TECHNOLOGY IN LANGUAGE TEACHING TODAY

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Abstract

Technology is playing an increasing role in education world-wide and is having a growing impact on the design and delivery of English language programs. Todays' language teachers are expected to understand how to integrate technology into their teaching as well as knowing how to help learners make use of resources such as media and the internet to improve their learning of all four skills. As such technology offers both new challenges as well as new opportunities for both teachers and learners. This article surveys the role of technology in language teaching and explores the opportunities it offers to teachers and learners to support new technology-mediated teaching and learning.

Keywords: computer-assisted learning, flipped classroom, professional development, curriculum design, internet-based learning

INTRODUCTION

The landscape of language teaching has been transformed in recent years. While only a few years ago the primary context and resources used in language teaching were the classroom, textbooks and the tape-recorder or video player, today's learners inhabit a different world. Interactive whiteboards, mobile devices, computers and the internet are increasingly viewed as integral and necessary component of the teaching and learning process and teachers are challenged to discover effective ways of integrating technology into their lessons. And for many learners the classroom might constitute only a small segment of their learning environment since they conduct much of their learning outside of the classroom – at home, in a media lab, on the train or bus. The classroom has been "flipped" in many cases and may serve not as the primary learning site but just one of many, and often as a place to prepare for and review out of class learning. In this paper we will consider the role of technology in today's language classrooms.

TECHNOLOGY AS A TEACHING AND LEARNING RESOURCE

Technology is changing the ways language teachers teach and that

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language learners learn and consequently is playing an increasingly central role in curriculum implementation (Warschauer and Meskill, 2000: Lacina, 2005; Meskill et al., 2002; Woo et al., 2007; Levy, 2010, 2012). Computers and interactive whiteboards are increasingly common in schools world-wide and the speed with which schools can connect to each other and to the world constantly increases. For teachers and students technology is now mobile, and laptop computers, tablet devices and smartphones are a normal part of the teaching and learning context in many schools. More and more teachers and school administrators accept the role that digital resources and the internet can play in raising levels of motivation and engagement in learners, supporting learners with different learning styles and helping improve the quality of teaching and learning (Zhao, 2005).And advocates of methods such as Task Based Teaching argue that technology-mediated communication is an ideal application of the principles of TBT (Gonzalez-Lloret & Ortega, 2014).

Digital language learning
Digital language learning is a broad category that includes:
- Online learning, whether self-paced or collaborative;
- Digital learning resources (e.g., e-textbooks, e-gradebooks, interactive media);
- Mobile learning apps, including educational games and other mobile services.

The ways in which language schools can apply any of these technologies are equally broad. For example, a school may choose to offer online learning, whether as a stand-alone programme for remote students, as a complement to classroom instruction for students on site, or a tool to use before or after studying abroad.
Additionally, a school may choose to provide mobile devices or mobile apps to allow students greater opportunity for independent study outside of class time. Teachers may bring technology into the classroom in the form of new teaching tools, such as interactive whiteboards or computer-based assessments, and more.
http://monitor.icef.com/2015/04/the-promise-and-challenge-of-technology-in-language-learning/ accessed June 21 2015.

The use of technology in a school is no longer an option but is a core requirement of today's schools. Teachers are expected to be technologically literate just as quality schools are expected to make effective use of the resources technology makes available. A statement of standards for school administrators (TSSA Collaborative, 2001) could also serve to define technology standards for schools (revised to reflect this focus):

[Schools should ensure] that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching. To do this they should:

A. *identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.*
B. *facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.*

C. *provide for learner-centred environments that use technology to meet the individual anddiverse needs of learners.*

D. *facilitate the use of technologies to support and enhance instructional methods thatdevelop higher-level thinking, decision-making, and problem-solving skills.*
E. *provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology.*

http://www.kyepsb.net/documents/EduPrep/tssa.pdfaccessed 22 June 2015
Teachers too are similarly expected to be technologically literate, as seen in Technology Standards (NETS) for Teachers created by the International Society for Technology in Education (ISTE, 2000).
1. *Teachers demonstrate a sound understanding of technology operations and concepts*
2. *Teachers plan and design effective learning environments and experiences supported by technology.*
3. *Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.*
4. *Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies*
5. *Teachers use technology to enhance their productivity and professional practice.*
6. *Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice.*

Similarly the TESOL organization has developed technology standards for both learners and teachers which consists of both goals and standards Healey et al., 2011). The goal that describes teachers' use of technology states, "Language teacher integrate pedagogical knowledge and skills with technology to enhance language teaching and learning (p.vii) and describes four standards for this goals:

1. Language teachers identify and evaluate technological resources and environment for suitability for their teaching context.
2. Language teachers coherently integrate technology into their pedagogical approaches.
3. Language teachers design and manage language learning activities and tasks using technology appropriately to meet curricular goals and objectives.
4. Language teachers use relevant research findings to inform the planning of language learning activities and tasks that involve technology (p vii).

SUPPORT PROVIDED BY TECHNOLOGY

Levy (2010) identifies five levels at which technology can support language teaching (pp.16–17).

The physical level, with tools such as mobile phones, digital cameras, laptops and tablets.

The management level, which includes learning management systems (LMSs) that enable the administration, delivery, tracking, reporting etc. of a language course.

The applications level, including word processing software, email and chat clients, social-networking sites and blogs.

The resource level, which includes access to authentic materials, such as online newspapers, magazines, language tutors and dedicated websites for learners.

The component technology level, such as spelling checkers, grammar checkers, electronic dictionaries and other support tools.

In considering how technology can provide support in the curriculum, we can consider the role it can play for learners, for teachers and for the institution.

Support for Learners

The potential benefits to learners include:

Provides a wider exposure to English- e.g. through the internet Increases opportunities for authentic interaction with other learners worldwide

Enables flexible learning – students choose when and where to learn.

Supports different ways of learning such as visual or auditory learning

Supports different skills, allowing students to focus on a particular skill such as reading or listening.

Suitable for learners of different proficiency levels

Encourages more active learning since students are more in control of the process and the outcomes.

*Encourages learner autonomy giving l*earners choice over what they learn and how they learn it
Provides a less stress environment than classroom learning
Provides a social context for learning, allowing learners to interact socially with other learners.
Increases motivation and allows access to engaging materials such as digital games and YouTube content

Multimedia presentations
Peter loves a screen. It does not matter if it is a television, iPad, video console or computer screen. He loved to be engaged with technology. At school, since kindergarten, Peter has had to build some form of communication skill. Usually, this is in the form of a news report, topic talk or project presentation. In Year 3, it was suggested that students could use Microsoft PowerPoint to present a few slides while they were doing their presentations. Peter found this very easy, and by Year 4 became quite bored with the software. Peter's mother found a few different iPad applications ('apps') and suggested Peter try them. Peter settled on Skitch and added text and drawings to the photo he chose to use for his presentation. Peter was engaged for hours, doing something that he loved while learning at the same time. Peter's teacher had not seen Skitch before. She asked the school's technology support officer to install it on the school's iPads and then asked Peter to teach the class how to use the app. She thought it would be a great app to use for the class's next creative arts lesson.
Eady, M. J. &Lockyer, L. 2013, 'Tools for learning: technology and teaching strategies', Learning to Teach in the Primary School, Queensland University of Technology, Australia.

Support for Teachers

Technology- supported teaching potentially enhances teaching in several ways:
Enables more learner-centered teaching:
Supports teaching with mixed-level classes:
Expands the classroom to the real world:
Enriches the curriculum:

Collaborating across countries
In 2008, the Sioux Hudson Literacy Council held the first online collaborative learning experience for students in Canada's north and Australia's outback, called Building Opportunities for Literacy Development. This was an opportunity for students at distance to collaborate using an online, live-time platform called CENTRA. The children in both countries worked together in groups to create slide presentations about their part of the world. After months of preparation, each group presented its work and took questions from online guests. One of the Australian students confessed, 'I don't understand about snowmen and how you make the balls of snow.' The students in Canada worked together to draw a picture on the white board and showed the students in Australia how a snowman is built. In this example, the students worked collaboratively, using technology in their own schools and classrooms, and then again with students at a distance, in the online synchronous environment.
Eady, M. J. &Lockyer, L. 2013, 'Tools for learning: technology and teaching strategies', Learning to Teach in the Primary School, Queensland University of Technology, Australia.

Gives teachers a much wider range of strategies to use in teaching
Provides new roles for teachers from transmitter of knowledge to a facilitator who supports and guides student learning.
Provides opportunities for teachers to take greater individual responsibility for their courses:
Creates a better learning environment where students are engaged in interactions and communication among themselves.
Provides greater opportunities for monitoring learning through LMSs as well as many

CALL materials
Provides practical support simplifying administration and assessment through CALL and LMSs.

Support for Institutions

Benefits for institutions include:
Enhances the reputation of the school, showing that the school is up to date with developments in education
Supports a more individualized approach to curriculum development.
Teaching, focusing on topics of interest to students and students' needs.
Leads to better learning outcomes since students receive additional learning opportunities beyond the time scheduled on the timetable.
Allows for greater flexibility in the curriculum since schools can use a blended mix that best suits the needs of their clients.
Simplifies administration and record keeping through the use of a learning management system (LMS)

EXAMPLES OF THE USE OF TECHNOLOGY
IN TEACHING THE FOUR SKILLS

Speaking and Pronunciation Skills

Computer-mediated communication: Synchronous (real-time) computer-mediated communication, such as chat rooms and some other forms of near instantaneous interaction (for example, micro blogs), shares many of the characteristics of spoken language, offering conversational-skills practice, and in an environment that many learners experience as non-threatening.

Spoken interaction: Programs such as Skype and Google Hangout® allow two or more participants to interact. The inclusion of video in many of these programs can be particularly helpful for learners, as the added visual information helps them to understand the message.

> Pontese and Shimamuzi's (2014) describe how they used an on-line program to improve their learners' speaking skills in preparation for the Cambridge Proficiency Exam (CPE). They made use of the on-line program Voicethread© to enable the students to improve their speaking performance. The students were assigned a topic, asked to prepare a short recording on the topic, (an average of approximately two minutes each) and upload it to their restricted area on Voicethread©.
> Once all of the recordings had been uploaded, teachers and learners would listen to them and record their comments, impressions and general feedback. Learners would then listen to the comments made on their production, and record different versions each time, incorporating aspects they considered relevant from their peers' or teacher's feedback. …After having recorded and posted their contributions, depending on how their peers reacted to their posts, they would revisit their work either in terms of grammar (accuracy), vocabulary (lexical appropriacy), or pronunciation (prosodic features), leading to their linguistic development.

Observing how interactions take place: The student may watch video clips of real or simulated interactions (e.g. checking into a hotel), and then play the part of either of the participants in the interaction.
(e.g. see Greetings http://www.real-english.com/new-lessons.asp
Personality https://www.youtube.com/watch?v=5n2ma_4sy_8)

Comparing spoken texts: Some websites allow students to record a spoken text, such as a story, a conversation or an oral presentation. Students can then compare their production with the speech of a native speaker.

Listening Skills

Listening resources for L2 learners: Sites are available with materials

specially designed for L2 learners and offering a variety of graded listening or viewing texts, with aids such as subtitles, glossaries, captions, transcripts and comprehension quizzes.

Authentic materials with learner support: A number of websites provide access to a variety of listening text types (advertisements, movie clips, YouTube videos), accompanied by listening-comprehension tasks.

Authentic listening without learner support: authentic listening materials in the form of news broadcasts, TED Talks, interviews and TV shows, which a teacher can then create activities for.

Reading Skills

Fluency development: Speed-reading practice, with texts that progress in length and difficulty.

Sentence and text awareness: Activities that develop awareness of the grammatical and discourse organization of texts.

Test preparation: Activities to prepare students for the reading component of standardized tests can include timed components, immediate or delayed feedback and model answers.

Practice in reading skills: opportunities to practice a range of skills, such as skimming, scanning, inferencing and summarizing, with some software highlighting key parts of the text, with accompanying explanations.

Vocabulary building: Text-completion tasks where students see a text, guess missing words and get feedback on their choices.

Writing Skills

Learner support: Web-based writing labs to help students with writing assignment.

Sharing and showcasing work: Students can share their compositions through desktop publishing or through sharing via a blog or web publishing.

Computer-mediated peer review: Students can share drafts of written work, for example, in the form of blog posts that other students can then comment on.

Righini (2014) describes how social media can be used to develop skills needed to read authentic texts and news articles from the electronic media. News articles on topics of interest were taken from BBC News, CNN World, The Guardian, The New York Times, The Australian, and assigned at the end of each lesson as self-study. Students were asked to choose one a week and teachers were encouraged to create a blog where students would upload comments on their chosen news article and comment on their peers' posts. In order to encourage student participation teachers employed different forms of interacting with students on the blogs and also with different social media tools, such as voice recording capable websites (voicethread or voxopop, for example) and micro blogging, mainly Facebook.

Collaborative writing: collaboration   on writing tasks, making the process of generating ideas, drafting and revising a piece more interactive such as Wikis

Personal writing: Blogs enable students to create more personal and expressive writing and to compare their blogs with those of other writers.

Editing tools: These include dictionaries, spelling checkers and model texts to assist learners as they write.

Blogging

Journal writing has long been an activity utilized in the primary classroom. Journal writing allows students to reflect on what they are learning and how they are learning. This traditional, notebook-and-pencil activity can become digital when word- processing software is used. Or it can go online as a blog. Blogs (a short form of the weblog) are personal journal websites on which a user can type an entry, add images, video and links to other websites. Readers of a blog usually can post comments.

For primary school students, the use of blogs have been found to be an engaging and effective way to promote writing skills, particularly when student peers provide feedback to the blog's writer. It is exactly this feedback and sharing mechanism that makes the blog different to the traditional journal. In the notebook-and-pencil version, the contents of the journal are private to the student, apart from the teacher and whomever the student decides to share the journal with. With the blog, access can be provided to the teacher, the class, the student's parents and the world.

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DETERMINING THE ROLE OF TECHNOLOGY IN THE CURRICULUM

As the success of a curriculum is increasingly dependent upon successful use of the affordances that technology makes possible, the role of technology in the curriculum raises a number of important issues (Staples et.al 2005; Glazer et al, 2005; Honigsfeld et al., 2009). Principal among these are the following:

What are the purposes for using technology?

The role of technology in a school will depend on the nature of the school, who its teachers and students, the nature of its programs and the extent to which the resources and learning culture of the school can provide support for technology. What are the benefits for teachers or learners and for the school? How will it change the nature of teaching and learning? How will it support the goals of the curriculum? How will it lead to improvement in development of knowledge and skills?

What technical skills do teachers and student need?

Students and teachers are often at different levels of skill with technology and computer software, with students sometimes at a higher skill level than their teachers. Both need to be confident in using available resources and in learning new software applications.

What are the infrastructure requirements?
What assets and resources are available to support the use of technology? Has any investment been made in specialist equipment or classrooms for the technology curriculum? Do students have access to computers and other digital equipment either directly in their classroom or in a media or self-access centre?

What technology resources are available?
The technology resources available for classroom use are extensive and changing. They include computers, interactive whiteboards, mobile devices like smartphones and tablets, digital cameras, social media platforms and networks, software applications, and the Internet. Which of these are readily available and accessible? Will resources such as CD-roms and other support materials such as commercially produced learning resources, be provided by the school?

How will technology be integrated with classroom teaching, learning and assessment?
There are many ways in which technology can be integrated with teaching, learning and assessment, and new possibilities become available almost weekly. For example:
- Project-based learning using technology
- Use of mobile devices in the classroom
- Electronic portfolio assessment
- PowerPoint presentations
- Learning with Mobile and Handheld Devices such as cell phones, mp3 players and tablets
- Creative uses of interactive whiteboards
- Video-based final assessment
- Web-based projects and collaborative online research
- Student-created media such as like podcasts, videos, and slideshows
- Collaborative online tools such as Wikis or Google Docs
- Use of social media

Will classroom-based face-to-face teaching be blended with on-line learning?

The kinds of choices available can be summarized as follows (Grgurovic, 2010):

Type	Features
Fully face-to-face	All teaching is classroom-based
Web-enhanced	A minimum amount of on-line material used, such as posting syllabus, assignments, and test scores
Blended	Significant on-line component (e.g. 55% face-to-face 45% on-line)
Hybrid	On-line replaces 45-80 of classroom teaching
Fully on-line	Up to 100% of learning activities conducted on-line

How will technology affect the ways teachers teach?

Teachers who make use of technology find they need to change the way they teach. It changes the role of the teacher who takes on different responsibilities such as adviser, facilitator, and coach. As facilitator the teacher sets project goals, provides guidelines and resources, and moves around the class providing suggestions and support for student activity. Technology thus changes the nature of the relationship between teacher and students. It creates the possibility of different kinds of teaching strategies and provides new ways of engaging learners with and new ways of interacting with the teacher and with other students. It encourages more autonomy on the part of learners, requiring teachers to give more choices to learners in making choices about how to search for and use content.

What professional development opportunities will be provided to support teachers' use of technology.

Teachers may need to two kinds of support: technical knowledge about how to use the resources of technology, as well as advice on how to integrate technology into their curriculum (Reinders, 2009). Without such support teachers may be hesitant to make use of the resources technology can offer. Such support can include workshops, a technology co-coordinator, as well as support from other more experienced colleagues. Sharing information about successful uses of technology can be achieved through newsletters, bulletin boards, informal meetings. Administrative support within the school can also assist with problem-solving and training.

CONCLUSIONS

As in other domains of life, technology changes at a pace that is sometimes difficult to follow, and today's innovations sometimes turn out to be tomorrow's memories. However, technology is here to stay and teachers and schools are accumulating growing experience and expertise in the use of technology in language teaching. In the process, teachers are finding creative ways of using technology to enhance both their own teaching and, as well, the learning opportunities provided for their learners. In doing so, they are finding ways of using technology not as a gimmick or novelty but as a resource that can be used to support the teaching of all aspects of language as well as for assessment and evaluation.   In the process, new roles for teachers and learners are emerging as the nature of classroom language learning changes. Rather than being defined by the content of the textbook and by the activities and materials that the teacher has selected for teaching, online and technology-supported learning provides limitless opportunities for new modes of learning – learning that draws on multiple modalities and that takes learners out of the classroom and into a world without walls. Changes in the ways people learn also require changes in the ways teachers teach and that schools operate. However, for technology to be used effectively, investment is needed not only in the technology itself and the means that schools need to provide for it to function effectively, but equally important, investment in the training and support teachers need in order for them to be able to make the best uses of technology in language teaching.

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APPENDIX

EVALUATING TECHNOLOGY

Eady and Locker (2013) suggest a number of questions are involved when evaluating educational software, applications and resources, depending on the form of technology involved.

Age/year level:
- Is the application appropriate for the age and year level of the students?
- Is the reading level of the text and type of media appropriate?
- Curriculum links: Are there links between the content/functions of the application and the expectations of the curriculum?
- Are the content and examples relevant to the curriculum?
- Will this help teach the curriculum in new or different ways?

Instructional content:
- Is the information accurate, complete and current?
- Are sources reliable?
- Does the content encourage higher-order thinking?
- Is the content culturally appropriate? Does it present multiple perspectives? Engaging and interactive:
- Will the learner(s) be actively involved in using the tool?
- Is feedback provided? Is the feedback appropriate and meaningful?

Assessment:
- Are assessment tasks included, or can the teacher develop relevant assessment tasks that link to the use of the tool?

Flexibility:
- Can all aspects of the tool be integrated easily into classroom activities?
- Can the tool be used for multiple curriculum units?
- Media: Does the medium used support or distract from the learning activity?

Usability:
- • Is the tool easy to use and intuitive?
- Technical considerations:
- Does the tool work consistently?
- Are there special technical requirements for using the tool? Does the school have access to those requirements?   Support materials:
- Does the tool have multiple forms of help (manuals, context-sensitive help, and tutorials)?
- Are teaching support materials or online resources available to help a teacher embed the tool into lessons?

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