

# Contents

<i>List of Figures and Tables</i>	viii
<i>Series Editor's Introduction</i>	xi
<i>Acknowledgements</i>	xv
<i>Introduction</i>	xvi
1 The Twenty-first-century Learning Experience	1
2 The Classroom as a Technology Centre	22
3 Fostering Autonomous Learning	45
4 Curricular Vetting for Online and Mobile Learning	69
5 Technology for Speaking and Listening	91
6 Technology for Reading and Writing	113
7 Language, Principles and Technology	134
8 Technology for Assessment, Evaluation and Proficiency Testing	157
9 Professional Development and Technology	180
<i>Glossary</i>	203
<i>References</i>	206
<i>Index</i>	224

# The Twenty-first-century Learning Experience

*Education is in an interesting transitional phase between its 'ICT-free' past and its 'ICT-aware' future.*

Laurillard, 2013, xx

In our twenty-first-century world, new information and communication technologies (ICTs) are emerging at an astonishing pace. Organizations are investing vast sums of money in research and development in order to find novel solutions to humankind's ever-changing needs and challenges. In the field of education, the fervour for achieving technological breakthroughs in such a short space of time is perhaps not as discernable, but significant progress has occurred nonetheless. Thus, few would argue against the notion that learning today is much different from what it was ten or even five years ago. As for present and future trends in education, a number of studies have shed light on technologies that seem to hold the most promise (Briggs, 2013), with enormous implications for the fields of second-language acquisition and English language teaching. In fact, these studies confirm that there is an almost immeasurable new expanse for learning that has yet to be explored. As such, gamification, **learning analytics**, flipped classrooms, cloud computing, virtual worlds, tablet-based apps and other technologies will soon be changing the mainstream English language training (ELT) landscape, leading to a new kind of language learning experience that meets the needs and demands of the twenty-first century. Consequently, our

immediate thoughts are centred on the following questions, which are addressed throughout the chapter:

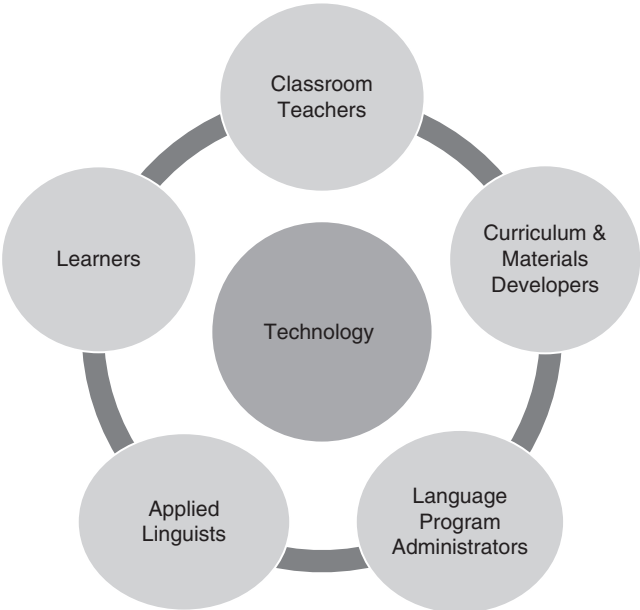
- What are today's learners like, and how can we meet their needs?
- How can teachers be better prepared as facilitators of twenty-first-century learning experiences?
- What should we look for in technology before using it?

*The Oxford Dictionary* (2015) defines **technology** as 'the application of scientific knowledge for practical purposes, especially in industry' or 'machinery and devices developed from scientific knowledge'. Throughout this book, technology is understood as digital or electronically based devices, resources or processes that facilitate the teacher and learners' ability to think, perform and succeed.

In this highly technological, so-called 'post-methods' era (Richards and Rogers, 2014; Thornbury, 2009), researchers, materials developers and classroom practitioners are exploring new perspectives on language learning, with prospects that seem more favourable than ever before. Technology now affords learners new ways to learn, practise and strategize while providing teachers with the means to make the instructional process more diverse, effective, efficient, engaging and contextually meaningful. What is so exciting for the field at this time is that there is undoubtedly an enormous opportunity to further explore the applicability of technology to the second-language acquisition process and English language teaching. Research can aid this effort by offering valuable insights into everyday instructional practices and student learning. The lessons learned can then be either applied directly or extrapolated by the intended end user.

In the search for ideas, solutions and innovations, technology can facilitate the English language learning process by making it more amenable and relevant to twenty-first-century learners, if it is applied wisely. Thus, key stakeholders in the educational process are called upon to make the right decisions as to which technologies should be used, as well as when

and how. Curriculum and materials developers, including publishers and e-learning providers, must create content and learning opportunities that are engaging. In order to do so, the content should be in accordance with learners' needs, expectations and lifestyles, taking full advantage of technology as an important recourse. Applied linguists have the all-important role of working closely with these other constituent groups in order to unveil and propose new practices that may lead to more effective and efficient paths to learning, with technology in a supporting role. They must also make certain that any perceived gains are grounded in solid, objective data. Thus, to ensure that technology serves its purpose well and offers the greatest possible gains, all of the stakeholders depicted in Figure 1.1 should work closely together in order to have the



**Figure 1.1** Collaborative cycle for major stakeholders in a twenty-first-century technological era.

greatest impact on the learning process. They should share information, experiences and ideas whenever possible. Let us not forget the learners, who also play an important role by offering input and feedback on what they think works and what they most like. Substantive new gains in the field of English language learning will not be possible without such collaboration.

Opportunities for engaging in research and innovative practices in English language learning through technology are countless. Perhaps it would be wise for these efforts to be concentrated on those areas that have the greatest potential for advancing the field, with an emphasis on those aspects of the teaching and learning process that may be of greatest interest to the everyday practitioner. Table 1.1 provides a list of areas on which research and exploratory practice could focus over the coming years in the hope of revealing new paths to learner achievement and proficiency development.

**Table 1.1** Areas for Research and Exploratory Practice with the Greatest Potential

---

### **Opportunities for Research and Practice in Technology and ELT**

---

<b>Area</b>	<b>Potential</b>
<b>Motivation</b>	Align the learning experience with the learner's background, preferences, goals and self-concept to make it more meaningful and relevant.
<b>Skills</b>	Find new ways to develop the learners' language, higher-order and technological skills, thus helping them attain a more complete competency profile.
<b>Proficiency Standards and Benchmarks</b>	Establish a strong correspondence between learner achievement and international proficiency benchmarks, including technology standards, in order to make their skill and knowledge sets more robust, comparable across different settings and contexts, and applicable to the world outside the classroom.

<b>Content-Based Instruction (CBI) / Content and Language Integrated Learning (CLIL)</b>	Facilitate the acquisition of language skills through content that is contextualized in the form of subject matter that is not ESL/EFL oriented, responding to more recent trends that concentrate on large amounts of differentiated input, life skills for professional and academic contexts, and vocabulary building.
<b>Autonomous, 'Situational' and 'Instinctive' Learning</b>	Create new spaces and opportunities for learning through which the learner can significantly expand the classroom learning experience.
<b>Learner Achievement</b>	Develop novel means to assess, monitor, analyse and report on learner achievement in order to improve instruction and learning.

---

## Motivation and Development

The process of learning a second or foreign language is long, complex and highly dependent on a range of variables, of which learner motivation is perhaps the most crucial. As Brown (2007) points out, 'countless studies and experiments in human learning have shown that motivation is a key to learning in general' (p. 168). Krashen (1982) also highlights learner motivation as one of the attitudinal factors that has the greatest effect on language-acquisition success. To promote the highest degree of learner motivation, however, teachers must fully understand the needs and expectations of their students and what is most likely to keep them engaged throughout the entire learning process. This means it is an

### ACTIVITY

Create an instrument that will allow you to collect information on your students' satisfaction with a technological device, resource or activity. Then develop an action plan to follow up.

absolute must for English language teachers to familiarize themselves with the likes and preferences of the twenty-first-century learners they will find in their classrooms. Recognizing that these learners expect technology to be an integral part of their language learning experiences is essential for success.

Today, many teachers may find that a majority of learners in their class are composed of members of the millennial generation and 'digital natives' (Prensky, 2001), groups which have been found to have a great reliance on technology for activities in their everyday lives. For Hershatter and Epstein (2010), **millennials** have adopted technology as a 'sixth sense' that serves as the principal means through which they interact with the world. Going further, Wilson and Gerber (2008) refer to research findings that highlight the enormous preference millennials have for technological applications, including video games, and how this has major implications for language teaching pedagogy in terms of goal setting, task completion, intrinsic motivation, feedback and rewards. As regards these **digital natives**, Prensky (2011) reminds us that the key to the future of education is not so much whether we use technology, but how we use it and to what extent that reflects our students' fast-paced, highly connected view of the world.

Bennett (2012), however, warns us not to take anything for granted, referring to many studies that have been conducted since Prensky's first article. Most of these indicate that the term *digital natives* may not be as generalizable to a certain age group as was initially claimed. In fact, it may apply in its truest sense to only a small minority of that population due to the existence of 'digital divides', or notable disparities in terms of which technologies are accessible or how technology is used. Therefore, it is essential for teachers to adapt technology and apply it so that it matches the learners' backgrounds and characteristics as closely as possible, depending on the group, setting or **context**. To achieve success, however, it may not be enough to know who our learners are; we must also know what motivates them.

In today's globalized world, English undoubtedly continues to grow in importance as the main means of international communication, with an estimated 2 to 3 billion people using or learning the language around the world (Crystal, 2008; Graddol, 2006). In L2 (second-language) motivation research and literature, this is often attributed to the notion that language learners wish to connect with the world as *global citizens*, a term that has arisen from the gradual diminishing of barriers previously imposed by geographic location and a lack of technology. Gardner and Lambert's (1972) concept of *integrativeness* seems to support this view, stating that the motivation of language learners is strongly grounded in their desire to get closer psychologically to another language community or cultural group. However, other motivation researchers have a different perspective (Ushioda and Dörnyei, 2009; Ryan, 2006), often citing a person's desire to develop a self-concept or sense of identity rather than identification with an external reference group (Ushioda and Dörnyei). Markus and Nurius (1986), for example, have proposed the existence of *possible selves*, or the language learners' present conceptualizations of what they might become, what they would like to become and what they are afraid of becoming.

Another mainstream view of L2 motivation is that communicating in English has become a necessity for accessing opportunities in life and raising living standards, especially in countries where it is taught as a foreign language. Graddol (2006) affirms this is due to economic motives that arise from the presence of transnational corporations throughout the globe, as well as the drive of many countries to become more competitive on the world stage. He goes further to say that English 'is widely regarded as a gateway to wealth for national economies, organizations, and individuals. If that is correct, the distribution of poverty in the future will be closely linked to the distributions of English' (p. 38). Thus, English can be seen as a commodity, affording a high status to those individuals within a society who can use it satisfactorily and conferring the power to advance their self-interests (Tan and Rubdy, 2008).



In the professional world, English is considered by many to be a universal life skill. The International Research Foundation for English Language Education (IRF), for example, recently sponsored a large-scale, global study to identify the knowledge and skills required for the twenty-first-century workplace. The study concluded that language learning experiences are shifting towards the mastery of 'competencies which will enable [language learners] to communicate and collaborate with others, organize and analyze information, make informed decisions, and take decisive action in professional contexts' (Fitzpatrick and O'Dowd, 2012, p. 20).

Despite the wide variety of perspectives in academia, classroom practitioners may not need an in-depth knowledge of the research and literature to successfully approach L2 motivation within a twenty-first-century, highly technological context. Perhaps it is sufficient for teachers to understand that their students are learning the target language in an era of globalization. This means that it is very likely that at some point they will encounter English speakers from different parts of the world without leaving their own countries, cities or even their offices and homes, not to mention the endless amount of cultural input from around the globe that is now accessible in English via cable television and the Internet. Moreover, the instrumental purpose of learning the language is fast becoming an unavoidable reality that goes beyond freedom of choice of the language learner. For example, many universities in EFL settings now require English for graduation, regardless of the personal preferences for language learning their students may have. Similarly, many companies have established degrees of competency in English as prerequisites for higher-end, better-paying jobs (Neely, 2012).

In terms of self-identity, teachers have long been aware of the need to recognize students as individuals, each with their own personal needs, goals, challenges and dreams. Technology allows the language learners to personalize their education in the language. It takes it above and beyond the standardized,

one-size-fits-all approach that still characterizes many language classrooms today. With technology as a foundation, the following could be taken into consideration when it comes to maximizing learner motivation, taking as a reference the theoretical constructs we have discussed so far (Table 1.2):

**Table 1.2** L2 Motivation Research Constructs, with Implications in Terms of Pedagogy and Technology

<b>L2 Motivation Construct</b>	<b>Examples of Supporting Technology</b>
<i>Integrativeness</i>	Social media, MOOCs, blogs, wikis, mobile apps and content management platforms can all provide learners with vast amounts of input in the L2 that can reinforce their identification with or desire to learn more about a target language user group or culture. They can also offer channels of communication with their classmates as well as learners from other groups, cities and countries.
<i>Self-Identity</i>	Virtual worlds, such as <i>Second Life</i> <sup>®</sup> , can offer language learners the possibility of assuming alternative, desirable selves. Learning analytics technology allows learners to monitor their progress and set learning goals that are in line with their current and future needs. Modern learning management systems (LMSs) and educational apps can allow learners to personalize their daily lessons and build up readily accessible e-portfolios of their achievements as they strive to attain a future state of being.
<i>Instrumental</i>	Content platforms can provide learning content, assessments and resources to support English for academic or professional purposes. Virtual environments and laboratories can serve as venues for practising essential life skills. Cloud technology allows students to upload their work, content, etc., at any time during their very busy lives.

Thus far, we have answered the first question posed at the beginning of the chapter. As a result, it is clear that knowing our learners and promoting their motivation are both essential to the success of any language learning experience. Yet, we must also keep in mind that teacher motivation and self-confidence are equally important. When teachers are motivated, they make a greater effort to understand their learners' wants, needs and expectations, as well as create a learning environment that maximizes learner engagement and commitment. They are also more likely to be open to change and innovative practice, including the use of technology. The opposite also holds true as well. Teachers who tend to show negative attitudes or dispositions will often be less likely to engage in the kind of self-reflection and self-determination that may be critical for overcoming their fear of change, as some studies seem to indicate (Bitner and Bitner, 2002; Villegas, 2007).

For many teachers, coming to terms with the use of technology in their classrooms can still represent a major concern and cause of anxiety. Blended and fully virtual learning solutions, for example, are now quite common and can be seen by teachers as a threat to their careers (Blake, 2008). In addition, the seemingly endless emergence of new technologies in the form of devices, operating systems, apps, content management platforms and web-based resources can be difficult to keep up with and sometimes overwhelming. Perhaps for such teachers, the often-quoted 'Technology won't replace teachers, but teachers who use technology will probably replace teachers who don't' is representative of their fears that their unfamiliarity with technological tools and resources will eventually be reflected in an unfavourable comparison with their more tech-savvy colleagues. Therefore, even in the second decade of the twenty-first century, it is highly probable that fully integrating technology into the English language learning experience is still an enormous challenge for many teachers.

According to various studies, there is a close relationship between teachers' beliefs, attitudes and dispositions towards

technology and their potential for success in applying it to the classroom. Teachers who exhibit positive dispositions towards change and innovation will generally be the most open to the idea of creating a highly technological learning experience for their students. In a study with 12 award-winning, highly technology-proficient teachers, the findings showed that there can be a high degree of alignment between teachers' beliefs and attitudes about using technology with their actual practices. This has clear implications for learning that can be highly positive when teachers embrace technology as a powerful tool (Ertmer et al., 2012). From the perspective of motivation theory, Sokolowski and Heckhausen (2010) point out that teachers will embrace technology if: (i) the goals they have set for themselves are plausible and hold a positive emotional value that is associated with some form of personal gain; (ii) the negative consequences associated with not making the effort are significant; and (iii) the expectations placed on them by their authorities are reasonable.

Contrary to what some may believe, teachers need not become experts in the use of technology as soon as they begin their careers or new jobs. As with all other aspects of teaching, it takes time to develop a level of expertise that can provide confidence about its use. Along with a growing knowledge of technological devices, tools and resources, a repertoire of *strategies for learning enhancement through technology*, or **SLET** (Mercado, 2012a), can be developed as experience is gained. Such strategies involve the use of technology to improve classroom management, student interactions, levels of engagement, the

## ACTIVITY

For a week, track the number of times you use technology in your lessons, and reflect on why you used it. Did you have a strong reason for each use? How did it impact each lesson?

presentation of new language, skill practice, personalization, knowledge transfer and more. To maximize their chances of success, teachers should start off slowly by limiting the scope of the technology and strategies they wish to employ. Once they have met their own expectations for success, they can gradually expand the number of alternatives. Here is a possible path to developing expertise in the use of SLET:

- Stage 1: The teacher uses technology to facilitate classroom management and delivery of content (e.g. YouTube, PowerPoint, websites, timing with digital stopwatches, interactive whiteboards (IWBs), etc.)
- Stage 2: The teacher uses technology to promote autonomous learning (e.g. Google Group online forums and communities, LMSs, content management platforms, websites, mobile apps and *autonomous learning projects*, or ALPs (Mercado, 2015b).
- Stage 3: The teacher and learners collaborate in making the learning experience more technological in nature by jointly creating or contributing to wiki's, blogs, newsletters, community service projects, mutual sharing forums and so on.

The stages are not necessarily sequential. Teachers may be able to engage in activities that are associated with more than one stage, especially as they accrue experience and become more confident. However, teachers who are new to this kind of technology, or who have decided to gradually build up their repertoire of SLET from what may currently be an elementary knowledge and skill set, can begin with the first stage. This could mean, for example, using a YouTube video of their own, a digital stopwatch to improve lesson pacing and student participation, or Microsoft PowerPoint to present a grammar or vocabulary lesson rather than using the board. These are relatively simple tasks that require little training or effort. At Stage 2, however, teachers do need additional preparation, practice, familiarity and/or training to use, for example, LMSs, Skype and Google Group (e.g. recording feature, aligning classroom and autonomous tasks – covered in Chapter 4). For Stage 3,

teachers need to be working in a highly collaborative classroom environment, the creation of which is a demanding process in and of itself, along with using the respective specifications, procedures and protocols for content development, tools, resources and so forth.

When working on their lesson plans, teachers should map out the opportunities for technology to play a supporting role for learning enhancement or classroom management.

## **Context**

Context could be understood as a current, desired or anticipated situation or state that serves as a frame of reference for language use in any of its forms (e.g. words, phrases, sentences, etc.). From a linguistic and pedagogically oriented perspective, contextualization is perhaps the factor that has the most impact on the success of any language learning experience. Many would probably say that it is the key to language learning. Nunan (1999a) refers to it as extra linguistic knowledge and knowledge of the world, without which language cannot even be understood, much less serve a functional purpose. Nation (2008b) considers guessing the meaning of new words from context as one of the most important of all vocabulary learning strategies. The stakeholders, the educational setting, the type of instruction and assessment in the classroom, and other factors play a crucial role in contextualizing the language for test design, implementation and subsequent washback (Cheng and Curtis, 2004). From the broader view of second-language acquisition research, it is believed that making certain a full range of contexts are provided for L2 output or target language use will give learners a reason to attend to the language and do their best to offer what Ellis (2005) calls a 'full performance' (p. 41) that reflects their ability to handle diverse situations. Krashen (1982) has referred to context as an essential means of scaffolding L2 input, thus making it more comprehensible.

In the twenty-first century, technology is a key channel through which the context of language can be communicated and deciphered. Technology has the potential to bring the target language to life in ways not possible before as students engage in their learning experiences, whether in a classroom, at home, on the bus, in a park or anywhere else an opportune learning moment may arise. In the past, most of the learning had to take place in the classroom, with highly graded, scaffolded input that often came as audio or video with the printed course book material. Now, the language can be contextualized on something as small and portable as a smartphone. Some examples include grammar exercises in an LMS for the kind of practice that focuses on form and seeks to prepare students for an international proficiency examination; input for **situated learning** (Beatty, 2013) on the street that comes through a useful app for daily reference; or, when available, in the form of apps like *Skype*, *Google Hangouts* or *Jitsi*, all of which make video chatting and conferencing with friends possible through their powerful voice over Internet protocol (VoIP) capabilities.

On the Internet, there are abundant resources as well. The British National Corpus or Brigham Young University's Corpus of Contemporary American English (COCA) or any other large collection of contextualized language provides language learners with hundreds of millions of examples of how language is used in a range of authentic, out-of-class settings. Similarly, DiVii is a powerful Internet-based application for use on either a personal computer or a mobile device that serves as a video dictionary, allowing students to find new words that are highlighted and embedded in thousands of authentic videos. Back in the classroom, the target language can now be contextualized faster than ever before through the use of audio and video files, Internet websites, mobile device apps, PowerPoint and Prezi presentations, IWBs, and so on.

The context of where the learning is to take place is also a fundamental factor to consider when trying to ascertain the applicability of technology. Nowadays, English language learning

can take place at a school, university, binational centre, language academy or non-governmental organization (NGO). The degree of investment in technology, whether it is in the form of a Wi-Fi or cable Internet connection, bandwidth capability, IWBs, mobile devices, servers, multimedia labs and so on, will determine the degree to which the institution is willing and able to commit to a twenty-first-century learning experience for its students. However, at times, financial constraints do not allow for a wide-scale, varied implementation. Under such conditions, institutions should consider low-cost options that offer the greatest benefit in favour of an efficacious teaching and learning process. Here are some essential principles to keep in mind as we answer the question ‘What should we look for in technology before using it?’:

- *Massification*: It has to be able to reach and benefit the greatest number of students.
- *Return on investment (ROI)*: The benefits in terms of additional learning must offset the investment in time, effort and money by a significant margin.
- *Amenability*: Students should be able to relate to technology as meaningful and relevant to what they see and do in their daily lives.
- *Scalability*: Without requiring an additional investment, it can be applied upward, as the number of students grows, for a greater degree of individualization and personalized use, or downward, to be shared among a group.
- *Manageability*: It should be user-friendly for learners, teachers and even language programme administrators, who must decide on how to implement it for the best results.
- *Dependability*: It should be trustworthy so that it always (or almost always) works and is available when needed.
- *Appeal*: It should have innate characteristics that make it engaging for students to use.

An educational institution with ample financial resources would most likely make a substantial investment in order to



ensure the availability of technology. IWBs in the classroom, Internet connectivity with a high bandwidth, tablets or laptops for students, a range of software and applications, and an organizational culture that promotes creativity with technology on the part of both students and teachers would be some of the benefits. These institutions have curricula in which the use of technology is integrated throughout the study programme and is considered essential for student success. They will have a learning environment that not only focuses on learner achievement in the classroom but also one that promotes a high degree of autonomous student learning. In such cases, teachers will make it a habit to engage in exploratory teaching through technology and share ideas and resources with their colleagues. They will be highly versed in SLET and trained constantly. Rather than resorting mainly to face-to-face instruction, blended learning and flipped classrooms may be more of the norm in such institutions.

In the case of institutions with limited funds, the approach to using technology may be highly conservative. For example, there may be a small number of personal computers, laptops or tablets that must be shared by the students, either in the classroom or in a multimedia lab, if there is one; limited Internet capability/access; and an organizational culture that provides its students with occasional exposure to technology rather than making its use a permanent characteristic of the learning experience. The challenge for teachers and language programme administrators in such situations is finding a way to take full advantage of opportunities as they arise, especially since proficiency in the use of technology has become such a necessity. Language programme administrators and other key authorities who are entrusted with acquiring technology and making it available should ensure at least periodic access. They should also guide teachers on how to use technology effectively and efficiently in order to achieve clearly identified goals and objectives. Here are some ideas for such institutions:

## ACTIVITY

Students can be taken on field trips to places in which technology abounds. They could go to a museum with interactive information panels, the library for research, or visit a highly technological ‘brother’ or ‘sister’ school so that the students from both institutions can engage research or science fairs, ‘swap meets’ or other interactive activities. Regardless of how much your technology your institution employs, consider one of these options as a novel way to make your classes more interesting.

- *Sharing*: Students should share the personal computers, laptops, tablets or smartphones that may be available. It may not be possible or necessary for all students to have their own devices. The lesson plan should account for this and ensure that all students have an equal opportunity to use whatever devices are available. Students should be informed in advance of the nature and purpose of the activity that will require such sharing.
- *Alternate means*: If the educational institution cannot afford to invest in a permanent multimedia lab, it may be possible to rent certain equipment for specific days each month.
- *Adaptation*: Classrooms with low bandwidth for an Internet connection will have difficulties buffering videos and other dynamic content from the web. In those contexts, teachers could use websites and previously downloaded content, including pictures and videos, to avoid unnecessary delays during the lesson.
- *Partnerships and grants*: Institutions can seek partnerships with other educational organizations and government agencies that have greater technological resources, so that students can make use of them at different times during the year. Grants could also be sought in order to finance the acquisition of new equipment and resources, train teachers on the use of technology and fund other projects.

## Selecting the Right Technology

As a whole, technology has been used in the field of education and in English language teaching since the 1980s, with an exploding array of new alternatives just over the past few years. Unfortunately, it has not always been purchased or used wisely, at times resulting in million-dollar losses without a significant return in the form of benefits for the language learner. As an example, one Latin American government acquired more than 100,000 IWBs for distribution among the country's public schools. This was a good initiative. Unfortunately, many teachers were never trained on their use, and the devices were even distributed to places with no electricity (Color ABC, 2009).

What is important to keep in mind is that technology does not guarantee learning outcomes on its own. It will only become a powerful enabler and enhancer of the learning experience if the key stakeholders in the educational process use it with enough knowledge, expertise and determination. There must also be a conscientious effort on the part of institutional authorities to expand the learning envelope beyond the traditional paradigm of classroom teaching and learning. Using technology, it is possible to empower English language learners so that they can continue learning, practising and consolidating their language skills outside of a formal educational setting whenever they choose to do so. By promoting learner self-determination, learners will be able to choose what, when and how they want to learn. Moreover, when educational authorities espouse the concept of **classroom and autonomous learning integration (CALI)** (Mercado, 2015b), which is the systematic and purposeful integration of classroom learning and autonomous learning processes, a potentially boundless expanse of new opportunities for students to learn and practise the language is created.

Successful experiences with technology can shed light on the kinds of decisions that key stakeholders can make in order to bring about the greatest possible positive impact. Every context

is unique, but often the ultimate aim for using a particular technology is generally the same regardless of context or setting. As an example, such an experience took place when I was director at a language centre in Latin America. In 2005, we had to decide on a new technology to implement in the study programme as part of our efforts to renovate the learning experience for our students. The challenge was to choose a technology that could be acquired at the lowest possible cost and yet be widely implemented to benefit the greatest number of students. The alternatives offered by the competing publishers were (i) an online e-workbook; (ii) digital IWBs with supporting software; and (iii) a CD-ROM to go with one of the contending course books. After reviewing the research, consulting renowned experts in the field and doing a financial analysis, we chose the e-workbook option because of its scalability, low cost and usefulness in promoting autonomous learning, something which was consistent with the institution's new educational philosophy. Because it was Internet based, massification was more than feasible. The IWB option was postponed for reconsideration at a later date because of the high acquisition and maintenance costs at the time and the concern that it would inadvertently lead to greater teacher-talk-time in detriment to student-talk-time. The CD-ROM option was considered too traditional and passé. Looking back, the fact that as many as 70 per cent of the tens of thousands of students (*note*: reference to number is to highlight the impact of the decision and of using appropriate technology) enrolled there regularly got to use the *e-workbook* and other web-based resources indicates it was the right decision.

## Conclusion

In this chapter, I have set out to make the point that technology must be an integral part of twenty-first-century language learning experience because learners, as digital natives and millennials, expect it to be so. Yet technology is but a means to

an end and should be chosen and used carefully if it is to truly help our learners reach their fullest potential in learning a second language. In the end, choosing the right technology depends on what its ROI of sorts will be: how do the learning and other benefits for our students offset the investment in time, money and effort made by all of the key stakeholders in the process?

This first chapter establishes the underlying philosophy and aims for the entire book. As you think of how the ideas in this book can be applied in your classroom, you may see that, in talking about technology, we are also touching on issues such as learner motivation, CALI and the contextualization of language, among others. Therefore, it will become evident throughout the rest of the volume that the proposed strategies and innovations for enhancing English language learning through technology are all grounded – to one extent or another – in the principles, concepts and beliefs presented in this first chapter.

## Discussion Questions

1. Of the different areas in technology that offer encouraging prospects for second-language acquisition and English language teaching research, which one would you like to explore on your own? How?
2. In your opinion, what are three things to keep in mind when thinking about maximizing English language learner motivation through the use of technology? How can you include them in your lesson planning?
3. How would you rate your current level of expertise in applying SLET? What do you feel is the next step you need to take in your professional development in this area?
4. Imagine you have limited technological resources in your English language class. What are some strategies you would use in order to maximize learner participation and achievement?
5. Can you give an example of how the context provided in a course book activity could be enhanced through technology?

6. How would you offer your students the opportunity to communicate with L2 learners in another city or country? How would that be integrated into your lesson or curriculum?

## Suggested Readings

Beetham, H. and R. Sharpe (2013) *Rethinking Pedagogy for a Digital Age* (New York and Oxon: Routledge).

Orients teachers towards changing their philosophies on teaching and learning to account for technology.

Dörnyei, Z. and E. Ushioda (2009) *Motivation, Language Identity, and the L2 Self* (Bristol: Multilingual Matters).

Helps teachers better understand learner motivation so it can be enhanced through technology.

Prensky, M. (2010) *Teaching Digital Natives: Partnering for Real Learning* (Washington, DC: Sage).

Guides teachers on how to work effectively with today's 'digital natives'.