Information Communications Technology and the Contemporary Language Educator

Diane Boothe, Melissa Caspary, Clifton D. Wickstrom
1Boise State University, 2Georgia Gwinnett College, 3Educational Pathways International (USA)
dianeboothe@boisestate.edu, mcaspary@ggc.edu, clif.wickstrom@hotmail.com

Abstract
Education is rapidly evolving in the digital age. The way that we teach is changing by necessity and design, and innovative teaching and methodologies are essential. An arsenal of digital tools is literally at our fingertips and educators must tackle the latest technology and digital learning opportunities as quickly as they emerge, to stay current with their students, if nothing else. This presentation addresses teaching strategies for Information Communications Technology (ICT) that incorporates:
1. laptops and tablets
2. mobile learning devices, i.e. smart phones
3. rapidly deployed software and “apps”
4. gaming systems
5. social media

Teaching strategies including communication and collaboration strongly impact learning. Data gathering, simplified interfaces, and an emphasis on analytics are essential as we prioritize learning initiatives and outcomes for students. Disparities in the availability and access of technology for students as well as varying ability levels can result in challenges for educators. In fact, it is not unusual for tech-savvy students to have greater expertise than their teachers resulting in shared learning between teacher and student. ICT assumes a significant role leading and supporting educational endeavors of the future. No longer is learning restricted to the classroom or library and educators must strive for a balance between paper and digital. It extends among and beyond the school to educational settings allowing online collaboration that is increasing opportunities for continuous learning, in and out of the classroom. E-learning has become a key focus in classroom-based language learning. Free and open access to materials on the web and via social media continue to drive ICT uses in learning environments, especially those related to language. Now it is the responsibility of educators to adopt and adapt to the widespread benefits and tools to increase the value of incorporating technology in the education of our students. By encouraging students to power-up and celebrate the numerous opportunities afforded by taking advantage of integrating ICT into innovative language learning, exponential growth can take place.

1. Introduction
As 21st Century educators, we are all well aware that education is no longer constrained to the classrooms of our schools. Educational processes take place across the entire range of our activity spectrum and evolve rapidly. In this digital age, information and communication technologies proliferate around us. In the short period since the beginning of this millennium, we have moved from the desktop to the laptop to the phone/tablet and beyond. Where we were bound by the length of the power cord and interface cables just a decade ago, we are now freed from those electric/electronic chains by new battery systems and wireless technologies. Innovation, coupled with further miniaturization has yielded a wide array of technological tools which have made educational opportunity available at almost any place or at any time.

In this climate, the tools we use to educate will, of necessity, have to change as well. Gone are the chalk board, and even the erasable white board. In their place, electronic screen technologies can be used to allow materials to appear instantly on the tablets in front of every student. In their brilliant examination and captivating work, Generation on a Tightrope: A Portrait of Today’s College Student, Levine and Dean suggest that students are walking a tightrope attempting to balance digital connectedness and personal isolation. In a survey of undergraduate students, requests were made for greater use of technology and blended instruction combining online and in-person classes. However, employers are concerned that so much time spent on digital activity compromises students’ ability to develop skills focusing on collaboration and teamwork.

In the sections to follow, we explore five of the technologies which we believe every educator must understand to remain current, not only with their peers, but with their increasingly technologically
savvy students. These five: laptops and tablets; mobile learning devices, i.e. smart phones; rapidly deployed software and “apps”; gaming systems; and social media, are already being employed in many learning environments. We argue that for the sake of currency, if nothing else, all educators must not just learn, but master all five of these to be effective in the future.

2. Laptops and Tablets
Innovative and creative teaching approaches coupled with rapid technological change have impacted the ways in which educators combine computer technology and language learning. Laptops and notebooks have merged as valuable tools to assist English Language Learners (ELL) students in interacting communicatively and purposefully while participating in a variety of learning activities. Discovering ways to merge from the desktop to the laptop then notebook resulted in the best of digital worlds for learners. The capacity and technology combined with mobility results in a digital learning environment that extends beyond the traditional classroom. Lecture capture technologies allow for flipped classroom environments where students can claim ownership and responsibility for their education independent of traditional classroom time and location constraints. Learning and language skills consistently take place and time zones are no longer a detriment to communication.

3. Mobile Learning Devices, i.e. Smart Phones
Netbooks, iPads, cell phones, iPods, e-readers and Personal Digital Assistants (PDAs) are enabling students by providing the tools they need to take their education into their own hands. These mobile learning devices offer flexibility and facilitate a type of communication that extends beyond the limitations of the traditional classroom. Many of these devices have a tactile, user-friendly interface that students are already comfortable with, and can aid in bridging communication barriers. Students have the potential to integrate course-specific interactive software into their mobile devices that allows them to interact with course material and access cloud-based lecture capture services to search and replay course critical lecture material. These tools allow ELLs to improve their study efficiency, retain more, and target their learning efforts, which ultimately results in better performance. According to Bahrani (2011), mobile assisted language learning meets the learner at their own level of skill and gives the user an opportunity to work individually in an informal setting. Mobile learning devices are now being paired with rapidly deployed software and apps to encourage users to explore content that historically was unavailable due to access or cost constraints.

4. Rapidly Deployed Software and “apps”
One of the ways that ICT is revolutionizing education for language educators and learners is through continual development of rapidly deployed software and “apps”. These applications can be used in the classroom setting to strengthen memory recall, increase retention and improve grades. These programs raise the bar for innovating learning by integrating encyclopedia modules, vocabulary exercises, flash cards, translations, quizzes, illustrations, and gaming applications in simple and potentially cost effective tools that language learners can implement any time, any place. Mosher (2013) tested 20 language learning applications and found Duolingo (2013), Busuu (2013), and Rosetta Stone TOTALe Companion (2012) to be favored language tools. These are just some examples of the platforms available for educator use to incorporate and supplement course content which can strengthen acquisition of language skills.

5. Gaming Systems
English Language Learners benefit from educational tools and methodologies that keep pace with the rapidly evolving processes of the 21st century. As ICT impacts language learning by evolving and engaging students in transformational and non-traditional approaches that are fundamentally different from previous approaches, gaming becomes a valuable asset to e-Learning. Gaming and the new media associated with it has greatly expanded approaches for language learning. This form of student-centered learning fosters collaboration and an electronic learning network that is transitioning learners into practitioners and leads to improved preparation and language learning. The task-based learning associated with video games blends education and entertainment and actively engages enthusiastic students with reward and feedback. Simulated real-life environments are purposely designed to improve English language skills. By constructing an experience that incorporates games, learning becomes a process reinforced at each sequential step. The transition from authentic materials to live materials allows cultural learning. Sound specialization technologies enable the creation of live curriculum along with the games. Parents are often concerned when students prefer video games over
school work, but that no longer needs to be the case. These games can extend and reinforce the
learning environment, inspiring language learners with a range of activities and new media. In an
interview, Young Baek (2013), one of the foremost gaming professors from Korea currently employed
as a professor at Boise State University, stated, "Educational games are a potential alternative to
language learning by providing situated learning opportunities. They can help students learning a
language by improving abilities to deal with situations they might encounter. Specifically, simulation
games provide students with situated learning by offering imaginary situations and contextualized
problems. If educational games can be designed to provide learners with meaningful content based
on authentic contexts, then students' language skills should improve."

6. Social Media
There are numerous opportunities to extend social media and incorporate it as a tool for English
language acquisition. Reading and writing skills are strengthened as long as correct grammar and
spelling are used by participants. Students have numerous opportunities to develop their interests and
share information as well as cultivate friendships. It is often suggested that the easiest topic to speak
or write about is oneself. Therefore developing a homepage characterizing the individual can be a
thoughtful and energizing task. Facebook and MySpace allow for creative development of vocabulary
while Twitter allows for a more brief exchange of thoughts and opinions. Bringing social media into the
classroom adds another dimension to language learning that will engage students in authentic
interactions with family and friends and reinforce learning. These communicative-based teaching and
learning experiences let students to derive enjoyment and enthusiasm from learning when participating in social media in L2 and encourage authentic interactions beyond traditional classroom
learning. One caveat is that students do not realize that the information published on social media can
be used to gather information about an individual by numerous agencies and institutions. If care is not
exercised, students may realize that they have provided too much personal information and that, when
it comes to divulging information on social media, there is no place to hide.

7. Conclusion
As we have shown above, laptops and tablets, mobile learning devices, i.e. smart phones, rapidly
deployed software and "apps", gaming systems, and social media are all well-established tools in the
lives of those we teach. They are becoming an integrated part of global culture in this new millennium.
As educators, we have an obligation to be aware of and facile with the tools already in the hands of
our students. That is the primary challenge before us. For some this challenge will be easy, but for
some, not so. But accept the challenge, we must. And, we must also not be content to rest on our
laurels, having mastered these five. New and increasingly intriguing technologies are emerging every
day. When one can find descriptions of such items as Sifteo cubes which are touch screen enabled,
wireless capable, computer powered blocks (like the wooden alphabet and number blocks of old) in a
widely distributed weekend magazine supplement to a local American newspaper (USA Weekend
2013), the challenge ahead is obvious. The race ahead is not a short sprint, but a marathon that we
will all have to run.

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