Designing between pedagogies and cultures: Audio-visual Chinese language resources for Australian schools

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Abstract: This design-based study examines the creation and development of audio-visual Chinese language teaching and learning materials for Australian schools by incorporating users’ feedback and content writers’ input that emerged in the designing process. Data were collected from workshop feedback of two groups of Chinese-language teachers from primary and secondary schools in Australia and content writers’ reflections of their understanding and transformation of their understanding of Chinese teaching and learning materials for Australian schools. It is found that a reciprocal process between the users and content writers can effectively facilitate the creation and development of user-oriented teaching and learning materials which are sensitive to the local curriculum needs. Based on teachers’ comments and content writers’ ideas, appropriate audio-visual Chinese language teaching and learning materials need to be tailor-made with a range of topics focusing on current China. A strong pedagogical scaffolding needs to be embedded into the materials and tasks, supporting students’ language learning in the classroom. The creation of Chinese texts needs to employ simple yet authentic language structures on topics of relevance to students’ life. Findings also indicate that audio-visual resources need to be accompanied with quality images and subtitles. All audio recordings should be spoken by Chinese native speakers, who are fluent in standard Mandarin. Additionally, it is suggested that an interactive learning platform could effectively enhance peer learning.

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PUBLIC INTEREST STATEMENT
This design-based study examines the interactive process of selecting and creating audio-visual Chinese language teaching and learning materials for Australian schools. By taking on board teachers’ collective feedback recorded at the demonstration workshops, content writers were able to complete a set of texts in different text types to accompany related videos. The interaction between the users and content writers effectively facilitated the development of user-oriented teaching and learning materials, which are sensitive to the local curriculum needs. The broad framework informed by major findings of this study may help draw attention of content writers of Chinese digital resources to a range of aspects, when creating language-learning resources, to be utilized in similar teaching and learning contexts such as the US and Europe where Chinese is taught as a foreign language.
1. Introduction

Australia and China have setup a close working and trade partner relationship when China was experiencing its burgeoning global growth in economy, culture and politics in the past decade. The Group of Twenty (G20) offers Australia closer and broader engagement with China in myriad domains. The growing influence of China, both globally and in Australia, has impacted the future of all young Australians, which was recognized in the Melbourne Declaration on Educational Goals for Young Australians (2008). The Australia in the Asian Century White Paper (2012), commissioned by the former Prime Minister of Australia Julia Gillard, indicates that all Australians should develop broad Asia-relevant capabilities, which will drive the economic growth in Australia in the coming years.

The capacity in a second- or foreign-language can increase people’s understanding of the target culture, history and society, facilitating deeper and broader engagement between different cultures (Kramsch, 2011). The increase of teaching Asian languages has become a global tendency in Europe and North America, for example, Sweden has announced that by 2020, Chinese (Mandarin) will have been taught in all schools across the country (Asia Education Foundation, 2012). In Australia, sets of national and state education-based programmes/projects focusing on teaching and learning Asian languages in schools have been initiated in recent decades, such as the National Asian Languages and Studies in Australian Schools (NALSAS) (1995–2002) and National Asian Languages and Studies in School Program (NALSSP) (2008–2012). The White Paper (2012) proposes that other than English, Chinese (Mandarin) should be one of the priority Asian languages to be learned by Australian students in their years of schooling.

Today, Chinese (Mandarin) is the most predominant language in the world, with 1.197 billion native speakers (British Council, 2013). In Australia, Chinese is one of the top 10 foreign languages taught in schools, remaining the third place in student enrolment. The number of candidates sitting in Higher School Certificate (HSC) examinations in Chinese in New South Wales (NSW) Australia has been allocated into the same statistical range in the past five years, occupying around one to two percentages of the total high-school graduates with minor differences between each year. In the State of NSW, the major audio-visual and printed Chinese teaching and learning materials recommended by Language Curriculum were developed by NSW Department of Education and Training in the late 1990s or early 2000s, for example, Shuo Shuo Xiao Xiao and Zou Ba.

Both audio-visual and printed teaching and learning materials currently used in Australian schools intend to introduce aspects of Chinese culture with social issues specified as one of the themes and topics in the language curriculum. However, the content of these materials appears to be not in keeping with recent developments in China as they did not include more recent cultural changes and social development in China. The cross-cultural pedagogy, which could better assist Chinese language learners to acquire relevant knowledge and develop language competence, was not sufficiently evident in the existing Chinese materials though sets of tasks were developed to help learners in their knowledge construction. Such learning materials, to some extent, may have affected, among other factors, the number of Australian school students taking up the Chinese course, particularly in senior schools. The official statistics from Board of Studies Teaching and Educational Standards (BOSTES) NSW (2014) indicated that only 914 NSW school students, occupying 1.19% of the total of HSC students, studied Chinese as an HSC language in 2014. Well-designed and developed learning materials, particularly those employing current technologies, may help attract and engage more students, and achieve the ambitious goal of the commonwealth government funded of NALSSP projects: by 2020 at least 12% HSC students can fluently speak one of the four priority Asian languages (Chinese, Indonesia, Japan and Korea).
The development of language learning and teaching materials is an interactive communication between different stakeholders, including content writers, local experienced teachers, curriculum designers and educators. This reciprocal process can leverage different resources to generate more appropriate and up-to-date learning materials to help enhance the learner’s language and cultural competence. To date, there is a lack of research examining the interactive process of creating language teaching and learning materials, particularly the audio-visual materials, by effectively incorporating users’ feedback and content writers’ understanding of language learning in the local context. This study aims to fill this gap by investigating the dynamics and their interplay in the process of text creation. Specifically, the study will solicit both content writers’ and potential users’ opinions of the audio-visual Chinese teaching and learning resources to address the following two research questions:

1. What main features do teachers would like to see in the audio-visual Chinese learning resources in development?
2. How have these resources been created interculturally in terms of topic selections, languages appropriation and pedagogies embedded?

2. Design-based research

Design-based research is a methodology and was introduced into education as it could provide useful prescriptions for design and development issues emerged in educational reforms worldwide (van den Akker, 1999), particularly when technology began to be used in education (Reeves, 2006). It systematically examines education systems, programs, learning processes and environments, teaching—learning materials and products, which contributes to practice improvement and informs policy development within the realm of education (Plomp, 2013). Design-based research focuses on investigating innovations in the teaching and learning (Fishman, Marx, Blumenfeld, Krajcik, & Soloway, 2004), commonly including a close relationship between researchers and implementers (Hoadley, 2004).

A design-based study is iterative, collaborative, process focused and multileveled as it is based on collaboration between researchers and practitioners in real settings, underpinning a pragmatic philosophy to produce changes in related contexts (Barab & Squire, 2004; Kelly, 2004). It increases the impact on and translation of education research into practice and informs and guides the improvement of practice and theory in educational contexts (Anderson & Shattuck, 2012). Design-based research well addresses complex problems in real contexts in collaboration with practitioners and refines the teaching and learning innovations, which sets up a strong connection between education research and real practice (Amiel & Reeves, 2008; Reeves, 2006). This study employs the design-based research methodology to develop more appropriate and current audio-visual Chinese teaching and learning materials for Australian schools. It examines the interactive dynamics of audio-visual resource development by way of analyzing communication between content writers and local Chinese language teachers in the process of material selection and task design. Findings of this study may initiate innovations in materials development as well as in pedagogy in Chinese teaching and learning in Australian schools.

3. Data collection and analysis

Data were collected from workshop feedback of two groups of Chinese language teachers from primary and secondary schools in Australia and content writers’ post-production reflections of the Chinese teaching and learning materials development process as well as their understanding of teaching and learning in the local context. Two workshops were organized by the research team of a large teaching and learning project to develop a set of video-based language materials for interactive web-based teaching and learning of the Chinese language and culture. The main objective of the demonstration workshops was to obtain views and perceptions of local Chinese teachers in terms of the specifics of syllabus requirements, learner factors and classroom pedagogy of the audio-visual Chinese teaching and learning resources to be created. The collective anonymous feedback was used to add a classroom perspective to inform the process of digital resource creation and
development for school Chinese language teaching and learning. The first workshop was held to acquire teachers’ opinions of the initially created digital materials while the second one was to get their further feedback on the refined resources in accordance with their suggestions collected from the first workshop. The workshops also provided a platform for the content writers to share with teachers the design concept and structure and their understanding of the purpose of the audio-visual resources as well as opportunities to solicit further comments from teacher for developing a more culturally interactive model to inform the design process.

All workshop participants were registered qualified Chinese language teachers in Australia. They were bilinguals in English and Chinese at the professional level with the first higher degree completed in China. All teachers were informed of the purpose prior to the commencement of the first workshop. The same group of participants attended both workshops to ensure the validity of their feedback. As participating teachers came from different schools in the greater metropolitan region, the workshops were conducted at a negotiated time outside of normal teaching hours in order not to disturb their daily routines. The content writers were also bilinguals in English and Chinese, all of whom had higher research degrees and experiences in second- or foreign-language teaching as well as expertise in designing and creating audio-visual materials and tasks for teaching and learning in different contexts.

In the first workshop, the teachers were shown a set of sample digital Chinese language teaching and learning materials on the topic of Online shopping via a publically accessible online portal. They were given time to discuss and share their ideas with other teachers. Participants were encouraged to express specifically their views of the potential links between the sample materials and the Chinese language curriculum and practice in Australian context. All of their comments and suggestions were accurately recorded in words with a view to improving and contextualizing the audio-visual materials in development.

The same group of participating teachers was invited to attend the second workshop after the digital materials were modified by the content writers in line with teachers’ suggestions collected from the first workshop. The teachers were shown the refined digital resources and were invited to give their comments on these materials. As this project was design-based research a reciprocal approach was followed at the workshop sessions, in which the content writers were able to highlight key principles informing the design and creation of the audio-visual materials and work with teachers by way of explaining and clarifying issues arising from the interactive process of demonstration, hands-on work and discussion.

4. Results and discussion
Results showed a general consensus that the proposed topics of audio-visual Chinese teaching and learning materials were in alignment with the broad themes set out in The Australian Curriculum: Languages – Chinese (2014) (see Table 1). The current topics also showed recent developments in China.

| Proposed topics | Proposed topics |
|-----------------|-----------------|
| 1               | Sports          |
| 2               | Lifestyle       |
| 3               | Food            |
| 4               | Travel          |
| 5               | World EXPO (Shanghai) |
| 6               | Chinese idol    |
| 7               | Online shopping |
| 8               | Technology      |
All participating teachers agreed that the suggested topics were familiar to Australian school students, focusing on recent developments in China, for example, “World EXPO (Shanghai)” and “Chinese idol”. Such topics were situated in the local context as students watched a similar show, *Australian idol* and could resonate well with the contents and events of the show, thus enhancing students’ interests in learning the target language. Learners’ interests could be a positive motivational variable in facilitating language learning (Tin, 2013). Highly motivated language learners can acquire language knowledge and develop their language competence in a more efficient and productive manner as they are interest-driven and self-motivated. It would be helpful for Australian school students being exposed to these resources that facilitate them to enhance Chinese language knowledge and understand the current China.

It was suggested at the workshops that “Technology” could be a too abstract heading for school students. A more specific wording like “computer games”, which is more familiar to students, should be employed. The teachers also noted that contents and topics of the audio-visual materials need to avoid stereotyping the target culture, and expose language learners to positive cultural aspects so that they could develop cultural sensitivity or a sense of appreciation through exposure, experiencing, comparing and contrasting (Liddicoat & Scarino, 2013).

It was noted that a cross-cultural angle, which allows students to contrast different cultures or aspects of cultures in learning, had been consciously intended in the process of curating videos and related resources. It was obvious that there was careful consideration on the part of the content writers of learners’ backgrounds (e.g. language and cognition) in topic selection and content creation of the audio-visual materials. For example, Australian school students may utilize their knowledge of the TV show of *Australian Idol* to help understand the “Chinese Idol”. Opportunities for comparison and contrast through a process of knowledge transfer could not only allow learners to explore and examine issues of interests to both Australian and Chinese students, but also make it easier for them to acquire Chinese language and cultural knowledge.

Participating teachers showed their agreement that the newly created audio-visual materials were current and realistic, covering different aspects of school students’ daily routines. All videos were well filmed with high-quality images and sound. The filming background was not artificial and actors and actresses spoke clear standard Chinese (Mandarin) that could better assist school students developing their Chinese language knowledge. It was found that the audio-visual Chinese learning material development well considered the students’ learning backgrounds, including students’ Chinese language proficiency and their knowledge of the target culture. Video filming occurred in the authentic environment and professional Chinese native-speaking actors and actresses were employed, offering visual stimulus to engage students in learning. However, teachers suggested adding subtitles to the videos which could be helpful for students to acquire language knowledge by focusing on key linguistic items highlighted in the video. Students can turn to the subtitles if they are not able to catch up with the speaking speed or fully understand the content while watching the videos.

It was also found that the audio-visual materials offer a systematic learning support and scaffolding for school students. Each unit of resources on a select topic is consisted of four texts: one authentic texts and three pedagogical texts, and the two sets of texts were prepared in different genres or text types. Vocabulary and sentence structures commonly used by Chinese native speakers are employed in the authentic text creation. The text was created and recorded at the normal speaking speed. It was anticipated that the sets of authentic texts would pose a challenge for Australian school students, who learn Chinese as a foreign language, and would find it hard to understand the text without support. In order to help students build their language and cultural competence progressively over time, a set of scaffolded texts (pedagogical texts) on the same topics was created for each topic.

The pedagogical text is a simplified version of the authentic one. It covers the main content of the authentic text and utilizes simple words and sentence structures to convey the same meaning. The
recorded speaking speed was much slower than that of the authentic text. Such design principles were applied in the creation of all texts in different genres within each of the select topic areas. Different genres, such as dialogue, interview, discussion, to name only a few, were used in text creation. Key information and languages were repeated in these scaffolded texts. All these texts would enable students to understand the authentic text, acquiring language and cultural knowledge. Figure 1 shows the relationship of these texts.

Teachers showed their appreciations to the creation of these audio-visual learning materials. It was believed that students were able to better develop their Chinese language knowledge and competence by being exposed to these scaffolding texts. The supportive materials could as temporary scaffolding for Australian school students to understand authentic materials gradually and acquire language and cultural knowledge through repeated exposure and engagement. Scaffolding is an effective means for learning instructions and a source for learning (Cole, 2006; Pawan, 2008). This scaffolding embedded in the pedagogical design (Reingold, Rimor, & Kalay, 2008) could facilitate the learning process in which learners can enhance Chinese language competence as well as their understanding of the Chinese culture and text types.

Findings also indicated that the language appropriateness in audio-visual materials development may directly impacted the learning outcomes. Special attention should be drawn to the level of languages and structures in material development. Participating teachers suggested that it could be helpful to employ simple languages and structures in the materials, particularly in the simplified pedagogical texts, as school students are not competent Chinese language users. A number of difficult words and complicated structures were suggested by teachers to be appropriately replaced with easier and simpler items. For example, it may be hard for Australian school students to acquire the meanings of some phrases as “弊端” (wrong practices), “青睐” (like), “时髦” (fashionable) and “低廉” (cheap) while watching the videos. These phrases are not everyday language and even native Chinese school students at the same level may not be familiar with them. It was advised that everyday language focusing on oral communication may need to be prioritized when selecting video material.

The teachers also indicated that students may struggle to obtain the meanings of some sentences in the materials, for example,

“淘宝网和京东商城都是中国比较大的网上购物网站, 它们是中国的 eBay和 Amazon.” (Translation: Taobao and Jingdong Shopping Mall are large online shopping websites in China. They are China’s eBay and Amazon.)

“但是, 人们不断地想出新的办法, 开发新的技术, 来让人们在网上买东西更安全、更方便.” (Translation: However, people are constantly working out new methods and developing new technologies in order to make the online shopping safer and more convenient.)

These sentences appeared to be long and employed complicated language structures so that Australian school students, though they might have learned Chinese for years, may find it hard to understand, not to mention mastering the language. Being exposed to such difficult learning materials may make learners lose interests in learning Chinese and worse still, they might give up learning Chinese. Taking on board teachers’ suggestions, the content writers reviewed and simplified sentence structures as well as languages used in the materials. This was to ensure adequate comprehension of the texts in the videos for Australian school students through repeated exposure and
with teacher support. The above two example sentences were modified in both language and sentence structures as:

“在中国, 受欢迎的网购网站有: 淘宝网、京东商城等等, 它们是中国的 eBay 和 Amazon.” (Translation: In China, Taobao and Jingdong Shopping Mall are popular online shopping websites. They are China’s eBay and Amazon.)

“人们通过开发新技术, 让网上购物更安全、更方便.” (Translation: People try to make the online shopping safer and more convenient by developing new technologies.)

In the second workshop, all teachers showed their acknowledgement to the refined resources. Simple sentence structures and appropriate level of languages were used in the modified texts. Learners would find it easier to acquire, review and practice their Chinese language knowledge when interacting with the materials. Subtitles had been added in all videos as well. While watching the videos, students would be able to obtain both language knowledge and content that would help them to maintain their interest in learning Chinese. Students are provided with glossary, cultural notes and questions to the texts, which offer scaffolding to support students to better comprehend the text content and acquire the language knowledge. Some possible difficult Chinese words, such as “成熟” (become mature), “流行” (popular), “服饰” (clothes) and “质量” (quality), were listed in the glossary with English translation. Key cultural notes, for example, “淘宝网” (Taobao) and “京东商城” (Jingdong Shopping Mall), were provided with detailed information in English that will help students to understand aspects of the target culture. Questions for checking comprehension of the texts or stimulating thinking were prepared in English (for example, What kinds of goods can people buy from online shopping websites?), the first language of Australian school students, assisting them to better acquire the text details and understand the content. These questions can also be used as a means to examining the students’ comprehension of the texts and initiating discussion or arguments associated with the topic. All these scaffolding and support can facilitate classroom learning for Australian school students to acquire both language and cultural knowledge in practice.

In addition, it is also found that an interactive learning portal could provide a platform for Australian school students to discuss and share their opinions to enhance their peer learning. Students can raise questions to the learning materials and seek assistance from others to resolve their learning difficulties via the discussion board. With the support of new technologies, this emerging interactive learning approach engages all learners in the learning process and provides them with abundant learning and practice opportunities (Fahrutdinova, Yarmakeev, & Fakhrutdinov, 2014). Meaningful interactions with peer learners and the teachers in the learning process can effectively help develop learners’ language knowledge and overcome learning obstacles (Hüseyin, 2014; Wei, 2013).
5. Conclusion
This study examined and captured key features of a set of audio-visual Chinese language learning resources for Australian schools as revealed in the collective teacher feedback recorded in two demonstration workshops. The refined materials resultant from the reciprocal process of interaction between Chinese language teachers and the content writers of audio-visual materials (see Figure 2) highlighted a design-based research approach. As shown in Figure 2, appropriate audio-visual Chinese language learning resources for Australian schools need to include tailored learning materials for students, with topics focusing on current developments in China and relevant to the local curriculum context. A culturally interactive approach employed in the material development appeared to be serving the purpose, shown largely by a level of teacher acceptance and engagement in development process. Learner exposure to, and interaction with authentic materials were believed to be highly desirable and helpful if sufficient scaffolding and support were built into the design of the materials. This could assist school students of Chinese to effectively acquire both the linguistic and cultural knowledge. Effective development of language learning resources also needs to involve a careful language appropriation process in which difficult language items and sentence structures need to be simplified in the text selection and creation. To enhance learner engagement level, language resources need to be accompanied with good images, subtitles, and recorded preferably by educated Chinese native-speakers. Informed by the study results, a possible interactive learning platform could be developed to facilitate peer learning as shown in Figure 2.

It is evident that interaction and communication between the users and the content writers can effectively facilitate the creation and development of client-oriented teaching and learning materials. The broad framework informed by the major findings of this study may help draw attention of content writers of Chinese digital resources to a range of aspects, when creating language learning resources, to be utilized in similar teaching and learning contexts, such as the US and Europe, where Chinese is taught as a foreign language. Well-created or developed audio-visual Chinese language learning resources may have a positive impact on curriculum and pedagogy innovation in Chinese language teaching and learning in Australian schools. The findings of this study may contribute to further understanding of the application of audio-visual Chinese language resources in the practical classroom teaching and learning, which was not discussed in this paper and is the limitation of this study. It will be interesting to examine how Australian school students perceive and employ these digital learning resources in their Chinese language learning and compare the findings with what has been reported by teachers in this study. Results of comparative studies may establish a broad empirical base for Chinese language instruction and curriculum innovation in Australian schools.

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References
Amiel, T., & Reeves, T. C. (2008). Design-based research and educational technology: Rethinking technology and the research agenda. Educational Technology & Society, 11, 29–40.

Anderson, T., & Shattuck, J. (2012). Design-based research: A decade of progress in education research? Educational Researcher, 41, 16-25. http://dx.doi.org/10.3102/0013189X11428813

Asia Education Foundation. (2012). Submission to the Australian government white paper on Australia in the Asian century. Retrieved September 29, 2014, from http://www.asiaeducation.edu.au/verve/_resources/AEF_Submission_to_White_Paper_Mar_2012_file.pdf

Australian Curriculum, Assessment and Reporting Authority. (2014). The Australian curriculum: Languages–Chinese. Retrieved September 25, 2014, from http://www.australiancurriculum.edu.au/Australian%20Curriculum.pdf

Australian Government. (2012). Australia in the Asian century white paper. Retrieved September 26, 2014, from http://www.asiaeducation.edu.au/verve/_resources/australia-in-the-asian-century-white-paper.pdf.
Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *Journal of the Learning Sciences*, 13(1), 1-14. http://dx.doi.org/10.1207/s15327809jls1301_1

Board of Studies Teaching and Educational Standards NSW. (2014). HSC 2014 – The numbers. Retrieved September 15, 2015, from http://www.boardofstudies.nsw.edu.au/news-media/media-guide-2014/numbers.html

British Council. (2013). Languages for the future: Which languages the UK needs most and why. Retrieved June 16, 2015, from http://www.britishcouncil.org/sites/britishcouncil.uk2/files/languages-for-the-future-report.pdf

Cole, A. D. (2006). Scaffolding beginning readers: Micro and macro cues teachers use during student oral reading. *The Reading Teacher*, 59, 450–459. http://dx.doi.org/10.1598/RT.59.5.4

Fahrutdinova, R. A., Yarmakeev, I. E., & Fakhrutdinov, R. R. (2014). The formation of students’ foreign language communicative competence during the learning process of the English language through interactive learning technologies (The study on the basis of Kazan Federal University). *English Language Teaching*, 7, 36–46.

Fishman, B., Marx, R. W., Blumenfeld, P., Krajcik, J., & Soloway, E. (2004). Creating a framework for research on systemic technology innovations. *Journal of the Learning Sciences*, 13, 63–76. http://dx.doi.org/10.1207/s15327809jls1301_3

Hoadley, C. M. (2004). Methodological alignment in design-based research. *Educational Psychologist*, 39, 203–212. http://dx.doi.org/10.1207/s15326985ep3904_2

Hüseyin, Ö. Z. (2014). Teachers’ and students’ perceptions of interactive whiteboards in the English as a foreign language classroom. *TOJET: The Turkish Online Journal of Educational Technology*, 13, 156–177.

Kelly, A. (2004). Design research in education: Yes, but is it methodological? *Journal of the Learning Sciences*, 13, 115–128. http://dx.doi.org/10.1207/s15327809jls1301_6

Kramsch, C. (2011). The symbolic dimensions of the intercultural. *Language Teaching*, 44, 354–367. http://dx.doi.org/10.1017/S0261444810000431

Liddicoat, A. J., & Scaringo, A. (2013). Intercultural language teaching and learning. Malden, MA: Wiley-Blackwell.

Ministerial Council on Education, Employment, Training and Youth Affairs. (2008). Melbourne declaration on educational goals for young Australians. Retrieved September 26, 2014, from http://www.curriculum.edu.au/verve_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

Pawan, F. (2008). Content-area teachers and scaffolded instruction for English language learners. *Teaching and Teacher Education*, 24, 1450–1462. http://dx.doi.org/10.1016/j.tate.2008.02.003

Plomp, T. (2013). Educational design research: An introduction. In T. Plomp & N. Nieven (Eds.), An introduction to educational design research (pp. 11–51). Enschede: Netherlands Institute for Curriculum Development (SLO).

Reeves, T. C. (2006). Design research from a technology perspective. In J. van den Akker, K. Gravemeijer, S. Mckenney, & N. Nieven (Eds.), Educational design research (pp. 52–66). London: Routledge.

Reingold, R., Rimor, R., & Kaly, A. (2008). Instructor’s scaffolding in support of student’s metacognition through a teacher education online course: A case study. *Journal of Interactive Online Learning*, 7, 139–151.

Tin, T. B. (2013). Exploring the development of “Interest” in learning English as a foreign/second language. *RELJ* Journal, 44, 129–146. http://dx.doi.org/10.1177/0033688213488388

van den Akker, J. (1999). Principles and methods of development research. In J. van den Akker, R. M. Branch, K. Gustafson, N. Nieven, & T. Plomp (Eds.), Design approaches and tools in education and training (pp. 1–14). Boston, MA: Kluwer Academic. http://dx.doi.org/10.1007/978-94-011-4255-7

Wei, L. (2013). An experimental study of interactive and cooperative English writing strategy under network environment. *Theory and Practice in Language Studies*, 3, 338-344.