

Immerse into the Digital Age: New Technological Tools and New Challenges for the Improvement of Language Teaching

Dr. Zakia DJEBBARI

Abou Bekr Belkaid University- Tlemcen - Algeria

Abstract:

Within this changing time of globalisation where teachers have to deal with digital native learners, it seems crucial for them to be familiar with information and communication technologies to survive in this digital age. Tremendous changes have been observed in education with the incorporation of technological tools in different teaching and learning settings, such as engaging more students in the lesson, using multimedia sources flexibly, and motivating learners easily. Nonetheless, one should be cognisant of the fact that despite the growing importance of ICTs in education, there is no “magic bullet” that will answer all existing challenges (Schramm, 1977), still there is a lack of a structured approach based on collaboration, innovation, development and implementation of educational technologies. Thus, this paper is designed to probe possible links between deeper interactivity in teaching, the use of ICTs, and learning. It also aims to explore how engaging in reflective dialogue with researchers contributed to changes in teachers’ thinking and practices.

Key-Words:Digital age, ICTs, quality of instruction, technological tools.

ملخص:

في زمن العولمة , قد لوحظت تغييرات هائلة في مجال التعليم مع إدماج الأدوات التكنولوجية في إعدادات التعليم والتعلم المختلفة، مثل إشراك عدد أكبر من الطلاب في الدرس، وذلك باستخدام مصادر متعددة الوسائط بمرونة، وتحفيز المتعلمين بسهولة. ومع ذلك، يجب الإدراك لحقيقة أنه على الرغم من الأهمية المتزايدة لتكنولوجيا المعلومات والاتصالات في التعليم، لا يوجد "حل سحري" الذي سوف يجيب على جميع التحديات القائمة و لا يزال هناك عدم وجود نهج منظم على أساس التعاون والابتكار، وتطوير وتنفيذ تقنيات التعليم. وبالتالي، تهدف هذه الورقة للتحقيق في تفاعل أعمق في التدريس باستخدام تكنولوجيا المعلومات والاتصالات.

الكلمات المفتاحية: العصر الرقمي، تكنولوجيا المعلومات والاتصالات، نوعية التعليم، الأدوات

التكنولوجية.

Introduction:

The last half of the twentieth century was characterised by revolutions in information and communication technology that influenced various professions. The impact of information and communication technologies on the education process has given rise to some interesting debates and reflections among researchers. In view of the fact that technology is relevant in the production, transmission, and distribution of information, teachers cannot in all possibilities ignore computer-based technology in their teaching and even in their own professional development. The growth and development of information and communication technologies (ICTs) has led to a wide diffusion and application in pedagogy and education. Thus, the present paper is mainly concerned with the application of technological tools in the English teaching methodology to pursue the objectives of certain skills or competencies that learners should acquire in order to learn in a professional manner. It tries to shed light on theoretical reflections on how technology-based knowledge check how the use of ICTs may assist teachers to overcome time and space bar.

Bringing Technology into ELT Classrooms

A new global landscape is emerging as our world currently witnesses a period which may be called “a digital age” where countries are trying to catch and utilize amazing technological developments into every area of their technical and social life. It is often assumed that one of the

main challenges of current pedagogy is the integration of technology into classroom tasks. Language researchers strongly argue that it appears to be inevitable that, the more a teacher makes use of instructional technology in the classroom, the less teacher-centered and the more student-centered a classroom will become.

Throughout history, tremendous developments in technology have brought out new needs for human beings to facilitate and to speed up his process to progress. In view of this fact, foreign language teachers have always been ahead of the curve in incorporating technology in foreign language instruction and learning, seeing the benefits of technology even without an extant research database to confirm their judgment. The number of computer applications, communications technologies, and sheer volume of offerings on the Internet has grown at an amazing rate over the last years, and many educators have embraced these new technologies as useful instructional tools in pedagogy. In this line of thought, I believe that the following questions should be asked when implementing technology in professional pedagogy:

- What needs we are trying to meet when using technology?
- What is the best way to integrate technology in a given context?
- What impact does the use of technology have on the teaching/learning process?

Answers to all these questions are urgently needed to build our knowledge base of the instructional use of technology in professional education, because it is no longer a question of whether we should use technology or not, but rather in what contexts and for what purposes is technology appropriate for learning and teaching.

Technology-Oriented Pedagogy

Considering language as being a remarkable index of pedagogy changing, it would be surprising; indeed, if such a radically innovative phenomenon; namely technology did not have a fascinating impact on the way learners learn and grow. However, the feasible combination of technology into education seems reasonably doubtful if it is not carefully integrated the curriculum accompanied by appropriate services, mechanisms and professional development support (Fox, 2003). Within the same line of thought, Collis and Moonen (2001) propose that an important driving force for pedagogical change is technology and that a key-issue in this implementation is how to exploit its power to enhance teaching and learning. Joining this idea, NCEL (2004) states that:

The integration of new and powerful technologies in our educational institutions and increasing emphasis on higher-order skills in curriculum content will not bring about the broad changes required without essentially changing the ways teachers and learners work together.

This integration might be in the form of the following suggested materials suitable to a lab-based course.

- **Language Laboratory**

Language laboratory, or lab for short, can be used in a variety of ways within the teaching/learning process. It acts as a platform for learning, practising and enhancing language skills through interactive lessons and communicative modes of teaching.



Figure 1. Panorama of Language Laboratory (2009)

Teachers, who wish to develop their learners' listening and speaking proficiency, may broadcast video or audio materials to all students via video streaming; at the same time, students can watch and listen the teaching material in their screen and earphones. This may add to the

experience of listening and repeating the means of self-criticism by recording and playing back. In this way, each student works in a semi-private booth equipped with PCs, headphones and microphones which enhance their autonomy. Their self-confidence and motivation will be raised since they establish a non-threatening individual learning environment. Besides, while using the lab, teachers may control learners' PC remotely, including turning on/off and restarting their computers, and even controlling their learning outcome and progress. In a language lab, the majority of students takes part in the learning process and does not play a passive role. In other terms:

- Students interact with multimedia materials in which native speakers of the target language are talking in an authentic context.
- Students record themselves and listen to themselves speaking the target language – comparing their responses to a model speaker.
- Students converse in the target language with their fellow students in pairs or in groups – giving every student sufficient time to practise their listening and speaking skills.

White paper_Language Labs Demystified(2011:3)

Accordingly, teachers are required to settle clear objectives and functions to work upon; to illustrate this, the subsequent objectives may be considered:

Objectives	Purposes of Teacher's Console
<ul style="list-style-type: none"> • Develop pragmatic competence, to understand the grammatical form & function & scale of formality. • Enrich the discourse competence, to prepare the learner to be able to produce contextualize written text and speech. • Acquire strategic competence to use both spoken & written language to use in a wide range of communication strategies 	<ul style="list-style-type: none"> • Stay in control-Monitoring the students from the teacher's PC when they are on self learning. • Reinforce learning-Facilitating broadcast and sharing files from Teacher's PC to the other student workstations through audio, video, text and image. • Teaching with software that is approachable-Pairing and grouping the students to facilitate group discussions. Content authoring to create course material, and tests. • Ensure the best learning results

Table 1. Language Lab’s Objectives (Adopted from Madhavi, 2012)

- **Using Podcasts to Integrate Listening, Speaking and Pronunciation**

The first podcast appeared in early 2005, and soon ELT educators join this movement. Podcasts can be considered as following:

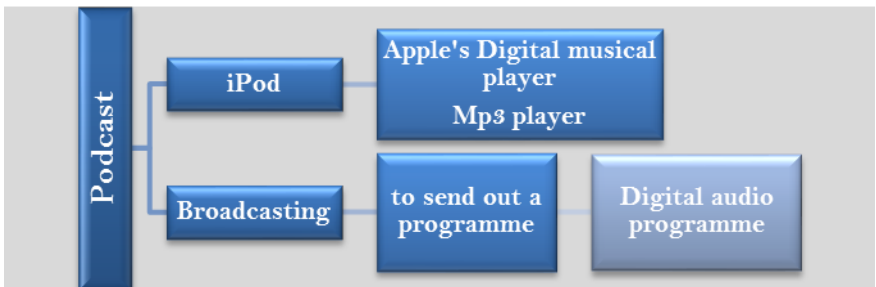


Diagram 1. Podcasts

Thus, Podcasts are “*digital audio programmes that can be subscribed to and downloaded by listeners*” Carvalho, 2008. One should be cognizant of the fact that though audio programmes have existed on the Web years ago, what seem to make podcasting unique is its capacity for “*subscription*”: through an RSS feed, Really Simple Syndication, which is a way of publishing information on a website so that someone can take it and use it on another website. In this fashion, listeners can “subscribe” to their favorite podcasts, and their computer will then receive “alerts” whenever new episodes have been posted. Using podcasts in language teaching covers a wide range of areas; a brief survey of ELT podcasts will be put in the following table:

Content	Description	Example
Compréhensive	Podcasts that cover a wide range of content types, such as traditional listening comprehension activities, interviews, and vocabulary.	http://www.englishteacherjohn.com/podcast/
Whole lessons	These are whole lessons based on a podcast. The text of the news story is provided, and is accompanied by the audio file. There is then a lesson plan with accompanying worksheet materials. In effect, these are ready-made lessons based on podcasts which teachers can use in the classroom directly.	http://www.breakingnewsenglish.com/
Vocabulary, idioms, etc.	This is a popular type of podcast, probably because it is easy to produce. In this kind of podcast, the host chooses some vocabulary items and explains their usage. The example presents a few idioms in each episode.	http://englishteacherjohn.com/
Conversations with script	These podcasts contain conversations between native speakers. To help less proficient learners, each episode is accompanied by the script, for learners to refer to while listening to the conversation.	http://www.e-poche.net/conversations/

Jokes	These are podcasts containing jokes. Because they usually play on language, they encourage careful listening by the learner.	http://www.manythings.org/jokes/
Songs	These podcasts contain songs for ESL learners. The songs are either traditional children's songs, or authentic popular songs for teenagers. They are also often accompanied by the text of the lyrics.	http://englishpodsong.blogspot.com/
Phonetics, Pronunciation	Podcasts are obviously highly suited for teaching phonetics and pronunciation. These podcasts are lessons which focus on specific phonemes and pronunciation problems in English.	http://phoneticpodcast.com/
Listening Comprehension	These podcasts provide conventional listening comprehension practice.	http://mylcpodcasts.blogspot.com/
Stories	These are usually story read-alouds. They may or may not be followed by listening comprehension questions	http://www.englishthroug hstories.com

Table 2. Content of ELT Podcast (adopted from Paul, 2007:118)

- **Video-Based Activities: Immerse into Youtube**

In this era of ‘YouTube’, as English courses evolve in the 21st century and adapt to new technology, teachers are supposed to stay ahead of the curve and incorporate technological tools at a large extent. Researchers have reported myriad positive effects associated with the use of video in language courses. Students will find videos enjoyable (Levin, 1998), which may help increase students’ responsiveness to the target instruction (Marx & Frost, 1998).

There was a time when videos were only used by professionals after a great deal of expense and time; however, with the advent of inexpensive pocket video cameras and simple-to-use editing software, video production has now become easy and highly accessible. With a couple clicks, a video can be shared and viewed by millions of people (Johnson, Levine, & Smith, 2008).

Using videos as an educational tool may increase learners’ motivation and willingness to partake in class. It also enhances learners’ self-confidence and promotes enthusiasm in classes, assists learners’ comprehension, constructs more attractive lessons and reduces absenteeism in classrooms. It is crucial to mention then, that many students prefer short videos rather than long paragraphs

written in response to particular questions, this way will fit all learning styles and preferences.

In a speaking course, videos may be helpful if used to display functions of voice quality and intonation, cross cultural communication, and body language. Social media has allowed anyone to become a video producer; therefore, any teacher can straightforwardly produce high-quality teaching videos similar to www.teacherTube.com which offers a variety of videos designed to help teachers in a number of areas, including language teaching. Also www.bbclearningenglish.co.uk is a reference for language teachers.

As an illustrative example, let us consider a video related to British behaviours; it shows the ‘dos’ and ‘don’ts’ when being with an English man. Teachers may play the video at the beginning without making pauses, learners watch and consider ideas, and then they discuss the general ideas about the video. A second watch may be offered, but this time, by cutting it into pieces to learn new words, pronunciation, intonation, stress, and body language.

- **M-learning**

“The way to bring a language to life is to be able to converse in it every day” Hanafin (2013). Consequently, in this globalised time in which technology governs every aspect of life, it is vital for teachers to be able to insert technological aids to motivate their learners and keep pace with the latest technologies. M-learning or Mobile Learning

appears to be a newly adopted technique within the teaching and learning of languages.

Traxler (2005: 262) describes that mobile learning as “*any educational provision where the sole or dominant technologies are handheld or palmtop devices*”. He assumes that mobile learning may include mobile phones, smart phones, personal digital assistants (PDAs) and their peripherals. On the other hand, mobile learning can also be defined as “*any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that occurs when the learner takes advantage of the learning opportunities offered by mobile technologies*” (O’Malley *et. al.*, 2003: 6).

Mobiles can be used in teaching language skills at large extent; for instance, texting may raise learners’ writing and spelling competence, audio recordings may facilitate the listening process, voice recording may help the learners develop their speaking performance and also camera can be a useful source to audiovisual activities.

Paradoxically, a number of merits and demerits are worth mentioning in the following table:

Advantages	Disadvantages
<p>-It increases student’ motivation through the use of familiar technology.</p> <p>-Even unenthusiastic</p>	<p>-Activities such as browsing internet, sending messages, making calls will cost money.</p>

<p>learners are attracted towards this technology.</p> <p>-Helps students become more competent in English.</p> <p>-Promotes the use of English for communication purposes.</p> <p>-Helps in assessing the language skill of the learners.</p>	<p>-Use of noisy phones in the classroom may harm the classroom atmosphere.</p> <p>-Keen observation of the teacher is mandatory otherwise the use of mobile phone may divert the attention of the students to unnecessary web sites.</p>
--	---

Table3. The Advantages and Disadvantages of Mobiles in Classrooms (Jaya, 2012)

In a speaking course for instance, mobiles can be used to make use of the electronic dictionaries applications, voice recording and playing back, using the camera to film the learners’ progress over time, and even note taking in its agenda. Pronunciation application may also be found in learners’ mobiles.

5. Interactive White Board IWB

Tremendous changes have been observed in education with the incorporation of technological aids in different teaching and learning settings, such as engaging more students in the lesson, using multimedia sources flexibly, and motivating learners easily. Interactive Whiteboard, or IWB for short, can be a useful complementary tool for education, providing ample

opportunities to bring in different kinds of multimedia resources into the classroom setting. The British Educational Communications and Technology Agency (2003:1) defines IWBs as follows:

An interactive whiteboard is a large, touch-sensitive board which is connected to a digital projector and a computer. The projector displays the image from the computer screen on the board. The computer can then be controlled by touching the board, either directly or with a special pen. The potential applications are: using web-based resources in whole-class teaching, showing video clips to help explain concepts, presenting students' work to the rest of the classroom, creating digital flipcharts, manipulating text and practicing handwriting, and saving notes on the board for future use.

Therefore, interactive whiteboard systems consist of a computer related to a data projector along with a large touch-sensitive electronic board displaying the projected image which allows direct input through finger or special pen for objects to be easily moved around the board. Interactive whiteboards are believed to provide a number of benefits for students:

- IWBs may increase student motivation and enjoyment (BECTA, 2003a).

- IWBs may enable greater opportunities for participation and collaboration, thus developing students' personal and social skills (Levy, 2002).
- IWBs may eliminate the need for students to take notes, through the capacity to save and print what appears on the board (BECTA, 2003b).
- IWBs may help teachers make clearer and more dynamic presentations and in turn the students can manage to deal with more complex concepts (Smith, 2001).
- IWBs may also allow teachers to accommodate different learning styles and to choose materials according to the particular needs of students (Bell, 2002).
- IWBs seem to enable students to be more creative and self-confident in presentations to their classmates (Levy, 2002).
- IWBs attract the attention of students, and they may be useful not only for visual intelligent students, but also for kinesthetic learners because they allow touching and marking on the board as displayed in the following picture:

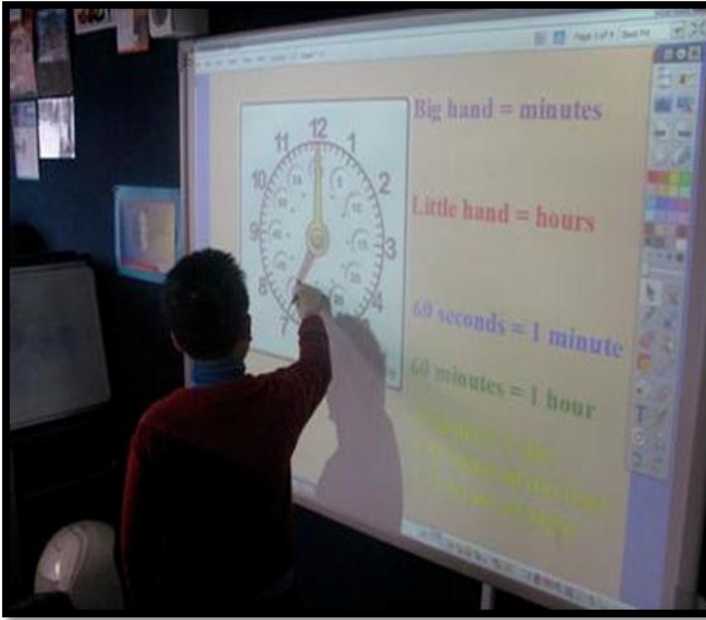


Figure 2. Panorama of IWB Use in Classroom

IWBs may be used in the classroom during speaking sessions for instance, to enhance learners' motivation degree and self-confidence; also, to build a relaxing atmosphere for learners to participate and engage in active learning process. In addition to this, IWBs can also help learners while their classroom speaking presentations (free talks) where they can manage what they want to say and picture their thoughts on the screen. Besides, teachers can easily create a collaborative learning environment where the majority of learners take part in the lesson process.

Conclusion

Based on the fact that the Use of technology especially computers and internet in every area of education enhances language learning, necessary budgets need to be reserved to equip schools with several kinds of technology. Additionally, teacher preparation programs are required to prepare ‘technology aware teachers’ because tomorrow teachers will be expected to follow and use technological developments in their classrooms with digital natives.

Instructional technology improves students’ achievement when integrated correctly into education. However, for this improvement to occur, teachers need to be familiar with computers, have positive attitudes towards computers, be comfortable with the technology and be able to use it effectively. Especially, experienced teachers have difficulty in finding effective uses of computers in their classrooms (Rakes & Casey, 2002).

There appears to be an inevitable movement towards the use of technology in professional education; indeed, the incorporation of technologies into professional education seems to be gaining momentum. There is a tendency in today’s world to regard any technological innovation as progress and to attempt to find a use for it. Nevertheless, satisfying learners and supporting their needs through pedagogical richness is considered one way towards greater effectiveness in producing learning.

REFERENCES

- Bruce, B.C. & Hogan, M. P. 1998. 'The Disappearance of Technology Toward an Ecological model of Literacy', in D. Reinking, M. McKenna, and R. Kieffer (Eds.), *Handbook of Literacy and Literacy: Transformations in a Post-Typographic World*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Collis, B., & Moonen, J. 2001. *Flexible Learning in a Digital World: Experiences and Expectations*. London, Kogan Page.
- Crystal, D. 2006. *Language and the Internet* (Second Edition) Cambridge University Press The Edinburgh Building, Cambridge.
- Fox, R. (2003). Technology and Change. An Examination of Staff Beliefs and Use Of ICT. *Staff and Educational Development International*, 7,1,85-94.
- Kwan, R. & Fox, R. & F. T. Chan & Tsang, P. 2008. *Enhancing Learning Through Technology: Research on Emerging Technologies and Pedagogies*. World Scientific Publishing Covent Garden, London.
- Lee, D. W. 2002, Java CC Grammar Repository, UCLA, in <http://www.cobase.cs.ucla.edu/pub/javacc/>.
- Miller, D., Glover, D., & Averis, D. (2004). *Matching technology and pedagogy in teaching*

mathematics. University of Keele: Department of Education, Staffordshire, UK. Retrieved January 12, 2009, from: <http://www.keele.ac.uk/depts/ed/iaw/docs/BERA%20Paper%20Sep%202004.pdf>.

North Central Regional Lab - NCEL (2004). *E-Learning Knowledge Base*. Retrieved 2 June 2006 from <http://www.ncrel.org/tech/elearn/tandl.htm>

Passey, D. (2002). *ICT and school management: A review of selected literature*. Lancaster University: Department of Educational Research. Retrieved July 16, 2008, from: http://partners.becta.org.uk/page_documents/research/ict_sm.pdf

Rakes, G.C., & Casey, H.B. 2002. An Analysis of Teacher Concerns Toward Instructional Technology. [International Journal of Educational Technology](#), 3(1).

Schuck, S. & Kearney, M. (2007). *Exploring pedagogy with interactive whiteboards: A case study of six schools*. Sydney: University of Technology. Retrieved November 19, 2008, from: <http://www.ed-dev.uts.edu.au/teachered/research/iwbproject/home.html>.

Strickland, A.W. (2006). [ADDIE](#). Idaho State University College of Education Science, Math &

Technology Education. Retrieved June 29, 2006.