BOOK REVIEW

Computer-Assisted Foreign Language Teaching and Learning: Technological Advance

Reviewed by Zhuo Qiao, Xi'an Jiaotong-Liverpool University, Suzhou, China &

Yunyin Zhou, Xi'an Jiaotong-Liverpool University, Suzhou, China

Computer assisted language learning (CALL) has generated much debate in recent years about how to assist second language acquisition (SLA) both effectively and efficiently. Recent research (e.g. Levy & Stockwell, 2006; Chinnery, 2006; Zou et al., 2012; Zou, 2013) has shown the inconsiderable potential of CALL, including mobile learning and preliminary framework for CALL to incorporate the learning process through collaborative study, providing a platform for communication and allow diversities of classroom learning equipped with these new techniques. As for "*Computer Assisted Foreign Language Teaching and Learning: Technological Advance*", the book has provided a further detailed framework in three sections: collaborative learning in CALL, CALL, teachers and learners and CALL course design.

Chapter 1 is "A Wiki Platform for Language and Intercultural Communication", this chapter provides an example of a linking platform to learn foreign languages for Chinese students and English Students learning in the UK and China. Xing, Zou & Wang conducted this study in order to examine whether interaction between those students is effective by collecting results through a questionnaire and a focus group interview. This chapter has shown that wikis (web 2.0) could function as a platform in enhancing language output and intercultural communication competence and has set up a role model, if well designed and monitored.

Chapter 2 is "Engendering Interaction, Collaboration, and Reflection in the Design of Online Assessment in Language Testing". Wang

& Cheng discuss about the framework of the online assessment as well as advantages and disadvantages of the assessment design. The design of this online assessment encourages students in deeper reflection and further study. The framework of such an assessment was applied at Griffith University, Australia, for an online Chinese program and places emphasis on the process of learning. Based on the design framework, three elements should be included in the online assessment; these are interaction, collaboration, and reflection. Each of the elements is correlated to the students learning based on proven theory. Furthermore, the aim of the assessment is to perceive the preparation of the assessment as a process of leaning. These three dimensions improve deep learning through learning collaboratively and give opportunities for interactions between learners created by the assessment. Although the underpinning learning theories for these three dimensions in assisting learning have been proved, the framework of the online assessment combining these three dimensions needs to be examined as to its effectiveness in future research.

In Chapter 3, Orsini-Jones, Brick & Pibworth discuss "Practicing Language in Interaction via Social Networking Sites: The expert Student's Perspective on Personalized Language Learning". In this chapter, some students who are trained to be teachers of English as a foreign language were asked to evaluate the effectiveness of self-study and learning autonomously using Web2.0 voice tools in learning language (Levy & Stockwell, 2006). They experienced some problems in the learning process including the process of motivating, and frustration related to the learning materials. Furthermore, students experienced some problems that occurred in the cyber-world such as the mismatch between what some the materials claims to be and the real learning content as well as and the cyber-stalking.

Chapter 4 is the "Scaffolding Role of Computer-Supported Collaborative Learning Environment on Collaboration and Academic Literacy: Possibilities and Challenges." Zhao emphasizes that collaborative working is essential to the construction of knowledge. In this chapter, a Computer –Supported Collaborative Learning (CSCL) platform has provided supportive evidence in scaffold collaborative inquiry-based learning. It is proposed that CSCL will facilitate students to scaffold their knowledge in a collaborative learning environment equipped with technology. Consequently, the design initiative of the environment of Computer-supported Collaborative Inquiry Learning (CSCIL) is to evaluate the effectiveness of CSCIL, compared to the Regular Project-Based Learning (RPBL) environment in the aspect of facilitating students in the development of academic literacy. The underpinning theory in CSCIL is the social constructive theory in collaborative learning. The design platform of CSCIL, *Knowledge Forum*, provides opportunities to discuss the solution and the problems the students encountered in class which alternatively construct their knowledge collaboratively. After a 14-week project, students gained higher understanding in the concept and argumentative understanding in the CSCIL group than in the RPBL group. Evidences also from interviewing for the students revealed that students eventually scaffold their knowledge in such a collaborative learning environment.

Chapter 5 is "Language Economy in Computer-Mediated Communication: Learner Autonomy in a Community of Practice" White explains that this is another example which illustrates how CALL is also able to promote learners' autonomy in the process of interaction, although most of the previous data are empirical. Data was extracted from text-chat conversation among second language learners enrolled in a MA program in English linguistics. Some of the text chat revealed that the students were able to reach learner autonomy to some extent proved by the evidence that VP-ellipsis started to occur in the economized conversation. Meanwhile, other short forms of the language such as abbreviation, and homophonous form appeared to reduce vocabulary to the miniature size phonetically. Furthermore, students were able to achieve other markers of interaction proposed by Peterson (2009), such as greeting/

leave-taking and inter-subjectivity. In addition, other learning results of the language form that text chat includes comments in a syntactic aspect, repeat for confirmation, follow up questions, and compliment ellipsis. Although with limited data, evidence still revealed autonomy with the language economization data.

In chapter 6, "Facebook Comparison Research: Faculty and Student Perceptions of Social Media for Foreign Language Courses", Terantino illustrates that despite the disadvantages of the Social Network Sites (SNSs), the students who are likely to be language teachers still suggest applying SNSs in their future teaching, in order to improve leaner's autonomy and to learn both proactively and interactively for private use. As social networking websites such as Facebook have attracted considerable attention globally, numerous theoretical discussion and empirical studies have also suggested that social networking tools such as Facebook have the potential to establish a community for foreign language learning (Blattner & Fiori, 2009; Millis, 2011). A preliminary survey, which has collected data from 181 students and faculty in Kennesaw State University, shows that Facebook could be utilized as a tool in higher education. In addition, the majority of the students and the faculty in the follow-up interview regard Facebook as a beneficial tool to language teaching and perceive that it will even be able to assist coursework. However, it will be of great importance for the further researchers to provide a successful model of Facebook assisted language learning.

Guo & Guo in Chapter 7 "Learner Engagement in Computer-Mediated Chinese Learning" reveal that the combination of voice tools for online learning and assessment has received some progress. By combining learning experiences such as using voice tools and online assessment among the students who have learnt Chinese in the past three years, results have shown that such online learning experience has enriched students' learning experience at the university, and has increased the engagement of students in the learning process. In the study, learners are required to provide evidence of their improvement, such as some sentences they have learned, which will be countered in the final score. Meanwhile, students are encouraged to build up an e-portfolio to upload and download their voice messages with teachers and other students. Such voice messages include communication with teachers of the certain questions they do not understand, and learning experiences with peers. As a result, students who use the voice tool found it helpful to practice oral Chinese outside the classroom and students' level of language proficiency has been proved much higher than the students who do not use the tool. However, future research still has to establish a certain model to engage students in online language learning.

In Chapter 8, "Students in the New Millennium: How Much do We Know about Them?", Wu conducts a survey on what kind of impact technology has on the students, in order to understand students and lay a foundation for the study of CALL. The research reveals that the students of the current generation do need individual care rather than being treated as different groups or generations. Additionally, the results also uncovered that it is essential that students could take advantage of learning content, rather than being concerned about which technology will be used to deliver the learning content. Furthermore, as mobile devices are prevailing among students, a future study would be preferred to focus on what kind of mobile applications are most suitable to assist students in language learning and the compatible educational model for learning language with mobile technology.

Chapter 9 "Using a Virtual Learning Environment to Promote Autonomous Language Learning for Chinese Students" is written by Eoin Jordan and Mark Coyle. In this study, quizzes on VLE are used to examine whether it increases the levels of autonomous study by students. The VLE is based on Moodle. All pronunciation, writing, grammar, reading, listening and vocabulary quizzes are involved in this study. With regards to the data collection and analysis, both data from Moodle and questionnaires were collected and analyzed.

Based on the data analysis, it is indicated that the participation rate is high though an obvious decline of activity happened later in the semester. According to the questionnaire, it is also suggested that most students found it beneficial and helpful in terms of being able to study autonomously compared with their performance before entering university, and this is attributable to doing the quizzes. The result also reveals that "both regular monitoring and providing freedom of choice are important when encouraging students to engage in autonomous study via a VLE; however, they also suggest that regular monitoring may be a more important factor"(P153).

Chapter 10 is "Developing and Implementing an Online Chinese Program: A Case Study". It is a fully virtual beginner-level Chinese program that happened in a US university. Sun, Chen and Olson present five significant aspects of this online Chinese program development and implementation, which are curriculum redesign, content development, course management, assessment and online learning community. The authors used an online survey, student reflection and an online course management system data tracking and Facebook activity tracking as methodology to conducting discussion. First, the study reveals that, in terms of instruction time and overall performance, the online course shows no notable difference compared with a face-to-face program. Secondly, based on the data analysis and experience from the real case study, this chapter suggests a prototype of "asynchronous instruction, synchronous interaction, and asynchronous assessment" course re-design model (P182).

Chapter 11 "Design of Language Learning Software" discusses the issues of language learning software design in terms of its principles and guidelines. Turel and Mckenna argue that the learner-based approach is the most appropriate one since it focuses on LL's needs. Furthermore, the authors explain the importance of simplicity, clarity, brevity and consistence and point out several approaches to guarantee these aspects. Interactivity is another important aspect and attributes of software that Turel and Mckenna are concerned with, which can be achieved by several means that are mentioned in detail in the chapter. Moreover, this chapter also deals with the issue of flexibility, which concerns both LLs and materials writers. The next aspect mentioned in this chapter is guiding. Both general information and specific information pertinent to different parts should be well considered. Chapter 11 also discusses the motivation aspect and correlates it with simplicity, brevity, consistence, interactivity, flexibility, icons and colors. Moreover, the authors consider icon and color as significant aspects in designing language software and provide detailed information concerning these two aspects.

Rae Lynne Mancilla in Chapter 12 "Getting Smart about Spilt Attention" pays attention to the second language (L2) listening and note-taking performance of students studying in an international university abroad, with regard to both Cognitive Load Theory (CLT) and split attention effect. Background knowledge of four concerned concepts: L2 listening, note-taking, CLT and Spilt Attention Effect, are introduced at the beginning of the chapter. As spilt attention effect can be categorized into three types (temporal contiguity, physical spilt attention and affectively spilt attention), the author correlates L2 note-taking with three subtypes accordingly and explains the effect they have on L2 note-taking. Meanwhile, this chapter also introduces a mobile e-learning tool named Echo Smartpen. Moreover, the author continues illustrating the Smartpen's ability to reduce spilt attention effect in L2 listening and improve the listening decoding process. In the end, Mancilla claims that language educators must be aware of the cognitive theory and spilt attention effect and must provide L2 learners with the necessary support, or tools, to minimize the effect of spilt attention.

Chapter 13 is "Computer-Based Perceptual Training as a Major Component of Adult Instruction in a Foreign Language". Watson and Miller argue that the majority of non-native English speakers lack the ability to understand English at normal conversational rates. The

Speech Perception Assessment and Training System for ESL (SPATS-ESL), therefore, is introduced to solve this problem. The authors start the paper with analyzing several research-based conclusions, which support their study on computer-based perceptual training. The SPATS_ESL training program, which consists of constituent training and sentence training rotations, has been tested by the authors in Section 2. And the results have shown that this training program is sufficiently applied to adult students of English for improving their recognition of conversational speech. In the last section, the authors have predicted several future research directions on follow-up studies on time course of improved pronunciation and some technology issues. Perception and pronunciation training are expected by the authors to become successfully designed and more widely accepted in the next decade.

Chapter 14 "e-Assessment for Learning: Gaining Insight in Language Learning with Online Assessment Environment" deals with the issue of how e-assessment of oral proficiency in foreign language can be designed and conducted in ways that enhance the students' learning experience. Maele, Baten, Beaven and Rajagopal introduce two online learning and assessment platforms: WebCEF and CEFcult. First, the authors claim the importance of engaging learners in the assessment process and summarize three main principles, which are student-involved assessment, effective feedback and (self-) assessment skills. Then the chapter moves on to the specific introduction of WebCEF and CEFcult. Following the introduction of these two online assessment tools, this chapter also introduces a practical case of these two tools in application. Meanwhile, the chapter also pays attention to the process of how e-assessment applies the three key principles mentioned previously and the relevant limitations of these two tools in each of the three aspects. Accordingly, this chapter also provides solutions and recommendations for each of the three principles while using WebCEF and CEFcult as an e-assessment tool.

Catherine Franc and Annie Morton introduced "The use of VLE for Monitoring Independent Language Learning in Large Cohort Provision: The Case of French Studies at the University of Manchester" in Chapter 15. The authors point out that the French study students are not as engaged in independent French learning as expected. Based on the recognition of the issue, both solutions in theory and solutions in practice are provided. In terms of solutions in theory, it is suggested that both "Free Choice" section and "Monitored" section should be considered, both of which will be achieved via Blackboard9. Meanwhile, it terms of solutions in practice, multiple activities are designed both for grammar practice and oral practice, accompanied by "feedback and feed-forward for both right and wrong answers" (P266). In order to evaluate the effectiveness of this approach, two surveys were conducted to collect information and the results indicate that most students consider the VLE for independent learning beneficial.

In Chapter 16, "Computer-Assisted Pronunciation Training and Assessment (CAPTA) Programs: Requirements, the Current State of Affairs, and Challenges for the Future", Tsurutani first points out the types of L2 pronunciation errors with regard to the three aspects of pronunciation: segmental features, suprasegmental features and prosodic organization. The ASR system is introduced in terms of assessing segmental error. While in terms of assessment programs for prosodic features, many studies are introduced, most of which give concerns to pitch and timing. Furthermore, Tsurutani discusses the intelligibility, which is a significant criteria for L2 pronunciation assessment, and argued that "there is a strong indication that timing is more crucial than pitch for intelligibility" (P 284). Tsurutani also provides suggestions and implications to teachers with regard to using CAPTA programs in class.

In conclusion, this book addresses various aspects of computer-assisted foreign language teaching and learning, providing detailed discussion in three major sections. These are topics with notable interest and are worth further discussions. By reading this book, the readers are exposed to some of the most popular discussions

in the CALL area, and benefit not only from being informed of what is going on in this area, but are also helped to explore further study in their own interests.

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Zhuo Qiao and Yunyin Zhou are both MA TESOL students at Xi'an Jiaotong-Liverpool University, China.

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