history of English Language Teaching has embraced particular technologies to support it. According to Al-Kadi (2018), teachers who used the grammar-translation technique, for instance, depended on the chalkboard as the ideal medium for one-way information transfer. The blackboard was then superseded by OHP (Overhead Projector), another medium for the classroom dominated by the teacher. Subsequently, the audio recordings served as instruments for the audiolingual approach, which favored vocal repetition as a way of learning. Next, the multi-media and social networking expanded the scope of English Language Teaching even further.

Technology integration in language education has always been linked to second language acquisition theories and instructional strategies. The choice of technology tools typically aligns with a specific methodology in language education (Davies, Otto & Rüschoff, 2013).

In the early days of applying digital technology in English education, CALL, referred to Computer-Assisted Language Learning was first termed at the end of the 20th century which basically depended on fixed computers as the delivery medium for applications. It was developed in accordance with the behaviorist theory of language learning in the 1960s and 1970s. Early CALL tools such as phonograph records and reel-to-reel tapes were used to improve listening and drill activities, which were later replaced by portable cassette tape recorder (Wilkinson, 2016) but were still centered on repetitive language drills and games. With the help of these computer tools, the drill-and-practice rehearsal became more effective. After that, during the 1970s, Overhead Projector (OHP) and other software computer programs such as audio-taped materials became more popular, reducing the rely on mechanical and repetitive drilling.

With more critics on the audiolingual approach for its lack of focus on communicative aspects of language use, more interactive CALL tools emerged in parallel with the cognitive learning theories in the 1980s. Students started to learn English better through watching movies and animations, listening to recordings and using images. The contents of these digital tools and software tended to be more alike to real-life situations, practicing English users' capability of

speaking and listening in unrehearsed situations. The late 1980s and early 1990s witnessed a move toward communicative language teaching, aiming at engaging students in real-life situations. Computer-based activities were used to teach grammar implicitly and to facilitate original utterances generation instead of drilling patterns (Al-Kadi, 2018).

In its broader definition, CALL encompasses various technologies, including personal computers, mobile phones, and electronic whiteboards, all of which contain embedded computing systems to carry out different learning activities (Al-Kadi, 2018). Other associated terms were coined later on: Internet-Assisted Language Learning (IALL), Web-enhanced language learning (WELL), Technology-Enhanced Language Learning (TELL), and Mobile-Assisted Language Learning (MALL), all of which encompass a range of digital platforms, materials, and approaches for assisting language learning in a flexible and interactive way. Today, these terms are still used and researched to prove the beneficial effects of digital applications.

The rapid expansion and development of Internet and technology in the 21st century opened up more opportunities and practices for the integration of digital tools in English teaching and learning. This trend also resulted in the shift from communicative teaching to a more social and socio-cognitive view (Wilkinson, 2016), laying solid foundation for the cognitive-constructionist approaches, i.e. integrating learners in authentic environments and integrating the skills of language learning and usage (Davies, Otto & Rüschoff, 2013; Wilkinson, 2016). Qin and Shuo (2011) suggested two salient aspects of using technology in English instruction: (a) Technology is a tool for teaching English and (b) English is taught via technology. The former aspect focuses on choosing a specific tool to aid the learning process while the latter focuses more on using digital tools to create the whole language learning environment where teachers and learners basically put their attention on the target language and its culture but not technology itself. The popularity of smartphones, tablets, and numerous other advanced devices and electronic platforms has proved extremely beneficial for language learners in the 21st century, truly creating a more interactive, flexible, structured and authentic environment for English learners. The new task-based, project-based and content-based methodologies enabled learners to “combine speaking, listening, reading, and writing in ways that resemble more closely how they normally engage with the digital facets of their own lives” (Blake, 2016, p. 129). Instead of going to computer labs once a week for isolated exercises, they use digital tools as part of their daily life activities. The roles computers and technology play are largely extended to a tutor offering “instruction, feedback, and testing in grammar, vocabulary, writing, pronunciation, and other dimensions of language and culture learning” (Kern, 2006, p.191). As a result, the ways teachers teach and students learn undergo huge evolution as digital technologies provide them with numerous resources and possibilities to make teaching and learning more efficient and authentic.

From above, it can be seen that language education especially English education has always been accompanied by and benefited from digital technologies in different ways and forms, which proved that if implemented appropriately, digital technologies can be a huge facilitator for language teaching and learning.

### **3. The Potential Drawbacks of Traditional Language Teaching Modes**

Nowadays, English education also face the problem that teachers teach what they know but when students are required to see what they manage, there are only fragmented grammar rules especially in speaking and listening and especially in countries that lack authentic English environment. This reminds educators that something must be changed and reformed.

From the students' perspective, linked to the expansion of web-based applications broadly, not solely concerning educational techniques, it can be contended that there has been a transformation in the manner by which students approach their learning (O'Connor, et al., 2022). The new “net generation” hold different learning styles to the previous generations. They grow together with the expansion of digital media and is therefore more receptive to a more digital way of learning which include multiple media use and stimulation based virtual settings (Jefferies & Hyde, 2010). Taking this feature into consideration, digital tools can perfectly match with the new generation students' needs, providing an authentic and interactive learning environment which traditional “talk and chalk” teaching mode cannot hold a candle to. And also, as Alexander and Boud (2001) argue, “learning does not occur in isolation. [...] The extent to which we are motivated to learn depends as much on the context of learning as it does on intrinsic interest in the object of study” (p.14). In traditional language classes, it's difficult for the instructor to satisfy every students needs in every learning stage. By employing a variety of digital tools, the roles of the tutors and learners are both largely expanded (Kern, 2006, p.191).

In addition, teachers and students sometimes struggle in some areas in English studies in traditional classes, such as scansion (the rhythm of a line of poetry, or the process of examining the rhythm of a line of poetry when appreciating English or American literature). This is to some extent unteachable but can be addressed with technology in the way which is not possible and feasible in traditional classrooms where teachers rely singly on reading and repeating. Digital tools allowed for crowdsourcing through discussion board, videos and so on (Higgins & Gomez, 2014). This enables students to better appreciate English poems and touch the cultural aspects underneath.

### **4. The Practical Values of Digital Technologies in Second Language Teaching**

For educators and learners, teaching and learning English has always been a long-term and complicated process which calls for a lot of practice and engagement. Pedagogy is a major component for any learning environment, since it offers a foundation for its design, and provides instructional guidelines needed for effective and efficient teaching (Bednar, Cunningham, Duffy, & Perry, 1992). As the multimedia digital technologies become more available, they hold large potentials to stimulate L2 pedagogy refinements, making English classrooms to be more communicative, interactive, and learner-centred. Below are some of the important advantages of applying digital technologies.

For students, integrating digital technologies allows for

learner diversity and autonomy, self-motivation and authentic scenarios. Learning technologies are adaptive, defined as “software and online platforms that adjust to individual students’ needs as they learn. Through interacting with the technology, behavioral and cognitive patterns are recorded and personalized learning experiences are shaped accordingly” (p. 7) by Alamri and Watson (2020). Imagine a large English classroom with students at different levels. It's difficult for the instructor to notice every student's needs and problems. However, digital technologies provide students with friendly and acceptable materials and resources accordingly, serving as individual scaffolding irrespective of different learners with different levels of understanding. Thus, students' initiatives and autonomy are encouraged. According to Rana (2013), we need to take into account that “human beings are very visual beings, that what we see tends to affect our judgement more”. In real classrooms, it's difficult to create native speaking country context but digital technologies have the potential to bridge the gap between language knowledge printed on books and language usage in real-world situations. For example, the audio and visual effects help students to transform rigid sentence patterns and decontextualized words into capacity cultivation. It fosters a supportive atmosphere for classroom activities including debates, group discussions, and topic discussions, which can increase the chances for communication between students and between both educators and learners. In this way, students' mutual intelligibility and communicative competency are developed.

Besides, using digital technologies helps to broaden students' knowledge about the culture of the targeted language. Usually, what is shown on textbooks isn't the whole picture of the lives, customs and culture of the people speaking the language. Digital technologies and platforms, with a wealth of learning resources such as pictures, recordings and videos, provide more information than textbooks and broaden students' horizons. Students can understand the bigger picture of the world and not just stay confined to what schools and teachers teach them within their classrooms and textbooks. With the wealth of materials available through the multimedia technology, students can become knowledgeable about the target language's culture. It facilitates the exchange of information between students and encourages active participation in class activities, both of which accelerate and improve language acquisition (Pun, 2013).

For modern language teachers, they encounter new responsibilities and problems posed by the new era. With the remarkable emergence of contemporary technologies like multimedia, the tradition of teaching English has undergone significant shift. Technology offers a plethora of possibilities that enhance the interest and effectiveness of language instruction by drawing in language learners. First, there are numerous resources provided by digital technologies that teachers can take advantage of. Multimedia technology can be used by educators to make language lessons more vibrant and engaging. There are numerous methods that can be used in a variety of contexts while teaching English. Some are helpful for business English, spoken English, reading, listening, and interpretation; others are beneficial for testing and remote learning (Pun, 2013).

Second, digital technologies can help to create a conducive and favorable teaching environment in language classrooms. Healey et. al. (2008) say, “Bad teaching will not disappear

with the addition of even the most advanced technology; good teaching will benefit from appropriate use of technology to help learners achieve their goals” (p.17). The characteristics of digital technology, such as its visibility and vibrancy, have unique effects on the participants. This technique makes the language class lively and interesting, motivating the students to participate in the classroom activities. Therefore, the whole class can be activated instead of being dull and inactive. One of the biggest problems of English classrooms in China is that students are always quiet and unwilling to talk. Even if they like to talk, they are sometimes trapped by their hesitation and stuttering, which reduce their confidence and willingness to communicate. Multimedia technology helps to settle this dilemma by using it in classrooms to help students become more proficient communicators by enhancing their speaking and listening skills. During this process, teachers can utilize digital tools to facilitate students' engagement by creating an authentic, meaningful and interactive class environment. By doing this, educators in the classrooms release the pupils from being forced to absorb knowledge passively.

## **5. Some Ways to Better Integrate Digital Technologies in Language Education**

Despite the numerous potentials and advantages digital technologies have on language education, they are still a source of fears and insecurity for many teachers everywhere around the world. As Deborah Healey et. al. (2008) say, “pace and extent of change in technology for teaching, however, have made it difficult for many teachers, teacher educators, and administrators to know how best to employ computers, other forms of digital technology, and the global interaction enabled by the Internet in language teaching” (p.2). Therefore, some measures can be taken to reduce the hesitation and improve the overall situation.

First and foremost, teachers should not overuse and over-rely on digital tools. Young and Bush (2004) say, “With no clear sense of effective technology use, teachers often ignore it altogether or resort to exposing students simply to whatever current software is most available, with little instructional support or curricular connection” (p.7). To use digital aids doesn't mean that teachers can hide behind the “technology curtain” and resume the lecture's conventional role or trust too much on the technology (Hashemi et al., 2020). Instead, in order to maximize both components and accomplish the stated objectives of language learning, all delivery channels must be used simultaneously and methodically (Shraim, 2012).

Second, teachers and students should be trained for adequate technological competency. This is because technology is advancing and changing at an unprecedented speed and different platforms and tools are constantly appearing. No one can make sure to conduct a class full of digital tools with every student coordinating flawlessly. So adequate training should be provided before introducing new digital tools to make sure teachers know how to conduct classes with those tools as helpful aids and students know how to use those tools to facilitate their learning. Besides, support from the stakeholders is also important. Adopting digital technologies is not only concerned about language teachers and students but also institution stakeholders as the whole process may require large amount of fund, advanced infrastructure and improved pedagogy to achieve the largest

maximum learning outcomes.

## 6. Conclusion

From above, it can be concluded that in the new digital area when traditional “talk and chalk” teaching mode sometimes fail to satisfy the needs of language learners, digital technologies can be integrated as a large facilitator to language learning, improving students’ thinking and practical language skills. Especially in the non-native English speaking context, this can be an efficient and practical way to get learners engaged and motivated by creating an interactive, communicative and authentic language environment. It is undeniable that these days, L2 pedagogy is linked to Internet apps, mobile devices, and computers. A plethora of technology, including IWB, videos, and web-based applications (including blogs, wikis, Facebook, and Twitter), are familiar to language teachers and learners. In fact, digital technologies have developed together with L2 learning theories. The choice of technology and the way of applying it are undergoing constantly evolution. Last but not least, while both new and old appliances optimize real-world chances for L2 learning and teaching, digital tools do not always guarantee improved language acquisition. There is still a long way to go. This essay poses some suggestions for a better application of digital technology to maximize its effectiveness.

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