PART I

Theoretical Background

Introduction to Part I

Language education has traditionally been more skeptical than other fields of the effectiveness of technology as a tool to facilitate teaching and learning. The assumption is that a discipline placing human communication and interaction at its core will have little to gain and much to lose if part of that interaction is mediated through a technological device. However, in this book, we opt for a much more positive view of the role of technology integration in language courses. In fact, we intend to demonstrate throughout that a well-designed blended learning (BL), and, more specifically, a blended language learning (BLL), experience – which combines the advantages of face-to-face (F2F) human contact with the affordances of virtual learning environments – can be more effective than other delivery formats in language education.

The notion of affordances is crucial to considering how technology may facilitate language learning in a blended environment. The concept has become relatively widespread, particularly in the field of technology-enhanced teaching and learning. According to the Merriam-Webster online dictionary, the term *affordance* refers to "the qualities or properties of an object that define its possible uses or make clear how it can or should be used." The term was originally proposed by Gibson (1966), who suggests that our actions are determined (whether limited or facilitated) by the specific relationship between the properties of the environment and the actor who interacts with it. The assumption is that technology will promote certain behaviors and activities that are less likely or, at the very least, less effective when conducted F2F. By taking advantage of the types of interactions that technology can afford and combining them with the benefits of the brick-and-mortar learning environment, BLL can be the most effective mode of instruction, provided that the decisions to combine those affordances are informed by research and based on sound theoretical principles.

Part I of this book provides the necessary background to understand the various definitions of the term *blended* used in educational circles and

reflects on how a lack of consensus on a definition has led to difficulties in research on its effectiveness in the classroom. When we discuss the results of research conducted to measure the effectiveness of various course models, the issue of exploiting the affordances of technology in BLL comes to the fore.

As with any other type of blend, the result of blending in an educational context is determined by the ingredients that go into it. The review of research presented in Chapter 1 proves that BLL cannot be considered a monolithic enterprise and that there are currently as many different models – and often as divergent results – as there are programs or instructors implementing them. This current state of variability supports our proposal, expanded later in this book, to follow a systematic, research-based approach to the design of BLL experiences.

Reader Resources and Activities Proposed in Part I

In the online catalog, we propose the following activities:

1. Additional information sections:

Know More — By scanning the QR code provided or clicking on the links listed, readers will be able to read more details about a specific topic.

2. Two types of follow-up activities for readers:

Reflect, Post, and Share — Group activities that help share reflections and comments on the main information presented in the chapter.

Discuss in Small Groups — Reflection questions to generate stimulating discussions, whether in class or with colleagues.

Specific Abbreviations Used in Part I

Acronyms

BL:	blended learning
BLL:	blended language learning
CAI:	computer-assisted instruction
CAL:	computer-assisted learning
CALI:	computer-assisted language instruction
CALL:	computer-assisted language learning
EFL:	English as a foreign language
F2F:	face-to-face

FL:	foreign language
L2:	second language
PPT:	(Microsoft) PowerPoint
SLA:	second language acquisition
TA:	teaching assistant
TL:	target language
VoIP:	Voice over Internet Protocol

National Organizations and Associations, International Societies

AACE:	Association for the Advancement of Computing in Education
AAUS:	American Association of University Supervisors
ACTFL:	American Council for the Teaching of Foreign Languages
ELI-EDUCAUSE:	Educause Learning Initiative
IALLT:	International Association for Language Learning Technology
ISTE:	International Society for Technology in Education
MLA:	Modern Language Association
NCAT:	National Center for Academic Transformation
NETS:	National Educational Technology Standards
NSFLEP:	National Standards in Foreign Language Education Project
OLC:	Online Learning Consortium
SITE:	Society for Information Technology and Teacher Education
TESOL:	Teaching English to Speakers of Other Languages
WCET:	Western Cooperative for Educational Technologies

Specific Terminology

computer-assisted language learning (CALL) The acronym CALL is used throughout the book to refer to the application of computer technologies in the teaching and learning of foreign languages. The term CALL is widely used, although revisions of the term are suggested regularly (Chapelle, 2001, p. 3). It has evolved to encompass issues of pedagogical theories and modes of instruction as well as material design and technologies (Beatty, 2013, p. 7). The design of CALL materials takes into

consideration principles of language pedagogy in line with the communicative framework we espouse in this book. For this reason, we have adopted the term CALL over CALI (computer-assisted language instruction).[1] While the latter appears to imply a teacher-centered approach that utilizes programmed instruction practices, the term CALL puts a strong emphasis on a student-centered approach, focusing on interactive and individualized learning as well as requiring a more participative role of the student, all of which facilitates the language learning process.

distance learning (DL) The acronym DL acknowledges the role of some form of technology in learning (Garrison & Shale, 1987; Keegan, 1986) and has been in use both in the United Kingdom and the United States since at least the 1970s (Sewart et al., 1983; Willis, 1992). According to *Encyclopædia Britannica* (Simonson & Berg, n.d.), the term has been used since the late nineteenth century, originally in the specific form of (religious) correspondence courses.

In this book, we adopt the term to refer to the social practice of learning and teaching online. We follow the definition given by Mood (1995, p. 19) that includes physical separation of teacher and learner, supervision by an educational institution, the use of (digital) media, and two-way interaction between instructor and learners, between learners and learners, and between learners and content.

second/foreign language (L2/FL) We do not apply the terminological distinction between *foreign language* (FL), the language learned or studied outside its environment, and *second language* (L2), the language other than one's mother tongue being learned in the country or region where the language is mainly spoken. Rather, we will adopt the cover label L2, which can refer to the acquisition of a second language both in a classroom situation and under more natural exposure. Although our analysis and examples will mainly refer to teaching and learning in formal educational contexts, we opted for a more general acronym, as we maintain that the theoretical approach to BLL and its practical implications apply equally to both contexts.

target language (TL) The acronym TL refers to the *target language*, or the language that a nonnative speaker is in the process of learning.

[1] Originally developed in the United States as a subset of the general term computer-assisted instruction (CAI), the term CALI was in common use until CALL became the dominant term in the early 1980s, following the agreement at the 1983 Teaching English to Speakers of Other Languages (TESOL) Convention.

CHAPTER ONE

Blended Language Learning

Definitions and Research

Chapter Objectives

This chapter provides opportunities for readers to:

1. Compare the curricular roles of technology in different types of language courses: *Web-facilitated* or *Web-enhanced*, *blended*, and *fully online*
2. Give examples of definitions of the term *blended* and a rationale for its adoption
3. Describe the conditions for effectively blending language environments in light of comparative and noncomparative research studies conducted in the field

Within an increasingly globalized world, the social, political, and economic changes and challenges societies are currently experiencing have generated the need to continually assess and validate what counts as effective instruction. Such a process entails careful planning and often results in the implementation of pedagogical innovations for educational improvement. Perhaps the most pervasive of these innovations has been the integration of technology into curricula, which has spread into several fields of education and resulted in the widespread adoption of online and blended curricula.

According to the US Department of Education (Snyder et al., 2016), in fall 2014 alone, 5,750,417 students enrolled in distance courses at degree-granting postsecondary institutions. The 2016 *Distance Education Enrollment Report* from the Western Cooperative for Educational Technologies (WCET, 2016) confirmed that this number contributed to a 13-year-long growth trend. By 2014, 28 percent of higher education students were enrolled in at least one distance course. Key findings from *Grade Increase: Tracking Distance Education in the United States* by the Babson Survey Research Group show that distance education enrollment increased for the fourteenth straight year, with 31.6 percent of higher education students enrolled in at least one distance course in fall 2016. By this time, the number of distance education students had grown to 6,359,121(Seaman et al., 2018).

In the subfield of language education, the integration of technology is by no means a new trend. Starting from the late 1950s, language teachers began to adopt audiovisual technologies in the form of filmstrip projectors, overhead and opaque projectors, and tape and videocassette recorders to enhance the teaching of listening skills, simplify the assessment of oral performance, and facilitate individual pronunciation practice. By the 1980s, university language classes routinely included obligatory sessions in audio laboratories, also known as language labs, where students performed audio-based repetition drills aimed at perfecting form and accuracy (Chapelle, 2001).

In response to this early use of technology, which primarily promoted a focus on form and accuracy, the communicative trend in the 1980s and 1990s began to advocate first the value of computers with multimedia capabilities and later the importance of the internet as a communication tool (although in practice, the application of those technologies was neither immediate nor widespread). Multimedia and communication-based technologies facilitated student engagement with authentic, meaningful interaction in real-world language situations and emphasized interactions in different contexts (among students, between individuals or groups of students, and between the teacher and student): all central components in developing fluency.

The beginning of the new millennium witnessed a remarkable display of technology innovations and applications. Multiple Web-based tools have extended, enriched, and enhanced classroom instruction in a variety of new ways, making the second language (L2) experience mobile and available 24/7 through portable devices as well as providing a more active learning experience through collaborative venues and interactive modalities. Such tools have created increasing opportunities to provide learners with flexible learning options at local and global levels, both within and beyond the physical boundaries of the language classroom. Given the magnitude and scope of technological advancements and the proliferation of language learning applications, the focus of today's language instruction is vastly different from that of the middle to late twentieth century, as geographical and physical boundaries are being transcended by technology while accepted notions of language instruction are giving way to innovative approaches to teaching and learning an L2.

These changes are making educators develop an awareness of how technology can enhance language education and engage learners in innovative ways. Most teachers today would argue that current technologies, particularly the World Wide Web (WWW, or simply the Web) and its host of internet-based tools, are necessary to maximize

opportunities for students to interact in the target language (TL), both in and out of the classroom (Van Lier, 1996). This is fundamental for L2 development (see Dörnyei & Murphey, 2003; Nation, 1990; Van Lier, 1996; Warschauer, 1997), particularly in situations in which students have limited interaction with the TL beyond the classroom (Nation, 2003). The increasing adoption of technology integration is also the result of specific directions from most higher education institutions, whose administrations stress the importance of technology-enhanced curricula for second language acquisition (SLA) and nudge reluctant teachers to embrace technology in their teaching.

Technology can be incorporated in a variety of ways, and it is important that teachers be aware of the differences among those multiple options and understand their curricular implications, as different degrees of incorporation may yield different learning outcomes (Cerezo, 2014). One form of technology integration is known as *Web-facilitated or Web-enhanced* curricula (Smith & Kurten, 2007). Here, F2F classroom instruction is supplemented with online/remote components, either "technology mediated" or "technology based," depending on whether learners use technology to interact with each other (technology mediated) or work independently (technology based) (Cerezo, 2014, p. 50). *Fully virtual* or *online* curricula altogether eliminate or dramatically reduce F2F instruction, placing most of the instruction online, whereas *blended* or *hybrid* curricula – the topic of this book – incorporate online instructional time in lieu of select portions of F2F time, keeping a careful balance of the two components. Thus, the goal of blended or hybrid courses is to marry the best features of in-class teaching with those of online teaching to promote learning.

Several researchers have used the structural aspects of the different learning environments to describe their curricular implications. For example, Allen and Seaman (2011) differentiate fully online and blended courses based on time allocation for course content: an online course delivers between 80 and 100 percent of course content via technology, whereas a blended or hybrid course replaces between 30 and 80 percent of F2F time and content with technology. By contrast, Smith and Kurthen (2007) differentiate Web-enhanced, blended, and hybrid learning by the percentages of online material included in each. Web-enhanced courses offer a minimal amount of online material; blended courses provide some online learning material and activities (less than 45 percent); while hybrid learning formats offer between 45 and 80 percent as compared to 80 percent or more for the fully online (Blake, 2014, p. 13).

The structural aspects of learning environments, however, are not always the most useful parameters for describing teaching implications. As we will see more in depth in the next section, the word *hybrid* or *blended* implies a combination or mixture of individual parts that may or may not be always discernable (Picciano et al., 2014). The different modalities may be carefully separated and differentiated. For example, a course may meet for a total of 5 weekly hours, in which 4 hours are allocated for meeting in an F2F classroom, while the equivalent of 1 weekly hour is conducted online. By contrast, the different modalities may not be easily distinguishable, as in the case of courses in which time is devoted to activities such as collaborative group projects, where students are required to maintain regular communication with one another through e-mail and online discussions.[1] Because of this difficulty, many researchers have subscribed to a broader definition of BL (Ross & Gage, 2006; Thorne, 2003). We will present a broad and more detailed overview of the several definitions of BL in the next section, although, as we will see, no consensus has formed around a single definition. We will, however, be able to highlight the important elements to consider in BL, while also touching on emerging trends and issues.

1.1 Blended Learning: Definition of the Term and Rationale for Use

The concept of BL was the result of discussions on educational effectiveness conducted in the early twenty-first century and rapidly became one of the most important pedagogical innovations of this century. For example, the latest report by the Babson Survey Research Group (Seaman et al., 2018) indicates that almost 40 percent of academic leaders in US higher education agree that blended courses "offer more promise" than fully online courses and rate learning outcomes for blended courses as superior to those of courses taught F2F.

Many authors have paid increased attention to BL and have devised various possible definitions (Driscoll, 2002). Some have used the word *hybrid* as an alternative term to describe the same concept. This development has ultimately added confusion to the discussion of BL. In the following paragraphs, we will address this lack of clarity by illustrating different interpretations of the term and discussing the rationale for its adoption. In order to have a clear understanding of BL development, we

[1] *Online discussions, internet/online forums,* or *online messages/bulletin boards* are interchangeable terms to define an online discussion site where users can hold conversations in the form of posted messages.

will be considering the definitions in (1) corporate training contexts, (2) higher education, and (3) L2 teaching and learning.

A broad definition of BL comes from a corporate training perspective and includes various combinations of any F2F teaching (classroom sessions, mentoring arrangements, access to faculty members) and DL (computer technology support using both online and offline materials, simulations, live e-learning, and self-paced learning) (Masie, 2002; Reid-Young, n.d.; Singh & Reed, 2001; Valiathan, 2002).

In higher education, however, the term BL was circumscribed to refer mainly to one format: a combination of established, instructor-led F2F classroom sessions requiring the physical copresence of teacher and students, with DL based on internet and digital media (see, among others, Alonso et al., 2005; Friesen, 2012; Garrison & Kanuka, 2004; Novak et al., 1999; Osguthorpe & Graham, 2003).

With reference to the L2 teaching field, the definitions provided are more specific. Although they continue to refer to a combination of F2F components with DL components based on appropriate use of technology, some definitions refer to a wide range of technologies, such as internet, digital audio content, and interactive whiteboards (Sharma & Barrett, 2007, p. 7); others are distilled down to online delivery with some offline delivery (Dudeney & Hockly, 2007, p. 137); and others refer to computer-assisted learning (CAL) "in a single teaching and learning environment" (Neumeier, 2005, p. 164) or computer-assisted language learning (CALL) (Stracke, 2007, p. 57).

These definitions, however, still lack any reference to the student experience in the learning process, a central component in teaching and learning. Various other definitions have been so thoroughly discussed and debated in literature, as well as at conferences and workshops, that some researchers have proposed a full reconceptualization. The Educause Learning Initiative (ELI)[2] points out that simply adding non-F2F elements into a traditional course structure most often results in a dysfunctional phenomenon known as the "course-and-a-half," which represents a superficial understanding of BL. Garrison et al. (2002) as well as Dziuban et al. (2004) share a similar view: the *blend* is not obtained by simply enhancing the traditional class with technology. In

[2] Besides ELI (www.educause.edu/), the Christensen Institute for Disruptive Innovation (www.christenseninstitute.org/), the Association for the Advancement of Computing in Education (AACE [www.site.org/]), and the Online Learning Consortium (OLC [www.onlinelearningconsortium.org/]) are among the professional organizations that have greatly contributed to research and scholarly meetings where best practices on BL are shared.

simply converting printed handouts into digital files, adding a supplemental website for further resources, or posting PowerPoint (PPT) slides, video materials, and online quizzes to the Web, a teacher has not converted her traditional course to one that she can teach both online and F2F. Although she may refer her students to the supplemental website, or ask them to listen to the audio or video files followed by online exercises, she is not providing a viable tool for her students to get the best out of the F2F and online environment. This is because she has at this point merely transferred the raw course material from one medium to another but failed to create a blend, as she has not taken any instructional design steps to combine the two environments. This is especially problematic when student time spent online is meant to replace some classroom time: when this is the case, the incorporation of technology plays a subtractive rather than additive role in the learning process. The goal of BL is to offer students an enhanced learning experience through the incorporation of online technology that is used not only to enhance traditional F2F instruction but to add content, skills, and strategies that cannot easily be acquired in the F2F classroom alone.[3]

The Clayton Christensen Institute for Disruptive Innovation (www.christenseninstitute.org/) also emphasizes that BL goes beyond a learning experience enhanced by the use of one-on-one computers or online or mobile technologies. According to the Institute, BL is "a formal education program" in which learning occurs by making the best use of the internet and increasing control over the time, place, path, and pace of students' learning, and where "modalities along each student's learning path within a course or subject are connected to provide an integrated[4] learning experience" (Blended Learning, n.d.). This creates a learning experience that combines the inherent advantages of F2F and online environments, integrates them seamlessly, and results in improved pedagogy that is beneficial for teachers and learners.

[3] This concept of instructional enhancement is reflected in the definition adopted by the participants of the 2005 Sloan-C Workshop (OLC), according to whom a portion of F2F time is replaced by online activity in a planned, pedagogically valuable manner (Laster et al., 2005; Picciano, 2006).

[4] The concept of the integrated or formal learning experience emerged also from the definition adopted by the participants to the 2005 Sloan-C workshop and were presented as a guideline for the researchers contributing to the book *Blended Learning: Research Perspectives* (Picciano & Dziuban, 2007). This definition puts emphasis on the importance of a pedagogical plan for integrating online elements with the traditional offline/F2F component and the time commitment for online activities replacing F2F time (Laster et al., 2005).