

Using Interactive Open Textbook Materials to Tackle Issues of Intercultural Communication in Multi-Cultural Contexts

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Abstract

Language and culture, while closely related and best acquired together (Brooks, 1968), are often presented in textbooks in an oversimplified form, focusing on a few salient principles (Stockwell, 2018). However, in multicultural contexts, for migrants and refugees in particular to develop the language and cultural understanding they need, a more sophisticated approach is required. The focus of this study is a set of reusable resources in the form of an online open book for use in English for Academic Purpose (EAP) programmes. A collaborative approach is adopted through the use of authentic, interactive resources by using available technology to encourage active participation and the co-creation of materials. The wider use of Open Educational Resources (OERs) is indicative of the shift from traditional learning resources to more user-generated content fostering deeper individual engagement and personalized learning. By leveraging technological tools, this approach not only enhances accessibility and adaptability but also reflects the broader trend in Computer-Assisted Language Learning (CALL) towards more interactive and student-centred learning environments. The materials are evaluated using a three-stage approach: 1) critical comments from experts working through the materials. Appropriate improvements are then carried out and 2) group feedback is obtained from small groups of users representative of the target audience. Any necessary further changes are made and 3) larger scale use and evaluation of the materials is carried out. This systematic evaluation ensures that the resources are continuously refined to meet the evolving needs of

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learners, thereby supporting the ongoing transition in CALL towards more open, flexible, and collaborative educational practices.

Keywords: Open Educational Resources (OERs), English for Academic Purposes (EAP), Intercultural communication

Introduction

Over the past two decades, the integration of technology into language education has increased, with Computer-Assisted Language Learning (CALL) materials becoming increasingly prevalent. This trend has been further propelled by the global academic community towards creating and sharing digital open educational resources (OERs). The creation, publication, reuse, and discovery of OERs demand significant technological engagement and an understanding of the digital educational environment (Borthwick & Gallagher-Brett, 2013; Olivier, 2019). Utilising OERs has been shown to enhance student language learning, promoting both language acquisition and content knowledge while fostering collaborative learning practices (Brook, 2011; Burgess & Green, 2009: Olivier, 2019).

Research has highlighted the impact of technology-integrated resources on developing learners' intercultural competence and linguistic proficiency (Chun, 2011; Levy, 2007). These resources are now critical components of curriculum design, providing accessible, effective, and up-to-date methods for language education.

In the past year, we have developed the OER book "Communication Across Cultures" as part of the UniSQ Open Education Practice Grant. This study focuses on the production and evaluation of these OER materials, applying a usability testing framework before implementation.

Intercultural Communication

Language and culture are closely related and are best acquired together (Brooks, 1968). However, while textbooks used in English language programmes usually incorporate elements of culture (e.g. customs and traditions of countries where English is spoken), this content is typically information-focused, directing students to compare and contrast the similarities and differences between their own and the target cultures. This approach risks oversimplifying the richness and variety of a culture by reducing it to a few salient principles (Stockwell, 2018). However, for migrants and refugees in particular, a more sophisticated approach is required if they are to develop the linguistic and cultural resources they need in order to engage, interact, and collaborate effectively in a multicultural context.

Open Educational Resources (OERs)

Open Educational Resources (OERs) are defined as "learning, teaching, and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license that permits no-cost access, reuse, repurpose, adaptation, and redistribution by others" (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2019). OERs can vary in format and size, from entire courses (big OERs) to individual items like handouts, images, or presentations (little OERs) (Weller, 2010).

In practice, the term OER often encompasses activities better described as Open Educational Practice (OEP). OEP refers to "the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions which are characteristic of OER" (Bali et al., 2020; Wiley & Hilton III, 2018). The 5Rs are Retain, Reuse, Revise, Remix, and Redistribute, emphasizing the rights to control, use, adapt, combine, and share educational content (Wiley, n.d.). Borthwick and Gallagher-Brett (2013) and Whyte et al. (2013) investigate OERs for CALL teacher education as a part of professional development for use of technology in language teaching. For students, OERs provide accessible, cost-effective materials that can be freely used, adapted, and distributed, reducing financial barriers. Language learning materials are crucial in shaping learners' experiences (Cortazzi & Jin, 1996). OERs facilitate sharing diverse perspectives and resources across linguistic and cultural contexts, enriching language learning. The development of OERs aligns with the transition in CALL by highlighting the shift from traditional, static learning resources to dynamic, user-generated content that fosters deeper engagement and personalized learning experiences.

Methodology

This study is part of a systematic process for designing and developing open access materials in the form of an open textbook, using the Pressbooks platform. Using HTML5 and H5P (see Figure 1), and introducing Hypothes.is (https://web.hypothes.is/), collaboration is facilitated by means of interactive reading and discussion tasks, self-reflection activities and learning journals which encourage and provide practice in critical thinking. The primary aim is to enhance intercultural communication in multicultural language classrooms and deepen students' understanding of their own and other cultures through activities that encourage critical reflection and self-assessment. The content is composed of three modules. The aim is for the learners to enhance

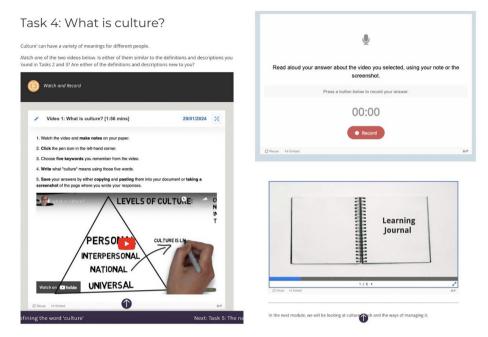


Figure 1. Examples of using H5P.

their knowledge and skills in three areas; 1. Language proficiency; 2. Cultural knowledge, and 3. Digital literacy.

This study applied a usability testing framework to identify potential issues with the online materials. Six English as a Foreign Language students at an Australian university, from various first language (L1) backgrounds, participated in the usability testing study. They studied for 10 hours per week in a 10-week Academic Skills course as part of an EAP programme, with spoken English proficiency between pre-intermediate and intermediate levels of the International English Language Testing System (IELTS 5.0 to 5.5).

Analysis and Discussion

Participants engaged with materials and their reactions were documented through observations, interviews, and written comments to identify areas for improvement. The data were analysed using the Usability Matrix (Kessler & Plakans, 2001), categorising emerging themes under three foci: design, navigation, and content to investigate how the materials were experienced for first-time participants as potential users. The elicited themes were allocated into three core categories, which were further developed into sub-categories (see Table 1).

Core Categories	Sub-Categories
Design	a. Visual appeal and layout consistency b. Interactive elements and multimedia integration c. Task instruction
Navigation	 a. Ease of use/user-friendly interface b. Search functionality/bookmark, taking a note, progress tracking c. Link d. Cross-device compatibility
Content	 a. Educational value and relevance (i.e., Is this book for the autonomous learners or in classroom user?) b. Engagement c. Instruction/Clarity and Comprehensibility d. Cultural sensitivity and inclusivity

Participants appreciated the visual appeal and clear layout but noted some sections were overly crowded, suggesting the need for more multimedia elements to enhance engagement. Interactive features like quizzes and videos were particularly well-received, with students expressing a desire for more such content. The usability of the materials was generally high, though initial navigation challenges were observed, underscoring the importance of intuitive design and potential teacher guidance. Functionality aspects like search tools and reliable note-saving were found beneficial, but improvements like highlighting tools and progress tracking were recommended. The educational value of the content was affirmed, providing valuable cultural insights and practical skills, though sensitivity in handling complex topics was advised, especially for beginners. The study also underscored the importance of cultural sensitivity and inclusivity, with diverse perspectives enhancing relatability and student engagement. Overall, the findings suggest that while the current OER materials are effective, there is room for enhancement in design, functionality, and content to better meet the needs of diverse learners.

Conclusion

This study highlights the significance of usability testing for open resources. Usability testing improved material quality in this study, with student involvement being valuable. A follow-up study will examine the effectiveness of student learning with these materials.

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