



## Review of *Technology-enhanced language learning for specialized domains: Practical applications and mobility*

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### **Technology-enhanced language learning for specialized domains: Practical applications and mobility**

Martín-Monje, E., Elorza, I., & Riaza, B. G. (Eds.)

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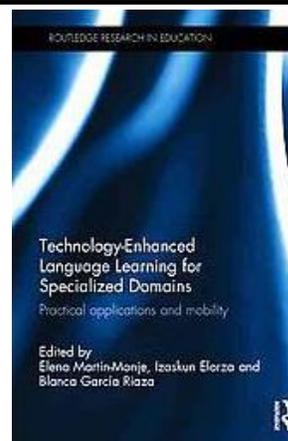
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With the emergence of Web 2.0, speech recognition systems, and machine translation, applications of information and communication technology (ICT) for education have advanced dramatically over the last 15 years. The book *Technology-enhanced language learning for specialized domains: Practical applications and mobility*, edited by Martín-Monje, Elorza, and Riaza (2016), provides a comprehensive overview of essential topics broadly related to technological advances in specialized language learning and teaching over the last decades. As noted in its introduction, the book—divided into six parts with a total of 20 chapters—attempts “to provide a representative sampling of how technological applications have contributed to enhance language learning in a variety of ways” (p. 1). Thus, the book is a valuable resource for practitioners and researchers interested in the integration of technology and language learning.

The first part, *General Issues about Learning Languages with Computers*, includes four chapters and explores general issues about learning languages with computers. Chapter 1, by Pegrum, provides an overview of the different types of digital literacies, loosely categorized as language-related, information-related, connection-related, or remix literacies—“reworking existing cultural artefacts to express new meanings” (p. 18)—and discusses their roles in language comprehension and production. The author claims that mobile literacy, which pulls together other literacies and thus evolves into the most significant literacy skill set, should be considered a complement for traditional language and literacy skills. Pegrum asserts that digital literacy skills are an important factor contributing to effective language use and argues for the integration of digital literacies with language, culture, and more traditional literacies among language teachers. Chapter 2, by Vinage, reports on a study examining the effects of using wikis to develop participants’ intercultural competence. In Chapter 3, Jiménez-Muñoz calls for the inclusion of context in evidence-based ICT-enhanced research on English for specific purposes learning. Arguing that a two-dimensional model (i.e., delivery–learning outcome) is insufficient in evaluating the impact of ICT usage on learning, the author proposes that contextualized interpretation of data facilitates the discovery of relevant patterns of successful pedagogical ICT usage. Part 1 ends with a chapter by Escobar that presents a case study on the effects of online activities on students’ test performance. The researcher found that

although students did not perform well on an English grammar test, they outperformed those who did not participate in online activities on oral, reading, and writing tasks.

Part 2 focuses on the use of technology in language assessment. Chapter 5, by Álvarez, presents a brief review of the history, advantages, and drawbacks of technology-enhanced assessment, including computer-based, computer-adaptive, web-based, and computer-assisted language testing as a field. This chapter also discusses the future of technology-enhanced assessment and issues for research such as construct definition and the impact of computer literacy on test performance. Chapter 6, by Beltrán-Palauques, illustrates a technology-enhanced assessment of pragmatic competence using Google Docs and Google Hangouts for interactive discourse completion tasks (IDCTs) and retrospective verbal reports (RVRs). The researcher concluded that synchronous computer-mediated communication could be used to create an environment for performing the IDCTs and conducting the RVRs and that test takers had positive attitudes towards using the ICT tools for the test. The last two chapters in Part 2 are more descriptive in nature, with Chapter 7, by Romero, Ranero, and Cesteros, explaining the development and use of a questionnaire for evaluating digital educational materials and Chapter 8, by Pareja-Lora, describing the architecture and methodology of OntoTagger, a part-of-speech (POS) tagger, designed to interlink other POS taggers to increase accuracy rates.

Part 3, *Mobile-Assisted Language Learning*, includes three chapters focusing on the benefits, challenges, and implementation of mobile-assisted language learning (MALL). First, Chapter 9, by Underwood, discusses the relevance, opportunities, and challenges of MALL in language for specific purposes (LSP), with an emphasis on mobile tools for vocabulary learning. In Chapter 10, Hockly's classroom-based action research project presents a practical framework for designing and implementing communicative MALL tasks. The author identifies six key parameters for the design of communicative MALL tasks. Finally, in Chapter 11, Read, Bárcena, and Kukulka-Hulme argue for the potential of mobile devices in language massive open online courses (LMOOCs) using an example of a successful course. They claim that correctly structured and managed LMOOCs can bridge formal and informal learning to facilitate the development of L2 competences and that mobile devices can be potent tools for students in LMOOCs.

LMOOCs are further discussed in the three chapters in Part 4. Chapter 12, by Sokolik, looks at the challenges and benefits surrounding the online teaching of writing. The author points out that despite challenges related to content delivery, discussion forums, assessment tools, plagiarism, and attrition, writing MOOCs are still quite popular because they provide many benefits to the stakeholders. These benefits include building communities of discourse, stress-free environments that lower the affective filter, relative ease of access, and promise for big data. The chapter concludes with a call for re-examining the methods used to teach writing so that more academic writing students can benefit from MOOCs. Chapter 13, by Rubio, Fuchs, and Dixon, emphasizes the need for a re-examination of design issues in LMOOCs and then provides best practice recommendations. The chapter highlights the need to focus on course design, rather than on a finished course product. These course design practices include building community, enhancing the social aspects of the course, providing a variety of feedback and assessment types (i.e., the potential of learners as assessors), and ensuring student accountability. Part 4 is finalized with Chapter 14, by Martín-Monje and Ventura. The authors present a study exploring how social learning affects the acquisition of specialized vocabulary in an LMOOC. Rather than adding any additional methods into the MOOC itself, they present research that includes a social learning aspect (a Facebook group). The research concludes that all stakeholders in the MOOC believed that "social networks have the potential to engage students and foster interaction in LMOOCs" (p. 196). The authors call for more research in the area of using social networks to supplement MOOCs focused on language acquisition.

Part 5, *Corpus-Based Approaches to Specialized Linguistic Domains*, spans three chapters. Chapter 15, by Berber Sardinha, is a practitioner-focused chapter about teaching LSP with corpus-based methods. In this chapter, the author classifies corpus-based teaching materials into two categories: phraseology-centered and register-centered. Examples of pedagogical activities using each type are provided. The topic of Chapter 16, by Díez, is related to transcribing and annotating non-native speech corpora. The purpose of

this chapter is to introduce “a framework for compiling, transcribing, and annotating a non-native speech corpus” (p. 225). The author cites two primary goals for the use of this framework: (a) providing a resource for empirical studies on pronunciation in SLA and (b) providing a foundation for a database that can contribute to the development of software programs aiding in computer-assisted pronunciation teaching. The authors also contend that for non-native spontaneous speech, standardization of transcription conventions are needed to account for disfluencies and non-linguistic vocalizations. Chapter 17, by Ramos and Moreno, is the last corpus-related chapter and is about the use of corpora in translator training. This chapter explores the use of corpus-based training materials for legal translators and makes an argument for the efficiency of this type of specialized training.

The final section of the book, Part 6, focuses on computer-assisted translation (CAT) tools for language learning. Chapter 18, by Fernández-Parra, describes the use of CAT tools for translation and advocates expanding their use for language learning as well. This chapter examines the use of two CAT tools (SDL Trados Studio 2011 Suite and Dèjà Vu X2) to supplement language learning for self-study and classroom use. The chapter cites portability, shareability, and reuse as the main benefits of the translation tools and emphasizes that tools such as these could never replace other strategies, but could co-exist or contribute in a supplementary way—especially in schools that are already using these programs. Chapter 19, by Bausela, focuses on utilizing corpus-based translation in the classroom. The author examines the development of an ad hoc corpus of microbiology texts to be used for specialized translation purposes and claims that corpora can enhance the competence of translators in training. Chapter 20, by Moreno, is about Videos for Speaking, a MALL app designed to improve oral skills. The chapter provides a brief state of the field of MALL, outlines the steps taken to develop the app, and then reports on a qualitative pilot study of its use. The findings demonstrate the potential of the app to promote oral language development.

*Technology-Enhanced Language Learning for Specialized Domains: Practical Applications and Mobility* provides a clear overview of how various technologies have affected language teaching and learning. A strength of the book is its varied representation of current technologies in language learning via an examination of multiple methodological positions, including empirical studies (whether quantitative, qualitative, mixed-methods, or action research). Consequently, the book is also research-oriented, providing readers with up-to-date findings in technology integration in language learning and prompting future research. Readers with research ideas in areas such as technology-enhanced language assessment, data-driven learning (corpus-based pedagogy), MALL, LMOOCs, and translation can find much potential within these chapters. Also, the book builds on other recently noted themes in technology-enhanced language learning, such as the focus on practices and methods instead of products (Canagarajah, 2014; Pennycook, 2010). Consequently, the book seems to achieve most of its goal “to provide a representative sampling of how technological applications have contributed to enhance language learning in a variety of ways in the last years” (p. 1). It certainly represents a major portion of those effects. However, its representativeness in some areas seems incomplete.

There are several sections of the book that could benefit from some additional topics relevant to the application of technology in language learning and assessment. First, Part 2 on technology and assessment could show a more direct application of technology in language assessment. For example, while Chapter 8 provides a detailed description of the development and implementation of a tagger, a discussion of the importance and application of such technology in automatic scoring or automatic feedback systems to language learners would be useful in helping readers see how such technologies have been employed in the L2 classroom and large-scale assessment. Second, the focus on MALL in Part 3 could be improved by widening its scope. While the discussion of vocabulary learning in Chapter 9 is useful, it would be advantageous to include other skill areas, especially reading, listening, and pronunciation or speaking, as using MALL for these skills has become an important research focus (see Bozdoğan, 2015). Finally, in the chapters related to oral skills (Chapter 16 and Chapter 20), one might expect to see information about automatic speech recognition, which has been noted as an effective technology in second language teaching (Bodnar, Cucchiari, de Vries, Strik, & van Hout, 2017; Duman, Orhon, & Gedik, 2015; Golonka, Bowles, Frank, Richardson, & Freynik, 2014).

Furthermore, the chapter organization could be more coherent. For instance, the review of a POS tagger is found in Chapter 8 of Part 2, *Languages and Technology-Enhanced Assessment*, but its descriptions of the tagger's development, which focus on natural language processing, might fit better in Part 5 (i.e., the use of corpora in language instruction). Moreover, Chapter 20, which is about a MALL-based app, is in Part 6 about translation, yet the chapter focuses on using the app to improve students' oral competence and hence might work better in Part 3. However, as the authors acknowledge, the topics covered in this book overlap, which makes organizing them more challenging.

Overall, *Technology-Enhanced Language Learning for Specialized Domains: Practical Applications and Mobility* provides readers with an overview, theoretical background, and some practical issues related to important topics in the field. Its relevance in the world of language teaching and language learning cannot be understated, for as the afterword points out, "the question is not whether a course or a learning situation is technology-enhanced or not, but rather to what extent it is" (p. 280). This book is a relatively comprehensive collection of how the technological changes and advances of the recent past have affected ICTs related to information (e.g., assessment and corpus tools), communication (e.g., language teaching and learning, MALL, LMOOCs, and translation tools), and interrelated aspects of ICTs. As such, the book has met its goal to place emphasis not on "how much technology will develop in the next years, but rather on the consequences that past changes are having for language teaching and learning and how these and the coming changes will affect them" (p. 1). The book is relevant to language teachers, linguists, and researchers in related fields because of its intersecting topics, which build upon each other throughout, and its presentation of information relevant to current and future endeavors in language learning and teaching. This edited volume weaves together past and present, paving the way for a better understanding of the current and future transformations taking place as a result of technological innovation and its effects on language learning and teaching in specialized domains.

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