

#### **Queensland University of Technology**

Brisbane Australia

This is the author's version of a work that was submitted/accepted for publication in the following source:

Kettle, Margaret A., Yuan, Yifeng, Luke, Allan, Ewing, Robyn, & Shen, Huizhong (2012) The pedagogical, linguistic and content features of popular English language learning websites in China: a framework for analysis and design. *Frontiers of Education in China*, 7(4), pp. 534-552.

This file was downloaded from: http://eprints.qut.edu.au/54072/

### © Copyright 2012 Brill Academic Publishers

**Notice**: Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source:

http://dx.doi.org/10.3868/s110-001-012-0027-7

#### RESEARCH ARTICLE

Margaret KETTLE, Yifeng YUAN, Allan LUKE, Robyn EWING, Huizhong SHEN

# The Pedagogical, Linguistic and Content Features of Popular English Language Learning Websites in China: A Framework for Analysis and Design

Abstract As increasing numbers of Chinese language learners choose to learn English online (CNNIC, 2012), there is a need to investigate popular websites and their language learning designs. This paper reports on the first stage of a study that analysed the pedagogical, linguistic and content features of 25 Chinese English Language Learning (ELL) websites ranked according to their value and importance to users. The website ranking was undertaken using a system known as PageRank. The aim of the study was to identify the features characterising popular sites as opposed to those of less popular sites for the purpose of producing a framework for ELL website design in the Chinese context. The study found that a pedagogical focus with developmental instructional materials accommodating diverse proficiency levels was a major contributor to website popularity. Chinese language use for translations and teaching directives and intermediate level English for learning materials were also significant features. Content topics included Anglophone/Western and non-Anglophone/Eastern contexts. Overall, popular websites were distinguished by their mediation of access to and scaffolded support for ELL.

Keywords computer-assisted language learning, ELL in China, online learning, website design

#### Introduction

English is the major foreign language taught in China's colleges, universities, and secondary schools, where it often occupies equal time in the timetable with Chinese (Hui, 2001; UNESCO, 2011). The primacy of English derives from initial open-door reforms in the 1990s when the language was linked to China's increasing engagement in trade and technology. With China's entry into the World Trade Organization (WTO) in 2001 and English being the language of international business and development, proficiency became a matter of high importance (Qiang & Kang, 2011). Ongoing efforts have been directed at improving and renewing the methods for meeting the English language needs of Chinese learners.

One response has been the rapid development of technology. The internet and mobile phone have become parts of most people's lives, even in the developing western regions of China. In December 2011, China's population of internet users reached 513 million, with 69.3% of them (356 million) using mobile phones to access the internet (CNNIC, 2012). No statistics are available on the number of people learning English online or via mobile phone nor is there research on the quality of online English programs in China. However, a search of 520 Chinese language

Margaret KETTLE (⊠)

Faculty of Education, Queensland University of Technology, Brisbane, QLD 4059, Australia

E-mail: m.kettle@qut.edu.au

Yifeng YUAN

Faculty of Education and Social Work, The University of Sydney, Sydney, NSW 2006, Australia

E-mail: yi.yuan@sydney.edu.au

Allan LUKE

Centre for Learning Innovation, Queensland University of Technology, Brisbane, QLD 4059, Australia

E-mail: a2.luke@qut.edu.au

Robyn EWING

Faculty of Education and Social Work, The University of Sydney, Sydney, NSW 2006, Australia

E-mail: robyn.ewing@sydney.edu.au

**Huizhong SHEN** 

Faculty of Education and Social Work, The University of Sydney, NSW 2006, Australia

E-mail: hui-zhong.shen@sydney.edu.au

journals published in China on the China Academic Journal Database (CJFD) revealed that over 50% of articles on online learning were related to English language teaching and learning. There is also a concentration of articles on Chinese English language learners' culturally-based motivations, preferences and approaches to learning (Li, 2002; Shen, 2009).

This article reports on the first stage of an Australian Research Council (ARC) research project *Images, perceptions and resources: Enhancing Australia's role in China's English language education* that investigated the use of technology for English Language Learning (ELL) in China. This stage of the project was specifically interested in the designs of Chinese websites as they sought to attract learners for the purposes of learning and buying online ELL services. This article reports on the findings of the first-stage analysis and focuses on the pedagogical, linguistic and content features of the websites as manifested in instructional objectives, materials and tasks, target audiences, language choices and functions, and topic selections. Of interest were the configurations of the features in the website designs and their perceived value to Chinese learners of English.

## **Online English Language Learning in China**

With the high demand for ELL and increased use of technology in China, it is not surprising that the two have coalesced in research and teaching. Indeed, the phenomenon is worldwide. Chapelle (2007) maintains that across the world the march of technology throughout all aspects of language learners' lives is expanding and represents the context in which a great number of learners are currently studying language. In China researchers such as Li (2008), and Zhong and Shen (2002) have noted the prevalence of technology for learning English. Many English learning websites have begun to attract Chinese English language learners. These websites are operated by official government institutions such as the China Daily and China Central TV University or enterprises such as Shanghai Hu Jia Cultural Media Ltd. and the Foreign Language Teaching and Research Press (FLTRP). In addition, English training institutes such as the New Oriental Training Institute have established their own websites for students' self-access and independent learning.

There is a growing literature on the evaluation of websites and a variety of evaluation criteria have been proposed focusing on website currency, objectivity, navigation, authority and content (Beck, 2009; Wilkinson, Bennett & Oliver, 1997). In terms of designing online learning experiences, MacLean and Scott (2011) propose a framework of learning design competencies that begins with needs analyses and cycles through ten stages of design, development and delivery. These initiatives have established benchmarks for reviewing existing websites and creating new ones.

Within the field of Second Language Acquisition (SLA), studies conducted by Bradin (1999), Chapelle (1998), and Comer and Geissler (1998) have developed criteria for evaluating ELL websites including format, software, feasibility, and operation. While these studies have furnished the field with evaluative guidelines, they have been critiqued for not including considerations such as learners' needs, motivations, and choices of learning resources (Furner & Daigle, 2004). Work that does engage explicitly with learning considerations is the framework developed by Hubbard (1988, 2006) to evaluate Computer-Assisted Language Learning (CALL) software. The framework draws together software operations with teaching approaches (teacher fit) and learning design (learner fit) for the purpose of providing teachers with procedures for evaluating CALL educational materials (Hubbard, 1988). Chapelle (2007) maintains that the intersection of technology and SLA provides second language teachers and researchers with new forms of interactive technology such as CD-ROMs, webpages and internet-based communication software and new types of language learning tasks. Technology has afforded new interactive and cognitive opportunities, as well as modal and locational possibilities (Chapelle, 2007).

Research on effective learning via web-based English language resources is emerging with the expanding market outpacing empirical studies. A growing number of internet users are using websites designed by people from cultures other than their own. In response, there is an emerging body of literature addressing cross-cultural web design for learning (e.g. Shen, 2009). Early research called for web designers to consider differentiated cultural learning styles and preferences, communicative strategies, and approaches to language learning (del Galdo, 1996; Nielsen, 1993). This paper reports on one part of the study investigating ELL website design for Chinese learners. The organising principle for the paper is the identification and description of the features that characterise highly valued ELL websites. The findings will provide the foundation for a framework that will function as a heuristic for ongoing ELL website design in the Chinese context.

#### **Methods**

The research consisted of a three-phase procedure: (i) sourcing websites and a method of ranking websites; (ii) developing, trialling and refining criteria for the pedagogical, linguistic and content analysis; and (iii) analysis and synthesis of the findings including the production of a framework for ELL website design. The data collection and analysis processes are summarised in Fig. 1.

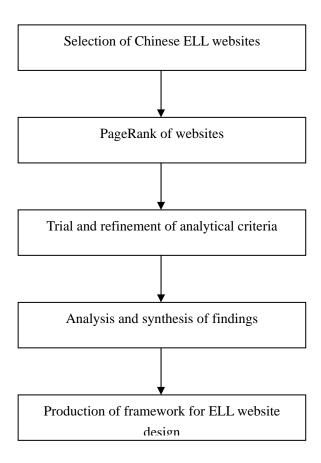


Fig. 1 Data Collection and Analysis Process

In Phase One of the study, the authors searched for websites by typing "English language learning websites" in Chinese into the "Google" and "Baidu" search engines. The search did not extend to social networking sites or learning sites such as chatbots (Coniam, 2008). A variety of websites, such as *Hu Jiang English*, *Love Thinking*, *Wang Wang English Learning*, *Big Ear English*, *HengXin English Learning*, and *Foreign Languages Education* emerged on their first or second page after searches by both search engines. Opening each of these websites presented links to other ELL websites. Links that appeared on the websites at least twice were accessed and included in this study, for example, *51 IELTS*, *New Oriental Online*, *KeKe English*, and *Moses English*. Thus, a total 25 Chinese ELL websites were selected for the study as they satisfied the criteria for inclusion, that is, they appeared on the 1st and 2nd page of

both search engines.

Sourcing a method of ranking websites was beset by problems of access and reliability. For example, the researchers were formally told by website corporations that Internet Protocol (IP) visiting numbers were confidential business documents and not available. Consultation with IT experts eventually led to the selection of the PageRank system as an independent method for measuring user value of websites.

PageRank is a link analysis algorithm named after Larry Page who is the co-founder of Google. It is used by the Google Internet search engine to assign a numerical weighting to each element of a hyperlinked set of documents such as the World Wide Web for the purpose of "measuring" its relative value and importance within the set. PageRank uses ten levels to rank websites. Higher levels indicate more importance or popularity of use. Levels 7 to 10 indicate the website is very important or popular with users while a Level 4 website indicates a "good" value or level of popularity.

In this study, 25 Chinese ELL websites were analysed using the PageRank system with the help of IT experts. The analysis established a distribution of rankings for the websites across four PageRank levels in decreasing levels of importance and value from Level 7 to Level 4. Three websites were ranked at Level 7, or "very high" value and importance; 11 at Level 6; six at Level 5; and five at Level 4, or of "good" value and importance. The websites and their PageRank categorisations are presented in Table 1.

Table 1 Chinese ELL Websites and their PageRank Levels

	PageRank Level 7	PageRank Level 6	PageRank Level 5	PageRank Level 4
Chinese	Hu Jiang English	51 IELTS	Peanut English	English Bus
ELL websites	www.hjenglish.com	www.51ielts.com	www.english.voc.com.cn	www.en84.com
websites	New Oriental Online	Love Thinking English Website	English language learning	English Dian Jin
	www.koolearn.com	www.24en.com	www.ell.com.cn	www.chinadaily.com.cn/langua
				ge_tips/index.html
	In 2 English Website	Li Yang Crazy English	HengXin English Learning	GDI O II
	www.in2english.com.cn	www.crazyenglish.com	www.hxen.com	CRI Online
		Big Ear English	Roast Duck Website	gb.cri.cn/edu/index.htm
		www.ebigear.com	www.ielts999.com	American Slang Network
			W W WILLIAM STATE OF THE STATE	www.meiguoliyu.com
		Foreign Languages Education	Moses English	
		www.for68.com	www.mosesenglish.com	VOA English
				www.tingvoa.com
		Wang Wang English Learning	Seven-colour English	
		www.wwenglish.com	www.qcenglish.com	
		KeKe English		
		www.kekenet.com		
		English Weekly		
		www.ew.com.cn		
		English Salon		
		www.es123.com		
		WWW.cs123.com		
		English Writing		
		www.4ewriting.com		
		Happy English		
		www.joyen.net		

Phase Two of the study was the development of criteria for the descriptive analysis of the pedagogical, linguistic and content features of the websites. The process was iterative in that initial criteria were developed and applied, and then refined through reference to literature on online ELL (e.g. Gikandi, Morrow & Davisa, 2011; Hubbard, 1988; Liu, Liu & Hwang, 2011; Yang & Chan, 2008). Yang and Chan (2008) list the baseline evaluative criteria for websites as content, objectivity, currency, navigation and authority. Educational websites require additional attention to learners' attitudes, motivation, interactions, and instructional objectives. The authors make the point that language learning

websites need to adhere to theoretically-informed principles of second language teaching. The aim of language learning websites is self-learning through the provision of learning support and materials (Yang & Chan, 2008). For Liu, Liu and Hwang (2011), the evaluation of language learning websites should cover the four language macro-skills (reading, writing, speaking and listening) and following Levy (2009), the major language areas of pronunciation, grammar, vocabulary and culture. The evaluative categories devised by Hubbard (1988, 2006) synthesise software operation with language teaching approach and learning considerations. These insights informed the refinement of the analytic categories. The objective at this stage of the research was the identification and description of website features. The criteria and their descriptors are presented in Table 2.

 Table 2
 Initial Criteria for the Analysis of Chinese ELL Websites

Criteria	Associated Questions
purpose	<ul> <li>pedagogical: English language teaching and learning;</li> </ul>
	<ul> <li>non-pedagogical: content/information;</li> </ul>
target audience	- children;
	<ul> <li>adults: beginner to advanced levels;</li> </ul>
	<ul> <li>college students: English language tests to English for Specific Purposes (ESP);</li> </ul>
	- other;
pedagogical focus	<ul> <li>four language macro-skills (reading, writing, speaking, listening);</li> </ul>
	<ul> <li>language areas (pronunciation, grammar, vocabulary, culture);</li> </ul>
	- exam preparation;
	- ESP;
activities	- presentation;
	<ul> <li>mechanical practice: grammatical structures, vocabulary, exams;</li> </ul>
	<ul> <li>meaningful practice: text-based; task-based;</li> </ul>
content	<ul> <li>national: topics, locations/nations, representations of culture;</li> </ul>
	<ul> <li>international: topics, locations/nations, representations of culture;</li> </ul>
	<ul> <li>text types: authentic, modified authentic, pedagogical;</li> </ul>
language, first language (L1):	<ul> <li>function: directives, informatives, translation, presentation of texts;</li> </ul>
Mandarin Chinese	- navigation: percentage of L1 (1st page, 2nd page etc.);
language, second language (L2):	<ul> <li>purpose: directives, informatives, translation, presentation of texts;</li> </ul>
English	- navigation: percentage of L1 (1st page, 2nd page etc.);
pictures, images and graphics	<ul> <li>types: photographs, drawings;</li> </ul>
	- percentage versus written text;
design	<ul> <li>organisation of white space;</li> </ul>
	- colours;
	- sound/movement;
	- advertising;
interactive possibilities	<ul> <li>self-regulated, peer interaction, teacher/expert interaction;</li> </ul>
	<ul> <li>types of interaction: questions, correction and feedback, chat, blogs, email.</li> </ul>

Phase Three was the application of the criteria to the analysis of the websites. The 25 websites were navigated and analysed multi-directionally: (i) as individual websites; (ii) as sets of websites with similar PageRank scores; and (iii) as one set inclusive of all PageRank scores. The aim was micro- and macro-analysis of the websites and website sets, with contrasts and comparisons relative to their PageRank scores. The iterative process of developing the criteria led to the final analytic categories: focus (pedagogical objectives versus content and information); audience (beginners/elementary learners, intermediate learners, advanced learners, English for Specific Purposes (ESP) learners); activities and topics (examination-oriented, Western/anglophone-oriented, Eastern/non-anglophone-oriented); language of first webpage (percentages of Chinese as first language (L1) and English as Target Language (TL)). The websites at each PageRank level and across PageRank levels were analysed using these categories.

#### **Data Analysis and Results**

The results of the website analyses are presented in the tables as follows: PageRank Level 7 websites (Table 3); PageRank Level 6 websites (Table 4); PageRank Level 5 websites (Table 5); PageRank Level 4 websites (Table 6). The websites are numbered and identified in the legend beneath each table; evidence of a feature is indicated by "X"

in the table.

 Table 3
 Level 7 Chinese ELL Websites

		Focus		Audience				Activities and Topics				First Page Language		
	ped gog	ıntorn	nati	beginners/ elementary learners	intermediat e learners	advanced learners	ESP learner s	macro- skills	examinatio n-oriented	Western oriented topics	East ern orien ted topic s	Englis h	Chinese	
W	1 X			X	X	X	X	X	X	X	X	0%	100%	
W	2 X				X	X	X	X	X	X	X	0%	100%	
W	3 X				X	X	X	X	X	X	X	55%	45%	

Note: W1: Hu Jiang English; W2: New Oriental Online; W3: In 2 English Website.

 Table 4
 Level 6 Chinese ELL Websites

	Focus		Audience					Activities and Topics				
	pedag ogy	content/ information	beginners/ elementary learners	intermediate learners	advanced learners	ESP learners	macro- skills	examinatio n-oriented	Western oriented topic	Eastern oriented topic	English	
W4	X			X	X		X	X	X		0%	
W5	X	X	X		X	X	X	X	X	X	3%	
W6	X			X			X	X	X		4%	
W7	X	X	X	X	X	X	X	X	X		8%	
W8	X		X	X	X	X	X	X	X	X	0%	
W9	X		X	X	X	X	X		X		2%	
W10	X		X	X	X	X	X	X	X	X	10%	
W11	X		X	X	X		X	X	X		0%	
W12	X	X		X	X		X		X		5%	
W13	X			X	X		X	X	X	X	40%	
W14	X	X		X		X	X	X	X		60%	

Note: W4: 51 IELTS; W5: Loving Thinking English Website; W6: Li Yang Crazy English; W7: Big Ear English; W8: Foreign Languages Education; W9: Wang Wang English Learning; W10: KeKe English; W11: English Weekly; W12: English Salon; W13: English Writing; W14: Happy English.

 Table 5
 Level 5 Chinese ELL Websites

	Fo	ocus		Audienc	Activities and Topics									
	pedagogy	content/ information	beginners/ elementary learners	intermediate learners	advanced learners	ESP learners	macro- skills	examination -oriented	Western oriented topic	Eastern orient topic				
W15	X	X	X	X	X	X		X	X	X				
W16		X		X	X				X					
W17	X	X		X	X	X	X	X	X	X				
W18	X			X	X		X	X	X					
W19	X			X			X		X					
W20		X	X	X			X		X					

Note: W15: Peanut English; W16: English Language Learning; W17: HengXin English Learning; W18: Roast Duck Website; W19: Mose English; W20: Seven-colour English.

**Table 6** Level 4 Chinese ELL Websites

	Focus		Audience					Activities and Topics					
	pedagogy	content/ information	beginners/ elementary learners	intermediate learners	advanced learners	ESP learners	macro- skills	examination-oriented	Western oriented topic	Eastern oriented topic	English		
W21	X			X	X		X		X		20%		
W22		X			X		X		X	X	10%		

W23		X			X	X	X	X	10%
W24	X	X		X	X	X	X		30%
W25	X		X	X	X	X	X		50%

Note: W21: English Bus; W22: English Dian Jin; W23: CRI Online; W24: American Slang Network; W25: VOA English.

The cumulative outcome of the analysis was the synthesis of the findings into four matrices, each representing a PageRank level. The matrices were mapped against the analytical categories, summarised as: (1) pedagogical focus, (2) content/information focus, (3) audience, (4) examination orientation, (5) Western-oriented topics, (6) Eastern-oriented topics, and (7) first language<sup>1</sup> (L1) coverage on the opening page. Each category was awarded 0 to 10 points. If a website exhibited a particular categorical feature, it was awarded 10 points; if not, it scored 0 points. For the audience and webpage language (L1) categories with multiple outcomes, points were allocated and tallied. The audience category was divided into four sub-categories: beginning/elementary learners, intermediate learners, advanced learners, and ESP learners. A website was given 2.5 points if it orientated towards a particular sub-category. The first webpage language (L1) category was tallied using percentage of coverage. For example, if Chinese occupied 45% of the first webpage, the website was scored 4.5 points. To develop the matrix for each website set, the scores of each analytical category were averaged and plotted on a graph. The averages of all website sets appear mapped relative to each other. The four matrices highlight the points of similarity and difference between the respective website sets. The matrices are presented in Fig. 2.

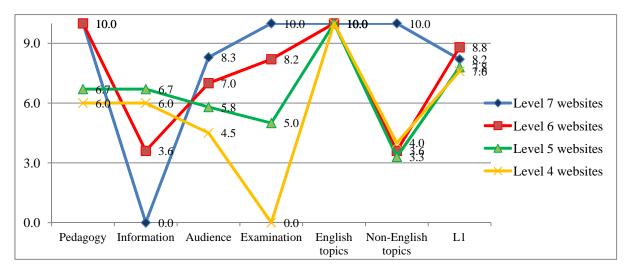


Fig. 2 Summary of Categories Evaluating Chinese ELL Websites

In the analysis, both Levels 7 and Level 6 websites are scored 10 points in the pedagogy category, followed in decreasing order by Level 5 and Level 4. The three Level 7 websites are completely pedagogically-oriented as they recorded 0 points in the content category. The averaging outcomes indicate that the six Level 5 websites contain more content/information than the five Level 4 and the eleven Level 6 websites. The three Level 7 websites provide activities directed at learning English Language (EL) grammar and vocabulary, as well as the development of reading, writing, listening and speaking macro-skills. An extensive suite of EL proficiency test practice activities is available as well as practice possibilities for ESP. Interestingly the analysis of the Level 6 websites indicates that while most of the sites focus on pedagogy and provide EL learning activities, four offer only content/information to their users. The six Level 5 websites contain a much reduced focus on teaching and learning and greater orientation to content/information. Of the five websites ranked Level 4, two provide learning materials while two others are entirely content- and information-based, with one displaying a mixed pedagogical and content focus.

The Level 7 websites are directed at a much wider range of audience members than Level 6 websites, Level 5 websites and Level 4 websites in that order. The attractiveness of Level 4 websites to a range of learners is limited because they offer little to elementary and beginner learners and those wanting specific examination and ESP practice. This is in contrast to Level 7 websites that cater for a wide range of proficiency levels and language learning interests.

The Level 7 websites present a comprehensive practice list of high-stakes EL proficiency tests that currently

<sup>&</sup>lt;sup>1</sup> While Mandarin Chinese might not be the mother tongue or home language of some overseas Chinese learners, it is the official language of formal education in China and referred to as "first language" here.

constitute the gatekeepers in globalised English-medium education and assessment. High scores on these tests equip learners with increased opportunities for overseas study, employment and international mobility in the transnational jobs market. Level 4 sites provide no examination practice. Level 6 websites include more examination-related materials and activities than Level 5 websites. Websites across all four PageRank levels contain topics related to Western/Anglophone countries such as the US, the UK, Canada, and Australia. Topics related to Eastern/non-Anglophone countries such as Korea, Japan and China are most evident on Level 7 websites. Less than half of the websites at the other three levels have texts on topics related to Eastern/non-Anglophone countries.

The use of the L1 (Chinese) and the Target Language (TL; English) and the functions of codeswitching between the two is relevant given the salience of codeswitching in foreign language teaching and learning (Qian, Tian & Wang, 2009). Current Second Language Acquisition (SLA) theories foreground the importance of TL output for learning (Swain, 1985) and prioritise medium of instruction and meaningful practice tasks in the TL (Spada, 2007). It follows that the percentage of use and functions of the L1 and TL on the ELL websites are of interest in the analysis. The findings indicate that the use of Chinese on the first webpage is most prevalent in Level 6 websites, followed in decreasing coverage by first webpages at Levels 7, 5 and 4. The degree of difference is not great, however, with scores ranging between 8.8 and 7.6 points. Two of the websites at PR Level 7 have 100% use of Chinese on the first webpage, with the third website presenting 45% Chinese and 55% English. Of the other PageRank website sets, most have first webpages with 100% Chinese, although in a minority of cases Chinese and English appear in equal percentages. The website with the least amount of L1 on its opening webpage is *Peanut English* (W15), a Level 5 ranked website with 40% Chinese and 60% English.

On the opening pages, the Chinese language performs the functions of guiding navigation, providing information, giving directives, instructing, and translating. English is reserved for the learning materials, that is, the grammar and lexis exercises, practice tests, and modified reading and listening texts. The significant point evident in the analysis is the lack of differentiation between the websites in their use of the L1. There appears to be a high level of consensus that most users will be at a proficiency level that requires Chinese for navigational and instructional purposes, a finding that will be investigated further in the next stage of the study through online surveys and interviews with learners.

#### **Discussion**

The analysis indicates that the orientation of high ranking Chinese ELL websites is pedagogical, with the provision of an extensive range of learning materials and self-directed practice opportunities for a diverse population of EL learners. Though it is estimated that there are 440 to 650 million English language learners in China, which makes it the largest population in the world (Bolton, 2003; He & Zhang, 2010; Jiang, 2002), most of them are students studying at schools and universities. These students often face examinations and proficiency tests, and may be attracted to ELL opportunities that are scaffolded and targeted at their needs. Influenced by understandings of language as primarily lexico-grammatical structures (Ji, 2008; Zhong & Shen, 2002), learners accessing Level 7 websites have access to myriad opportunities for acquiring linguistic knowledge such as grammar and vocabulary. The highly ranked websites also contain extensive skill development possibilities in TL reading, writing, speaking and listening.

Self-directed practice is also available in language proficiency tests such as the College English Test (CET Band 4 and 6), International English Language Testing System (IELTS) and Test of English as a Foreign Language (TOEFL). These tests are powerful gatekeepers to local and international academic opportunities including successful completion of a Chinese undergraduate course (e.g. CET) and enrolment in overseas university courses (e.g. IELTS and TOEFL). Overall, the features of the high ranked websites reflect the arguments that online ELL websites should offer teaching aids, tasks and materials for self-learning in language skill development and lexico-grammatical practice (e.g. Chapelle, 2007; Levy, 2009; Liu, Liu & Hwang, 2011; Yang & Chan, 2008).

Reflecting the teaching orientation of the websites, the Chinese language on opening webpages functions largely as informatives and directives, acting effectively as the "teacher's voice" to guide learners through activities. The English language level of the learning materials on the most valued websites (Levels 7 and 6), aside from formal tests, is predominately within an intermediate band, possibly reflecting the general proficiency level of many English language learners in China. This finding recalls Medgyes's (1999) point that the English language proficiency level of many European non-native speakers lies within the upper and lower limits of the intermediate band. It appears that the websites of most value to users are pedagogical, providing scaffolded instruction, strategies, and different types of practice. The lesser valued websites are non-pedagogical and more content-oriented. These findings will be

triangulated with other data during the next stage of the study.

It appears that the higher the website PageRank, the lower the English language level of the site and by extension, the proficiency level of users. Levels 7 and 6 websites are directed at providing multiple learning opportunities for a broad spectrum of learners with diverse learning needs. These sites are characterised by a variety of content and links that are close in design to popular Chinese language websites such as *SOHU* and *SINA*. In contrast, the webpage designs of Levels 5 and 4 websites are reminiscent of Western-style sites with more white space and less text. These websites are less comprehensive in their offerings and more targeted in terms of audience, possibly directed at communicatively-oriented learners with higher EL proficiency levels.

While all websites presented materials on topics related to Anglophone countries such as the US, the UK, Canada, and Australia, it was only the highest ranked Level 7 websites that exhibited topics about Eastern/non-Anglophone countries such as Korea, Japan and China. Overall, this most valued set of websites appeared to be the most eclectic in their range of learning materials and topics, with greater orientation to the local Chinese context and the Asia region more generally. An interpretation of these localised topic choices might be that the presentation of the known generates a degree of contextual congruence and familiarity for learners. The topics promote relevance and align with current approaches to second language teaching and learning that prioritise adaptation and contextualisation (Qiang & Kang, 2011; Spada, 2007). Respect for learners' existing knowledge and interests, and recognition of their motivational orientations are key issues for online educational materials and content (Hubbard, 2006).

#### Conclusion

This paper has reported on a study of the pedagogical, linguistic and content features of 25 Chinese ELL websites that were ranked by the PageRank system for their importance and value to users. Through an iterative process, the study developed and refined criteria drawing on literature from the fields of website evaluation, ELL website design, and computer-assisted language learning. The criteria related to website focus (e.g. pedagogical and/or content/information), target audience (e.g. beginners, advanced), activities and topics (e.g. practice exercises, skill development, and Western/Eastern topics), percentage and functions of the L1 (Chinese) and the TL (English; e.g. informing, directing). The analysis indicated that pedagogically-oriented ELL websites are most valued by users.

An aim of the research was the development of a heuristic device for prospective website design. As noted above, this study is the first stage of an ARC research project titled *Images, Perceptions and Resources: Enhancing Australia's Role in China's English Language Education*. In the project, analysis and design have an interactive relationship. Fig. 3 presents the framework generated from this initial analysis as the first step towards the design of an ELL website for Chinese College English students.

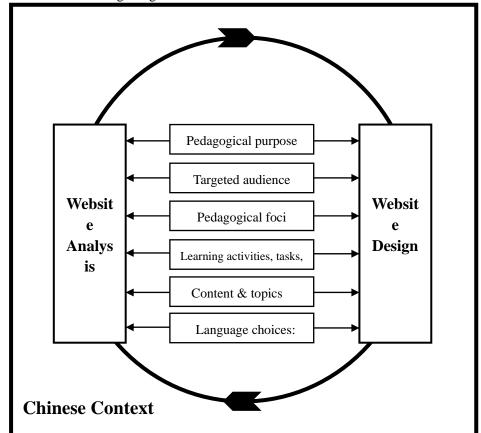


Figure 3 Framework for Analysing and Designing Chinese ELL Websites

The framework will be further informed and modified by a review of existing frameworks (e.g. Hubbard, 1988, 2006) and survey and interview data from College English learners in the second stage of the study. The revised framework will be utilised to design and build the website which will trialled with student focus groups. The objective will be the refinement of the website's effectiveness as a learning tool and the development of further understandings about the variables that contribute to online ELL in China.

**Acknowledgements** The research presented in this paper is part of an ongoing project funded by an Australian Research Council (ARC) grant. The authors wish to acknowledge the contribution of Dr Chun Hu of The University of Sydney, especially her initial work on the project.

#### References

- Beck, S. E. (2009). Evaluation criteria. Retrieved May 8, 2012, from http://lib.nmsu.edu/instruction/evalcrit.html
- Bolton, K. (2003). Chinese Englishes: A sociolinguistic history. Cambridge, UK: Cambridge University Press.
- Bradin, C. (1999). CALL issues: Instructional aspects of software evaluation. In J. Egbert & E. Hanson-Smith (Eds.), *CALL Environments:* Research, practice and critical issues (pp. 159–175). Alexandria, VA: TESOL.
- Chapelle, C. A. (1998). Multimedia CALL: Lessons to be learned from research on instructed SLA. *Language Learning and Technology*, 2(1), 22–34.
- Chapelle, C. A. (2007). Technology and second language acquisition. *Annual Review of Applied Linguistics*. 27, 98–114. doi: 10.1017/S0267190508070050
- CNNIC. (2012). 第 29 次中国互联网络发展状况统计报告 [The 29th statistical report on China's internet development]. Retrieved March 9, 2012, from http://www.cnnic.cn/research/bgxz/tjbg/201201/P020120116330880247967.pdf
- Comer, P., & Geissler, C. (1998). A methodology for software evaluation. Retrieved September 13, 2012, from ERIC database (ED421140).
- Coniam, D. (2008). Evaluating the language resources of chatbots for their potential as English as a second language learning tools. *ReCALL Journal*, 20(1), 98–116. doi: 10.1017/S0958344008000815
- Del Galdo, E. M. (1996). Culture and design. In E. M. del Galdo & J. Nielsen (Eds.), *International user interfaces* (pp. 74–87). New York, NY: John Wiley & Sons.
- Furner, J. M., & Daigle, D. (2004). The educational software/website effectiveness survey. *International Journal of Instructional Media*, 31(1), 61–77.
- Gikandi, J. W., Morrow, D., & Davisa, N. E. (2011). Online formative assessment in higher education: A review of the literature. *Computers and Education*, 57(4), 2333–2351. doi: /10.1016/j.compedu.2011.06.004
- He, D. Y., & Zhang, Q. Y. (2010). Native speaker norms and China English: From the perspective of learners and teachers in China. *TESOL Quarterly*, 44(4), 769–789. doi: 10.5054/tq.2010.235995
- Hubbard, P. (1988). An integrated framework for CALL courseware evaluation. *CALICO Journal*, 6(2), 51–71.
- Hubbard, P. (2006). Evaluating CALL software. In L. Ducate & N. Arnold (Eds.), Calling on CALL: From theory and research to new directions in Foreign Language Teaching (313–338). San Marcos, TX: CALICO.
- Hui, D. (2001). The globalisation of the English language: Reflections on the teaching of English in China. *International Education Journal*, 2(4), 126–133.
- Ji, P. Y. (2008). Pragmatics and pedagogy in College English teaching. Shanghai, China: Shanghai Foreign Language Education Press.
- Jiang, Y. J. (2002). China English: Issues, studies and features. Asian Englishes, 5(2), 4–23.
- Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, 93, 769–782. doi: 10.1111/j.1540-4781.2009.00972.x
- Li, J. (2002). A cultural model of learning: Chinese "heart and mind for wanting to learn." *Journal of Cross-Cultural Psychology*, 33(3), 248–269.
- Li, L. Q. (2008). 李岚清谈外语教学 [Li Lanqing's talks about foreign language education]. Retrieved November 23, 2011, from http://www.enbaike.cn/view/5697.html
- Liu, G. Z., Liu, Z, H., & Hwang, G. J. (2011). Developing multi-dimensional evaluation criteria for English learning websites with university students and professors. *Computers & Education*, 56(1), 65–79. doi: 10.1016/j.compedu.2010.08.019
- MacLean, P., & Scott, B. (2011). Competencies for learning design: A review of the literature and a proposed framework. *British Journal of Educational Technology*, 42(4), 557–572. doi: 10.1111/j.1467-8535.2010.01090.x
- Medgyes, P. (1999). Language training: A neglected area in teacher education. In G. Braine (Ed.), *Non-native educators in English language teaching* (pp. 177–195). Mahwah, NJ: Lawrence Erlbaum.

- Nielsen, J. (1993). Usability engineering. New York, NY: Academic Press.
- Qian, X. F., Tian, G., S. & Wang, Q. (2009). Code-switching in the primary EFL classroom in China: Two case studies. *System*, 37(4), 719–730.
- Qiang, H. Y., & Kang, Y. Q. (2011). English immersion in China as a case of educational transfer. Frontiers of Education in China, 6(2), 8–36. doi: 10.1007/s11516-011-0120-8
- Shen, H. Z. (2009). Problematising research on Chinese English: Issues, stances and reconceptualisation. In H. Z. Shen & Y. Yan (Eds.) 中国英语教学探索与展望 [Developments and prospects of English teaching in China] (pp. 3–20). 上海,中国: 复旦大学出版社. [Shanghai, China: Fudan University Press].
- Spada, N. (2007). Communicative Language Teaching: Current status and future prospects. In J. Cummins & C. Davison (Eds.), *International handbook of English Language Teaching* (Vol. 15, pp. 271–288). New York, NY: Springer.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.
- UNESCO. (2011). World data on education: People's Republic of China, 2010/11 (7th ed). Retrieved on September 10 2012, from http://www.ibe.unesco.org/fileadmin/user\_upload/Publications/WDE/2010/pdf-versions/China.pdf
- Wilkinson, G. L., Bennett, L. T., & Oliver, K. M. (1997). Evaluation criteria and indicators of quality for internet resources. *Educational Technology*, 37(3), 52–58.
- Yang, Y.-T. C., & Chan, C.-Y. (2008). Comprehensive evaluation criteria for English learning websites using expert validity surveys. *Computers & Education*, 51(1), 403–422. doi: 10.1016/j.compedu.2007.05.011
- Zhong, Y. X., & Shen, H. Z. (2002). Where is the technology-induced pedagogy? Snapshots from two multimedia EFL classrooms. *British Journal of Educational Technology*, 33(1), 39–52. doi: 10.1111/1467-8535.00237