BOOK REVIEW

Review of *SMART CALL: Personalization, contextualization, & socialization*

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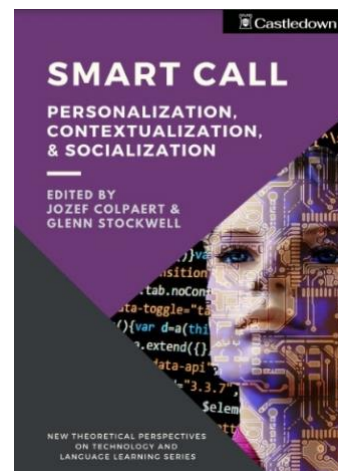
Computer-assisted language learning (CALL) explores a wide range of tools that can support individuals studying a second or foreign language (L2), including distance L2 learning (Canals, 2020; Levy & Stockwell, 2006). *SMART CALL: Personalization, contextualization, & socialization*, edited by Colpaert and Stockwell, includes a selection of papers from the 21st International CALL Research Conference in Tokyo describing successful implementations of CALL across Asia, Europe, Oceania, and the Americas. Although the *SMART* (smart, measurable, achievable, relevant, and time-bound) features are not new, the editors approach *smartness* from both environmental and psychological perspectives.

Overall, the authors of each chapter explore strategies and instruments to enhance L2 learning experiences based on three principles: *personalization*, *contextualization*, and *socialization*. In Chapter 1, Colpaert and Stockwell define personalization as customizing the CALL design to cater to the needs of the students and teachers. Contextualization concerns aligning the CALL experience with sociocultural, educational, and geographical contexts. Meanwhile, socialization centers around promoting interaction and building relationships among learners, educators, and other stakeholders.

In Chapter 2, Tanaka-Ellis evaluates Affordance-Actualization theory in terms of its relevance to SMART CALL environments. First, the author examines the historical utilization of the term *affordance* in language learning and CALL research followed by a discussion of the need for *actualization,* or making use of a particular affordance. In practice, the author examined the affordances of a tablet computer in an English content-and-language-integrated learning classroom in Japan. The author examined videos depicting the tablet and actor attributes that could lead to an affordance, along with the required actions to utilize that affordance effectively. Although the method of analysis was unclear, Tanaka-Ellis suggests investigating technological and linguistic perspectives utilizing appropriate tools to fully understand the potential of a particular technology.

In Chapter 3, Peeters introduces *social network analysis*, a quantitative method for deriving meaningful information from large amounts of text-based data, particularly for analyzing interaction in online L2

learning spaces. Using optional posts and comments students made to a learning management system, the author describes *burst patterns*, or temporally mediated clusters of active engagement in online collaboration among Japanese students learning English. To understand the collaborative process, Peeters also utilized *interaction heatmaps*, which provided a visual representation of connections between topics in participants' initial posts and topics that appeared frequently in the comments. Peeters suggests that through monitoring the evolution of computer-mediated communication over time, educators and researchers can observe distinct stages in online collaborative learning to create environments that lead to meaningful interaction and socialization.

In Chapter 4, Chen et al. explore the potential of Intelligent Personal Assistants (IPAs) for improving L2 learners' communicative ability. The authors utilized the *Google Assistant Language Learning Questionnaire* and classroom observations to evaluate Taiwanese students' perceptions of using Google Assistant (GA) in the classroom. Chen et al. calculated the frequency distributions of each survey item to identify areas of agreement or disagreement among the participants. They used qualitative data from focus group interviews to support and clarify results of the quantitative analysis. Although there was not a control group, the authors determined that GA helped improve participants' motivation and their scores on measures of pronunciation, fluency, vocabulary, and listening.

In Chapter 5, Li and Zou study the use of self-purported, artificial intelligence (AI) speech evaluation programs for L2 speaking practice. The authors investigated the perceptions of English-as-a-medium-of-instruction university students in China toward popular AI-based programs like *Liulishuo*, *EAP talk*, *YaSiGe*, *Duolingo*, and *iSpeak*. These apps use machine learning algorithms to analyze language data and to provide personalized feedback. Several aspects of learning satisfaction were measured, including convenience, access, motivation, learning efficiency, and effectiveness. The authors found that most participants favored incorporating the apps into their personal study of English speaking.

In Chapter 6, Obari et al. explore the addition of smart speakers to a blended learning environment for L2 English students in Japan. The research included three studies about the potential of AI-based smart speakers to enhance participants' scores on the Test of English for International Communication (TOEIC). Two of the three studies employed pre- and post-tests to identify improvement in student scores following the inclusion of Google Home Mini or Amazon Alexa in the curriculum. The second study compared the TOEIC score changes between an experimental group, which received the AI smart speakers, and a control group that followed a similar curriculum without the smart speaker integration. Obari et al. reported statistically significant results of a *t*-test comparing group differences. Several advantages and disadvantages of using smart speakers for language learning are also discussed.

In Chapter 7, Espejel et al. discuss the use of *WhatsApp*'s mobile instant messaging service to foster social presence in telecollaboration. The participants were Spanish-speaking pre-service teachers at a university in Barcelona and L2 Spanish learners at a university in Iceland. The researchers identified four types of activities, including linguistic, sociocultural, conversational open, and conversational present activities. Espejel et al. also identified three types of social presence: *affective* (e.g., expressions of emotions, humor), *cohesive* (e.g., politeness, appreciation), and *interactive* (management of conversational threads). Espejel et al. acknowledge the role of multimodal elements such as emojis, photos, audio files, and GIFs in building social presence, which can reduce communication anxiety and facilitate learning.

In Chapter 8, Chen et al. investigate major trends and topics regarding socialization in L2 learning using a topic-based bibliometric analysis, which involves statistical analysis of key terms and topics within a body of published literature. The authors' Web of Science search for literature on socialization in L2 learning (and their subsequent elimination criteria) led to a corpus of 143 articles. Based on this corpus, they identified publication trends, including the journals where most of the articles were published and the top institutional contributors. The authors reported that the most popular topics were collaborative writing combined with instant messaging and podcasting. Chen et al. found that the popularity of various technologies for socialization in language learning (i.e., online games, podcasting, audiobooks, and digital storytelling) varied across different time periods. The authors argue that studies in this area could benefit

from advanced AI technologies (e.g., deep learning and learning analytics) for gaining more detailed insights on learner-learner interactions.

In Chapter 9, Lee examines the use of machine translation (MT) as a writing assistant and how Korean EFL students use resources such as *Google Translate*, *Naver*, and *Grammarly*. The research investigated five methods of using MT technology: *performing actions* like translation, comparison, searching, double-checking, and checking the final outcome; *selecting the translation direction*, from Korean to English or vice versa; *determining the size of the text being translated*, whether it was a word, phrase, sentence, or paragraph; *gauging the level of adoption*, which could be all, most, half, part, or none; and *choosing between typing or copy-pasting the text*. The author found that comparing MT output to student-generated texts was the most frequent action, and that translations from Korean to English were the most common. Sentences, as opposed to individual words or paragraphs, were more commonly selected for MT, and the participants rejected some or all of the MT output 60% of the time. Lee suggests that instructor guidance on how and when to use MT would greatly benefit lower-level learners.

In Chapter 10, Akoto and Li explore collaborative multimodal writing (CMW) processes and outcomes in a French as a foreign language class using three data sources: digital postcards, archived *Google Docs* records, and screen recordings with *Camtasia*. Following the completion of a unit on travel/vacation, participants were asked to collaborate using Google Docs to create a digital postcard that detailed planned vacation activities. Audio data provided by Camtasia revealed three types of discussion during the collaborative writing task: content-based discussions (i.e., generating and discussing ideas), language negotiations, and task management (i.e., division of and problem-solving). The authors also found that the student pairs spent a great deal of time accessing images and texts from the Internet. Finally, Akoto and Li concluded that although the pairs exhibited different engagement levels, the CMW task was effective in enhancing writing quality.

In Chapter 11, Li discusses how learners' source-based expository writing skills can be improved using multimodal open education resources (OERs) and an online collaboration tool. For the first project, the author supported traditional, academic writing course content with links to multimodal OERs, including podcasts, videos, and freely accessed websites. For the second project, Li engaged participants (organized in groups of two to three) in collaborative reading and writing activities on *OneNote*. The author reported that students had positive reactions to both interventions. From Project 1, Li suggested that the use of contextualized multimodal OERs helped students to become stronger writers. Finally, from Project 2, Li determined that the online collaborative reading-to-write practice was enjoyable and socially engaging.

In Chapter 12, Cárdenas-Claros and Dassonvalle propose a framework for designing computer-based L2 listening tasks that consist of three main components: input features, task structure, and task support. On the basis of focus group data provided by 68 high school L2 English learners, the authors identified sub-components of each of the three macro-components. Regarding the first macro-component, features of the *aural input*, Cárdenas-Claros and Dassonvalle determined that the participants preferred input with clear everyday language, two to three minutes in length, and covering a variety of topics of interest. Secondly, the authors divided *task structure* into three sub-components, including task components, task difficulty, and task preferences. Finally, the third macro-component, *during-task support*, referenced potential scaffolds that could be included with a listening task, such as pre-task vocabulary exercises, use of first language (e.g., subtitles or captions), teacher feedback, visual support, and opportunities to pause the input. The authors concluded that the framework could provide a basis for future research on the design of computer-based listening tasks.

In Chapter 13, König et al. explore how F-Lingo, a browser add-on for massive open online courses (MOOCs), can promote domain-specific vocabulary acquisition. Once a student has downloaded the plug-in, F-Lingo uses a data mining tool to extract textual content from the MOOC platform. Next, F-Lingo identifies domain-specific vocabulary beyond the most frequent 2,000 words in English and creates hyperlinks to additional web-based resources displayed in a pop-up window. Finally, F-Lingo records the student's interactions with the hyperlinks, including the words or phrases selected and the amount of time

spent reviewing relevant information. Based on the logged data, F-Lingo creates a learner profile to generate unique vocabulary tests (wherein a learner identifies whether or not they know a selection of words and non-words) and, in the future, fill-in-the-blank activities. In addition to a description of the plug-in, the authors share information about the F-Lingo behavior of a group of 109 participants.

The authors of the chapters included in this collection have successfully addressed practical applications of SMART technology to L2 teaching and research practices emphasizing personalization, contextualization, and socialization in online language learning—the theme of the volume. Another notable aspect of the volume is the attention given to different types of language learning environments, including fully online, blended, and face-to-face learning environments. Several chapters highlight the role of AI in CALL, which is particularly relevant given the growing expectation that AI be beneficial for language learning (Godwin-Jones, 2022). In this regard, Chun (1998) argued that "real communicative interaction between users and computers is limited without AI" (p. 57). Today, human-computer interaction is becoming more widespread and there is increasing interest in the potential for individualized language learning.

Even though the book provides many useful tips and strategies for incorporating technology into language learning, it does not offer much in the way of explaining why certain approaches to language teaching and learning may be more effective than others. For instance, in Chapter 2, it is challenging to equate Affordance-Actualization Theory with personalization, contextualization, and socialization. Moreover, the chapters prioritize these principles differently depending on the technology being discussed, and none of the chapters integrate the three principles simultaneously. For example, Chapter 9 emphasizes the personalization principle only, while Chapter 11 focuses on contextualization and socialization. Despite these limitations, the text is an excellent resource for practitioners and researchers looking to advance L2 teaching practices through technology. Language teachers will likely find the experiences shared by several participants relatable, and researchers may be inspired by the variety of techniques used to explore CALL's potential.

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