Guest Editor Preface

Special Issue of GLoCALL 2018 Conference Papers
Exploring the Multiple Roles of Technology in Learning & Teaching in Diverse Educational Settings

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This special issue is a compilation of selected articles presented at the GLoCALL 2018 Conferences which were organised jointly by PacCALL and ChinaCALL at Xi"an Jiatong Liverpool University from 16th to 18 August 2018. This conference is part of the GLoCALL series of conference organised yearly since 2007 to share knowledge, research and experiences on how to use technology to enhance language learning and to explore how technology can be adapted to meet the needs of language learners in a variety of contexts. This special issue offers a selection of papers covering a range of topics that explore the multiple roles of technology in learning and teaching in diverse educational settings. The first four papers focus on multiple roles of technology in language learning. The fifth, sixth and seven articles describe studies that use technology tools to investigate student learning. The last two articles describe two studies that explore the effects of the use of technology on teachers.

In the first paper entitled "The Use of Mobile Devices in Language Learning: A Survey on Chinese University Learners' Experiences, Gavin WU Junjie explored the experiences and perceptions of 235 Chinese EFL students in a foreign language school at an Eastern Chinese university towards the use of mobile devices in their learning (MALL). He believed that students' views and prior learning experiences "represent a valuable resource of information for teachers and policy-makers" and their voices have "a 'transformational potential' for school practices" (Manca & Grion, 2017). A questionnaire was conducted on 235 Chinese university students followed by a nine-student text-based group discussion to collect data for the study. The results of questionnaire revealed that over 85 percent of the Chinese learners reported a preference for using their smartphones for learning. They were also aware that they could use their smartphones and multiple online resources to facilitate their informal learning. More than half of them used their mobile devices to enhance their English listening, reading and writing skills, sometimes independently and sometimes directed by their teachers but over 65% of them did not use their mobile devices to improve their spoken English. Thus although the Chinese students appreciated the value of mobile devices in their learning however usage was still limited. The overall conclusion was that students should be encouraged and supported by their teachers in order to facilitate the development of their language skills through mobile learning.

The second paper in this collection entitled "Virtual Reality in the Language Classroom: Theory and Practice" was written by Mehrasa Alizadeh. This paper begins with a brief review of the basic concepts of virtual reality in comparison with augmented reality, as well as ways to experience VR and how this new technology aligns with learning theories. The she introduced a free VR mobile application named Expeditions which is a VR educational platform that can be easily set up to allow

teachers to take their students on virtual trips all over the world without having to leave the classroom. According to the author, career-related expeditions can be integrated into EFL/ESL lessons with the theme of jobs and future career. The author believed that those VR tours that generated by students can be used for digital storytelling tasks in L2 classes or for creating student-generated 3D campus tours targeting international/exchange students.

In the third paper of this collection, Ying ZHAO and Jiaqing LI investigated whether Chinese learners and native speakers have equal amount of conversational floors in WeChat communication. This study was conducted on a joint online course, namely Cross-Cultural Distance Learning, offered at a university in Australia and a teacher college in China, for a duration of 10 weeks. The participants comprised 20 Australian students majoring in Education and 21 Chinese students majoring in English Education. The research started by inviting the participants to plan for a short trip to Australia and China. In their conversation, the groups discussed on where to visit in order to fully experience Australian and Chinese culture, then decided on what souvenirs they should take home for their family. Free discussion was also encouraged after planning of the trip. When the conversation of the groups ended, the chat screen was saved, and the scripts were downloaded and transcribed. Students' participation was measured based on Simpson's (2005) classification of floor types. The findings of the research revealed that most of the floors produced by the Chinese and the Australian students were collaborative floors. The Chinese students yielded more prime-speaker floors and less supporter floors compared to their Australian counterparts. They spoke more and their utterances were longer than their Australian partners. The findings further revealed that when there was a lack of topic or non- understanding, an interactional repair sequence aimed at restarting the conversational flow and reaching shared understanding in communication was usually started by the Chinese students. This showed that WeChat communication promotes active and conductive participation of the Chinese L2 learners due to its behind-the-curtain effect that can lower foreign language anxiety levels compared with face to face interaction (Angelova & Zhao, 2016).

The fourth paper by Travis COTE and Brett MILLINER questioned whether inferior digital literacies restricted their Japanese university freshmen's one-year study abroad experience (September 2015-September 2016) in Melbourne, Australia. This report marked the final component of a larger, four-stage investigation into the digital literacies of students from the Department of Tourism and Hospitality Management (DTHM), Japan, who participated in the one-year study abroad programme. The authors defined digital literacies as having the skills and pragmatic understanding to manipulate, read and write using electronic devices. From the Online Survey and Focus Group Discussion(FGD) on the 104 students, it was possible to deduce that despite being generally recognized as a technologically-advanced country, digital literacy levels among Japanese youth were found to be lacking in many ways compared to other developed nations, hence the students' digital literacies were challenged during their Australian sojourn. The study identified the need for freshmen students to develop digital skills covering a broad range of areas, master an awareness of Internet literacy and the ability to manipulate basic productivity applications (e.g., word processing, spreadsheet creation, cloud computing, and presentation software). In addition to that it was deemed necessary for DTHM to create more practical opportunities for students to apply and practice their digital skills.

In the fifth paper, " Understanding online learner knowledge building from discussion forum analytics", Lay Huah GOH in her research employed learning analytics to understand online learner knowledge building through discussion forums. The activity used for the learning analytics is a full time massive open online course (MOOC) on action research created by an open university in Malaysia. Six separate threaded discussions were analyzed in a 3 weeks Module implementation of the MOOC "Action Research" course on the Moodle platform. The task was to record as much observations of the students' learning and attempts at knowledge building from the beginning of the course. More than 200 asynchronous contributions (both learners and facilitator) occurred within the discussion platforms during the 3 weeks of the course. The research analyzed the contents of forum discussions using Atlas.ti, which is a qualitative data analysis software. This research revealed that knowledge building was mainly formed through the community knowledge that was generated by the learners. Knowledge building was also a result of posing authentic problems or questions that elicited real ideas connected to the actual situation that the learners were experiencing. It is recommended that relevant learning discussions should incorporate practices that encourage the development of meaningful learning dialogue. This research contributed to an understanding of how learning analytics information may be used to execute interventions, predictions, reflection, awareness, personalization, recommendation and benchmarking (Khalil & Ebner, 2016).

Dennis FOUNG in the sixth paper used a mixed method to explore the effectiveness of data-mining techniques in identifying at-risk students in an academic English course. The study used a data set with more than 5,000 students from two academic courses offered at a university in Hong Kong, and adopted two commonly used data-mining techniques: classification tree and logistics regression analysis. This quantitative analysis explored the suitability of data-mining techniques. The two techniques had an accuracy rate of around 90%, which is considered to be good from a practical perspective. Therefore, there does not seem to be one method that is better than the others. This result echoed Sarle (1994) which states that the two techniques do not compete with each other and the accuracy and suitability depend on the data set and variables (Dreiseitl & Ohno-Machado, 2002). To understand the language teacher perspective of these techniques, the results were presented to a group of 16 professional English teachers, to check whether they thought the results were useful. The language teachers appeared to lack confidence in data-mining techniques and were very hesitant to use them. The teachers' resistance stemmed from their doubts about the techniques, and the applicability of these techniques in the language education context. Further research should be conducted to promote these techniques to language teachers.

In paper seven, THANG Siew Ming and Noor Baizura Abdul Aziz used the eye tracker to investigate the effects of Malaysian ESL students' reading processes and preferences in the comprehension of two different types of passages: A descriptive text (inclined towards language learning) and a comparison text (inclined towards psychology). This investigation was carried out on 17 students from the English Language Studies department and 16 from the Psychology department of a public university in Malaysia. The eye tracker device (EyeNTNU-120) developed by the National Taiwan Normal University was used to record students' eye movements while reading the two different types of texts and their patterns analysed statistically. This was triangulated with interviews to find out students' preference and a reading test to measure their reading comprehension performance. The results showed that both groups of students preferred Passage B and performed better for it too. The results further revealed that generally both group of students exhibited similar patterns

while reading and there was no relationship between reading patterns and reading comprehension scores. Finally, it was discovered that text-based reasons (formal schemata) had a greater influence on passage preference than reader-based reasons (content schemata). Aligning this with the conceptual framework, it can be surmised that texts with more organised and clearer rhetoric structures will reduce readers' cognitive load and hence enabling ease of comprehension and better memory retention (Ong, 2011).

In the eight paper, Shubashini Suppiah et al. utilised the Community of Inquiry (CoI) framework in exploring the affordances of an online collaborative and dialogue-based reflective practice approach between three teacher-educator mentors and sixteen pre-service ESL teachers at an institute of teacher education (ITE) in Malaysia. The study which was conducted for a period of twelve teaching weeks was framed by the following research questions: (1) What are the nature of the online reflection posts in terms of the cognitive presence and its reflection orientation? (2) What are the nature of the online interactions (comments and responses) in terms of the social presence? (3)What are the roles and contributions of the teacher-educators in terms of the teaching presence? The three main data instruments used to gather data in the course of the study were the online reflection posts, the online interaction posts and semi-structured interviews with the student-teachers and the teacher-educators. Findings gathered from the online reflections and the threaded discussions revealed that while most of the data were in accordance to the key indicators of the CoI, there were also shortcomings in terms of encouraging and enhancing student-teachers practices in a more critical manner. For critical reflection to take place, it is imperative to establish 'trust' amongst the community of inquiry so that genuine and constructive comments can take place.

The final article in this special issue by Pham Thi To Nhu et al. investigate the issues and challenges faced by the Vietnamese teachers in using ICT to teach English. A mixed method comprising surveys, observation and reflection notes were utilised to collect data which were analysed using Activity Theory (AT) as a framework to unpack the processes, tensions, and complexities involved when teachers use technology to mediate the teaching and learning of English in their schools. The study was conducted on 20 primary school teachers from 4 different provinces in Vietnam. The issues and challenges identified include lack of ICT competence, lack of ICT facilities, oversized classes, heavy teaching load, lack of technical support, and lack of support from relevant authorities. It was recommended that relevant stakeholders such as the Ministry of Education and Training of Vietnam (MOET), relevant authorities, the Rectors of the school and the language teachers themselves should collaborate in solving the identified problems.

These papers clearly indicate the intricacy and complexity of technology use in the Asia Pacific region. Despite that the various papers in this collection clearly indicate that efforts in using technology in this region is ongoing and robust. It is hoped that after reading these papers, readers will be motivated to attend future GLoCALL conferences to discover for themselves the vast potential of technology use in the field of CALL and Education.

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