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dante.fabros@site.edu.au

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Foreword

Welcome to the June 2014 issue of *The Asian ESP Journal*!

We are happy to publish five articles that cover a range of research topics contributed by authors from Iran, Algeria, China, and Hong Kong, namely:

1. A cross-disciplinary analysis of higher education students' perspectives on the use of e-books for learning academic English, by Sayyed Mohammad Alavi and Reza Dashtestani, Iran
2. Revisiting the ESP teachers' perception of resilience: a call for more professional development of teachers, by Masoomeh Estaji and Ali Rahimi, Iran
3. Motivation in the ESP classroom: the case of Algerian biomedical engineering students, by Hafida Hamzaoui-Elachachi and Wassila Bouklikha Graia, Algeria
4. Research article introductions in applied linguistics: a comparison between Chinese and English, by Gao Li, China
5. Challenges faced by non-native undergraduate student writers in an English-medium university, by Bruce Morrison, Hong Kong

I hope you will enjoy reading the papers and recommend them to your colleagues and students to further disseminate the findings and enhance the impact of the research studies.

Last but not least, I would like to take this opportunity to express my heartfelt gratitude to the professional contribution of our Associate Editors and Academic Editors* whose quality review work has made the current issue possible. I also wish to thank our proof readers for their great work!

Chief Editor

The Asian ESP Journal

Winnie Cheng

Department of English

The Hong Kong Polytechnic University

egwcheng@polyu.edu.hk

* Details about our Associate Editors, Academic Editors and proof readers can be found on

http://asian-esp-journal.com/asian-esp-journalbeta/index.php?option=com_content&view=article&id=90&Itemid=53 .

A Cross-Disciplinary Analysis of Higher Education Students’ Perspectives on the Use of E-books for Learning Academic English

Sayyed Mohammad Alavi and Reza Dashtestani

University of Tehran, Iran

Biodata

Dr Sayyed Mohammad ALAVI is an associate professor of Applied Linguistics at the English Department of University of Tehran. He teaches language testing and research methodology to BA, MA, and Ph.D. students. He is interested in doing research in task based language teaching, language testing and assessment, and English for specific purposes. Email: mohammed.alavi@gmail.com

Reza Dashtestani is a PhD candidate in Applied Linguistics at the University of Tehran, Iran. His research interests include English for Specific/Academic Purposes (ESP/EAP), CALL, distance language learning, and electronic literacies. Currently, he is active in CALL materials production and CALL teacher training in Iran. He serves as editor and reviewer in several journals of Educational Technology and Applied Linguistics. Email: rdashtestani@ut.ac.ir

Abstract

This study contributes to the research on the implementation of computer-assisted language learning (CALL) in English for Academic Purposes (EAP) instruction by investigating Iranian students’ perceptions on the challenges to the use of e-books for learning academic English. Data were collected from three sample groups of university students from three different disciplines i.e. engineering (n=243),

humanities (n=248), and basic sciences (n=240). Data sources were surveys, in-depth interviews, and observations. Analysis of the relevant data depicted that the students perceived the use of e-books for EAP learning as beneficial and facilitative despite demotivating obstacles and impeding factors. Findings revealed an absence of e-book use in the EAP context of Iran and students' preference for printed books over e-books. No significant differences were found among the perceptions of the three disciplines. Recommendations and suggestions have been made on how to include e-books in EAP instruction.

Keywords: EAP; CALL; perceptions; e-books; higher education

1. Introduction

The history of e-books (or electronic-book, also known as e-texts) goes back to 40 years ago. From then until now, the nature of e-books has been in flux constantly. It was in 1971 that the first e-book was digitalized and produced by Michael Hart, the establisher of Project Gutenberg, who used the word "e-text" to call his free e-book. The newer types of e-books which were produced in 1991 provided users with translation into different languages. A myriad of online e-book stores emerged in 2000 with different new formats and services (Chrystal, 2010). With the advent of new types of reading devices, reading e-books became more comfortable, interesting and widespread (Chrystal, 2010; Lebert, 2009; Stone & Rich, 2009) since the readers can benefit from a myriad of services, including searching texts, using multimedia properties, browsing, and using animations while reading a text (Huang, 2012; Oakley & Jay, 2008).

1.1 E-books in higher education

Recently there has been growing interest in the application of e-books in educational settings and educational authorities are making attempts to introduce e-books as an alternative to printed books in higher education (Woody, Daniel & Baker, 2010). The use of e-books in language teaching contexts has also been considered as beneficial and facilitative for learning. Several research studies in the field of English as a foreign language (EFL) have shown the positive reactions of EFL learners to the use of e-books (e.g., Huang, 2012; Lam, Lam, Lam & McNaught, 2009; Lin, 2009).

Early research on the diffusion of e-books revealed that students of higher education did not accept this kind of technology (Bell, McCoy & Peters, 2002; Dearnley & McKnight, 2001) since students perceived several limitations regarding the use of e-books. Later research revealed that students used e-books in a cut-and-paste fashion to carry out research for academic purposes (Anuradha & Usha, 2006). Bell (2005) criticizes this cut-and-paste approach to using e-books since it hinders students' ability to think critically.

Accordingly, a number of studies have been conducted on students' attitudes toward and perceptions about the use of e-books in higher education. In general, the findings of these studies depict that students have positive attitudes toward the use of e-books for their learning experiences. For instance, convenience (Bennett & Landoni, 2005), searchability (Levine-Clark, 2006), readability (Abdullah & Gibb, 2006), cost-effectiveness (Anuradha & Usha, 2006), availability (Raynor & Iggulden, 2008), and downloading speed (Clark, Goodwin, Samuelson & Coker, 2008) were the important affordances of using e-books which have been reflected in the literature. More recently, experts of educational technology have pointed out several other benefits of e-books for educational contexts including portability, eco-friendliness, attractiveness, and easy access. Multimedia features and easy access via hyperlinks

were also regarded as other considerable advantages of e-books (Huang, 2012; Woody, Daniel & Baker, 2010; Young, 2009).

Potential obstacles to using e-books were the focus of other studies. Several specific limitations of e-books have been reported in these studies including difficulty with reading and browsing e-texts and the need for reading devices (Chu, 2003), eye strain and degree of access to e-books (Bennett & Landoni, 2005), and lack of ICT competence and awareness about the availability of e-books (Abdullah & Gibb, 2006). Subsequent research provided valuable insights into new limiting factors related to e-books including technical limitations such as screen size and zooming properties (Clark, Goodwin, Samuelson & Coker, 2008), access problems and manipulability limitations (Carlock & Perry, 2008), display quality (Young, 2009), and lack of training on using e-books (Huang , 2012; Woody, Daniel & Baker, 2010). Additionally, research has shown that students of higher education do not make common use of e-books in their learning experiences and they generally prefer reading printed books over e-books (Anuradha & Usha, 2006; Carlock & Perry, 2008; Woody, Daniel & Baker, 2010).

In the Iranian educational context, there is very limited research conducted on the suitability and applicability of online resources (Ghaebi & Fahimifar, 2011; Negahban & Tawalar, 2009). Iranian students of higher education rarely make use of e-books and other electronic resources for their academic purposes (Borujerdian, 2011) and generally prefer printed books and resources. The main reasons include lack of awareness about the availability of online resources, low English proficiency of students to locate major-related online resources, slow speed of the Internet, lack of searching skills, lack of ICT literacy, eye-strain, hardware and software limitations, hackers, and lack of familiarity with e-books (Ghaebi & Fahimifar, 2011; Keshtiarai,

Yusefi, & Shahbazi, 2010). Some merits of using e-books in Iran including multimedia properties, high storing possibility, ease of selection, and limited space occupation have been pointed out in the literature (Ghaebi & Fahimifar, 2011).

Specifically, there is a dearth of research concerning the perceptions of students of higher education on the use of e-books in Iran. The majority of research studies have explored teachers' and faculty members' perceptions of using online resources. In this study, the e-book-related perceptions of three groups of EAP students from three different disciplines were assessed and compared. Possible impediments to the use of e-books and strategies to include e-books in EAP learning were also examined. The study aims at providing insights into students' current use of e-books for EAP learning as well. Currently, reading comprehension includes a significant part of EAP instruction in Iran and considerable emphasis has been placed on enabling EAP students to learn to read academic texts in English. Consequently, attention should be directed at shifting traditional approaches to the instruction of reading comprehension to technology-based and interactive approaches to teaching reading comprehension in the Iranian EAP context due to the merits and affordances that technology provides for learning. The results of this study would help curriculum developers of higher education to include technology and computer-based resources including e-books in the curricula of higher education.

In this study in order to explore EAP students' perceptions of e-books, the following three sets of research questions were addressed:

1. What are the attitudes of EAP students from different disciplines i.e. humanities, engineering, and basic sciences toward the application of e-books for EAP learning?

Is there a significance difference among the attitudes of the participants from different disciplines regarding the application of e-books for EAP learning?

2. What are the perceptions of EAP students from different disciplines i.e. humanities, engineering, and basic sciences of the limitations of using e-books for EAP learning?

Is there a significant difference among the perceptions of the participants from different disciplines regarding the limitations of using e-books for EAP learning?

3. What are the perceptions of EAP students from different disciplines i.e. humanities, engineering, and basic sciences of the necessary strategies to be taken to include e-books in EAP courses, the current use of e-books and students' levels of proficiency to use e-books?

2. Design of the study

The study is designed on a mixed-methods survey basis using interviews, questionnaires, and observations based on the emphasis on the triangulation of different instruments in EAP research methodology (Jordan, 1997; Long, 2005). The use of surveys has been emphasized in EAP research methodology since the results of surveys would guide EAP syllabus designers and curriculum developers through designing EAP courses based on EAP students' needs, preferences, perceptions, and lacks (Jordan, 1997).

2.1 Instrument development

One part of the data for this investigation was collected via the use of a survey comprising 60 items. The items for the survey were constructed through reviewing previous studies on the use of e-books in educational and language teaching contexts (e.g., Anuradha & Usha, 2006; Carlock & Perry, 2008; Huang, 2012; Levine-Clark, 2006; Woody, Daniel & Baker, 2010). The following sections were included in the questionnaire: 1) students' attitudes toward using e-books for EAP learning (Cronbach's Alpha=0.87, 17 items), 2) students' perceptions of the limitations of using e-books for EAP learning (Cronbach's Apha= 0.93, 23 items), 3) students' perceptions of the strategies to include e-books in EAP learning (Cronbach's Alpha= 0.82, 10 items), 4) a total of six multiple-choice items on students' perceptions of their current use of e-books and their levels of proficiency to use e-books, and 5) four open-ended items to add any suggestions or issues which had not been covered in the items of the questionnaire (Appendix 1). To validate the content of the survey, it was submitted to a jury of seven EAP and EFL senior university professors. Revisions were applied with regard to the experts' judgments. In relation to the construct validation of the survey, the results of exploratory factor analysis (EFA) indicated five factors in the first section, four factors in the second section and three factors in the third section of the questionnaire.

Following the survey, in-depth interviews were conducted with the voluntary participation of university students. The interview was designed based on a semi-structured format. The following open-ended questions were used to examine the perceptions of the participants:

1. What are the possible benefits of using e-books for EAP learning?
2. What are the possible limitations of using e-books for EAP learning?
3. What strategies do you suggest for including e-books in EAP learning?

4. What is the current status of your use of e-books?

Observations were further carried out to identify the current e-book-related activities and use in the Iranian EAP courses. The researcher observed 10 EAP classes after gaining permission from the EAP instructors to observe their classes. The aim of the observation was to investigate the current application of e-books in EAP courses, actual facilities in EAP classes to use e-books, and awareness-raising activities used by instructors to persuade students to use e-books.

2.2 Data analysis

All analyses on the questionnaire data were conducted using the SPSS statistical software package version 16. The questionnaire data were presented in terms of the analysis of the mean and standard deviation. Mean score greater than 2.5 indicates that more than half of the participants had consensus on the importance of the given item. Statistical significance level was set at $p \leq 0.05$. Since the study sought the differences among the perceptions of three sample groups of students, the Kruskal Wallis test for non-parametric significance was conducted on the first and second section of the questionnaire. Content analysis was further conducted to analyze the qualitative data. The interview data were recorded, transcribed, and translated into English. The emerging themes were reported accordingly.

3. Results

3.1 Participants

The sample was selected based on cluster sampling and involved 731 undergraduate students from three disciplines i.e. engineering, humanities, and basic sciences from seven universities in Iran (Table 1). The average age of the participants of this study was 23.4 years. The interview phase of the study was conducted with 100 EAP students. Based on the results of the survey, the participants were those who had used e-books at least once for their academic purposes prior to the implementation of the study.

Table 1. Participants of the study

<i>Participants</i>	<i>Questionnaires</i>		<i>Interviews</i>	
<i>Faculty of Engineering</i>				
Civil Engineering	Males: 96	Females: 28	Males: 9	Females: 2
Industrial Engineering	Males: 86	Females: 33	Males: 10	Females: 5
	Total: 243		Total: 26	
<i>Faculty of Humanities</i>				
Philosophy	Males: 58	Females: 34	Males: 12	Females: 10
Sociology and Social Studies	Males: 79	Females: 77	Males: 7	Females: 8
	Total: 248		Total: 37	
<i>Faculty of Basic Sciences</i>				
Biology	Males: 36	Females: 67	Males: 6	Females: 17
Geology	Males: 67	Females: 70	Males: 8	Females: 6
	Total: 240		Total: 37	

3.2 University students' attitudes toward the use of e-books for EAP leaning

As the values in Table 2 depict, the participants regarded the use of e-books as useful since e-books offer several benefits for EAP learning including easy portability, searchability, readability in low light and darkness, possibility of being sent via e-mail, possibility of copying and pasting the contents, interactivity, lightness and smallness of reading devices, inexpensiveness in terms of copying, and efficiency in

time and energy. It was further illustrated that there was no significant difference in attitude of the participants between the different disciplines (Table 2).

Table 2. Students' attitudes toward the use of e-books for EAP learning

<i>Questionnaire items</i>	<i>Engineering students</i>	<i>Humanities students</i>	<i>Science students</i>
E-books need less space and weight to be stored	3.6 ± 0.6	3.3 ± 0.9	3.1 ± 0.9
E-books are easier to be translated using some software than textbooks	2.2 ± 0.9	2.3 ± 0.9	2.4 ± 1
E-books are readable in low light or darkness	2.6 ± 0.9	2.9 ± 1	3.2 ± 1
E-book reading devices enable users to change fonts and display motion	2.6 ± 1	2.1 ± 0.9	2.1 ± 1
E-books can be converted into audio files	2.1 ± 1	2.3 ± 1.1	2.1 ± 0.9
Copying e-books is cheaper than printing textbooks	3.1 ± 0.9	3.1 ± 0.9	2.9 ± 1
Buying e-books is easier than buying textbooks	2.6 ± 1.1	3.1 ± 0.8	1.9 ± 0.8
E-books can show links for easy access to more information and related websites	2.8 ± 1	2.6 ± 1.1	2.1 ± 1
E-books are searchable	2.7 ± 1	2.6 ± 1.1	2.8 ± 1
E-books are interactive	2.9 ± 1	2.9 ± 0.9	2.7 ± 1
There are a lot of free e-books on the Internet	2.1 ± 1.1	2.1 ± 1	2.2 ± 1
E-books are easier to be carried than textbooks	3.2 ± 0.8	3 ± 0.9	3.2 ± 0.7
E-books are environmentally friendly compared to textbooks	2 ± 0.9	2.6 ± 1.1	2.5 ± 1
The contents of e-books can be cross-referenced using hyperlinks	2.3 ± 1	2.7 ± 1	2.2 ± 1.1
E-books are easier to be read than textbooks	2.1 ± 1.1	2.4 ± 0.8	2.2 ± 0.8
Electronic texts can be copied and pasted	3.1 ± 0.7	3 ± 1	2.9 ± 0.9
E-books can be sent via email	2.7 ± 1	3.1 ± 0.8	2.8 ± 1.1
Kruskal Wallis results	Chi-square= 0.736	P= 0.692	P ≤ 0.05

Likert scales: 1. Disagree, 2. Fairly agree, 3. Agree, 4. Strongly agree

3.3 Interview results

In the interviews, the majority of participants from different faculties reported that one important benefit of e-books is the possibility of copying and pasting texts or parts of texts from e-books. The participants believed that this property of e-books

enables them to spend less time and energy on retyping different parts of texts. A few participants believed that only some formats can be copied and pasted. Some participants also reported that the interactivity of e-books is another important property. The same results which were reflected in the survey were reported in the interviews as well.

3.4 University students' perceptions of the limitations of e-books

The participants pointed out some limitations of e-books including lack of availability of e-books, high prices of e-books, lack of a standard format of e-book files, possibility of being lost, deleted or stolen, eye strain, expensiveness of reading devices, lack of access to reading devices, low resolution of reading devices, susceptibility of reading devices to damage, difficult navigation of the text, lack of comfort when reading e-books, lack of online e-book markets and careless reading of contents when reading e-books. It was further depicted that there was not a significant difference among the perceptions of participants from the different disciplines about the limitations of e-books as in Table 3 below.

Table 3: Students' perceptions of the limitations of using e-books for EAP learning

<i>Questionnaire items</i>	<i>Engineering students</i>	<i>Humanities students</i>	<i>Science students</i>
E-books are not as available as textbooks	3 ± 1	2.9 ± 1.1	3.1 ± 0.9
Purchasing e-books requires paying high	3.4 ± 0.8	3.5 ± 0.7	3.1 ± 0.9
There is no single standard format for all reading devices to display e-books	2.8 ± 1	2.8 ± 0.9	2.7 ± 1.1
E-books cause quick reading without getting the main points	2.9 ± 1.1	2.8 ± 0.8	3 ± 0.8
E-books are mostly used for reference purposes	2.1 ± 0.9	2 ± 1.1	2.3 ± 1
It is not easy to read e-books compared to reading textbooks	2.5 ± 1	2.7 ± 1.1	2.9 ± 1.1
There is no e-book market to buy and sell used e-books	1.8 ± 1	2.1 ± 1	2.3 ± 1.1
E-books are more susceptible to be deleted, lost or stolen compared to textbooks	3 ± 0.9	2.7 ± 0.9	2.9 ± 1
E-book contents are not as valid as textbook contents	1.7 ± 0.9	1.8 ± 0.7	1.9 ± 0.9
E-book page numbers vary in different reading devices	2.2 ± 1.1	1.7 ± 0.9	2.2 ± 1
The display resolution of reading devices is low	3.1 ± 0.8	3 ± 0.9	3 ± 0.8
There are many versions of the same e-book with different font sizes and colors	1.7 ± 0.8	2.2 ± 1	3 ± 0.9
E-books cannot be loaned or resold to other people (due to Digital Rights Management) compared to textbooks	2.4 ± 1.1	2.2 ± 1	2.3 ± 1.1
Reading e-books is more boring than textbooks	2.9 ± 1.1	2.8 ± 1	3.1 ± 1.1
Reading devices are more susceptible to damage than textbooks	3.2 ± 0.9	3.1 ± 0.9	3.3 ± 0.8
Reading devices can be stolen or lost	2.8 ± 1	2.4 ± 1	2.1 ± 1
Reading devices are not accessible everywhere	2.7 ± 1	3 ± 0.9	3.1 ± 1
Reading devices are more expensive to be purchased than textbooks	2.8 ± 1.1	3 ± 1	2.9 ± 0.9
E-books are suitable for reading for fun and leisure rather than for academic purposes	2.9 ± 1	2.7 ± 1	2.9 ± 0.5
E-book reading devices need power sources	2.3 ± 0.9	2.9 ± 1	2.2 ± 1
Reading e-books causes eye strain	3.3 ± 0.8	3.2 ± 0.9	3.4 ± 0.7
E-books can be lost or disappeared by interference of viruses	2.4 ± 0.8	2.2 ± 1.1	3 ± 0.9
Electronic texts are more difficult to be navigated than printed texts	2.8 ± 1	2.7 ± 1.1	2.6 ± 1
Kruskal Wallis results	Chi-square = 0.260	P= 0.878	P ≤ 0.05

Likert scales: 1. Disagree, 2. Fairly agree, 3. Agree, 4. Strongly agree

3.5 Interviews results

The interview results revealed that all the students regarded lack of access to e-books as a very important limitation in using e-books for EAP learning. Also, most students

reported that it was not easy to work with e-books because of the high costs of purchasing e-books from the online e-book markets, lack of online e-book sellers in Iran to purchase their required EAP e-books and lack of access to reading devices. Finally, the students reported that they were not accustomed to reading e-books and that they regarded textbooks more common than e-books.

3.6 Observation of actual class use of e-books

The results of the observations indicated that e-books were not used in EAP classes. The instructors did not use any kind of electronic book and they did not persuade students to use e-books to learn EAP. All students used printed books in the EAP classroom. Also, there were not sufficient computer-based facilities for students to use e-books in their EAP classrooms.

3.7 University students' perceptions of the necessary strategies to be taken to include e-books in EAP learning

The participants reported on the importance of some strategies including training instructors and students on how to use e-books, improving the levels of academic and general English of students, creating the culture of reading e-books, providing funds for purchasing e-books, creating digital libraries at universities, providing the relevant facilities, improving academic reading skills, and providing access to e-book publishers at universities seen below in Table 4.

Table 4. Students' perceptions of the necessary strategies to include e-books in EAP learning

<i>Questionnaire items</i>	<i>Engineering students</i>	<i>Humanities students</i>	<i>Science students</i>
Training instructors and students to use e-books	3 ± 1	2.9 ± 0.9	2.8 ± 1
Improving the levels of academic English of students to use e-books	3.3 ± 0.8	3.2 ± 0.9	3.5 ± 0.6
Improving the levels of general English of students to use e-books	3.5 ± 0.7	3.4 ± 0.8	3 ± 0.9
Creating the culture of reading e-books by instructors and authorities	2.7 ± 1.1	3 ± 1	2.6 ± 0.9
Awareness-raising programs and sessions for students about the benefits of e-books	2.2 ± 1	2.7 ± 1	2.6 ± 1
Funding students and instructors to purchase e-books by universities	3.5 ± 0.7	3.4 ± 0.4	3.4 ± 0.6
Improving e-book-based facilities at universities to use e-books	3.3 ± 0.8	3.2 ± 0.9	3.5 ± 0.6
Providing access to major academic e-book publishers at universities	3.1 ± 1	3 ± 0.9	3 ± 1
Training students and instructors to improve their EAP reading skills	3.1 ± 0.9	3.3 ± 0.8	2.9 ± 0.9
Creating digital libraries at universities	3.4 ± 0.7	3.4 ± 0.6	3.1 ± 0.7

Likert scale: 1. Not important, 2. Somewhat important, 3. Important, 4. Very important

3.8. Interview results

The results of interviews confirmed several findings of the questionnaire and showed that the EAP student required training and motivation on using e-books and their EAP reading comprehension. The participants also reported that there is a need for the provision of e-book-based facilities and introduction of related websites for purchasing e-books by universities and instructors.

3.9 EAP students' perceptions of the current state of using e-books and students' levels of proficiency to use e-books for EAP learning

Based on the results of the fourth section of the questionnaire, the majority of EAP participants reported that they never or rarely use e-books (engineering students=66.2%, humanities students=67.3%, science students=67.3%). The majority

of EAP participants also reported that they use e-books for non-educational purposes (engineering students=67.5%, humanities students=73.6%, science students=70.5%). They also perceived themselves as not proficient or a little proficient in using e-books (engineering students=86.3%, humanities students=68.6%, science students=68.5%). The participants also considered themselves as not proficient or a little proficient in EAP reading comprehension (engineering students=59.2%, humanities students=70.4%, science students=62.3%). Most of participants read a single entry or a few pages of e-books instead of the whole e-book (engineering students=76.6%, humanities students=68.5%, science students=70.8%). Finally, 83% of engineering students, 79.4% of humanities students and 80.9% of science students preferred printed books over e-books.

3.10 Interview results

Most participants stated that they hardly used e-books for EAP learning. Similar to the results of the survey, the students reported that they preferred reading printed books over e-books. The participants also lacked general and academic English, and reading comprehension proficiencies to read e-books.

4. Discussion and conclusion

Overall, the EAP students perceived the use of e-books for EAP learning as positive and beneficial. This finding might be indicative of the interest of the EAP students in the incorporation of e-books into EAP learning. The inclusion of e-books in EAP learning would enhance EAP students' motivation for reading academic texts since e-

books provide EAP students with interactive and convenient reading opportunities (Bennett & Landoni, 2005). Admittedly, since EAP teaching methodology supports the implementation of learner-centered approaches to education (Hutchinson & Waters, 1987), the positive perceptions of EAP students will enable EAP providers and authorities to develop future EAP courses based on the technological needs and wants of EAP students. Based on the findings, it can be concluded that e-books are one of those technological needs of EAP students, at least in the context of Iran, which should be recognized and taken into consideration by EAP authorities and instructors. Currently, it appears that EAP instruction in Iran is firmly grounded on the traditional and technology-poor approaches to learning while much criticism has been leveled against the inefficiency of EAP courses due to sticking to traditional views to learning and teaching in the Iranian EAP context (Mazdayasna & Tahririan, 2008). Since students' perceptions of the use of e-books might be different from their actual use of e-books for their EAP learning, future research should be directed at the actual application of e-books in EAP courses and the effect of e-book use on EAP students' reading comprehension proficiency. The positive attitudes of EAP students' toward the use of e-books for EAP learning in this study supports the results of other studies which have reported on the positive attitudes of students toward the use of e-books (e.g., Abdullah & Gibb, 2006; Anuradha & Usha, 2006; Bennett & Landoni, 2005). The findings also support the findings of several studies (Huang, 2012; Woody, Daniel & Baker, 2010; Young, 2009) which have pointed out the benefits of using e-books including portability, eco-friendliness, attractiveness, easy access, and multimedia features.

In addition, the findings suggested that there are several limitations and challenges concerning the use of e-books for EAP learning. Some of these limitations

mentioned by the EAP students might be attributed to the problem of lack of technology-based facilities. In EAP courses, limitations should be identified and accommodated. These limitations might be linked to resources, participants' attitudes, teaching materials or methodologies (Hutchinson & Waters, 1987). The findings echo the results of the previous studies (Carlock & Perry, 2008; Clark, Goodwin, Samuelson, & Coker, 2008; Huang, 2012; Woody, Daniel & Baker, 2010; Young, 2009) which pointed out the limitations of e-books including display quality, screen size, zooming properties, lack of training on using e-books, access problems, and manipulability limitations. These limitations might introduce different obstacles to using e-books and would influence the positive attitudes of EAP students in the future. Most of these limitations can be removed if appropriate types of measures and actions be taken by educational authorities. More facilities and funding are needed to facilitate students' use of e-books. More specific studies should be conducted in order to identify the nature of each limitation identified by this study. These limitations might discourage students to use technology and electronic resources for their educational purposes. More importantly, these limitations may change the positive attitudes of students toward technology if they are not detected and accommodated.

To alleviate the effects of the obstacles to the use of e-books, Huang (2012) recommends that teachers can play important roles in training students how to deal with technical limitations and problems of e-books prior to the implementation of e-book projects in the EFL contexts. This issue is commensurate with the claim made by Jones (2001) who suggests that EFL teachers can have considerable effect on preparing and motivating EFL students to use a specific type of technology. Similarly, in the Iranian EAP context, the EAP teachers can offer training sessions for Iranian EAP students before the actual use of e-books in the Iranian EAP courses.

Apparently, there should be sufficient training and awareness-raising on the use of e-books in EAP courses before EAP students' participation in e-book reading projects.

Another finding was related to the strategies to be adopted to facilitate the inclusion of e-books in EAP learning. The participants reported on the importance of several strategies to include e-books in EAP instruction and learning. Parts of the findings are similar to the findings of the studies which have necessitated specialized types of training on how to read online and computer-based texts (Sutherland-Smith, 2002). Therefore, these strategies that EAP students suggested should be taken into account by EAP authorities since EAP is based on learner-centered approaches to teaching (Hutchinson & Waters, 1987).

The analysis of data obtained from interviews and non-participant observations regarding the current use of e-books by EAP students shows that EAP students do not make use of e-books and if they do, they use e-books for non-educational purposes. The participants perceived themselves as incompetent in using e-books. As it was mentioned previously, the EAP students perceived themselves as incompetent in academic reading comprehension. It was further demonstrated that the EAP students preferred reading printed books over e-books which is similar to the finding of the study conducted by Anuradha & Usha (2006). The participants also read a single entry or a few pages of e-books. Parts of the findings confirm the findings of the previous studies which showed the low use of e-books by students and instructors (Abdullah & Gibb, 2006; Anuradha & Usha, 2006; Carlock & Perry, 2008; Levine-Clark, 2006). Students need support to use electronic and computer-based resources for their learning. It is important that both instructors and educational supervisors provide students with adequate support and guidance on how to use

materials copied from e-books and other computer-based materials in an ethical manner.

Furthermore, specific types of training and motivating programs and activities are needed to enhance students' competence and confidence to make appropriate use of computer-based resources, including e-books, for their educational purposes. Students also need improvement on their English proficiency and reading comprehension skills in order to use e-books effectively in their learning experiences. What is obvious is that students need different types of skills to make use of e-books for their educational purposes. Most EAP students do not have sufficient proficiency in most e-book-related skills and competencies. Lack of these skills might be a potential factor which hinders students' use of e-books for their EAP learning.

Finally, instructors should make use of e-books in their teaching and encourage students to use e-books for their learning experiences as well. Other types of online and computer-resources can also be used for EAP instruction and learning. The use of computer-based materials would provide a plethora of pedagogical options for instructors regarding EAP instruction. Alternatively, EAP instructors should receive training on how to make use of e-books efficiently in EAP instruction.

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Appendix 1

Questionnaire on students' perceptions on using e-books for EAP learning

Dear Participants,

The following questionnaire is part of a research project that investigates the perceptions of EAP students' perceptions of the use of e-books for EAP learning. Your responses will be treated in strict confidence and individual teachers/schools will not be identified in any report or publication. Please answer all questions as accurately as you can.

Background information

Faculty:

Major:

Name of university:

Age:

Gender:

Have you ever used e-books for your EAP learning? Yes..... No.....

Section 1: Students' attitudes toward using e-books for EAP learning

Items	Disagree	Fairly agree	Agree	Strongly agree
<hr/>				
1. E-books need less space and weight to be stored				
2. E-books are easier to be translated using some software than textbooks				
3. E-books are readable in low light or darkness				
4. E-book reading devices enable users to change fonts and display motion				
5. E-books can be converted into audio files				
6. Copying e-books is cheaper than printing textbooks				
7. Buying e-books is easier than buying textbooks				
8. E-books can show links for easy access				

- to more information and related websites
9. E-books are searchable
 10. E-books are interactive
 11. There are a lot of free e-books on the Internet
 12. E-books are easier to be carried than textbooks
 13. E-books are environmentally friendly compared to textbooks
 14. The contents of e-books can be cross-referenced using hyperlinks
 15. E-books are easier to be read than textbooks
 16. Electronic texts can be copied and pasted
 17. E-books can be sent via email
-

Section 2: Students' perceptions of the limitations of using e-books for EAP learning

Items	Disagree	Fairly agree	Agree	Strongly agree
1. It is not easy to read e-books compared to reading textbooks				
2. There is no e-book market to buy and sell used e-books				
3. E-books are more susceptible to be deleted, lost or stolen compared to textbooks				
4. E-book contents are not as valid as textbook contents				
5. E-book page numbers vary in different reading devices				
6. The display resolution of reading devices is low				
7. There are many versions of the same e-book with different font sizes and colors				
8. E-books cannot be loaned or resold to other people (due to Digital Rights Management) compared to textbooks				
9. Reading e-books is more boring than textbooks				
10. Reading devices are more susceptible to damage than textbooks				
11. Reading devices can be stolen or lost				
12. Reading devices are not accessible everywhere				
13. Reading devices are more expensive to be purchased than textbooks				
14. E-books are suitable for reading for fun and leisure rather than for academic purposes				

15. E-book reading devices need power sources
 16. Reading e-books causes eye strain
 17. E-books can be lost or disappeared by interference of viruses
 18. Electronic texts are more difficult to be navigated than printed texts
 19. E-books are not as available as textbooks
 20. Purchasing e-books requires paying high costs
 21. There is no single standard format for all reading devices to display e-books
 22. E-books cause quick reading without getting the main points
 23. E-books are mostly used for reference purposes
-

Section 3: Students' perceptions of the strategies to include e-books in EAP learning

Items	Not important	Somewhat important	Important	Very important
1. Training instructors and students to use e-books				
2. Improving the levels of academic English of students to use e-books				
3. Improving the levels of general English of students to use e-books				
4. Creating the culture of reading e-books by instructors and authorities				
5. Awareness-raising programs and sessions for students about the benefits of e-books				
6. Funding students and instructors to purchase e-books by universities				
7. Improving e-book-based facilities at universities to use e-books				
8. Providing access to major academic e-book publishers at universities				
9. Training students and instructors to improve their EAP reading skills				
10. Creating digital libraries at universities				

Section 4: students' perceptions of their current use of e-books and their levels of proficiency to use e-books

1. How often do you use e-books for EAP learning?
a) Never b) Rarely c) Sometimes d) Often e) Always

2. For what purposes do you use e-books?
a) For learning EAP b) For non-educational purposes c) For academic purposes
d) For other purposes
3. How do you perceive your level of English proficiency to use e-books?
a) Not proficient b) A little proficient c) Fairly proficient d) Proficient
4. How do you rate your level of English reading comprehension proficiency?
a) Not proficient b) A little proficient c) Fairly proficient d) Proficient
5. What parts of e-books do you usually read?
a) A single entry or a few pages b) A chapter c) The whole e-book
6. Do you prefer reading e-books or printed books?
a) E-books b) Printed books

Section 5: Open-ended items to add any suggestions or issues which had not been covered in the items of the questionnaire

- 1:
- 2:
- 3:
- 4:

Revisiting the ESP Teachers' Perception of Resilience: A Call for More Professional Development of Teachers

Masoomeh Estaji and Ali Rahimi

Allameh Tabataba'i University, Iran

Biodata

Masoomeh Estaji is Assistant professor of TEFL at Allameh Tabataba'i University. She holds a Ph.D in TEFL from Allameh Tabataba'i University. Moreover, she is the head and adjunct Professor of TEFL at Khatam University. She has participated, presented, and published numerous papers on methodology, testing, and teacher education. Her research interests include language testing and assessment, teacher education, SLA, and ESP.

Ali Rahimi holds an M.A in TEFL from Allameh Tabataba'i University and is striving for a Ph.D admission. His research inclinations entail Language Assessment, English for Specific Purposes (ESP), and Teacher Education. He has presented and published a number of papers in the Field of Teacher Education and ESP.

Abstract

Teacher resilience provides a way of gaining a grasp of what enabling factors prod teachers to persist in the face of difficulties and functions as a complementary perspective to the studies of attrition, stress, and burnout (Beltman, Mansfield, & Price, 2011). To this end, the present study aimed to examine if gender and varied years of experience have a significant impact on teachers' ability to be resilient. Likewise, their beliefs and perception of resilience, its process, and the role they play

toward fostering resilience in the classroom were investigated. The participants of the study comprised 40 ESP instructors from different national universities of Iran who responded to a 5-point Likert-scale questionnaire. Semi-structured interviews were also conducted with 12 instructors (6 males, 6 females) in three categories of experience. Chi-square and frequency count results indicated a significant difference between teachers' resilience and their level of teaching experience. Further, the results revealed a statistical significant difference between gender and teachers' resilience. Moreover, teacher interviews demonstrated a considerably high self-perception of resilience and process of resilience development. Overall, resilience is reflected in all teachers through different practices and with varying behavioral patterns and has to be considered as a factor for professional development.

Keywords: Teacher resilience, Teacher perception, Professional development

1. Introduction

Teacher resilience has been a major issue of concern in recent years. For one to be resilient means having the ability to withstand an interruption or difficulty in one's teaching profession. It reveals the capacity of individuals to rebound and understand the necessity for change and adaptation despite experiencing adversity. Perhaps Beltman, Mansfield, & Price (2011) and Gu & Day (2007) could provide a unique definition on resilience considering its multiple perspectives due to the complex nature of resilience. To put it in their terminology, resilience is a means for thriving rather than just surviving. Resilience has seen some studies as far as children and students are concerned (Benard, 1991; Daniel & Wassell, 2002; Gore & Eckenrode, 1994; Gordon, 1995, Henderson & Milstein, 1996; Howard, Dryden, & Johnson, 1999; Luthar, Cicchetti, & Becker, 2000; Martin & Marsh, 2008; Werner, 1990;

Werner & Smith, 1988). Likewise, research into resilience has emerged from studies of families (Walsh, 1998). As an emerging field of research in teacher education, however, only relatively recently could one observe an upsurge of research on teacher resilience (Bobek, 2002; Day, 2008; Day & Gu, 2007; Fleet, Kitson, Cassady, & Hughes, 2007; Freedman & Appleman, 2008; Gu & Day, 2007; Henderson & Milstein, 1996; Hook, Lawson, & Smithells, 2004; Howard & Johnson, 2004; Mansfield, Beltman, Price, & McConney, 2012; Skaalvik & Skaalvik, 2011; Stanford, 2001; Sumsion, 2003; Sumsion, 2004; Tait, 2008).

It is important to note that resilience, whose facets can be defined in conjunction with professional development, is among those features of teachers which have to be demonstrated if we are to move from speculation about the nature of it to a comprehensive characterization of the notion. There is no avoiding the fact that, compared to a decade ago, further focal point of attention has been directed toward resilience in academia; however, it still calls for more research on other fertile grounds tied to instructor's resilience and the impact that strengthening resilience can have on the teachers' ability to function in the changing world. This current research contributes to the body of knowledge by highlighting and examining the perceptions, roles, and beliefs of teachers to build supportive educational settings for both instructors and students.

2. Resilience studies in retrospect

The area of teacher resilience is an emerging one. A limited number of studies have directly examined teacher resilience mainly in the field of ESP. Perhaps one of the earliest studies that focused on years of experience of teachers is that of Stanford's

(2001). The main thrust of her research was on why teachers show positive perseverance. Selecting ten teachers who met the preset criteria (Matching High Morale teachers' profile, having ten or more years of teaching experience, teaching at the elementary level, and working in schools in distressed urban environments), and through a semi-structured interview, the participants' choices in three ranking activities, the researcher's personal field notes and a focus group discussion with three of the participants, she examined ten African American woman teachers between 37-55. From the data analysis, five patterns emerged to help explain why the teachers had persevered positively for so long. The participants were similar in (1) their love of and commitment to children, especially "these" children, (2) their sources of satisfaction as a teacher, (3) their perceptions of their ideal and worst possible teaching lives, (4) their sources of support, and (5) their choices of metaphors (i.e. the ranking activity for selection on reasons of "being in school").

Day & Gu (2007), basing their study on the empirical data from a four-year large scale, mixed methods research project (VITAE) on variations in teachers' work, lives and effectiveness, which had been conducted by Day, Stobart, Sammons, & Kington (2006) as cited in Day & Gu (2007), investigated 299 teachers in 100 primary and secondary schools in seven Local Authorities. Teachers in their work were grouped into six groups according to their experience. The main data concerning teachers' perceived effectiveness were collected through twice yearly semi-structured, face-to-face interviews with teachers, supplemented by interviews with school leaders and groups of pupils. Measures of teachers' effectiveness as expressed through improvements in pupils' progress and attainment were collected through matching baseline test results at the beginning of the year, with pupils' national curriculum results at the end. It was found that commitment and resilience are fundamental to

teachers' effectiveness; that teachers do not necessarily learn through experience; that expertise is not acquired in an even, incremental way; and that teachers are at greater risk of being less effective in later phases of their professional lives.

In a more recent study, Tait (2008) distributed a questionnaire to 25 (22 responded) novice teachers (6 males, 16 females) to obtain a good grasp of teachers' resilience, personal efficacy and emotional intelligence. In the second phase, 4 (1 male, 3 females) out of the initial sample of 22 teachers were chosen for a two-hour long meeting, separately. During this time, participants were given a Stress Resilience Test (SRT), were guided interviewed, and completed a personal metaphor of teaching activity. Shedding light on categories representing the capacities of novice teachers who demonstrated high degrees of resilience, personal efficacy, and emotional intelligence, she went on to conclude that resilience is an indispensable part of a new teacher success and that provided with duly social, emotional, and professional support; novice teachers can work toward building up resilience.

Mansfield, Beltman, Price,& McConney's (2012) study of early career teachers' perception of resilience, bearing some resemblance to Castro, Kelly, & Shih (2010), is one of the most recent research studies in the domain of teacher resilience, and as well has a one to one correspondence with a portion of the qualitative phase of the present study. Gleaning 200 respondents' survey and an open-ended question at the end of the survey which asked "how would you describe a resilient teacher?", they identified four broad domains namely the emotional, profession-related, social, and motivational dimensions (p. 362) incorporating 23 aspects of resilience. The study's results indicated that graduating and early career teachers perceived that resilience for teachers comprised characteristics that were multidimensional and overlapping, and that views of resilience might develop according to teachers' career stage.

Detailed examination of the literature revealed that the research that has been conducted on teachers' perception of resilience has focused on ELT teachers and has not been extended to include ESP teachers too. To this end, this study was an attempt to measure the ESP teachers' perceptions of resilience with various years of teaching experience, further focusing on gender variations of resilience between male and female instructors to reach a deeper understanding of the concept of resilient ESP instructors. Specifically, the intent of this study was to compare the characteristics and perspectives of resilient teachers with regard to their teaching experience and gender which can provide invaluable information for staff development, induction, mentoring, and the supervisory practices of teachers. The fact that these areas remain largely unaddressed, presents a fertile ground for further research. The present study, therefore, has been carried out to respond to the following research questions.

1. What is ESP teachers' perception of resilience?
2. Do ESP teachers differ significantly with regard to their resilience as far as gender is concerned?
3. Do ESP teachers differ significantly with regard to their resilience as far as teaching experience is concerned?
4. What role do teachers play in fostering resilience in ESP classes?

3. Theoretical framework of the study

The *four dimensional framework of teacher resilience* developed by Mansfield, Beltman, Price, & McConney (2012) was chosen as the theoretical model for this study since it considers teacher resiliency as a multidimensional construct. This framework illustrates four dimensions of teacher resilience that should be considered in teacher education; those being emotional, motivational, social, and profession-

related. Each of these dimensions has various aspects and resilient teachers demonstrate their skills and attributes across the dimensions. For the purpose of this study, the researcher focused on various characteristics and factors that represent teachers as resilient, to better frame the examination of ESP teachers' perception of resiliency. Moreover, this framework was used in the content analysis of teachers' interviews to develop our understanding of diverse dimensions of resiliency reported by ESP teachers and how teachers' resilience can be fostered.

4. Material and methods

4.1 Participants and research settings

The participants of the study incorporated 40 university instructors working at different national universities of Iran; State (S), Azad (A), Elmi-Karbordi (E), and Payam Noor (P), out of which 16 were female instructors and the other 24 were male instructors. The sample size for the study was determined by using convenient sampling techniques (Kerlinger & Lee, 2000) where subjects were selected because of their convenient accessibility and proximity to the researcher. Note should be made that over 70 instructors received the questionnaire by hand or via email; however, only forty questionnaires were returned. In the second phase of the study, and having stratified the respondents pursuant to their gender and experience, 15 teachers were invited to partake in an interview session. They were all volunteers as they had been asked to leave their email and a phone number in case an interview necessity arises; and those half-hearted were not insisted so as to remove cooperation under sufferance.

No certain criteria were used for selecting the participants other than their gender and having ESP instruction experience at universities. For interviews, however, care was taken to choose an equal number of participants considering both genders and various levels of experience. As far as age is concerned, the teachers ranged from 25 to 55, and as for their experience, a second variable under study, there were 14, 16 and 10 instructors with 1 to 3, 4 to 9, and 10 and above years of experience respectively.

4.2 Instrumentation and data collection procedures

To gain insights into probable differences between male and female and among low, mid, and high-experienced teachers on the notion of resilience, the participants were surveyed via a 45-item, 5-point Likert-scale questionnaire ranging from “Definitely Agree” to “Definitely Disagree” (Connor & Davidson, 2003). Consistency coefficients were calculated for each subscale of the questionnaire based on data from the pilot studies. The internal consistency or reliability of the questionnaire was determined to be (0.67). The pilot tests support strong content and construct validity for the questionnaire instrument.

Although the survey measured constructs that have regularly been associated with teacher resilience in the literature, such as teacher efficacy, inclination in the job, motivational goals for teaching, self-perceived competence and satisfaction with teaching materials and strategies, this study was conducted to examine how male and female low, mid, and high-experienced teachers perceive resilient teachers, and whether they perceive themselves to be resilient.

Qualitative data collection technique was also employed in this study to better examine the study's naturalistic orientation. Qualitative data were a source of rich descriptions and explanations that conveyed the interrelated factors associated with the situation under study (Merriam & Simpson, 2000). For this reason, and to come up with serendipitous findings, a semi-structured interview session was arranged for 12 instructors (6 male and 6 female; 2 in each category of experience within each gender), which lasted for a time span of about 20 minutes, and reflected, for one part, on the very questions of the survey, and for another part, clustered around definition, self-related perception, other-related perception, and defining characteristics of resilience. The purpose of the interview, therefore, was to allow the researcher to enter into the other person's perspective (Merriam, 1991) and to determine the perception of resilient teachers. In order to minimize burden on the part of the interviewees, the researcher would commute to their convenient location, which in nearly all cases was their university of employment. The sessions were recorded using an MP3 player as well as a cell phone with in case one of the devices might fail to function properly.

5. Results and discussions

This section presents the findings based on the analysis of teacher participants' questionnaires and semi-structured interviews. Descriptive statistics measures were used to summarize the overall trends in the data, to identify the variability of scores, and to compare the scores. Moreover, taking advantage of SPSS version 18 software package, Chi-square and Std. Residual statistical measures were carried out on frequency counts. Collecting and analyzing data from multiple sources "triangulation

of method using quantitative and qualitative data analysis” (Neuman, 2000) allowed for the identification of resilience characteristics and the conditions affecting teachers and how their resilience influenced their ability to “continue and persevere.” Qualitative data were used to supplement and illuminate the data collected in the quantitative phase of the study. The results of the analyses and the themes derived from the data are discussed and organized in relation to each research question of the study.

5.1 Quantitative analysis

To explore the first research question, an analysis of chi-square is run to compare male and female teachers’ resilience. The results of the chi-square ($X^2(4) = 16.55$, $P < .05$) indicate a significant difference between male and female teachers’ resilience. Table 1 reveals the results of chi-square analysis for teachers’ resilience in terms of gender.

Table 1. Chi-Square resilience by gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.557 ^a	4	.002

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 39.90.

As also displayed in Table 2, the female teachers (Std. Residual = 2.3 > 1.96) have shown strong agreement with regard to their resilience. All of the other values of Std. Residuals are within the ranges of +/- 1.96. Thus, the results of the data analysis showed a statistically significant relationship between resilient teachers and gender. The female instructors recorded a higher resilience than the male instructors. The

fairly close values of percentages across all choices further support the above conclusion. One reason for this finding might be thanks to the fact that female instructors of ESP, particularly novice ones, were virtually seasoned General English instructors at university, while most of novice male instructors were new to both General English and English for Specific Purposes.

Table 2. Frequencies, percentages and std. residuals resilience by gender

		Choices					Total
		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree	
Gender	Count	50	182	200	429	208	1069
	% within Gender	4.7%	17.0%	18.7%	40.1%	19.5%	100.0%
	Std. Residual	-1.1	.5	.7	1.1	-1.9	
	Count	48	114	121	258	193	734
	% within Gender	6.5%	15.5%	16.5%	35.1%	26.3%	100.0%
	Std. Residual	1.3	-.6	-.8	-1.3	2.3	
Total	Count	98	296	321	687	401	1803
	% within Gender	5.4%	16.4%	17.8%	38.1%	22.2%	100.0%

To gain an understanding of the second research question, an analysis of chi-square was run to investigate the relationship between teaching experience and teachers' resilience. The results of the chi-square ($X^2(8) = 49.47$, $P < .05$) indicate a significant difference between resilience of teachers with different levels of teaching experience. Table 3 displays the results of chi-square analysis for teachers' resilience in terms of teaching experience that the teachers have had under their belt.

Table 3. Chi-square resilience by teaching experience

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	49.473 ^a	8	.000

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.12.

As also displayed in Table 4, the teachers with teaching experiences of one to three years are not decided on resilience (Std. Residual = 2.8 > 1.96). It is perhaps a truism to say that wisdom springs from experience, and as we shall touch upon strategies used by teachers with varying ranges of experience later in the conclusions section, we will see the wider variety of strategies pointed out which further consolidate this finding. The teachers with four to nine years of experience seem to hold contradictory views toward resilience. They have significantly selected the “NO idea” (Std. Residual = -2.3), “Agree” (Std. Residual = 2.8) and “Strongly Agree” (Std. Residual = -2.3). Finally, teachers with teaching experiences of 10 years and above are bipolar on their views toward resilience. They have significantly selected “Agree” (Std. Residual = -2.5) and “Strongly Agree” (Std. Residual = 3.6).

Table 4. Frequencies, percentages and std. residuals resilience by experience

			Choices					Total
			Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree	
Experience	1-3 Years	Count	33	98	145	229	132	637
		% within Experience	5.2%	15.4%	22.8%	35.9%	20.7%	100.0%
		Std. Residual	-.5	-.6	2.8	-.9	-.6	
	4-9 Years	Count	39	126	103	320	128	716
		% within Experience	5.4%	17.6%	14.4%	44.7%	17.9%	100.0%
		Std. Residual	-.2	.8	-2.3	2.8	-2.3	
	10 Years & Above	Count	29	71	76	138	134	448
		% within Experience	6.5%	15.8%	17.0%	30.8%	29.9%	100.0%
		Std. Residual	.8	-.3	-.5	-2.5	3.6	
Total	Count	101	295	324	687	394	1801	
	% within Experience	5.6%	16.4%	18.0%	38.1%	21.9%	100.0%	

Based on the obtained results, it can be concluded that the novice teachers, - with one to three years of experience, - are undecided on their views toward resilience. The teachers with moderate levels of experience, - four to nine years, - are not undecided but they have not yet show a complete agreement. The teachers with the highest levels of experience, in contrast, show the highest agreement with resilience. Hence, it can be claimed that as teachers' experiences boost, they move from undecided to agreement, and finally complete agreement.

5.2 Qualitative analysis

In the qualitative phase of the study, deriving from interview analyses, which intended to answer the third and fourth research questions, some new information has come to light on different qualities of teachers demonstrating resilience, thus adding to the

richness of the analysis while enhancing understanding of resiliency of the teachers. Responses were summarized, separated into common themes with teachers' responses categorized, and reported (Fraenkel & Wallen, 2003). Individual responses were analyzed using frequency count of Spreadsheet Software Package -Microsoft Excel. To analyze the interview results thematically, the questions were divided into three broader categories of (1) *Teachers' Attitude toward the Job* (interview questions 1, 3, 6, 9), (2) *Teachers' Perception of Resilience* (interview questions 11, 12, 13, 14), and (3) *Strategies Employed in Fostering Resilience in ESP classes* (interview questions 2, 4, 5, 7, 8, 10). Then they were discussed with their subcomponents according to the interview questions indicated for each category. As far as "teachers' attitude toward the job" is concerned, four areas were sought out: Interest in the job, prospective side of the job (job satisfaction), negative side of the job (sources of dissatisfaction), and if teachers have ever thought of quitting the job. These aspects are presented below, in order of relative significance employing the teachers' comments and responses as illustration and evidence to complement the findings of this study.

5.2.1 Interest in the job

All 12 interviewees gave their "yes" to if they have inclination toward their job as an ESP instructor. Amongst the most frequently named reasons for their interest stand: "it is something different" (8), "I learn new things" (7), "I love teaching" (5), "it is relevant to my major of study" (3), "it's fun" (2), "it opens other opportunities" (2), "it's challenging" (2), "it's financially motivating" (1), and "I love students" (1), with parentheses representing the frequency that each theme was mentioned on the part of

the interviewees. Below is a 1-to-3-year-experienced female teacher's response regarding her interest in the job:

Yes, it is ok. It is somehow *different* from the regular English courses that I used to teach. It is *something new*, somehow.

5.2.2 Prospective side of the job (job satisfaction)

Two-thirds of the respondents see a promising future ahead of their career. It is interesting to note that early career male teachers do not see a burgeoning window of opportunity as far as ESP teaching is concerned. For sure their lack of experience in ESP, for one thing, is why they are not hopeful toward their future. For another thing, not only are they novice in ESP, but also they are new to General English courses, which is undeniably a cause for their negative attitude toward future prospects. Here is what a male instructor with over 10 years of experience remarked as to his verdict on his future in the job:

Because I am interested in my job, I am *optimistic* about it. I think I can have a *shiny future* in my job.

5.2.3 Negative side of the job (sources of dissatisfaction)

It came as a surprise that except for two cases, the other 10 uttered that they were at times dissatisfied with their job for some several reasons. The outstanding reasons for disappointment in their job emanated from financial issues (7), student's lack of knowledge (6), inefficient educational planning (5), students' lack of interest (3), lack of facilities and freedom (2), and students' fear of being exposed to a new language

(1). Here is what a male instructor having 4-9 years of experience of teaching ESP responded:

I think getting disappointed is quite natural at any jobs... It can have lots of sources. For me it is also the case, I am not an exception. Sometimes I feel tired of teaching ESP courses and get totally disappointed. *Students' lack of interest, students' fear of being exposed to a new language, schools' administrative policies* or even *financial problems* can be some of these sources.

5.2.4 The idea of quitting the job

When asked if they have ever thought of withdrawing from their job, other than a male respondent with 1-3 years of experience upset that teachers are not valued, the others claimed not to have considered withdrawing from the job. The following are the replies two early career instructors-the first one being a man, and the second one being a woman- offered:

- a) *Sometimes I have a thought about it. Because I think in our society actually people or authorities do not consider teachers as actually to be influential in society and they don't value, don't care about the teachers, so it bothers me sometimes. I think I should give up teaching forever.*
- b) *No, never. I've never had a very serious problem as I have already told you I feel very comfortable with my work, with my capabilities and fortunately as I've been told I have a very good social skills that's why I can pretty easily get along with students and I do enjoy my job.*

Some of the questions raised for the teacher interviewees in this study are the ones also used in Stanford (2001), conceding that interest in and satisfaction with the job are of great moment to measure resilience in teachers. In addition to the

aforementioned questions, four areas of definition of resilience, qualities known for resilient teachers, self-perception of resilience, and whether it is possible to boost resilience in the classroom were raised to examine teachers' perception of resilience. Although the first and second parts; i.e. definition of resilience and qualities known for resilient teachers bear close resemblance, it was thought that in defining resilience teachers might not fully express the required qualities. Therefore, it intended to elicit more qualities on the part of the instructor interviewees being put as another major category and question.

5.2.5 Definition of resilience

In defining resilience, the following features were mentioned, which are presented in the order of their frequencies: flexibility (7), problem-solving (6), bouncing back (5), withstanding the difficulties (5), being patient/tolerant (4), being committed to the job (3), and potential for turning something unpleasant into something pleasant (1). The following is an excerpt from a female instructor's answer with 4-9 years of experience:

I think it's a problem with ESP courses *when you don't feel happy with your class and you try to maintain that wellness or happiness after a period of disappointment, or when you are off the track and you want to be again on the track, or be flexible to handle problems* so that you are again successful after a period of failure. This is what I understand from resilience.

5.2.6 Qualities known for resilient teachers

The participants' descriptions of resilient teachers also emphasized the significance of being flexible (8), problem-solver (7), patient (5), resistant against difficulty (4), creative (3), adaptive (3), energetic (2), friendly (2), understanding (1), forgiving (1), realistic (1), able to manage the class and students (1), self-evaluative (1), affective (1), autonomous (1), motivated (1), good discoverers (1), good learners (1), and self-esteeming (1). A male teacher with 4-9 years of experience responded:

A resilient teacher is the one who may get angry of the class or tired of the teaching practice but may not leave the job. Instead of quitting it, she/he finds ways to overcome the difficulties. It is a mastery which can be gained through being patient and having knowledge of class and student management.

5.2.7 Self-perception of resilience

When queried whether they thought of themselves as resilient, every single teacher answered "yes". They retorted because: I am flexible (4), always try to solve problems (6), never give up (5), am adaptive (4), am patient (3), am hard-working (3), use a variety of techniques and strategies (3), never get disappointed (1), am motivated (1), am self-esteeming (1), and am realistic (1). Here is a female instructor's comment, with 4-9 years of experience, to if she considers herself resilient:

Somehow yes, because if I face a problem, I try to solve it, and don't put it away.

5.2.8 Ways to foster resilience in the classroom

In determining the feasibility of developing resilience, except for an early career female instructor, the remaining 11 instructors opined that they see it possible to foster resilience. Suggestions they made for fostering resilience were through sending resilient teachers to classes (6), preparing teachers before taking the class as to how to handle difficulties, stress, etc. (3), trying hard (4), encouraging and motivating students (4), adding variety to what and how we teach (4), building a friendly atmosphere in the classroom (4), enhancing problem-solving skills (3), involving the students in the teaching process/syllabus development (3), updating our knowledge (2), using sense of humor (3), practicing (2), requiring novice teachers to observe experienced instructors' classes to gain insight (2), being in contact with our colleagues (2), doing research (2), increasing interaction between teacher and student (1), using authentic materials (1), being realistic (1), being good discoverers (1), and classroom management (1). A male experienced instructor with over 10 years of experience claimed that:

[We can foster resilience in the classroom] by *adding variety* to our way of *teaching and class management*, using *sense of humor*, *involving students in the teaching process*, and so on.

The final phase of interview analyses pertains to strategies employed in fostering resilience in ESP classes, which is further scrutinized into 6 subcategories of: Ability to handle the job successfully. And How?, Influence on students' lives, Methods of improving the job, Applied changes to the teaching method, styles, and materials, If they Will appeal to a colleague for help, and Strategies adopted to cope with difficulty, stress, etc.

5.2.9 The feasibility of handling the job successfully

All 12 participants in the interview held that they were successful in their job. Perhaps not surprisingly, particular strategies for optimal ESP classes such as being well-*organized, planned, prepared, and managing time* (9 responses) and following *effective instructional strategies* (5 responses) were mentioned. Modifying and adapting materials to students' level (8), providing positive feedback on the part of the students (6), not sticking to pre-determined materials (6), doing a needs analysis prior to kicking off instruction (5), motivating/encouraging students (4), trying to improve the students' general English (4), staying up-to-date (3), using a variety of sources (3), giving feedback (3), not just focusing on linguistic elements (2), asking the students to evaluate themselves and the class (2), being energetic/active (2), facilitating learning for the students (1), involving students in materials provision, keeping up with technology (1), and being realistic (1) are the themes found in ESP teachers' responses with regard to the strategies they devise to succeed in their instruction. An early career female instructor's response was:

I believe I'm doing my best and *am successful* as an ESP instructor. I try to *stay up to date* and I *put a lot of energy in my classes*. First of all, I try to *keep up with the most recent technology* and I'm *not confined to* what the university really offers; *only the textbooks of the university*. I am very *collaborative with my students* and I really *motivate them to get involved in the process of providing the material and engaging in the classroom activity*.

5.2.10 Influence on students' lives

Telling different stories, all interviewees are of the opinion that they have played a significant role in their students' academic life, and all have been influentially

effective at their lives. However, it was pointed out at times that due to the relative short length and number of the courses, the effect is rather relative than absolute. A 4-9-year-experienced male instructor's reply is as follows:

I do believe that *I am influential* at least in their academic achievement and excellence. It is clearly visible when I see *their gradual development* in academia.

5.2.11 Methods of improving the job

When the ESP teacher respondents were asked about what methods and strategies they would choose to boost the quality of their teaching, they identified methods including update my knowledge of content, find a variety of supplementary materials, adapt the materials to the students' level, use techniques of teaching that best suit the students' learning styles, motivate students, build up friendly relationship with students, consider students' needs, go to class prepared, keep contact with neighboring colleagues, try to be realistic, use authentic sources, use technological tools, participate in discussions with experienced teachers, check research papers on new developments in ESP, and give students tasks to do with 8, 5, 6, 4, 4, 5, 4, 5, 4, 1, 2, 1,1,1, and 1 time frequency of occurrence respectively. A medium-range-experienced instructor replied:

Naturally, I try to *update myself*. But the more influential factor to improve the teaching quality is to *provide students with motivation*. Besides, although I'm serious at teaching and behavior, I try to *make a friendly atmosphere* to qualify my teaching.

5.2.12 Applied changes to the teaching methods, styles, and materials

In that phase of interview, interviewees were asked if they would make any changes to the existing materials. 9 out of 12 teachers who were interviewed said “yes”. More noticeable was that out of the 3 participants who gave their “no” to the question, two were teachers with 4-9 years of experience. “No Change” reasons mentioned were lack of time, lack of energy, and students’ unwelcoming attitude with 3, 1, and 1 frequency of responses. Here is how an experienced male teacher reacted to the question:

No, seldom. Because any change in lesson plan or materials needs a lot of time and energy, and I don’t have enough time for this purpose.

5.2.13 Appeal to a colleague for help

Collaborating with others, such as other teachers, experts) seems to assist teachers to sustain psycho-social support they require. Bryk and Schneider (2002) similarly maintain that teachers’ interpersonal relationships are strengthened through distinct sets of role relationships: “teachers with students, teachers with other teachers, teachers with parents and with their school principal” (2002, p. 20). In this study except for one, other teachers pointed out that they would willingly ask a colleague for assistance if they encounter difficulties. Another teacher mentioned that she would only appeal to a colleague experienced in that particular field, and would not do so to a colleague in TEFL. The one against this idea was an early career male instructor who believed:

To be perfectly honest, no. I mean the answer is somehow negative, because I think of myself as a big one because I study at Allameh Tabataba’i University, a kind of reputable university, so why ask a

colleague, I mean a person who hasn't any good experience or quality of university. It's not because they don't know anything, it's because *I am a kind of self-centered person.*

By the same token, Schaufeli and Bakker (2004) found the obverse that a lack of social support from colleagues could lead to teachers' emotional exhaustion and depersonalization. Support for the importance of problem-solving and help-seeking is discussed in Castro, Kelly, and Shih's (2010) study, where they concluded that "problem-solving strategies and techniques must become an essential part of the novice teacher's training and experiences" (p. 629) and that "teacher educators and school leaders must provide an atmosphere that allows novice teachers to feel safe when they seek advice, guidance, and support" (p. 629). Here is another early career female teacher's comment:

For *sure*. Even English instructors, or sometimes I refer to other professors in order to get some information and help.

5.2.14 Strategies adopted to cope with difficulty, stress, and problems

The last phase of the interview analysis deals with the ways teachers use to survive in times of difficulty or stress. The most frequently cited strategies are try to be patient and calm (4), contemplate on the problem and try to solve it (4), use sense of humor (3), talk to myself (2), talk to the students (2), try to be flexible (2), will ask for advice from professional people (3), will try to be easy-going (1), will make the class more challenging (1), and use my experience, I will not show my stress (1). A male instructor with 4-9 years of experience, in response to "How do you maintain a sense of wellness in times of difficulty?" states that:

I try to be patient and keep calm. I do believe that a teacher should be patient otherwise he/she should not start the teaching process. Teaching is not just coming to classes and talking to a group of students, it's living with them in fact.

The features enumerated above are in all cases the exact words used by the teachers to respond to the questions posed in the interview. A great number of the features for resilience named are in compliance with Mansfield, et al. (2012) both with the ones that have higher frequency; that is, being patient (thick-skinned), positive, persistent, confident, and using sense of humor and those that have lower frequency such as being flexible, adaptable, prepared, realistic, and seeking help from others. Overall, 56% of ESP instructors described resilient instructors and their own perception of resilience by focusing on its emotional dimension, 64% manifested motivational side of resilience, 43% had zoomed in the profession-related aspects, and 38% evinced the social features of resilience in providing supports or constraints for the development of teacher resilience.

Although years of experience generally relates closely to the teacher's age, some teachers have less experience than might be expected for their age as a result of being late entrants to teaching or due to taking a career break. The interview results contradict, in part, the findings of the questionnaire, because novice instructors also showed a good deal of resiliency and had a lot in common with medium-experienced and experienced teachers. Even teachers in the middle category with 4-9 years of experience showed high perception and understanding of resilience, coupled with resilient characteristics they pointed out. One reason, as mentioned earlier, for such a finding can be the fact that some novice ESP instructors in this study are experienced General English instructors who lack a long career in ESP in particular. This further backs the notion that experience is not necessarily a determining factor for resilience.

Another reason may root in the conjecture that teachers who responded to the questionnaire lacked a clear-cut understanding of resilience and did not find it illuminating enough, and only after they had filled out the questionnaire, and during the interval between responding to the questionnaire and partaking in interview session, did they come to realize what lies in resilience. Finally, with all due respect to every single respondent for their candid cooperation, it is likely that the items were not answered with due care, which led to results which are not fully consistent across different means of measurement.

6. Conclusions and implications

Research specifically focused on ESP teacher resilience is in its infancy. Whilst much can be gleaned from the resilience literature generally, the specific and complex nature of teachers' perceptions and beliefs demands that research be focused on the variables that demonstrate teachers' capacity for resilience. This study highlighted the range of understandings and perspectives of ESP teacher resilience as described by male and female teachers with various years of experience. In addition, it identified the leading factors which can enhance the resiliency of the teachers and shed light on how resilience is manifested by individuals in ESP contexts.

The analysis of the findings revealed contradictory results, as questionnaires gleaned from teachers showed higher degree of resilience among females, as to the years of experience, likewise those with 10 and above years of experience were by far more resilient compared to teachers with 1-3 years of experience, and teachers with 4-9 years of experience who demonstrated contradictory views toward resilience. These results corroborate the prior research on resilience, which describes resilience as the

developmental process to successfully adapt and thrive in the face of difficulties or challenges (Coutu, 2002; Garmezy, 1990; Masten, Best, & Garmezy, 1990; Werner & Smith, 1992).

Interview results, however, produced first hand proof on teachers' high resilience between males and females and across different experience categories. Moreover, numerous themes emerged from the interview analysis that revealed certain personal qualities, interests, beliefs, behaviors, skills and areas of knowledge associated with multiple dimensions of teacher resilience introduced by Mansfield, Beltman, Price, and McConney (2012), namely motivational, emotional, profession-related, and social dimensions.

From emotional perspectives, ESP instructors were found to be patient, interested in their job, capable of dealing with their job demands and stress, and determining what they can control or change. The motivational aspects of the instructors also revealed that they were confident, motivated, persistent, optimist toward their future, in favour of challenges encountered in the classroom, developing realistic goals, and focusing on small steps that will move them toward their larger goals. In terms of social dimensions of teachers resilience, they enjoyed good communicative skills and were keen on developing interactive behavior in their classes, solving problems, seeking contribution and the support of others like friends, colleagues, and other instructors, and maintaining their relationships with others. The profession-related aspects of teacher resilience were also manifested by their devotion toward their classes and their students, considering their students' needs, developing their teaching skills, good classroom and time management, being malleable and adaptable, and not afraid of facing problems in the class and taking actions.

Despite all this, it would not be too much of an exaggeration to say that nearly all teachers, with minor differences, have a high perception of resilience. Although the quality of strategies varies as the experience goes up, novice and medium-range experienced teachers are not devoid of this quality. It is vivid, then, that resilience is a multi-faceted and dynamic construct (see also Oswald et al., 2003). It is not a static state and is closely related to multiple variables and the quality of relationships in the environments in which individuals work and live like ESP. More importantly, past research on resilience indicates that an array of attributes of resilience interacts with the environment, depending on the type of challenge (Benard, 2004).

Research on resilience also states that with an adequate resilience-supporting environment, strength can emerge from adversity (Higgins, 1994). The teacher participants of this study were eager to appeal to their colleague for help which allowed them to better interact with their environment based on their values and beliefs. It was this dynamic interaction between teachers (with their colleagues, experts, and students) and context (micro and macro context) that created change agents and determined their positive attitude toward resilience. Accordingly, the central question is not only to have a better understanding of the teachers' perceptions, beliefs, attitudes, and their capacity to teach well over the course, but also to identify the factors that can affect their perceptions, further, how teachers' resilience can be nurtured and developed. Finally, it is hoped that the study would contribute to a small but growing body of research on resilience, its contributing components, and the interface between resilience and other factors needed for teacher efficacy.

The findings of the current work can have implications for would-be teachers who are after taking teaching as a prospective career in the future. This way, a

proactive approach will be adopted rather than a reactive approach, minimizing future shortcomings. It can be potentially insightful for early career instructors to broach their job as effectively as possible through being sensitized with the significant qualities for teaching. It is also beneficial to in-service instructors who are seeking out ways to enhance their effectiveness. Students can also gain benefit from the findings through getting familiar and putting into practice strategies which contribute to development on their part. Materials developers can give the materials and sources specified for ESP courses a second thought. And finally at broader scopes, university administrators and policy-makers can take into account the themes mentioned in this study both for recruiting and training instructors. Specific personal skills such as managing stress, self-regulation, and coping behaviors can be taught according to their needs (Chan, 2008; Klusmann et al., 2008) to enhance teacher resilience and quality of classroom instruction not only in ESP but also in ELT classes. More importantly, resilience-building activities in pre-service and induction programs should include teaching social skills, assertiveness training, self-regulation strategies, and empathy (Tait, 2008).

Even though the field of resilience has seen some studies, it is still a fledgling one calling for a host of complementary studies to bridge the existing gaps. A similar study at a larger scale is necessary, as opposed to suggestive, focusing on gender- and experience-prone differences betwixt and amongst teachers to come up with sound concrete results that increase the generalizability of the findings in this study. A dearth of research is also vividly visible as far as students' degree and perception of resilience is concerned. In the same vein, it is also under-researched how resilient students can foster resilience in their teachers, if at all. A further study can illuminate existence or non-existence and degree of resilience in teachers of other context, such

as General English teachers at universities, General English teachers at language institutes, ESP instructors at language institutes, and School English teachers to see if similar finding arise. Lastly, an analysis can be run on the nexus between resilience and other characteristics of teachers such as self-efficacy and career longevity, to name a small few.

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Appendices

Appendix 1: Teacher Questionnaire

Dear Respondent,

This questionnaire aims at looking into your actual teaching practices as an English teacher.

Your careful completion of the questionnaire will definitely contribute to real data and is greatly appreciated.

PART 1: ESP Instructor's Features:

1. Age:.....

2. Gender: Male ☐ Female ☐

3. Years of experience at University: a) General English:years b) English for Specific Purposes: Years

4. University: ☐ State ☐ Azad ☐ Payam Noor ☐ ElmiKarbordi

5. Is it ok if I invite you to a 15-minute-long interview concerning the very same points raised in the questionnaire? Yes, sure./ No, sorry.

6. E-mail:

Phone Number (Optional):

PART 2: Please put a check mark next to the box which best describes your perceptions about your job as an English teacher. The information will be kept confidential and will be used just for research purposes.

Thank you very much in advance for your time and kind cooperation.

1: Strongly Disagree 2: Disagree 3: No Idea 4: Agree 5: Strongly Agree

Items	Strongly Disagree	Disagree	No idea	Agree	Strongly Agree
1. I stay in my job because I love teaching.	1	2	3	4	5
2. I try to improve my teaching performance by participating in discussions with my colleagues or some more experienced teachers.	1	2	3	4	5
3. I like teaching because I can communicate with other people.	1	2	3	4	5
4. I think of leaving teaching because of heavy workload.	1	2	3	4	5
5. I stay in my job because I love my students.	1	2	3	4	5
6. I try to improve my teaching by reflecting on my strengths and weaknesses.	1	2	3	4	5
7. I get disappointed when students are not motivated to study English.	1	2	3	4	5
8. I am highly confident of my ability	1	2	3	4	5

to help my students achieve their educational goal (e.g. getting accepted in exams).					
9. I mentor (guide) other teachers especially novice teachers.	1	2	3	4	5
10. I regard myself as effective in peoples' life and for the society.	1	2	3	4	5
11. I cannot create a balance between my work and my personal life.	1	2	3	4	5
12. I am serious about my job and I will get disappointed if my students do not take my class and learning English seriously.	1	2	3	4	5
13. When I face challenges in my workplace I do not give up and try to solve them.	1	2	3	4	5
14. I have difficulty in teaching something totally new (new methodology, new books, or a new class).	1	2	3	4	5
15. I am optimist about my future as an English teacher.	1	2	3	4	5
16. I do not have access to all the resources (tape recorder/CD player, TV ...) that I need for my class at school.	1	2	3	4	5
17. I am highly confident of my ability to teach people something they do not know.	1	2	3	4	5
18. I try to improve the quality of my teaching through different ways e.g. searching in the internet, reading books, and attending conferences and workshops.	1	2	3	4	5
19. I get disappointed by the schools' strict rules.	1	2	3	4	5
20. I am able to make friends with my students easily.	1	2	3	4	5
21. I try to prepare my students for their life in the future by talking about my own experiences in life.	1	2	3	4	5
22. I try to make my students motivated to learn everything, not only English.	1	2	3	4	5
23. I am confident that I can manage difficult relationships with my colleagues in my workplace.	1	2	3	4	5
24. I am not satisfied with my salary.	1	2	3	4	5
25. When I am tired, I try to get my energy back by talking to my students.	1	2	3	4	5
26. I make use of different teaching techniques in my classroom to satisfy different students' style of	1	2	3	4	5

learning.					
27. If I feel that my students do not like a part of one lesson I will change it based on their needs.	1	2	3	4	5
28. I have to practice a teaching methodology that is different from what I think is a fruitful methodology in language teaching.	1	2	3	4	5
29. When I am tired, I go to my colleagues to get energy and support.	1	2	3	4	5
30. The difficulties that exist in my job do not affect my teaching.	1	2	3	4	5
31. I ask my family to help me with my teaching problems.	1	2	3	4	5
32. I care for the slow learners in my class by paying special attention to them one by one.	1	2	3	4	5
33. I ask my close friends to help me with my teaching problems.	1	2	3	4	5
34. I am unable to meet various needs of my students (e.g. their different learning styles, their various expectations of the class).	1	2	3	4	5
35. I get disappointed of my students' disruptive behavior in class.	1	2	3	4	5
36. The out of date books and materials that I have to teach make me disappointed.	1	2	3	4	5
37. I will see a bright future for myself as a teacher, full of successes in my job.	1	2	3	4	5
38. I have difficulty following the syllabus that the institute/school has set for my class.	1	2	3	4	5
39. I do not think of stopping teaching.	1	2	3	4	5
40. I care for the students' satisfaction with my class and I feel good if the students are satisfied and happy in my class.	1	2	3	4	5
41. I do not ask my colleagues for help in my teaching problems because I think they may consider me an incompetent teacher.	1	2	3	4	5
42. I have a friendly relationship with my colleagues.	1	2	3	4	5
43. I am a successful teacher.	1	2	3	4	5
44. I am unable to adapt myself to my students' culture.	1	2	3	4	5
45. I am rewarded by my school manager (by giving positive feedback, payment rise...) for the efforts I put into my job.	1	2	3	4	5

Appendix 2: Teacher Interview Sample

1. Do you like your job as an ESP instructor? What are the reasons you have for staying in your job? (What influenced your decision to become an ESP teacher?)

Generally speaking I do enjoy being an instructor and I have extensive experience with regard to ESP classes at various universities for example university of Science and Technology, Sharif University and Azad university, Engineering Faculty. Yes, and I have a great passion for that.

The type of development, I'm constantly developing in my job I don't want to say that our job is a matter of trial and error, but it is a way for development, this job has made me an analyst person, a great psychologist, the advantages and benefits that I gained made me a persistent person in this field.

2. How do you regard yourself as an ESP instructor? What skills and talents did you bring to the classroom and your career?

Instruction requires several skills, I mean with communication skills more importantly, those regard to language knowledge, content knowledge, linguistic features, these skills are required more importantly interactive skills are more concerned because ESP learners are usually taught in a very cliché you know in a way that they easily get bored so an ESP instructor should be primarily a good researcher, a good discover, a good communicator, a good advisor at the same time, not just focusing on the certain linguistic elements . being theOf the class, Enjoying a good knowledge, skills is the way to build up skills, I mean various qualifications are required, I mean a good evaluator a good developer of the materials , You know they are all significant features more important to me a good facilitator , usually as you know ESP classes are more apt for the students to high intermediate and advanced and make sure that the students have reached the level , you know completely economist. We are there to set consultation, they can concentrate but we should be a good source of good feedback to them at the same time, we should be good advisors ,counselors.

3. How do you consider your future as an ESP instructor?

As an ESP instructor not that much of satisfaction because the area of research ,we have made a very good progress but it is not sufficient, We don't receive much of research fund, We have problem with conducting ESP, I can not yet identify the cause, there are many learners ,there are many people who are interested in doing research in the field of education, and when it comes to ESP they turn back, they retreat ,as an instructor who enjoyed extensive experience I could not have identified the cause maybe they have not had much experience of teaching ESP, they do not know much about ESP classes ,learners, models, materials, there are maybe a lot of predicaments and the problem ,some known and some unknown problems.

4. Do you regard yourself as an influential instructor in your students' lives?

That is a hard question to be answered because I cannot make judgment, you should have asked my students but as far as they are nodding in the class they may learn and they are satisfied, maybe, probably yes but I do try, I do my best and attend all my classes with more preparation comparing to my even other classes. I never underestimate my ESP classes, I know but under the title of being ESP, no. I guess, I suppose that I have to enrich my knowledge of content as well as ... even I have to be more organized more planned to run the classes in a neat way, in an organized manner.

5. What do you do to improve the quality of your teaching?

As one first quality I mentioned, a good ESP instructor should be a good researcher, I try to go over, take advantage of the result of studies conducted, I mean reading a lot of research papers, journals, forum, I try to be in contact with my other colleagues in other sections or departments, conferencing with my students because we know that in teaching ESP we have to focus on our learners' s so I try to develop my repertoire, issue that I should consider in my ESP classes I take even other ways for development.

6. Do you ever get disappointed at your job? What are the sources of this dissatisfaction?

Hmm of course it has rarely happened but sometimes it happened due to the lack of facilities, lack of resources lack of materials, I mean the students are not that much motivated due to their lack of knowledge ,they could be the causes but I always try to bring lots ofto my classroom Not that much of dissatisfaction or frustration even if it was so temporary I mean a temporary period it was a tension, it did not take for long.

7. Do you ever make modifications in your lesson plan and teaching techniques to satisfy your students' needs and learning styles?

Constantly, because I'm a continuum of perfection and there is no perfect optimal thing for me even if I teach a course whatever even concerning GE or ESP , I always modify my ,plan I try to make it be up-to-dated and try to make good adaptation.

8. If you have difficulty with some parts of the course, will you ask a colleague for help?

Why not! Yeah. They could be good sources for information. They may have experience, see, we cannot develop our knowledge we cannot be full, tactful, or skillful in all aspects, there are lots of things I can learn from my colleague. It's really rewarding and I really go for it.

9. Have you ever considered withdrawing from teaching? If so why and what helped you decide to continue?

No, never. If I pick the course or if I reached it, I had lots of offers, I mean in various disciplines, I was proposed by different people at high positions but no, I am really zealous.

I thinkthe pleasure I gain through my students learning I cannot compare it with other type, I mean you may find... here but that's really the best thing to me because teaching requires talent, creativity, you should be initiative, it's a way for developing self-efficacy. Let's say developing confidence. These are lots of advantages that these all had given me a huge amount of inspiration.

10. How do you maintain a sense of wellness in times of difficulty or stress?

That's a lot helpful, these are situations taken experience but how, we should try to change, we rebound, we turn back, but we should be able to be flexible enough, not to be rigid let's say, adapt that situation, if we want to withstand, we have to survive after all, ok, but there are cases we feel stressful If we say I have never experienced, it's a big lie, we all have experience....but I did my best to look for good solution way to survive and find in and avenue to survive after all.

11. What do you understand "resilience" to mean?

As a professional person in the field you know I have these lessons and these things, I try not to fight people but to give my own impression of understanding and resilience, what I found of resilience is withstanding the situation, it is just a way for development, I mean dealing with Stress, fear, problems in order to change to adapt in case of satisfaction even in the face of opposition I mean adversity In the case, hmm even if at times you get bitter experiences.

12. How do you identify resilient teachers?

They are autonomous as I mentioned, they are energetic they are creative they are I mean motivated you know these are teachers I can name resilient, flexible even, so that they can adapt to the situation and enjoy high sense of self-esteem. These are affective teachers, I can say I can identify these teachers into four classes; affective, motivational, social featured, professional featured, skills- development, strategies these are features which are required for let's say ESP classes.

13. Do you consider yourself resilient? Why?

That is a harder question for responded, that was why I could say I have reached this state experiences, several years of instruction ESP and EGP, I suppose I partly enjoyed I cannot absolutely say that I enjoyed all features in high racial but partly I can say yes, I can see myself a resilient one. I can name myself a resilient.

14. In your experience, is it possible to foster resilience in the classroom? If so, how can this be achieved? If not, why?

Yes in the way I define, resilience is a process ,or resiliency is a process, I mean we have to go for steps, developmental periods through it we can facilitate or build resilience by being in contact with colleague or talking to students , being good discoverers, researchers, I mean doing good research , updating our knowledge, and to know how to resolve problem, I mean problem solving skill is gained and developed through experience, and we get more and more experience and that is a way for further development and that is why we are doing research , studying, talking, conferencing, and motivation is a very significant element, something we push it onward to become a resilient and a successful ESP instructor.

Motivation in the ESP Classroom:

The Case of Algerian Biomedical Engineering students

Hafida Hamzaoui-Elachachi and Wassila Bouklikha Graia

University of Tlemcen, Algeria

Biodata

HAMZAOU-ELACHACHI Hafida is a Professor at the University of Tlemcen (Algeria), Department of Foreign Languages, Section of English. She holds a PhD in Applied Linguistics and TEFL and has conducted several studies in this area paying a special attention to the development of EFL learners' writing skill and the exploration of language learning strategies. Being the head of a research group in the ESP T LAB, her present interest lies in teaching English for specific purposes taking part in projects working on learner needs identification and analysis and course design in different ESP contexts. Email: hamzaouihafida@yahoo.fr

BOUKLIKHA GRAIA Wassila is a lecturer at the University of Tlemcen (Algeria), Department of Foreign Languages, Section of English. She started as an English teacher in secondary schools, then held a Master degree in ESP and taught English for specific purposes in the department of engineering for three years. Being a member of the research laboratory ESP T LAB, she is mainly attracted by learner affective variables and interested in how to control such variables to optimize learning in an ESP context.

Abstract

When trying to explain any success or failure in English language learning, motivation is often used as a key factor which determines the rate of success. This affective variable plays an even more important role when English is learned for specific purposes. This is why the present study explored learner motivation in an ESP context trying to find out the causes of learner low motivation. This case study involved third year biomedical engineering students at the University of Tlemcen (Algeria), and combined three data collection instruments: a students' questionnaire, a structured interview addressed to ESP teachers, and a classroom observation. The results revealed that biomedical engineering students lack motivation because of a number of reasons such as low English language proficiency level, inappropriate course content, teaching methods and materials, unpleasant classroom atmosphere, inadequate teacher-student relationship and finally insufficient timing allocated to the English course. The results also indicated that ESP teachers could create a motivating learning atmosphere by focusing on learner needs and involving students in the process of course design.

Keywords: Motivation, instrumental vs. integrative motivation, ESP teaching, biomedical engineering students, learner needs.

1. Introduction

English is becoming more and more important as a vehicle of information and means of communication in political, economic and scientific interactions. In the field of engineering, for instance, research showed that the English language is essential in the

academic and professional lives of students (Pendergrass et al., 2001; Pitchard & Nasr, 2004; Sidek et al., 2006; Venkatraman & Prema, 2007). However, biomedical engineering students at the University of Tlemcen, Algeria, show little interest towards learning the English language and this affects not only their language competence, but their academic success as well. This is problematic as these students are often required to use English in their studies, for most of their references whether printed or electronic are in English. Although these students learned General English at middle and secondary schools and receive an English course at university, they still show a weak ability to read, comprehend, write and speak this language. This handicap lowers even more their motivation and interest for English language learning.

Then, believing that motivation is a driving force for learning, this study tries to examine this affective variable in an ESP context, to identify the factors that cause its lack among learners and try to find out strategies to raise it. For this purpose an investigation was conducted on biomedical engineering students at the University of Tlemcen, Algeria, putting forward the following research questions:

1. To what extent are biomedical engineering students motivated to learn English?
2. If low motivation is shown, what are the reasons?
3. How can these learners' motivation be raised?

The results of this study are aimed to shed light on the issue of motivation for ESP teachers to make the language learning process a more motivating and enjoyable experience by developing adequate teaching programs which maintain student interest and obtain short term goals.

2. Literature review

In today's fast moving world, people are eager to learn a foreign language for their personal or professional development. Reality, however, rarely lives up to these ideals. Research has shown that motivation is the greatest problem of education faced by classroom teachers. This lack of motivation is very often recorded in the context of ESP as most of the time students are not compelled to attend classes, and seem to be bored expressing their dissatisfaction with the content of their course which is limited to a set of specific terminology, some grammar points and activities related to word or text translation. Indeed, "This approach which basically ignores learners' personal interests and needs often creates low motivation in students' English studies and, in turn, leads to poor performance later when they use English in their profession." (Ghalandari & Talebinejad, 2012:21). It is, then, important in an ESP course to address learners' needs and interests to raise their motivation which leads to more effective language learning (Hutchinson and Waters, 1987).

Before the exploration of motivation in the ESP classroom, it is important, first, to define it and understand how it functions. In different contexts, the term has been used to signify a variety of meanings from general disposition to do something, as "a blanket term" (William & Burden, 1997), to the initiation, direction, intensity and persistence of behavior (Keller, 1983). It is a multifaceted theoretical construct composed of many overlapping factions, such as interest, curiosity, and desire for something (Brophy, 1987), all of which may be caused, or enhanced, by either internal or external factors, or even both (William & Burden, 1997: 120).

As far as Second/ Foreign Language (SL/ FL) learning is concerned, the term motivation is "referring to the extent to which the individual works or strives to learn

the language because of a desire to do so and the satisfaction experienced in this activity” (Gardner, 1985: 10). Gardner adds that motivation in language learning is the “effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language” (ibid: 10).

There are internal and external factors that affect students’ motivation to learn a second language. The internal factors are, for instance, the learner’s age, gender (girls are known to acquire languages faster than boys), goals, needs (how much one needs to learn this language), interest and curiosity (how interested one is in learning this language), attitude (toward the target language), competence, and self-efficacy. External factors can be the teacher and his role in encouragement, expectations, feedback, scaffolding, course content (whether it is attractive, challenging and relevant to the learner’s needs), classroom atmosphere, social identity, home support, and learning environment.

According to the student’s drive to learn, his/ her motivation can be either integrative or instrumental. The first orientation lies in "learning a language because the learner wishes to identify himself with or become integrated into the society” of the target language (Gardner, 1983: 203). On the other hand, instrumental motivation is defined as "learning a language because of someone or less clearly perceived utility it might have for the learner" Gardner (1983: 203). Both are important for language learning if the learner is highly motivated as pointed out by Gardner and MacIntyre (1995: 208).

... it is not so much the orientation that promotes achievement but rather the motivation. If an integrative or instrumental orientation is not linked with heightened motivation to learn the second language, it is difficult to see how either could promote proficiency.

In the field of ESP, motivation is the starting point to learning. Hutchinson and Waters (1987) maintain that since ESP answers the learner's needs, it may be more motivating than learning English for general purposes because students can transfer what they learn in their English classes to their main field of study. Being able to use the vocabulary and structures that they learn in a meaningful context reinforces what is taught and increases their motivation. Yet to maintain this motivation, Hutchinson and Waters (1987:8) recommend the relevance of the course content to the learners' needs stating "... the clear relevance of the English course to their needs would improve the learners' motivation and thereby make learning better and faster"

Then it becomes clear that motivation is a key element in ESP course design which in turn is guided by learner needs analysis. These needs are divided into two types: target needs and learning needs (Hutchinson and Waters, 1987). The former are required by the target situation and can be put under three categories: necessities, i.e., what the learner has to know in order to function effectively in the target situation; lacks, i.e., the gap between what the learner already knows and what is needed from him; and wants, i.e., the learner's own perception of his needs. On the other hand, learning needs are "what the learner needs to do in order to learn" (Hutchinson and Waters, 1987: 54). They are as important to consider in an ESP course design as target needs. Tahir (2011: 6) describes the nature of these needs: "learning needs can be viewed from three main perspectives: psychological and cognitive, sociological and methodological", as illustrated in the figure below:

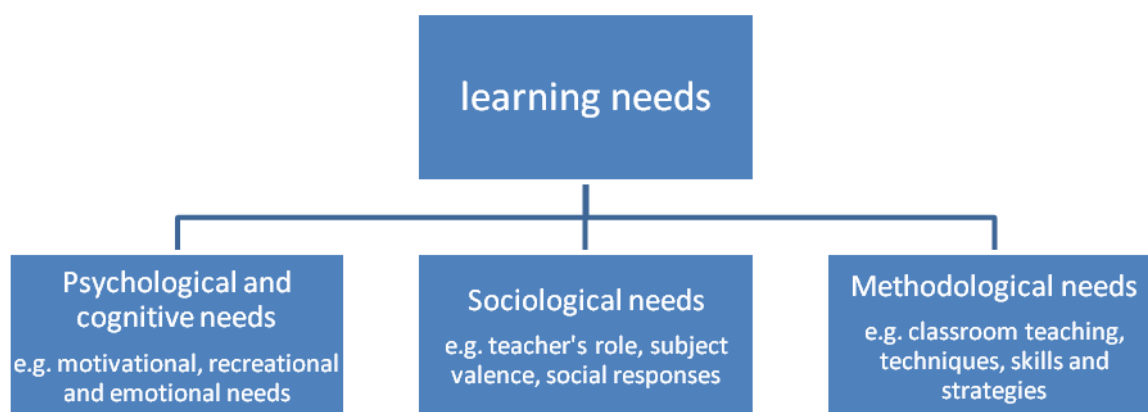


Figure 1. Learning needs of ESP learners (Tahir, 2011: 6)

Figure 1 shows that the motivational factor is one of the key components of learning needs; and therefore, should be given due attention in a course design. This led many researchers to be interested in investigating how to raise learner motivation in an ESP context. Davies (2006) suggests the use of class-specific questionnaires which unveil learners' needs so important for course planning and allow the design of a more specific and focused course leading to enhance learner interest and motivation because the course meets learner expectations. In the same way, Kaur (2006) shows in his study the importance of negotiating the aspects of course design with his learners in order to raise their motivation in the classroom. He concludes that matching learner needs to the course aims leads to a more motivating classroom atmosphere favoring effective learning. In another research, Chen (2005) maintains the importance of the implementation of a Task-Based Syllabus to raise learner motivation in an ESP context. In his study, this syllabus led to more motivating and effective learning for his Business English students as they could see the relevance of the tasks realized in the classroom to their professional field.

All these studies seem to converge to the idea held by Jiménez and Andersson (2012) who encourage educators and teachers to be preoccupied in a course not only by knowledge telling, but by raising their learners' motivation as well. In their work, this is done through active learning methods which facilitate student motivation and learning. Their engineering students were given autonomy when learning and free room to act as professional engineers. This in turn led them to transfer their education into a real life context. The researchers conclude that active learning methods have a positive impact on motivation and learning outcomes in engineering courses.

These research works and many others have proved the importance to address motivation in the ESP classroom as a learning need and put forward the necessity of investigating this affective variable and the factors leading to its raise. Being an important component of learning needs, which is often neglected in the ESP situation in Algeria, motivation is the center of interest of this study. The researchers examine biomedical engineering students' motivation to learn English, while trying to identify factors that may lower or raise this learning drive in order to stress its importance in the ESP enterprise and give suggestions to enhance it.

3. Research method

The present research is a case study of a class of third year university biomedical engineering students. Though this method does not allow general statements about the investigated phenomenon, it gives the opportunity to study the specificity of the case.

3.1 Informants

The subjects of this study were a class of third year students, specialised in biomedical engineering in the Faculty of Engineering, University of Tlemcen (Algeria) during the academic year of 2010- 2011. The selected students were thirty (9 males and 21 females) and different ages (from 19 to 24 years old).

The second group of informants were English teachers at the Faculty of Engineering who answered the interview. 7 teachers were concerned (4 males and 3 females) with different qualifications: 4 of them had a 'Magister' degree in Teaching English as a Foreign Language (TEFL); another one was preparing a 'Magister' in ESP; the two remaining teachers had a Doctorate degree, one in sociolinguistics and the other one in civil engineering. The teaching experience of these informants at university can be summarized as follows: 4 of them had from 2 to 3 years of experience; 2 of them had 5 and 6 years; and one had 12 years of experience.

3.2 Data collection methods

Motivation is not directly observable; it necessitates the use of some research tools to be unveiled. Then, three research instruments were used: a students' questionnaire, a structured teacher interview and a classroom observation.

3.2.1 Students' questionnaire

The questionnaire is divided into two parts: section A, which is a test on integrative and instrumental orientations of students' motivation (adapted from the Attitude /

Motivation Test Battery (AMTB) of Gardner (1985)); section B, which asks about the students' English proficiency level and needs (see Appendix A).

The model of Gardner was chosen to investigate students' motivation and orientation because it is highly supported by the majority of scholars to measure various individual difference variables based on the socio-educational model. It is made up of over 130 items, and reliability and validity have been largely supported. This model has been adapted to the situation under investigation and only 15 items are used divided into two rubrics: integrative motivation including 5 items and instrumental motivation consisting of 10 items. The AMTB used in the questionnaire is adapted to a five-point Likert Scale, ranging from 'Strongly Disagree' to 'Strongly Agree' (coded as follows: strongly disagree =1, disagree =2, neutral=3, agree= 4, strongly agree=5). Then, section B asks seven questions (closed, open and graded) dealing with students' perceptions of the English course and of themselves as learners.

3.2.2 Teachers' interview

This instrument is a fixed format interview in which all questions are prepared in advance and are put in the same order to each interviewee. The objective of the interview was to know to what extent engineering students in general and biomedical engineering students in particular are motivated to learn English, what may lower their motivation and how to raise it. The structured interview is composed of three rubrics: the first one is concerned with a description of the teacher and his teaching procedures; the second rubric draws the students' profile as perceived by teachers;

and the third rubric deals with how to motivate engineering students (see Appendix B).

3.2.3 Classroom observation

In addition to data provided by the questionnaire and the interview, it was necessary to look for information about what was actually happening in the teaching/ learning situation itself. Then, classroom observation was designed to obtain direct information on the classroom behaviour of the teacher and learners (Weir and Robert 1994). The first objective of this instrument was to examine possible relationships between English teacher's motivational practices and students' current motivational state toward the English course. The second objective was to identify the extent of motivation and the reasons for its presence or absence. The classroom observation grid used in this research was adapted from Centra *et al.* (1987). There are six criteria: content organization, presentation, interaction, instructional materials and environment, content knowledge and relevance, and teaching and learning observations (see Appendix C).

3.3 The procedure

The questionnaire designed in this study was piloted and then adjusted prior to distribution. During administration the researcher was present to help the students to complete it by explaining unclear points. After a preliminary analysis of the students' questionnaire, there were still some areas which needed clarification. So a structured interview was addressed to teachers to multiply data sources, provide further

explanation and allow triangulation. Regarding classroom observation, an unstructured one took place with the target group using no grid a year before. Those observations helped in the design of the present classroom observation which was held during the second term of 2011. Subject students were observed during four sessions of one hour and half. It should be noted that many students' absences were recorded during these sessions.

4. Results

The three research instruments enabled the collection of a considerable amount of data concerning the issue of motivation in the ESP learning context under study. Data analysis allowed to answer the three research questions put forward in this study. The first question: To what extent are biomedical engineering students motivated to learn English? Section A, which is an adaptation of the AMTB (Gardner, 1985), was statistically analyzed using the Statistical Package for Social Sciences (SPSS). Section B was quantitatively analyzed by means of tables and percentages for each question. Section A aims to discover the extent and orientation of students' motivation.

4.1.1 Integrative Motivation

Five items were used to disclose students' integrative motivation towards the target language. It should be reminded that 30 students were concerned with the

questionnaire. Table 1 presents the results obtained for each item and the mean values¹.

Table 1: Descriptive Statistics of Integrative Motivation (n=30)

Items: Reasons for learning English	1	2	3	4	5	Mean
I 1: English will allow me to be at ease with other people who speak English.	0	0	3	18	9	4.2
I 2: English will allow me to meet and speak with varied people.	1	0	4	16	9	4.06
I 3: I can understand English music.	0	5	7	11	7	3.66
I 4: I can keep in touch with foreign friends.	1	4	4	13	8	3.76
I 5: I would like to know more about native English speakers.	3	6	10	6	5	3.13
Overall mean						3.76

(coded: strongly disagree =1, disagree =2, neutral=3, agree= 4, strongly agree=5)

With an overall mean score of 3.76, respondents have a quite high integrative motivation and in general agree that studying English can allow them to interact with other English speakers and to meet various cultures and people. Many of them, if not all of them, have never had a chance to interact with native English speakers and get in touch with their culture. Their knowledge about the target language community is limited to books, magazines or movies. The results reveal that biomedical engineering students, with a mean score of 3.76, are integratively motivated to learn English.

4.1.2 Instrumental motivation

A close examination of the mean scores of the instrumental items presented in Table 2 below indicates that items 6 to 14 show a high motivation on the part of students. Item 6 which has the highest mean score expresses the students' paramount need to learn English for their future career. Items 13 and 14 indicate the participants' need for understanding English speaking films, videos, and TV and radio programs. Only item

¹ The means are arithmetic average of the responses

15 has a relatively low mean in this category expressing students' belief that English is important but not as much as not succeeding in any field. In sum, with an overall mean score of 3.69, one can conclude that most subject students have a high instrumental motivation towards learning English.

Table 2: Descriptive Statistics of Instrumental Motivation (n=30)

Items : Reasons for learning English	1	2	3	4	5	Mean
I 6: I'll need English for my future career.	0	1	2	8	19	4.50
I 7: English will make me more knowledgeable person.	1	1	4	18	6	3.39
I 8: English will someday be useful in getting a job.	0	3	4	18	3	3.5
I 9: I will be able to search for information and materials in English on Internet and elsewhere.	2	2	2	15	9	3.9
I 10: I will learn more about what's happening in the world.	2	0	7	12	9	3.86
I 11: Language learning often gives me a feeling of success.	0	7	6	10	7	3.56
I 12: An educated person is supposed to be able to speak English.	0	4	9	15	2	3.50
I 13: I can understand English speaking films, videos, TV or radio.	0	0	5	16	9	4.13
I 14: I can understand English books.	0	0	4	20	6	4.06
I 15: Without English one cannot be successful in any field.	9	10	8	0	3	2.26
Overall mean						3.69

To summarize, biomedical engineering students seem to be motivated to learn English integratively and instrumentally; however, the teacher interview and classroom observation give different results.

To question 12 of the teacher interview (Appendix B), which asked about students' motivation to learn English, six out of seven informants answered that their students were not motivated to learn English. This explains their lack of motivation due to unawareness of the importance of English and the low coefficient of the English module in their curriculum. Only one teacher claimed that his students were motivated to learn English justifying his response with his students' regular attendance, participation in classroom activities and completion of homework. On the

other hand, classroom observation disclosed lack of motivation among biomedical engineering students shown by lack of attendance, lack of interest in classroom activities and lack of participation. In fact, students seemed passive and rarely tried to interact with the teacher. These results reveal that though students report being interested and motivated to learn English, teachers' account and classroom reality disclosed a low motivation among these students which may be caused by some factors as will be disclosed below

The second research question is: What are the reasons for biomedical engineering students' low motivation?

Data analysis rendered students' lack of motivation to a number of factors such as low English proficiency of learners, irrelevant course content, inappropriate teaching materials, unpleasant classroom atmosphere, inadequate teacher - student relationship, and insufficient teaching time. Each of these factors will be discussed below.

4.2.1 Students' English proficiency level

As learners' motivation might be related to perceived linguistic proficiency, students were asked about their English proficiency. Most of them (90%) ranked between very bad and average as presented in table 3 below.

Table 3: Students' English proficiency level

Rating	A F ²	R F ³
Very bad	05	16.66%
Bad	11	36.66%
Average	11	36.66%
Good	03	10.00%
Very good	00	0%
Total	30	100%

Similarly, when teachers were asked in the interview to evaluate their students' English proficiency, three participants answered that it varied between very bad and bad, while three others rated it as average and one teacher stated that his students' level varied between very bad and good. These answers seem to agree that students' English proficiency varies between bad and average. In the classroom, too, low English proficiency was recorded. Students were unable to speak fluently in English and formulate a correct and coherent sentence. This is why most of their sentences were left unfinished or were continued in Arabic (L1) or French (FL1). It was clear that their linguistic handicap led them to hesitate to participate and finally to abandon communication. Several studies have recognized low-proficiency as a demotivational factor (Falout & Maruyama, 2004; Kim, 2009). This was clearly noticed during classroom observation when students either kept silent or gave up communication after several unsuccessful trials.

4.2.2 Course content

The majority of students (17) answered that it was not suitable for them arguing that there was no relationship between the lessons they received and their needs. In the interview (question 19, Appendix B), six teachers out of seven answered that their

² AF: Absolute Frequency

³ RF: Relative Frequency

course content corresponded to their students' needs, adding that the course took into consideration technological and scientific development. They also explained that their course included not only specific but general English as well. Only one teacher reported that there was no relationship between his course content and his students' needs to learn English.

In classroom observation, the rubric of *content knowledge and relevance* revealed that the teacher did not really deal with topics related to the students' field of study. Though the teacher demonstrated command of the subject matter, he rarely chose materials fitting the subjects studied by biomedical engineering students. Moreover, he spent a big part of the lesson speaking about poetry and literature.

Contradictory results were obtained, though most ESP teachers claimed choosing topics related to their students' field of study, the latter perceived them as inappropriate and this was further showed by classroom observation. Then, if students do not see the value and relevance of chosen topics and selected activities to their academic or professional life, they will lose interest in the course as a whole and this will lower their motivation.

4.2.3 Teaching materials

In the interview, all teachers explained that no syllabus and no materials were provided by the department they worked in, i.e., they designed their own syllabus and prepared their own materials. This task was difficult namely for the six teachers who were not subject specialists and for whom it was difficult to deal with texts and materials which were not familiar to them. The rubric *instructional materials and*

environment in classroom observation revealed that the activities, either written or spoken, prepared by the teacher were not so appropriate. They were either irrelevant to the students' field of study or too difficult such as the analysis of long quotations and complex texts. Such activities resulted in students' lack of interest and abandonment of the task. Once again, doing a work that seemed impossible to realize was not motivating at all. In addition, no audio-visual materials were used; chalk and board were the only supports to teaching leading to routine and passiveness on the part of students.

4.2.4 Learning atmosphere

In their answers to the questionnaire, half of the respondents (14) reported that the learning atmosphere in their classroom was not so good and another nine reported that it was bad. On the other hand, classroom observation divulged teacher's lack of encouragement to students to ask questions, to volunteer for extra work, or to take risks to complete a task. This behavior disclosed lack of interaction between the teacher and his students and an unpleasant classroom atmosphere leading to a demotivating ambience unfavorable to learning.

4.2.5 Teaching time

The time devoted to English teaching for biomedical engineering students is one hour and a half per week. Teachers and students alike consider this time as being insufficient and that more time is needed for English learning to improve one's language proficiency, because this short teaching time does not allow enough

exposure to the target language, to develop good language proficiency and to be motivated to learn.

The third research question was: How can biomedical engineering students' motivation be raised?

The data collected from the student questionnaire, teacher interview and classroom observation converge towards some important factors that may raise ESP students' motivation, as discussed below:

4.3.1 Course content

One factor that was revealed by the three research instruments to be crucial for motivating students to learn English is course content. It should be first and foremost needs driven and emphasize “practical outcomes” (Dudley-Evans & St. John, 1998). Generally speaking, biomedical engineering students' English course needs to combine subject matter and English language teaching so that students see the relevance of what they learn in their English course to their field of study. Topics and texts as well as vocabulary and structures are to be selected from their field of study. This gives students the context they need to understand the English of the classroom and reinforces the importance of English for their field of study.

It should be highlighted that the selection of course content necessitates the participation of three main actors: the ESP teacher, the subject specialist and the learner. It is very important to involve the learner in this process because this will allow him/her to choose topics and activities that connect to their outside interests; this will enhance his/her motivation and learning (Hutchinson & Waters, 1987).

4.3.2 Teaching method and techniques

To make language learning a motivating experience, teachers need to plan carefully the teaching method and techniques they adopt in order to maintain students' interest and achieve short term goals. However, many informant students (22) find their teacher's method inappropriate and explain that it is difficult for them either to follow the teacher during the lecture or to understand him and the purpose of his activities. This leads to conclude that the ESP practitioner needs to re-think his teaching method and techniques.

Though "methodology has generally been neglected in ESP" (Widdowson, 1983:87) different methodologies can be used according to course design, goals and outcomes. One possible solution could be what informant teachers propose, that is using the grammar translation method. This may prove to be helpful as a first step since students' proficiency level seems to be low. Then, teachers will move gradually from form to meaning using the Task-Based Approach, for example, which relies on the realization of different tasks which learners may be confronted to in their learning or working career. This approach relies on the use of the target language to achieve a goal. Yet, to keep students motivated, tasks need to be relevant, meaningful and have a suitable level of challenge. The techniques used by teachers need to be varied, using different teaching supports and introducing different types of tasks, this is important to break the routine.

4.3.3 Teaching materials

Selecting the appropriate material is an important step towards motivating students. All informant teachers believe that variation and innovation in teaching materials raise students' desire to work and motivation. They, therefore, propose first to use authentic materials, texts taken from the learners' field of study using their specific jargon, figures and graphs. The reason is that authentic materials "can increase students' motivation and expose them to real language and culture as well as to the different genres of the professional community to which they aspire" (Benavent & Peñamaría, 2011:90). Indeed, the closer and the more appropriate the ESP teaching materials are to the field of study of the learners, the more successful and motivated they will be. However, the use of authentic materials may be risky because of linguistic difficulty. Here again Gilmore (2007:109) gives the possibility of adapting authentic materials to students' language level by varying the tasks fitting different pedagogic needs.

In addition to authentic materials, teachers propose to use ICT for learning purposes as the use of technology increases student motivation by bringing change to the classroom and helping students to choose activities, media sources and content topics appropriate to their interests and learning styles.

4.3.4 Learning atmosphere

This study has also revealed a motivational problem of a sociological nature resulting from poor relationships between teacher and students. This finding seems to concord with what Hanrahan suggests (1998:750) "a neglected area of the classroom learning environment which may enhance positive motivational beliefs may be a sociological one". Indeed, teacher behavior in the classroom is a powerful "motivational tool"

(Dornyei, 2001: 120). Good teacher communication with his/her students is favorable to transmitting his/her message and attracting learner interest to the course. Then, it is important for teachers to establish a relationship of reciprocal trust and respect with learners; this could lead to enthusiasm, commitment, interest in learning the target language and a favorable classroom atmosphere.

4.3.5 Teaching time

The Faculty of Engineering at the University of Tlemcen offers one hour and a half of English teaching per week in all its departments. However, this short period of time for English learning is revealed by all informants (teachers and students) to be insufficient namely as English is a foreign language in Algeria and students have little chance to practice it outside the classroom. Yet, to be motivated to learn students need ample opportunities to do so. Therefore, it is necessary to allocate more time to the teaching of English for engineering students so that they benefit from more exposure to English which will lead to raise their motivation to learn it.

5. Conclusion

The current study has concentrated on examining biomedical engineering students' motivation as an important learning need trying to find out factors which affect it. ESP practitioners can benefit from this investigation. It certainly does not cover all possible researchable features regarding the issue of motivation in the ESP classroom. Yet, it gives some insights into the factors that may cause lack of motivation and those that may raise it in an ESP context.

Although subject students reported being motivated to learn English, their classroom behavior showed lack of interest and low motivation. Many reasons were found to be at the source of their motivational problem: their English proficiency level, course content, teaching method and materials, learning atmosphere and the insufficient time allocated to the English course. In sum, their low motivation was largely due to the English course they received which did not seem to be appropriate to equip them with the strategies and skills needed in their studies and future profession. This leads to assume that these students can be motivated and learn effectively if change and innovation is brought to their English course. This change is embodied in a move toward ESP students' involvement in their course and course design by a continued focus on their target and learning needs with an incessant encouragement of their autonomy and a careful selection of teaching method, techniques and materials in addition to the creation of pleasant and supportive classroom atmosphere. It is only through these conditions that learner motivation so important for language learning can be raised.

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Appendix A: Students' Questionnaire

Dear students,

I am undertaking research on students' motivation in the ESP classroom and I need to know what your reasons for studying the English language are. I would like you to indicate your opinion about each statement by ticking the boxes below and then answering the questions that follow.

Please try to be as honest as possible when completing this questionnaire, it will be strictly confidential.

Thank you

Gender Age Department

A.1 Integrative & Instrumental Motivation

- **Integrative Motivation**

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1-Studying English can be important to me because it will allow me to be at ease with other people who speak English.					
2- Studying English can be important to me because it will allow me to meet and speak with varied people.					
3- Studying English can be important to me because I can understand English music.					
4- Studying English can be important to me so that I can keep in touch with foreign friends.					
5- Studying English can be important to me because I would like to know more about native English speakers.					

- **Instrumental Motivation**

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6- Studying English can be important to me because I'll need it for my future career.					
7- Studying English can be important to me because it will make me more knowledgeable person.					
8- Studying English can be important to me because it will someday be useful in getting a job.					
9- Studying English can be important to me because I will be able to search for information and materials in English on the Internet and elsewhere.					
10- Studying English can be important to me because I will learn more about what's happening in the world.					
11- Studying English can be important to me because					

language learning often gives me a feeling of success.
 12- Studying English can be important to me because an educated person is supposed to be able to speak English.
 13- Studying English can be important to me so that I can understand English speaking films, videos, TV or radio.
 14- Studying English can be important to me so that I can understand English books.
 15- Studying English can be important to me because without it one cannot be successful in any field.

A.2 Students' Proficiency level, needs and motivation

1-How do you rate your English proficiency?

1) very bad ... 2) bad3) average 4) good 5) very good ...

2-Are you motivated to learn English?

Yes No

Why?

.....

.....

3-Do English courses attended at university correspond to your needs?

Yes No To some extent

4-Do you appreciate your English courses?

Yes No To some extent

5-Which difficulties do you encounter during your English courses?

.....

.....

6-Is there a good learning atmosphere in class?

Yes No To some extent

7-Is the time given to the English courses per week?

Sufficient Insufficient

Appendix B: Teachers' Structured Interview:

B.1 Information concerning the teacher

- 1- Sex: male female
- 2- Qualification: 'licence' 'magister' doctorate
- 3- What is your status in the university?

 Full time teacher Part time teacher
- 4- For how many years have you been teaching English for Specific Purposes?

 years.
- 5- Did you have any training in teaching ESP?

 Yes No

 -If yes, what type of training?
- 6- Is there any syllabus provided by your department?

 Yes No
- 7- Is there any material for teaching ESP provided by your department?

 Yes No

B.2 Student Learning

- 8- How large are your classes?

 students.
- 9- Do all students attend your course?

 Yes No

 - If no, how can you rate students' attendance?

 %
- 10- How do you rate your students level in English?

 Very bad Bad Average Good Very good
- 11- Do your students participate in the classroom?

 Yes No To some extent
- 12- Are your students motivated to learn English?

Yes No To some extent

- Why?

13- Are your students aware of the importance of English?

Yes No

14- What is their attitude to learn English?

.....

B.3 Raising motivation

15- How do you think motivation can be raised?

.....
.....

16- According to you what is the most appropriate teaching method for your ESP students?

.....
.....
.....

17- Which part of the course attracts students' attention and interest? Why?

.....
.....

18- Do you think that students are more interested in a particular skill? Which one?

.....

19- Do you think that the course content is relevant to your students' needs?

Yes No To some extent

.....

Appendix C: Classroom observation grid

University of Science and Technology of Abou Baker Belkaid

Department of Electric and Electronic Engineering (BME)

Classroom Observation Report

English teacher: Observer:

Course: Number of students who are present:

Date/Time of observation:

This form is used by the observer to report feedback from the classroom observation. It provides a list of teacher and students behaviours that may occur with the third year biomedical engineering students. The aim is to observe students levels of motivation and the reason/s for lack of motivation.

C.1 Content Organization	Not observed	More emphasis recommended	Accomplished very well
1- Lesson purpose clearly stated. 2- Related this lesson to previous lessons. 3- Presented overview of the lesson. 4- Presented topics with logical sequence. 5- Responded to problems raised. <u>Comments:</u>			
C.2 presentation	Not observed	More emphasis recommended	Accomplished very well
1- Projected voice so easily heard. 2- Explained ideas with clarity. 3- Maintained eye contact with students 4- Listened to students questions & answers. 5- Defined unfamiliar terms, concepts, principles. 6- Provided alternative explanations for complex material. 7- Used humour appropriately. <u>Comments:</u>			
C.3 Interaction	Not observed	More emphasis recommended	Accomplished very well
1- Encouraged questions. 2- Encouraged students' participation. 3- Encouraged students' volunteering. 4- Maintained students' attention & focus.			

5- Ask questions to monitor progress. 6- Gave satisfactory answers to students' questions. 7- Responded to non verbal cues or confusion or curiosity. 8- Paced lesson to allow students taking notes. 9- Encouraged students to answer difficult questions. 10- Asking probing questions when student answer was incomplete. 11- Students demonstrated interest in subject matter. <u>Comments:</u>			
C.4 Instructional materials & environment	Not observed	More emphasis recommended	Accomplished very well
1- Maintained a classroom environment conducive to learning and motivating. 2- Prepared students for the lesson with appropriate assignments. 3- Supported lesson with useful classroom discussions and activities. 4- Provided helpful audio-visual materials or demonstrations to support lesson. 5- Provided relevant written assignments. 6- Use technology appropriately to support the lesson. <u>Comments:</u>			
C.5 Content knowledge & relevance	Not observed	More emphasis recommended	Accomplished very well
1- Presented material appropriate to student needs, knowledge and background. 2- Presented material appropriate to stated purpose of the course. 3- Demonstrated command of subject matter. 4- Applied/ related content to authentic situations. <u>Comments:</u>			

C.6 Teaching and learning observations

1) How does the teacher handle students' questions?

.....

- 2) How does the teacher respond when a student gives an incorrect answer?
.....
- 3) Does the lesson meet various learning styles (multiple intelligences)?
.....
- 4) How much the lesson is related to students' needs?
.....
- 5) How does the teacher catch the attention of all students engaged in the lesson?
.....
- 6) Is there an opportunity during the lesson for students to interact?
.....
- 7) Do students work in groups or pairs?
.....
- 8) What overall impact does this lesson have on students and their learning outcome?.....
- 9) What suggestions for improvement?
.....

Research Article Introductions in Applied Linguistics:

A Comparison between Chinese and English

Gao Li

Ludong University, People's Republic of China

Biodata

Gao Li is a lecturer in the Department of Foreign Languages Teaching at Ludong University, China. She holds an M.A. in Applied Linguistics from Wuhan University. Her research interests include English for academic purposes, discourse analysis, and corpus linguistics.

Abstract

This paper compares the structural organization of Chinese and English research article introductions in the field of applied linguistics, using Swales' (1990; 2004) CARS model as an analytical tool. The study investigated a corpus of 30 research article introductions, 10 English ones written by English speakers, another 10 English ones written by Chinese, and 10 Chinese ones written by Chinese. The results show that the research article introductions written by Chinese researchers exhibit more similarity to those written by their English counterparts in terms of moves in the CARS model, compared with the studies of Taylor and Chen (1991) and Loi (2010). The differences lie in the use of certain constituent steps of moves. Generally speaking, English researchers tend to adopt more alternative ways to achieve their communicative purposes than their Chinese counterparts. Possible explanations are offered and discussed.

Keywords: research article introductions; comparative study; structural organization; the CARS model

1. Introduction

Since Swales (1990) proposed his CARS (Create a Research Space) model based on investigating 158 research article (RA) introductions across various disciplines, the study of academic writing has been of increasing interest among the researchers in the field of English for academic purposes. Though different types of academic texts, ranging from dissertations (Soler-Monreal et al., 2011) to textbooks (Hyland, 2000), have been under detailed analysis, RA, with its specific status in the academic community, has attracted most attention. Following Swales' CARS model, researchers have examined other sections of RAs from different disciplines, including abstracts (Lorés, 2004; Samraj, 2005), methods (Lim, 2006), results (Brett, 1994), discussions (Holms, 1997; Peacock, 2002), and the structural organization of the whole research article (Kanoksilapatham, 2003 ; 2005). However, particular attention has been paid to introductions (e.g., Taylor & Chen, 1991; Ahmad, 1997; Jogthong, 2001; Ozturk, 2007; Hirano, 2009) for their specific importance and complexity in the RAs (Swales, 1990).

According to the CARS model, RA introductions can be structurally analyzed with three moves, namely, Move 1: establishing a territory, Move 2: establishing a niche, and Move 3: occupying the niche, which are commonly presented in a cyclical order. Each of the moves can be realized by a number of obligatory and optional steps (Swales, 1990, p. 80). However, some subsequent studies have posited several modifications to the model after studies using this framework have been conducted in

various fields and in different languages. For instance, Anthony (1999) finds that the authors specializing in software engineering often provide “definitions of important terms and examples to illustrate difficult concepts” (p. 43) in Move 1, which is not accounted for by the CARS model. Besides, he identifies another optional step of “evaluation of research” in Move 3. Similarly, Samraj’s (2002) analysis of RA introductions in the field of Wildlife Behavior and Conservation Biology reveals that the review of literature is not an element only belonging to Move 1, but it can be found in all three moves. Her study also suggests the addition of an optional step “positive justification” to Move 2, because there are occasions that the authors explicitly express positive reasons for conducting the study (p. 9).

In response to these suggestions, Swales (2004) has revised his model for the purpose of making it more accurately account for the features of research article introductions, and thus more compatible in various fields. While the macro-structure remains unchanged except for the renaming of Move 3, steps within moves have been modified by means of adding, lessening, or integrating. In Move 1, the first two steps have been integrated into one, called “topic generalizations of increasing specificity”. The four sub-steps in establishing a niche (Move 2) have been lessened to two, with an optional step added, namely, “presenting positive justification”, in response to the modification proposed by Samraj (2002). Most modifications arise in Move 3, with many optional steps added compared with the 1990 version. Despite the different suggestions for modifications of the model, it seems that an agreement has been reached among the researchers that the CARS model is a valid analytical tool in investigating the structural organization of RA introductions. Therefore, the present study will adopt the Swalesian approach, taking the framework of the CARS model

(1990, 2004) as the analytical tool to code and analyze the moves and steps, as is elaborated below (see 2.2).

A number of studies have been conducted to compare the organizational structure of RA introductions written in English and other languages (e.g., Shim, 2005; Árvay and Tankó, 2004; Hirano, 2009). However, there have been very few research studies on the comparison of structural organization of English and Chinese RA introductions. Studies that have compared the move structure of English and Chinese RA introductions have been undertaken by Taylor and Chen (1991) and Loi (2010). Taylor and Chen (1991) examined 31 RA introductions in the field of geology, metallurgy and mineral processing, materials science, materials and mechanical engineering written respectively in English by Anglo-Americans, in English by Chinese, and in Chinese by Chinese. They found that Swales's four-move schemata (1981 version) were employed by all three groups. Therefore, they concluded that there is no distinctive "Chinese way" of writing RA introductions that is specific to the Chinese language system. Besides, their study also revealed discernible differences among the three groups. The striking difference lied in the relative scarcity of Move 2 (summarizing previous research) in the Chinese RAs. Chinese researchers tended to avoid elaborated structures, identifying the names, and summarizing the previous studies when they were expected to indicate gaps in the following Move 3, which was attributed to cultural factors. In addition, they also observed considerable differences across disciplines in applying the schemata, providing significant implications for the studies of disciplinary variation.

Loi (2010) examined the rhetorical organization of English and Chinese RA introductions in the field of educational psychology using Swales's (1990, 2004) model as the analytical tool. The findings revealed that, in line with Taylor and Chen

(1990), both RA introductions in English and Chinese followed the general framework of the model, though Chinese researchers generally used moves and their constituents differently and less than their native English counterparts. And some rhetorical strategies in the corpus were not accounted for by Swales's model. Therefore, Loi (2010) proposed that an analytic-synthetic approach be applied to teach academic writing to Chinese ESL students.

Despite the fact that their studies have, to some extent, filled the gap in the genre-based comparison of English and Chinese research articles, and have practical implications for academic writing teaching to Chinese ESL students, Taylor and Chen (1991) involved empirical and theoretical articles in the same study. Loi (2010) limited her study to the mere comparison of RA introductions written respectively in English and Chinese, without English articles written by Chinese as Taylor and Chen (1991) did. Therefore, following Taylor and Chen (1991), the present study will adopt the CARS model (1990, 2004) to compare the structural organization of RA introductions in three groups, English writing by English speakers⁴, English writing by Chinese, and Chinese writing by Chinese. In order to control the variable of disciplinary variation, this study will focus on the articles from English and Chinese prestigious journals in the field of applied linguistics, which still remains “under-explored” (Yang & Allison, 2004, p. 265). In this study, the author intends to find out similarities and differences regarding the structural organization of the three groups, and whether the results are divergent from those of Taylor and Chen (1991) and Loi (2010). The present study has pedagogical implications for academic English teaching in China.

⁴ English speakers are not strictly those from main English speaking countries and regions, such as US, Britain, Canada, etc., but those who successfully publish English articles in international journals.

2. Data and methodology

2.1 The corpus

The study was based on a corpus of 30 research articles randomly selected from three journals from the 2009-2010 issues in applied linguistics, 10 English RAs written by English speakers from *Applied Linguistics* (Appendix A.1), 10 English RAs written by Chinese from *Chinese Journal of Applied Linguistics*⁵ (Appendix A.2), and 10 Chinese RAs written by Chinese from *Foreign Language Teaching and Research* (外语教学与研究) (Appendix A.3). The journals, *Applied Linguistics* and *Foreign Language Teaching and Research*, were chosen because both of them are prestigious journals in the field of applied linguistics either around the world or in China. Not all the articles selected from *Applied Linguistics* were written by native English speakers. As the journal is internationally recognized and highly ranked in the field of applied linguistics, it is assumed that the RAs published in this journal can be considered as conventionalized and therefore fulfill the need in this study. *Chinese Journal of Applied Linguistics* was chosen as it is the only English-medium journal in applied linguistics published in China

2.2 The analytical model

⁵ *Chinese Journal of Applied Linguistics* has been renamed from *Teaching English in China—CELEA Journal* since 2010.

This Analysis of the RA introductions was based on the CARS model (1990, 2004), and some steps, unaccounted for by the model but identified in the corpus, were also added for the purpose of achieving a full description of the organizational structure of the RA introductions in the present study. The details were shown in Table 1.

Table 1: The coding model adopted for the corpus analysis

Move 1: Establishing a territory	Step 1 Claiming centrality
	and/or Step 2 Making topic generalization(s)
	and/or Step 3 Reviewing items of previous research
	and/or Step 4 Defining terms/concepts
	and/or Step 5 Presenting the theoretical basis
Move 2: Establishing a niche	Step 1A Indicating a gap
	and/or Step 1B Question-raising
	and/or Step 1C Continuing a tradition
	and/or Step 2 Presenting positive justification
Move 3: Presenting the present work	Step 1 Outlining purposes
	and/or Step 2 Announcing present research
	and/or Step 3 Presenting research questions /hypothesis
	and/or Step 4 Summarizing/justifying methods
	and/or Step 5 Introducing the implications of the findings
	and/or Step 6 Stating the value of the present research
	and/or Step 7 Outlining the structure of the paper

In Move 1, in addition to the three steps defined by Swales (1990), the strategy of defining specific terms or concepts observed by Anthony (1999) in software engineering and Loi (2010) in educational psychology, is also identified in this corpus. However, this strategy is placed in Move 1 rather than in Move 3 as it is done in Swales's (2004) revised model, because it commonly appears before Move 2 in the RA introductions. Move 1 Step 5, presenting the theoretical basis, is employed to specify the theories which form the basis of the concerning study.

With regard to Move 2, the sub-step “counter-claiming” in the CARS model (1990) is deleted as such a strategy is not found in the corpus, which is contradictory to the claim made by Swales (1990) that it is commonly used in linguistics.

With respect to Move 3, Step 5 “introducing the implications of the findings” focuses on the practical applicability of the research in the real world. It is illustrated by the following example:

[E-E-3] Determining the vocabulary size necessary to understand movies may provide both teachers and learners with a vocabulary learning goal, which when reached, would allow movies to become a valuable source of L2 aural output.

Unlike Step 5, Step 6, stating the value of the present research, is a strategy used to occupy the niche by emphasizing the novelty of the research in terms of differences or uniqueness in the research context (Anthony, 1999). For example,

[E-E-6] Our investigation is unique in the sense that it covers the various types of inter-cultural contact situation in a systematic way...

In the coding process, the author initially attempted to classify each sentence into a move and a step. In most cases, the classification was straightforward, but certain sentences may fall into two or more moves or steps. In these cases, they were assigned to the more salient move or step, as was done by Crookes (1986), Ozturk (2007), and Hirano (2009). It is exemplified below:

[C-E-4] So in this research, in order to search for the similarities and differences of ..., we first make a contrastive analysis..., and then we carry out an experiment..., and then aim to explore...

The writers started by stating their purpose (Move 3 Step 1), and then announced the present research (Move 3 Step 2), but it was apparent that the structure of the paper (Move 3 Step 7) was outlined in the detailed description of their research.

After having analyzed the introduction as a whole, the author assigned this sentence to Move 3 Step 2, which seemed more salient, as this was the only case that the writers elaborated the main content of their research.

The identification of moves and steps was functionally and semantically driven. Hence in order to deal with the problem of subjectivity, after coding the articles in the corpus, the author, following Crookes (1986), invited a PhD in linguistics to code the articles after several hours' training and exercise with a number of articles not included in the corpus with the model discussed above. Satisfactory inter-rater reliability has been achieved. Concerning the divergent step classification between the coders, an agreement has been reached after discussion.

3. Results

3.1 Descriptive information of the data

In this section, the detailed descriptive information of the RA introductions in the corpus is presented respectively in terms of number of words, number of sentences, number of paragraphs, ratio of the length of introductions and the whole articles, as well as the institutional locations of the author(s) (Tables 2, 3 and 4).

Table 2: Detailed information of *Applied Linguistics* RA introductions

RA intro.	No. of words	No. of sent.	No. of para.	Intr./article	Institutional location
E-E-1	579	15	3	7%	USA

E-E-2	605	16	3	8%	USA
E-E-3	546	15	2	7%	New Zealand, Japan
E-E-4	385	10	3	4%	Hong Kong
E-E-5	579	21	4	9%	Korea
E-E-6	721	23	4	12%	Hungaria, UK
E-E-7	237	7	1	3%	Japan
E-E-8	410	8	1	5%	UK
E-E-9	914	37	7	11%	UK
E-E-10	405	13	2	5%	Hong Kong
Average	538.1	16.5	3	7.1%	

Table 3: Detailed information of *Foreign Language Teaching and Research* RA introductions

RA intro.	No. of words	No. of sent.	No. of para.	Intr./article	Institutional location
C-C-1	536	12	2	8%	China
C-C-2	427	9	2	7%	China
C-C-3	540	8	2	6%	China
C-C-4	1502	26	5	18%	China
C-C-5	301	6	2	3%	China
C-C-6	1191	26	4	17%	China
C-C-7	191	4	1	3%	China
C-C-8	305	7	1	5%	China
C-C-9	632	6	1	9%	China
C-C-10	2122	40	10	30%	China
Average	774.7	14.4	3	10.7%	

Table 4: Detailed information of *Chinese Journal of Applied Linguistics* RA introductions

RA intro.	No. of words	No. of sent.	No. of para.	Intr./article	Institutional location
C-E-1	124	4	1	2%	China

C-E-2	221	9	1	5%	China
C-E-3	781	24	6	16%	China
C-E-4	523	23	5	11%	China
C-E-5	444	17	4	8%	China
C-E-6	369	13	4	6%	China
C-E-7	368	17	4	8%	China
C-E-8	203	6	1	3%	China
C-E-9	735	32	4	14%	China
C-E-10	334	13	1	7%	China
Average	410.2	15.8	3.1	8%	

As is shown in the tables above, the RA introductions vary from each other more or less in terms of length, and number of sentences and paragraphs. Comparatively speaking, the two groups of English RA introductions share more similarity in terms of number of words, ranging from 237 to 914 words in the E-E corpus (*Applied Linguistics*) and from 124 to 781 words in the C-E corpus (*Chinese Journal of Applied Linguistics*) respectively, than that in the Chinese corpus (the C-C corpus) from 191 to 2122 words, which demonstrates much greater variability in length. Two Chinese RA introductions exceed 1000 words, and a third one is even up to more than 2000 words. This difference is further substantiated by the ratio of the length of RA introductions and the articles, averaging 7.1% and 8% respectively in the E-E corpus and the C-E corpus, but the ratio is up to 10.7% on average in the C-C corpus, where one RA introduction (C-C-10) even accounts for as high as 30% of the whole article.

It is clearly shown in the tables that the average numbers of sentences are very similar in all the three groups, respectively 16.5 (the E-E corpus), 14.4 (the C-C corpus), and 15.8 (the C-E corpus). However, the statistics indicates that the C-C corpus endures more variability (SD=12.04) compared to the other two groups (SD=8.84 in the E-E corpus, and 8.70 in the C-E corpus). It is the same case with the

number of paragraphs. Although the average numbers of paragraphs are very close to each other (3 in the E-E and the C-E corpora, and 3.1 in the C-C corpus), much higher deviation has been measured from the C-C corpus ($SD=2.8$) compared to the other two corpora (1.8 for the E-E corpus, and 1.9 for the C-E corpus). Accordingly, the Chinese RA introductions in the C-C corpus adopt more diverse patterns in paragraph organizations.

With respect to the institutional locations of the authors, *Applied Linguistics*, as an English medium international journal, received submissions from authors from various countries, as is shown in Table 2. However, the authorship of both journals in China is unitary, all Chinese researchers.

3.2 Move structure and sequence of RA introductions

The results of the move structure of the RA introductions in the corpus are presented in Table 5. The Analysis of the E-E corpus shows certain deviation from the move structure proposed by the CARS model. Though six out of ten RA introductions contained the CARS model, only three of them were in exact accordance with it, following a strict M1-M2-M3 sequence whereas the others varied from it by one move repeating (E-E-2, E-E-6) or M2-fronting (E-E-3). Additionally, four out of ten RA introductions in this corpus did not accord with the CARS model as one move was excluded. Both E-E-1 and E-E-5 lacked M2, straightly presenting the current studies, without indicating a gap or raising research questions. Interestingly, E-E-5 owned a repetition of this pattern, namely, M1-M3-M1-M3. Similarly, the rest two RA introductions, E-E-7 and E-E-9, employed M1-M2 pattern, without presenting the

current research. Overall, the RA introductions in the E-E corpus vary in their organizational structure.

Table 5: Move structure of the RA introductions in the corpus

RAIs	Moves	RAIs	Moves	RAIs	Moves
E-E-1	1-3	C-E-1	1-2-3	C-C-1	1-3
E-E-2	1-2-1-3	C-E-2	1-3	C-C-2	1-3
E-E-3	2-1-2-3-1-3	C-E-3	1-2-3	C-C-3	1-2-3
E-E-4	1-2-3	C-E-4	1-2-3	C-C-4	1-2-3
E-E-5	1-3-1-3	C-E-5	1-3	C-C-5	1-2-3
E-E-6	1-2-1-3	C-E-6	1-2-3	C-C-6	1-2-3
E-E-7	1-2	C-E-7	1-2-3-1-2-3	C-C-7	1-2-3
E-E-8	1-2-3	C-E-8	1	C-C-8	1-2-3
E-E-9	1-2	C-E-9	1-2-3	C-C-9	1-2-1-2-3
E-E-10	1-2-3	C-E-10	1-3	C-C-10	1-3-1-2-3

With respect to RA introductions in the C-E corpus, they followed the CARS model more closely. Half of the RA introductions adhered to the M1-M2-M3 pattern strictly while one (C-E-7) contained an overall cyclical repetition of this model, i.e., M1-M2-M3-M1-M2-M3. Nevertheless, the remaining four RA introductions deviated from it. Three of them, C-E-2, C-E-5, and C-E-10, did not establish a niche (M2) before announcing their present study (M3), and one, C-E-8, contained only one single move, M1.

Comparatively speaking, the RA introductions in the C-C corpus had an explicit preference for the CARS model, as 80% (8 out of 10) of RA introductions contained the complete M1-M2-M3 pattern, and six of them followed the sequence strictly while the other two had slight deviation from the model by adding an M1-M2 (C-C-9) or M1-M3 (C-C-10) sequence into the pattern respectively.

The results suggest that, though the CARS model was proposed based on the English RA introductions, it seems that the RA introductions from the two Chinese

journals tend to follow this pattern more closely while the English ones from *Applied Linguistics* employ more diverse patterns varying from the CARS model.

4. Discussions

4.1 The organizational structure of English and Chinese RA introductions

As is shown above, despite the fact that the English and Chinese RA introductions in the corpus demonstrate more or less deviation in the organizational structure from the CARS model proposed by Swales (1990, 2004), generally speaking, they accord with this framework at the move level since no new moves out of the model were identified in the analysis of the corpus. This study further verifies that the CARS model is a valid tool in analyzing organizational or rhetorical structure of RA introductions, which has also been claimed by Jogthong (2001), Hirano (2009) and Loi (2010).

Although the CARS model was developed on the basis of English RA introductions, it seems that the RA introductions from the two Chinese journals accord more with the model than those from *Applied Linguistics*. As is shown in Table 5, though six out of ten RA introductions in the E-E corpus contained the framework, only three were in exact accordance with the model. Nevertheless, half of the RA introductions in the C-E corpus adhered to the M1-M2-M3 pattern strictly while one (C-E-7) contained an overall cyclical repetition of this model, i.e., M1-M2-M3-M1-M2-M3. Besides, six of eight RA introductions in the C-C corpus, which contained the complete framework, followed the sequence strictly. The finding is inconsistent with Loi (2010), as her study shows that compared with the Chinese

ones, the English RA introductions in educational psychology exhibit more similarity to the CARS model. However, it supports Loi's (2010) and Taylor and Chen's (1991) claim that Chinese researchers do not have their distinctive "Chinese way" that is specific to their language when they write RAs either in Chinese or English.

The phenomenon that the RA introductions written by Chinese researchers are more CARS model-like may be explained by the heavy influence of the English writing conventions on Chinese scholars. Most Chinese linguists engaged in the studies of applied linguistics are, in a strict sense, English teachers in various educational institutions, especially of the tertiary level. In most cases, they have received decades of English education at home or abroad. English academic articles and scholarly books are constantly referred to in their studies since English is the lingua franca of the academic world (Hyland, 2006; etc.). Therefore, Chinese academic papers are generally under the influence of English writing style, which has been proved in Shi's (2002) study by interviewing 14 Chinese professors of English.

It has been argued that the linear pattern of the CARS model (M1-M2-M3) usually occurs in shorter introductions, whereas the longer introductions tend to show a recursive pattern (Crookes, 1986; Swales, 1990; etc.). However, the findings of the present study are congruent with Ozturk (2007), providing "partial support" for this claim (p. 32). Though 44% (12 out of 27) of the RA introductions, ranging from 124 to 914 words, follow a strict linear sequence, the recursive pattern does not occur to the three longest RA introductions in the C-C corpus as expected. C-C-4 and C-C-6, exceeding 1000 words, adopt the M1-M2-M3 pattern, while the third one (i.e., C-C-10), up to 2122 words, follows the linear pattern repeatedly, which could not be classified as the recursive pattern in a strict sense.

4.2 Similarities and variations in moves and steps

Both English and Chinese researchers begin their introductions with M1 (establishing a territory) and end with M3 (presenting the present work). As is shown in Table 5, with the exception of E-E-3 which is fronted with M2, all the other RA introductions start off with M1, which is congruent with the findings discussed in previous studies, such as Swales and Najjar (1987) and Loi (2010). In addition, a great majority of RA introductions, except for two (E-E-7 and E-E-9) ending with M2 and one (C-E-8) only containing M1, close with M3, as is predicted in the CARS model.

Next, the author will turn to the comparison of the three corpora in terms of the strategic use of steps in separate moves.

4.2.1 Steps in Move 1

In Move 1, Step 2 (making topic generalizations) is most frequently used as the starting point of RA introductions by both English and Chinese researchers. As is seen in Table 5, 22 out of 30 RA introductions (9 in the E-E corpus, 7 in the C-E corpus, and 6 in the C-C corpus) start with making topic generalizations to provide background information of the to-be-reported research, while claiming centrality (i.e., Move 1 Step 1), either asserting its importance in the real world or in academic fields, seems less prevalent, with only five introductions starting from this step. This is similar to Jogthong's (2001) finding that a majority of RA introductions written by Thai researchers begin with Move 1 Step 2. However, it is inconsistent with those found in the studies of Swales (1981), Swales and Najjar (1987), Samraj (2002), and Loi (2010). Loi (2010) found that Move 1 Step 1 was "prevalent in both English and

Chinese introductions” in the field of educational psychology (p. 273). Swales (1981) pointed out that this step [Move 1 Step 1] occurred in the beginning of approximately 50% of the sampled introductions in his study.

The divergence might be explained by disciplinary variation and the emerging characteristic of the field of applied linguistics. Different from other disciplines, applied linguistics, as a sub-discipline of social sciences, aiming to solve the second/foreign language teaching, learning, and researching problems, does not have to reclaim its importance, which may help shape its specific genre of saving the use of Move 1 Step 1. Furthermore, some theories and methodologies adopted in applied linguistics are rooted in other branches of linguistics, psychology, or even some other scientific disciplines. The researchers may assume that some readers might be unfamiliar with the background of the concerning research, thus steps making topic generalizations (Move 1 Step 2) and reviewing items of previous research (Move 1 Step 3) are considerably used (Anthony, 1999), which is well illustrated by the present study with 73% step 2 and 77% step 3.

Among the three groups, the use of Move 1 Step 3 is similar.. This step occurred in 23 out of 30 RA introductions in the corpus, 70% in the E-E and the C-C corpus, and up to 90% in the C-E corpus respectively. The findings are different from Taylor and Chen’s (1991) claim that the more “Anglicized” writings lay more emphasis on “citing and summarizing the literature” (p. 329).

A detailed analysis of this step further demonstrates that English and Chinese academic introductions have much in common in terms of discoursal value⁶. Bhatia (1993) has discussed the possibility of literature reviews having more than one

⁶ According to Bhatia (1993), the term “discoursal value” refers to the communicative purposes that the moves or steps serve.

discoursal value. The results indicate that there are four primary rhetorical values undertaken by reviewing items of previous research in the RA introductions written by both English and Chinese researchers, i.e., providing information of the related academic topic, preparing for gap indication or research questions raising, and supporting the proposal of the current research.

The discoursal values are closely related to the position of this step, which usually occurs before Move 2 or Move 3. Judged by whether there are other steps inserted between them, it is shown that, of all the cases of reviewing literature, over 80% occur before Move 2 directly and indirectly, even up to 90% in the C-C corpus. When the researchers review past studies directly before Move 2, they intend to contextualize their own research by providing related academic information, or establish a niche by preparing to indicate gaps or raise their research questions. Nevertheless, if other steps have been inserted between this step and Move 2, it turns out that the discoursal value of reviewing the literature is limited to providing academic items deemed by the writers that highly correlate to the research topic, which may have the purpose of either showing that the researchers are fully familiar with the reported domain, or contextualizing the current research, or both. When it occurs before Move 3, the rhetorical values of literature review are reduced to two. In addition to providing related academic information, this step is also employed to provide support for the proposal of the to-be-reported research.

Besides the four shared values above, one case in the C-C corpus reveals that this step, occurring before Move 2 directly, could also be used to demonstrate the necessity of further research on the specific topic, which is absent in both English corpora. However, it cannot be concluded that this is the disparity between the Chinese and English RA introductions, because besides the purpose of providing

necessary information of the research topic, it seems that the values of reviewing past studies, to a great extent, depend on the ways in which the researchers establish the niche for their own study. That is to say, if the researchers tend to identify the shortcomings after reviewing certain past studies, this step will definitely be added the value of preparing for gap indication. This is also the case with preparing for raising research questions and demonstrating the necessity for further research.

Table 6: Frequency of Move 1 Step 3 in different positions and mean number of citations per RA introduction

Corpus	Before Move 2*		Before Move 3		Citations
	Directly	Indirectly	Directly	Indirectly	
E-E	6	2	3	0	14.7
C-E	5	3	2	1	13.1
C-C	7	3	0	1	9.3

*Move 1 Step 3 may occur more than once in one introduction.

As citations have received special attention in both Taylor and Chen (1991) and Loi (2010), a further step has been taken to discuss the references used in the RA introductions in the present study. As is shown in Table 6, the E-E corpus has the highest mean number of citations, 14.7 per RA introduction. Though there is similar occurrence of citations in the C-E corpus, the C-C corpus seems to yield a much lower number in comparison with the E-E corpus. It seems that this result is in line with the findings of Taylor and Chen (1991) who claimed that the more “Anglicized” writing would lay more emphasis on citing and summarizing the literature (p. 328-329). However, the analysis of the organizational structure of the whole papers reveals that both the C-E corpus and the C-C corpus have one RA introduction (C-E-8, and C-C-7) with a separate literature review closely following the introduction. Both RA introductions are very short, respectively 203 and 191 words, and none of the references are contained in the introduction part. The lower number of citations in the

C-C corpus could be attributed to the conventions of discourse structure of the RAs to some extent, or to the fact that the Chinese researchers have less access to the academic resources as their western counterparts do (Taylor & Chen, 1991). This topic needs to be further explored.

Unlike what has been claimed in Taylor and Chen (1991) and Loi (2010), the findings above indicate that there is much greater similarity in the use of reviewing the literature, i.e. Move 1 Step 3, among the English and Chinese RA introductions, despite their slight differences. This may be caused by the fact that since English has gained its prominence as the lingua franca of research and scholarship, the Chinese researchers, especially those specialized in foreign language teaching and researching, are very likely to read English publications for the latest theoretical and practical information of their research domains. Therefore, it is not surprising that the English conventions of academic discourse have been adhered to more or less in the RAs written by Chinese.

Move 1 Step 4, defining important terms/concepts related to the research topic, has been employed in all the three sets of RA introductions, whereas “presenting the theoretical basis”, Step 5, occurs in the E-E corpus and C-E corpus once respectively, but is totally absent from the C-C corpus. Both can be classified as the optional steps because of their scarcity.

4.2.2 Steps in Move 2

Move 2, establishing a niche, like a hinge connecting what has been done (Move 1) and what the present study is going to do (Move 3), is labeled as a key move (Swales,

1990; Shim, 2005). Though Move 2 has been frequently used in all the three sets of introductions, the English researchers tend to use more in proportion than their Chinese counterparts, with the occurrence of Move 2 up to 90% in the E-E corpus, 80% in the C-C corpus, and 60% in the C-E corpus respectively. This finding is consistent with the past studies, such as Ahmad (1997), Jogthong (2001), and Hirano (2009), etc., which claim the less prevalence of Move 2 in languages other than English.

Step 1A, indicating a gap, is the most frequently used step of Move 2 for the three groups. It was adopted in six, five, and eight out of ten RA introductions in the E-E, C-E, and C-C corpus respectively. A detailed analysis reveals that the Chinese researchers tend to employ it as the main means to establish the niche for their to-be-reported studies, while their English counterparts use more alternative ways to achieve their goal. Among the nine RA introductions involving Move 2 in the E-E corpus, the strategies of both Step 1B, raising questions, and Step 2, presenting positive justification, have been used. It has been argued in some studies, such as Taylor and Chen (1991), Ahmad (1997), Jogthong (2001), and Loi (2010) that gap indications in the RAs written by researchers with other language backgrounds are not used as frequently as those written by English scholars. However, this study only partially supports it, with less employment of gap indication in the C-E corpus, more in the C-C corpus than that in the E-E corpus.

Cultural differences may not be the cause of the discrepancy in the occurrence of gap indications between English and Chinese RA introductions written by Chinese scholars. Different density of research context the Chinese researchers face in publication of their RAs would be a better explanation. *Foreign Language Teaching and Research* is one of the earliest and most prestigious journals for linguistics and

foreign languages study and research in China. It is well-acknowledged that researchers have to face fierce competition to get published in this journal. In this case, making a strong research claim leaves them in a much advantageous position in getting their work accepted. Comparatively speaking, competition for publication in CJAL is not as intense. Thus, the writers do not have to show much aggressiveness to criticize prior research in the face-saving Chinese culture.

With respect to the expressions used to indicate gaps, both similarities and differences have been identified in the three corpora. In most cases, both English and Chinese researchers adopt the weak version (Ahmad, 1997), such as little attempt to do, or a lack of, certain research topic, to establish a niche for their own studies. In addition, like their English counterparts, some Chinese researchers, in both C-C and C-E corpora, identified and pointed out the shortcomings of specific previous research by name both home and abroad, unlike what was suggested by Taylor and Chen (1991) and Loi (2010) that Chinese researchers find it uncomfortable and inappropriate to take a strong critical stance towards the prior research. See the examples below:

[C-E-7] Although first language influence has always been a research focus in SLA, studies exploring this issue in tense-aspect acquisition are still few. Even those researchers who have addressed this topic such as Collins (2002: 43-94), Cai (2003a), Salaberry (1999: 135-152) limited their studies on single language subjects.

[C-C-6] 因此, 我们认为语义透明度和学习者对一个单词的熟悉度是影响英语复合词存储单位的两个因素。笔者分析了黄远振(2001)和陈士法等(2007) 两个研究的实验设计, 发现都没有涉及这两个因素。

(Therefore, we think that the semantic transparency and the degree of learners' familiarity with a word are two factors influencing the storage of English compounds. The writer found none of them were involved in both experimental designs of Huang (2001) and Chen et al. (2007).)

However, it differs in that a very tactful way of expression, which is absent in the E-E corpus, is adopted as another strategy for Chinese researchers to occupy a research space for their studies. For instance, the following example does not mention any shortcoming or limitation of previous studies. Instead, without “however” in the beginning, it seems more like a summary of what has been done rather than a gap statement.

[C-E-3] However, the previous researches mainly focused on the effects of text signals on memory for text and those studies were carried out with native speakers.

The co-existence of the phenomena that some Chinese researchers are “bold” enough to designate the shortcomings and limitations of past studies explicitly while some others adopt very tactful expressions and attitudes towards the literature could possibly be explained by the mutual influence of English writing conventions and Chinese culture. As what has been mentioned above, the Chinese scholars engaged in applied linguistics are mostly foreign language teachers, quite different from those hard science scholars in Taylor and Chen (1991) and educational psychologists in Loi (2010). In order to get their work published, it is almost a necessity for them to take numerous English RAs and scholarly books for reference. Thus, it is understandable that the English writing convention is reflected in the Chinese RAs. In addition, the Chinese high-context culture, which values reserved or implicit expression of one’s thought (Loi & Swans, 2010), urges some researchers to adopt indirect expressions to maintain others’ face, and avoid invoking negative attitudes from the colleagues in the same academic community.

Move 2 Step 2, presenting positive justification, as notified in Samraj (2002) to “provide positive reasons for conducting the study reported” (p.9), was identified in this study, too. This step was employed by four RA introductions, two from the E-E

corpus and the other two from the C-E corpus. Furthermore, in line with what was found in Samraj (2002), the positive reasons for conducting those to-be-reported studies were never used alone, generally presented after indicating a gap in previous research.

4.2.3 Steps in Move 3

It is found that the English RA introductions in the E-E corpus have employed all the possible steps listed in Table 1 to present their research while only a very limited number of them have been used in the RA introductions written by Chinese researchers.

Step 2, announcing present research, has the highest frequency of occurrence among all the steps of Move 3 in the three sets of introductions. In particular, this step, which accounts for 70% in the C-E corpus and 60% in the C-C corpus respectively, is preferred by Chinese researchers to inform the readers of the main features of their research. On the other hand, the proportion of this step in the E-E corpus is relatively low since more alternative steps have been used to achieve the same purpose.

The notable differences of this move between the RA introductions written by English and Chinese researchers are found in the employment of those steps, namely Step 1 (outlining purposes), Step 5 (implication of the findings), and Step 6 (presenting the value of the study). Four out of ten RA introductions in the E-E corpus have adopted Step 1 to indicate their research purposes. Besides, three RA introductions have explicitly specified the practical implications (Step 5) or academic

value of their studies (Step 6). However, these steps are totally absent from the RA introductions written by Chinese scholars.

The absence of these steps may be traced back to the influence of Chinese culture. Being a high-context community, the Chinese culture desires the interlocutors to express in an implicit or tactful way, in comparison to the explicit and direct communicative manner that the western culture advocates. In addition, the Chinese prose is more reader-responsible than the English ones (Hinds, 1987; cited from Loi & Evans (2010)). It may be assumed that, after indicating the gaps of the previous research, the readers are expected to realize the main purpose of the concerning study, which makes it unnecessary for the researchers to explicitly express it again. Furthermore, the Chinese researchers' reluctance to highlight the value of their own research, either practically or theoretically, may be attributed to their preference for modesty or humility, which is regarded as one of the most basic moral traits in the Chinese culture. Specifying the merits of one's work is not encouraged according to the traditional Chinese culture even though the researchers have to face fierce competition for getting papers published. In contrast, as is identified by Anthony (1999), the English researchers are more likely to give positive evaluation of their own work by stressing its uniqueness and contribution to the specific domain.

5. Conclusion

This paper has presented a comparative study of three sets of Chinese and English research article introductions in applied linguistics, aiming to identify the similarities and differences in the organizational structure on the basis of the CARS model. It has been revealed that the RA introductions written by Chinese researchers exhibit more

similarity to the English ones in terms of moves, in comparison with the studies of Taylor and Chen (1991) and Loi (2010). The influence of English writing conventions on Chinese researchers leads to the resemblance of rhetorical patterns adopted by their English counterparts. The discernible differences in the use of certain rhetorical strategies (steps) have also been identified, which might be attributed to the influence of traditional Chinese culture.

The move analysis demonstrates that the CARS model is a very useful descriptive reference to analyze the organizational structure of RA introductions. Though not all the three sets of introductions conform fully to the model, no example of moves falls out of Swales's structure. However, this study verifies Loi's (2010) finding that certain steps within the moves are not accounted for in terms of the model.

This exploratory study has examined a small corpus of 30 RA introductions. Therefore, the findings here are tentative, only reflecting the rhetorical organization identified in this corpus. Further exploration of a larger corpus is required to determine whether or not, and how, the findings of the present study could be generalized.

This study has some implications for the teaching of English academic writing in China. The move analysis verifies that "following the CARS model may be a good strategy" (Hirano, 2009, p. 246) to get articles published in English. Besides, the novice researchers could be guided to extend the way of analyzing introductions to the analyses of the rhetorical structures in other sections. Good awareness of the rhetorical organization widely used in English may provide better opportunities for

them to make rhetorical choices and get their papers accepted by international journals.

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Appendix A. Articles in corpus

A.1. The E-E Corpus

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E-E-6. Csizér, K., & Kormos, J. (2008). Modelling the role of inter-cultural contact in the motivation of learning English as a foreign language. *Applied Linguistics*, 30 (2), 166-185.

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E-E-8. Timmis, I. (2009). 'Tails' of linguistic survival. *Applied Linguistics*, 31 (3), 325-345.

E-E-9. Iwasaki, N. (2008). Style shifts among Japanese learners before and after study abroad in Japan: Becoming active social agents in Japanese. *Applied Linguistics*, 31 (1), 45-71.

E-E-10. Lam, P. W. Y. (2009). Discourse particles in corpus data and textbooks: The case of *Well*. *Applied Linguistics*, 31 (2), 260-281.

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Challenges Faced by Non-Native Undergraduate Student Writers in an English-Medium University

Bruce Morrison

The Hong Kong Polytechnic University, Hong Kong

Biodata

Bruce Morrison is presently working at The Hong Kong Polytechnic University (PolyU) where he has been Head/Director of the English Language Centre (ELC) since 2003. He has extensive experience in language teaching, teacher education, educational research and pedagogic administration. Before Hong Kong, he worked in Egypt, UK, Spain, China, Malaysia, Italy and South Korea. His research interests currently focus primarily on the tertiary English language experience for non-native speaking students. Other interests include independent language learning and the impact of computer-mediated teaching for tertiary English language teachers.

Abstract

This paper examines some of the challenges that seventeen second language (L2) students at an English-medium university in Hong Kong faced in writing academic texts. The data were collected as one part of a wider long-term qualitative study that recorded the experiences of 28 L2 students from various disciplines over their three-year study programme. After presenting an initial overview that highlights some areas of common concern with regard to writing, this paper focuses on perspectives derived

from semi-structured interview and learner activity log data that illustrate individual learners' experiences in completing one written assignment in their second year of study. Apart from issues relating to their language competence, participants reported facing two main challenges in writing acceptable undergraduate academic discourse. The first related to their management of the writing process and was highlighted by their general lack of effective planning and poor time management, while the second was text-focused and concerned their handling of inter-textuality and their ability to structure information effectively.

Keywords: academic writing; academic literacy; Hong Kong; second language writers; case study; writing process; tertiary education; university; medium of instruction; learner experience

1. Introduction

Apart from the challenges faced by all students entering tertiary education relating to factors such as time-management and affective issues such as loneliness, low motivation and feelings of inadequacy, the specific language related challenges that second-language (L2) students face in an English-medium university are numerous (Braine, 2002; Foster & Russell, 2002; Leki, 2007). While Hong Kong has long had a policy of English medium education, at tertiary level the implementation of this policy has not been without its problems (Littlewood & Liu, 1996; Evans, 2010; Evans & Green, 2007). Since the return of Hong Kong to China in 1997, a mother-tongue policy has been implemented in the majority of local secondary schools. Consequently, an increasing number of Cantonese-speaking students enter university having completed Chinese-medium secondary education. Evans and Morrison (2012)

suggest that the situation of such students is similar to that of EFL students in Eurasia who study part or all of their undergraduate programme in English. In terms of the nature of the challenges faced by L2 students generally, various studies (e.g. Christison & Krahne, 1986; Littlewood & Liu, 1996; Evans & Green, 2007; Zhang & Mi, 2010) have suggested that, although they clearly face difficulties relating to all four skills, academic writing, which plays an important role in the critical transition from secondary to tertiary education, presents the most difficulty.

This paper focuses on some of the difficulties faced by a group of L2 students at one university in Hong Kong when completing written assignments in English. The two major difficulties reported related to the management of the writing process and to the handling of inter-textuality and the ability to structure information effectively.

1.1 Literature review

Many students the world over are unfamiliar with the process of writing academic texts and discover that the writing training they received at school is not necessarily transferrable to the tertiary context (Leki, 1995; Spack, 2001), and that significant and disconcerting differences exist in the type of writing expected in secondary and tertiary education contexts (Foster & Russell, 2002; Li, 2002). Various corpora studies have highlighted the extent of the challenge they face (Nesi & Gardner, 2012). The differences relate to factors such as the length and complexity of texts, the greater emphasis on researching a topic, as well as a move in focus away from the language and structure of a text towards the analysis and interpretation of content and a response to the conventions of the discourse community in terms of aspects such as genre, identity and institutional practice (Swales, 1990; Lea & Street, 2006). In short,

these students lack the appropriate and effective academic literacy skills (Lea, 2004) that they need to develop over the period of their university studies and students operating in an L2 medium of instruction may well experience such greater difficulty than other students (Lea & Street, 2006: 270).

Among the challenges L2 students in particular face, some relate to language proficiency. These, for example, include an inability to express themselves clearly (Cooley & Lewkowicz, 1995; Schneider & Fujishima, 1995; Flowerdew, 1999) and a lack of sufficient relevant vocabulary (Casanave & Hubbard, 1992; Littlewood & Liu, 1996; Flowerdew, 1999; Al-Khasawneh, 2010; Lin & Morrison, 2010). With regard to vocabulary, studies relating to the role of multi-word expressions, referred to as *lexical bundles* (Biber et al, 1999), in academic discourse, have highlighted their distinctive patterning and importance in a student's ability to write effectively within a particular discipline (Hyland 2008). L2 writers have been found to use a narrower range of lexical bundles with a tendency to over-use of features less appropriate to academic writing (Chen & Baker, 2010; Adel & Erman, 2012). Another important factor that will have a considerable impact on the development of effective academic writing skills is a student's ability to read effectively (Leki and Carson, 1994; Spack, 2001) and then to integrate another writer's ideas and views into her/his own text while acknowledging their source.

Other challenges for both L1 and L2 students relate to a mismatch of expectations between the student and teacher (Schneider & Fujishima, 1995; Foster & Russell, 2002). In this regard, one area of concern identified is the organisation of ideas and coherent arguments within a text. Reflecting the findings of Casanave and Hubbard's (1992) US study in the US, Littlewood and Liu, in their (1996) Hong Kong study, found that both teachers and their students identified the organisation of

coherent arguments to be the most important feature of good academic writing. The development and organisation of ideas and structuring of a coherent extended argument within a text has been recognised as being particularly problematic for L2 students generally (e.g. Casanave & Hubbard, 1992; Cooley & Lewkowicz, 1995; Leki & Carson, 1997).

The challenge for L2 students may be seen not only in terms of the need for the accurate language and well-structured texts, but also in the process of managing the academic writing task. In their 1994 study of US students' writing needs, Leki and Carson reported that nearly one-third of their participants expressed a wish that they had learned more, and more effective, strategies related to task management in order to better deal with such issues.

Two of the strategies acknowledged as being crucial to effective task management in writing are effective planning (Skibniewska 1988), and revision and re-writing (Zamel 1983; Raimes 1985, 1987). Investigating the composing processes of 6 advanced ESL students, Zamel (1983) noted that the less skilled writer tended to focus more on trying to ensure linguistic accuracy and less on the text as discourse, and thus spent less time on more discourse-focused strategies such as planning and revising. Roca de Larios et al (2008) in their study of Spanish senior secondary and tertiary students of differing levels of English proficiency found that the students spent up to 80% of their time in the formulation process as opposed to as little as 1% in planning and 6% in revision, and that lower proficiency writers focused much more of their attention on language form than on planning and/or revision. This lack of focus on the text as discourse is reflected in the difficulty students experience in structuring an academic text.

1.2 The Hong Kong tertiary context

Much of the research focusing on the challenges faced by L2 undergraduate student writers has been undertaken within the context of North American universities. The Hong Kong setting is very different from one where L2 students enter an institution within a language context where the medium of instruction (MOI) is that of the wider community within which the university operates and where they might be considered “outsiders”, linguistically and culturally.

In Hong Kong, most students enter a university where the MOI is English. English is not, however, the first language of the overwhelming majority of these students who are Cantonese-speaking and who tend to live at home throughout their university study and are thus unlikely to use English very much outside what is required for their studies. The pressures placed upon them and some of the challenges they face have been identified by a number of researchers (e.g. Littlewood & Liu, 1996; Evans & Green, 2007; Evans & Morrison 2011). At the same time, the shift from English- to Chinese-medium instruction in approximately three-quarters of secondary schools (Poon, 2010) and a general decline in the role of English as a language of governance since the handover of Hong Kong to China in 1997 has had a significant impact on the language proficiency of those entering the Territory’s English-medium tertiary education system and on the institutions themselves (Evans, 2010).

1.3 The study

With the exception of case-study research such as that conducted by Schneider and Fujishima (1995), Dong (1996), Riazi (1997), Li (2007) and most notably Leki (2007), much research into the challenges that L2 undergraduate students face has tended to be synchronic. Of the studies above, all were small in scale (tracking four or fewer students) and all except Li (2007) were conducted within the North American context, and (with Leki's study being a notable exception) focused on a relatively short period of time within the participants' study programmes.

The data relating to the experiences of L2 students as writers, on which this paper focuses, is a small part of those data derived from a qualitative three- study that tracked 28 students over the three years of their university study. The overall aim of that three-year study was to understand some of the challenges L2 students encounter over the entire period of their studies in the Hong Kong English-medium tertiary environment, and had two principal research objectives. The first, in relation to their use of English, was to track the participants' learning experiences over the period of their studies. The second was to identify language-related problems that they encountered when studying their academic subjects in English, and the ways in which they attempted to overcome these.

This paper focuses on writing-related issues which were identified primarily from one interview. It reports on the writing processes of and problems encountered by seventeen L2 students from a variety of disciplines when writing an assignment in their discipline in the second two year of their university programme. To contextualise the interview data, findings are presented which are derived primarily from

questionnaire data and which relate to the participants experience as freshman student writers.

2. Methods

2.1 Participants

The twenty-eight participants, selected for the overall study using a purposeful sampling strategy (Patton, 2002), were generally heterogeneous in terms of their social and educational backgrounds, as well as their English proficiency as measured by public examination results. Of the twenty-eight participants, seventeen participated in the interview that focused specifically on their experiences relating to writing and which are the focus of this paper. Of these seventeen, fourteen had completed an English-medium secondary education, while one participant had switched to a Chinese-medium school in his last two years of secondary school study. Nine had obtained grade D in the Hong Kong AS Level Use of English examination taken at the end of their secondary education, three grade C and two grade E⁷. Two students had received their secondary education on the Chinese mainland and one in Malaysia.

The participants studied a range of academic disciplines in various faculties within the University. Six participants were studying in the Faculty of Business, five in the Faculty of Applied Sciences, four in the Faculty of Health and Social Sciences, two in The Faculty of Construction and Environment, and two in the Faculty of Humanities. All participants signed a consent form which detailed the objectives and

⁷ AS Level Use of English examination grades range from F (fail, which equates approximately to IELTS scores below 5.4) to A (which equates approximately to IELTS scores ranging between 7.4 and 8.3) – ref. http://www.hkeaa.edu.hk/en/ir/Standards_of_HKEAA_qualifications/IELTS/

nature of the study and were assigned a pseudonym for data analysis and publication purposes.

2.2 Procedure

In the overall study, there were a total of six rounds of in-depth interviews conducted, once semester over a period of three years, with each focusing on one particular aspect of the participants' tertiary learning experience. This paper, however, reports solely on data from the interview (n=17) which specifically focused on the participants' experiences of writing one particular assessment.

The interview lasted approximately 30 to 40 minutes and was conducted by the authors in English. Although the English proficiency of the participants varied, given that they were in their second year of English-medium tertiary education and that the interviewers were very familiar with Cantonese speakers of English, it was felt that better to conduct the interview in English rather than in Cantonese with subsequent translation. The interview was audio-recorded, and the (native English speaker level, Cantonese speaking) project associate produced a full verbatim transcript for subsequent analysis.

Semi-structured in design, although an interview protocol was used to guide questioning, discussion focused on issues that arose from the participants' previous completion of a learner activity log in which they had been asked to record activity related to their writing of one particular assessment and to reflect on the experience (Appendix A). Participants kept a record of activities such as searching for material, taking notes and writing a draft - from the beginning of the assignment process

through to submission. Having submitted the assessment, they were then asked to reflect upon their approach to the task. The quantity and quality of data derived from these activity logs varied but nearly all participants provided input relating to various aspects of the writing process. Those participants whose activity log input was insufficient to provide satisfactory interview prompts were asked to recall, and then reflect on, the writing process in the interview.

This interview format provided a guiding framework that allowed participants and interviewers to explore topics as they arose, and for the interviewers to be more open to new ideas and interpretations that surfaced. The iterative process involved in the interviews themselves and their subsequent analysis of the verbatim transcripts underpinned the study methodology. This allowed for flexibility that the use of questionnaires alone (for example), with their pre-conceived theoretical framework, would not have. We were able to explore areas of interest and concern as they arose, to quickly clarify participants' statements or views, and to reformulate questions in order to better ensure participant comprehension when necessary.

Although the interview was our primary source of data, we also made use of two complementary sources. The first was a 45-item, campus-wide survey (Evans & Green, 2007) completed by 3,009 respondents in their first year of study, one section of which examined students' perceptions of their academic English skills (Appendix B), and which was also completed by the study participants immediately after Interviews One and Two. The second was a short questionnaire administered during Interviews One and Two, which focused on learners' perceived levels of confidence with regard to their use of English (Appendix C). The use of different data collection tools and, in the questionnaires, of the Likert scale to derive a count not only served to

enrich the interview data but also provided an element of method triangulation (Denzin & Lincoln, 2005).

An overview of the contextual data, derived primarily from questionnaires is presented in section 3.1. The in-depth analysis of the qualitative data derived from Interview Four, which relates to the specific challenges our participants encountered in writing one assessment and which constitutes the major focus of the paper, is then discussed in section 3.2.

2.3 Data analysis

The semi-structured nature of both the interviews and the open format of the activity logs allowed interviewer and participants to explore relevant topics that arose. The resulting data are thus rich in terms of the depth of elaboration and diverse in scope, nature and occurrence. The process of analysis and interpretation of the data involved a process of data reduction (Miles & Huberman, 1994) which was achieved through an iterative processes of annotating, coding and checking the data. A degree of inter-rater reliability was ensured through the data coding being re-examined by both authors after the initial coding by the project associate.

After the initial annotation of the interview transcripts and activity logs had been completed and had resulted in identifying a number of emerging themes, coding software (NVivo) was used to aid the subsequent process of data coding which involved sorting the data, identifying main and sub themes, and subsequently cross-referencing and re-categorising data as the coding process progressed. Among the writing-related themes that emerged were, for example: the planning process, the

researching process, time management, constraints due to students' linguistic competence, working in a group and reading. In the following section, one piece of data is tracked through the coding process in the form of a "worked example" (Morrison, 2007).

2.3.1 A worked example of the coding process

One theme that emerged from one transcript was 'Writing up assignment'. This theme was subsequently explored by examining the interview and activity log data for each of the other participants. Taking participant Jessica for our example, various sub-themes were identified. These included her references to the writing process (e.g. "I wrote first half on Friday...and then again on Sunday"), her note-taking method ("I just highlight...I do not write notes"), her revision/editing process (e.g. "I just read it through once and handed it in") and the problems she encountered. These problems included her difficulty in activating her passive academic vocabulary (e.g. "try not to repeat the same vocabulary"), her lack of practice in writing academic texts (e.g. (I have) "fewer writing assignments") and her difficulty in extracting relevant points from her reading (e.g. (difficult) "to extract some useful points from the readings").

The data relating to Jessica were then exported to an Excel spreadsheet that enabled easier sorting and filtering which in turn allowed for clear hierarchical identification of main themes and sub-themes and the particular references made to these. Finally, the data from all participants were consolidated, filtered and sorted so that common issues could be identified, whereupon NVivo was used to retrieve specific references to these made by individual participants in order to provide illustrative references and quotations.

2.3.2 Identifying trends and common issues

While the qualitative nature of the data and the sample size did not lend itself to statistical inferencing, we considered it useful to highlight trends and common issues identified in the interview and activity log data as well in order to track elements of the data that were otherwise concealed in the broad distributional difference of items. Frequency counts were used in order to characterise broad similarities and differences, and questionnaire data were then used to provide an element of data triangulation. It is however the richer interview case-study data from Interview Four and the related learning activity logs, which are discussed in section 3.2, from which we can begin to flesh out individual participants' experiences of the writing process.

3. Results and discussion

3.1 Data from the overall study

The data derived from the overall study show that, together with reading, writing was perceived as presenting the greatest language-related challenge to the participants' tertiary study, with approximately 30% of difficulties reported by participants in all interviews being related to writing.

Participants' level or area of concern regarding writing did not however remain the same throughout their programme of study. In the short questionnaires administered during Interviews One and Two, which aimed to determine how confident participants felt using English in their studies (Appendix C), all except two of the participants had greater confidence in their writing abilities by the second semester. The average rating with regard to the item that focused on writing skills

rose from 2.6 to 3.1 (on a five-point Likert scale), signifying an approximately 14% improvement. With reference to the campus-wide survey that was conducted just after Interviews 1 and 2 (Appendix B), an overall 12% improvement in self-ratings on the academic writing section was recorded.

Additionally, in terms of the number of references to writing-related difficulties, students' perception of the relative level of challenge they faced in their writing also changed between the first and fourth interviews, as seen in Table One. Reflecting the findings of, amongst others, Littlewood and Liu (1996), Flowerdew (1999) and Al-Khasawneh (2010), when students were asked in Interview One about challenges they faced, the main one identified in relation to writing was a lack of vocabulary. By Interview Four, it is noteworthy that a problem that participants had not identified at all previously - i.e. the problem of organising and structuring their writing effectively - had become to be seen as the major obstacle they faced, and that concerns regarding language proficiency and vocabulary were by then much less remarked upon.

Table 1: Participants' perceptions of challenges related to writing

	Semester One: main problems	Semester Four: main problems
Vocabulary	1* (13**)	3 (5)
Academic style	2 (9)	-
Inter-textuality	3 (8)	2 (7)
Simple or weak English	4 (5)	5 (2)
Grammatical accuracy	5 (4)	6 (2)
Developing ideas	6 (4)	4 (9)
Text length	7 (2)	-
Information structure and organisation	-	1 (18)

* Problems are prioritised with "1" indicating the most problematic, based on number of references by participants that are judged to refer to the challenge. Semester Four priorities 2, 6 and 7 refer to challenges not related the topic of the paper.

** The number in parentheses relates to the number of participants referring to the particular challenge.

In Interview Four, which focused specifically on one of each of the participants' written assignments, another major area of concern, not uniquely related to participants' writing, which surfaced was their lack of effective study skills.

Overall, in relation to participants' experience of writing at tertiary level, apart from early concerns relating to a lack of vocabulary and language proficiency related issues, two major areas of challenge emerged from Interview Four, the campus-wide questionnaire and the learning activity log data. These partially reflect Leki and Carsons' (1994) conclusion that in completing EAP tasks students primarily faced difficulties related to task management and language issues. The two areas were: 1) the students' difficulty in effectively managing the writing process in the context within which the writing tasks were set; and 2) problems relating to how they organised their texts - in particular their inter-textual and information structuring skills. Their problems seem to have been exacerbated by the fact that many participants were working on group assignments.

3.2 Specific writing-related challenges faced by participants

In Interview Four, discussion focused on how these students from different disciplines approached and completed one of their written assignments. In preparation for the interview, participants were asked to record in a learning activity log the process of completing the assignment, as well as to reflect on the writing process itself. Table 2 details the types of assignments the participants completed, the types of guidelines provided by teachers and some participants' reflections on these guidelines.

Table 2: Details re. assignment types and teacher guidelines provided

Assignment type		Responses
Report		12
Presentation(s) plus report		3
Summary		2
Presentation plus training menu		1
Time allowance for the assignment		
Not more than 4 weeks		2
Between 5 and 9 weeks		3
Between 10 and 15 weeks		12
Not mentioned		1
Teacher guidelines		
Laboratory menus		3
Assignment Guidelines		12
No handouts provided		3
Participant comments on the handouts		
Content sufficiently detailed		4
Content not sufficiently detailed		3
Guidelines with assessment criteria		2
Easy to read		1
Lacking detail re. purpose of assignment		2

Given that the interview and completion of the activity logs took place in the second semester of Year Two (of a three-year degree programme), a number of issues that arose are troubling – not only in terms of students’ performance of a specific assignment, but also with regard to evidence of poor study skills, particularly in relation to reading, planning, note-taking and revision strategies.

3.2.1 Managing the writing process

All participants except one referred either to a lack of planning or to planning generally being an area of concern; while in the campus-wide survey, “planning a written assignment” was recognised as one of the more difficult tasks in the writing

process. From the interviews, it was clear that participants were referring to issues relating to both planning their writing and planning their time. Fourteen participants reported relying considerably on the guidelines from their subject lecturer not only to provide a framework for the structure of the assignment, but also to serve as an outline plan for the writing process. Flora (Marketing) refers to such guidelines as including “many types of information and everything we can include in the report”. These guidelines differed from programme to programme but included elements such as selected reading texts, lab menus with various steps outlined, an outline of the sections to be included and reminders of deadlines. While the participants agreed that such support was useful, Dora (Health Sciences) felt that the detailed guidelines and section headings “limit the students’ ability to have some better presentation”. This concern may be seen manifested in Laura’s (Applied Sciences) admission that her group “just copy the rules in Powerpoint and into Word and then make them into full paragraph, and also adding some more relevant information into it”.

All students need effective planning strategies when writing academic texts (Graham et al, 2013). Studies have reported L2 writers doing less planning than their L1 counterparts (e.g. Roca de Larios et al, 2008) and skilled writers spending more time in the planning process than those who are less skilled (Raimes, 1987; Skibniewska, 1988). Reflecting this, two participants reported an absence of planning at the outset of the assignment writing process, eight reported undertaking no planning at all throughout the entire duration of the assignment writing process, while three referred to late planning. The lack of planning almost certainly contributed to the fact that approximately a quarter of the participants reported only starting the writing process very shortly before the deadline - despite, in most cases, having received a clear overview of the task in the early part of the course. This behaviour

may in part be an example of students only doing that work necessary to pass a subject, indeed two participants attributed their late start to laziness. Iris (Humanities) admitted only starting to write two days before the deadline because she was “not motivated to finish the assignment before because I just thought that the deadline is not coming”, while another participant’s comment suggests that her “laziness” is perhaps more due to poor time-management:

Even the tutor gives me one month for doing the assignment, I will only just start work one week before...because I think I have lots of time. (Ann, Business)

Eleven participants did however acknowledge the potential benefits of better planning, with Gary (Applied Sciences) referring to the rush as the assignment deadline approached as the “death week”, and Hazel (Health Sciences) claiming to have learned from experience and to be improving her planning accordingly. Interestingly, Freddy (Business), the only participant whose group used a formal plan, ascribed this to the fact that his group included an exchange student from Germany who encouraged them to develop one. He suggested that:

Normally, the Hong Kong students don’t have any planning, they just think that we have to give in the first meeting, then they just discuss the issue and then distribute the work to each student or the group mates, and then they will set a time schedule, the deadline but usually the deadline will be more late.

Four reasons for improper planning were highlighted. One was the participants’ stated preference for depending on intuition and memory, as reflected in Jessica’s (Humanities) assertion that she did not need a plan because she felt she “can correct in the computer anyway, so I just write straightly”, and in Freddy’s explanation that “I

just have a mind idea in my mind, so I don't write it out". Secondly, some participants suggested that they lacked experience of making a formal plan, with Belinda (Health Sciences) suggesting that it was "typical of my class" that it was only "when time is limited your motivation will become very high" and that, prior to this, "we do not think so seriously at the beginning in planning the whole thing". Another reason given by two participants referred to their preference for completing the task in a short period in order to "do many task at same time" (Tom, Applied Sciences) and to ensure a smooth flow of ideas (Grace, Applied Sciences). Finally, the fact that many of the assignments were completed in groups seems to have had considerable effect on planning. Participants identified difficulties encountered when working on group assignments and ensuring the collaboration needed for such assignments with logistical problems such as communicating with students studying on different programmes being reported. However, they suggested that group dynamics and peer pressure (although this was often not explicitly articulated) contributed to the general view that, since the members of the group were good friends, there was no need to plan the assignment process except for agreeing upon the division of labour within the group and/or on the timing for group meetings.

The lack of formal planning and effective time management of the assignment process by many of the participants resulted not only in a rush to complete the assignment before the deadline, but also in making it difficult for them to formulate a focus for their assignment, without which the processes of critical reading, note-taking, data reduction and information structuring are made much more onerous and less effective. This important function of a plan was recognised by Dora who commented:

...if we don't have a plan first...we may not do the project well, and it is time-consuming. If we have a plan first then after the meeting, we each have the responsibility for some part and then in the next meeting, we can gather, hey what have you done, what have you done and then gather the information into a whole picture, and then we just discuss the whole picture to see whether some improvement or whether some missing points are there.

Interestingly, and perhaps supporting the assertion that they are inexperienced at planning and had managed to “get by” in the past, three participants, despite reporting the difficulties they encountered, reflected that in the end they felt they had managed the process adequately. Eric (Construction and Land Use), for example, who did “not make a written outline and just a rough idea in my mind...so there is not a clearly step by step...and I can't clearly know that what I am doing in assignment”, submitted the task on time and felt that his approach was ultimately “effective”.

In addition to a lack of planning, the other two main problems that surfaced with regard to the participants' process of writing were the lack of a systematic process of drafting, review and revision, and limited note-taking strategies (which are discussed in relation to inter-textuality in section 3.2.2). Andrew (Applied Sciences) stated that:

From time to time from the start to the end, I always revise it...checking about the grammar and some logic and some organisation.

As noted previously, Zamel (1982, 1983) suggested that skilled writers spend more time revising than those less skilled, while Silva (1993) observed that less proficient L2 writers were more likely to focus primarily on surface level revision, revising at a more superficial level. Apart from Andrew, no participant indicated that they followed a systematic process of review and revision. Although mention was sometimes made of checking content, the majority simply referred to checking surface

features such as grammar (8 participants), sentence structure (3), and lexical accuracy and consistency (3). In her activity log, Jessica (Humanities) referred to “proof-reading” but admitted in her interview that this was very limited. Two participants referred also to trying to ensure an appropriate and consistent writing style, making particular reference to the use of relevant terms and appropriate synonyms. One exception to the general practice of simply reviewing language features was Hazel, who not only checked for linguistic accuracy and lexical richness - “we are not just repeat the words” - but also identified the importance of “the organisation and the flow of your ideas, how to explain your problem, your rationale clearly, and how to take your reader step by step to your main focus”.

3.2.2 Inter-textuality and textual organisation

While the challenges outlined above relate to poor or insufficient planning in the overall writing process, another major area of concern related to text construction. As can be seen from Table One, while sentence level grammatical accuracy was a concern for students in their first semester at university, they subsequently began to shift their attention to discourse level aspects of their writing. It was very evident by Interview Four that most participants showed relatively little concern about grammatical accuracy, being clearly more focused on the effective structuring of textual content.

One of De Beaugrand and Dressler’s (1981) standards of textuality - inter-textuality - is used in this paper to refer to the “embedding of arguments” (Hyland, 1999) and the reflection of other textual references within the text (primarily through the use of paraphrasing, summarising, synthesising and referencing) in order for a

writer to be able to demonstrate how his/her writing builds upon and contributes to existing research (Swales & Feak, 2001). With specific reference to the student writer, Foster and Russel (2002) maintained that there was a need for the student academic writer “to integrate views of authoritative others skillfully and coherently into a more complex, multivocal perspective (and) to synthesize sources in the knowledge-making way their professors expect” (pp. 21/22).

As can be seen in Table One, in both Interviews one and four, participants identified aspects of inter-textuality as presenting considerable challenge, while by Interview Four the structuring of information became the concern to which participants most often referred. The main challenges participants faced regarding inter-textuality and information structure, were identified as being derived from two main sources: their ineffective reading and note-taking skills which resulted in their difficulty in integrating ideas and texts into their writing, and their problems in structuring information logically.

Reading and note-taking

Reading effectively and being able to identify the writer’s main and supporting arguments, and then noting these in one’s own words, is crucial to effective note-taking. In both these aspects, the majority of the participants experienced difficulties. Perhaps underlying both of these problems is the narrow range and limited amount of reading that the participants reported actually engaging in when preparing for their assignments.

All the participants were required to do background reading for their assignments, but participants generally relied on textbooks, lecturer's notes and recommended papers placed on the internet by lecturers. Two exceptions were Andrew and Ann. Andrew (Applied Sciences) referred to "searching for information" and then doing "a lot of reading for this", while Ann (Business) reported spending "maybe more than twelve hours" in background reading that included books as well as electronic sources. Of the only three participants who referred to using both library and internet sources to search for relevant texts (one of whom only did so for "big assignments"), Andrew expressed his frustration regarding the search process:

I've found very hard to find a good book...because the book always consists of many materials and I don't know what to be extract and which book to be borrowed.

Having identified their sources, reflecting a problem that Leki (2007) reports one of her students encountering, a challenge that a number of the participants reported was identifying (6 participants), extracting (6) and organising (15) the writer's main ideas, and then integrating these into their developing text. These difficulties with inter-textuality would seem to be at least partially a result of the participants' note-taking strategies that were reported as consisted primarily of photocopying (8 participants), highlighting or underlining passages in hard-copy texts (7), and copying and pasting from electronic texts (5). Only five participants reported making notes of any sort from the data they had collected. Two exceptions who clearly made considerable efforts to record and synthesise data were Karen (Humanities), who reported hand writing notes while reading, organising them and finally fitting them into her assignment framework, and Gary, who used a mindmap to organise the ideas he extracted from his reading in order for him to better see "the

flow of writing”. The others seem to have gone directly to making varying degrees of effort to paraphrase or summarise verbatim extracts into their developing text without fully understanding their context and how they fitted into the text as a whole.

With one exception, participants identified paraphrasing as a particular problem with Nicole (Business) commenting that the “phrases wrote by others have been perfect”, Iris complaining that “my vocabulary are not enough”, Eric worrying that he may “make the reader confuse”, and Karen expressing her difficulty in terms of both mechanical surface structuring and understanding the underlying ideas:

Sometime it’s quite difficult because there are technical terms and I don’t know how to replace them with other synonyms or other, and most of the time, I just rearrange the sentence structure, like active to passive yeah, or into just joining two sentence with a connection like that...I will try to express the idea in my own way as far as I can understand that, but sometimes they are just difficult to understand, and I don’t know whether if I put it right in this way, whether the definition still hold or is it still correct.

The problems participants reported when paraphrasing reflect the difficulty L2 student writers have displayed in other studies (e.g. Storch, 2009; Wette, 2010). When combined with the fact that the majority of participants did little or ineffective note-taking, the problems they encountered with paraphrasing meant that they faced a serious challenge when attempting to “combine all the information in a proper way” (Eric) - i.e. to integrate ideas from various sources into their text and thus ensure effective inter-textuality.

Structuring information

The lack of effective reading and note-taking strategies exacerbated the problems participants reported with regard to structuring their writing in terms of its conceptual

content. As reported in section 3.1 with reference to Table One, in Interview Four participants identified the effective structuring of information (something they had not even recognised as a problem in Interview One) as the major challenge they faced in their academic writing. Two of the participants explicitly highlighted the importance of effective structuring of ideas: Andrew referred to the need to think “very logically and from the introduction to the discussion there would, there should be linkage that the teacher wants us to”; while Karen (Business) stated that she:

...should define the presupposition semantically or pragmatically. Although I jot down lots of notes on the blank sheet, I have to organise them, during typing I find some argument sounds unreasonable or some are not important, so I have to reorganise them in a more reasonable way.

Most factors that participants identified as affecting their ability to structure information related to their difficulties reading and understanding sources which led in turn to three main problems.

1) Identification and selection of key points:

Interviewer: What was the most difficult part of it (the writing process)?

Jessica: Maybe to extract some useful points from the readings.

2) Identification and understanding of topic:

...if I can design earlier and I can just focus on the reference reading related to that particular topic, so that I do not need to spend so many time on reading, yeah...I just read everything he provided and relevant to, but when I have to design the topic, I just find that there are concepts or definitions that I don't understand in every topic, so I just don't know which topic I should write.

(Karen)

3) Integration of data:

Gary: ...to integrate discrete data from each point. For example, sometime I talk to my group mate, and they give me some point of view and then I ask the others and they give me a point of view, and I've found some maybe I will think this one and this one seems related, but in some degree, they are contradiction, I don't know how to...

Interviewer: Do you mean it's difficult to integrate them?

Gary: Yeah.

This reference to attempts by the group to structure their ideas demonstrates at least a basic awareness of the need for inter-textuality. In this, the discussion itself can be interpreted as an example of oral inter-textuality as Gary seeks to integrate various individuals' views into a coherent whole.

One interesting problem that Laura (Health Sciences) identified related to a strategy that six participants reported employing to help them ensure inter-textuality – the use of their lecturer's Power Point slides to structure the content of their writing.

Laura: For this subject, since the lecturer is a new teacher, the lecture notes is quite disorganised.

Interviewer: Are the lecture notes by the lecturer or by you?

Laura: By the lecturer.

Interviewer: Okay, disorganised in what way they disorganised?

Laura: Information are not structure organised.

Despite her reservations and “finding some problems”, it is interesting that Laura appears to eventually rely on the lecturer's Power Point notes to structure the report:

Actually in the written report, we just put the point in the Power Point to the written report, but we, I do find some problems in grouping the ideas in grouping the points in the Power Point because it's quite different in Power Point in written report, and but we just, we use some connections words and group the paragraph together.

Participants clearly perceived their major challenges to lie, not primarily in producing a grammatically and lexically accurate text, but rather with regard to the

process of writing and the structuring of content in order to ensure textual coherence. Their concerns relating to the writing process centred primarily around improper planning which not only had an impact on their time management but also on their ability to formulate a clear focus for their reading and note-taking, as well as to effectively structure information. The two main factors affecting their ability to produce coherent texts related primarily to the difficulties they experienced in reading and note-taking. These difficulties, particularly when identifying a writer's main points, identifying and understanding the topics, and then integrating others' ideas and data into their own texts, contributed to the problems they encountered in effectively structuring textual content.

4. Conclusions

This paper has focused on a small portion data derived from a study of the issues faced by L2 students in the three years of their English medium university studies. In examining some of the challenges they encountered writing an academic text for one assignment, it has become clear that the “emerging traditions” in the teaching of writing that Raimes (1991) saw coming “out of the woods” are as relevant today as they were two decades ago. The demands that the academic writing process placed on our students, together with a recognition of learner diversity in terms of both background and writing strategies (as also reflected for example in Leki's (2007) case studies) can clearly be seen in our study. Our participants were mostly products of a similar secondary education that does not generally prepare students well for the demands placed upon them as undergraduate writers. They are also however, reflecting Prior's (2006) observation of the heterogeneity of college level writers,

determinedly individual. This can be seen, for example, when comparing Karen's organised approach involving extensive reading, systematic note-taking and reviewing, and a clear awareness of the types of study skills that do or can benefit her, with Gary's short-termism and lack of planning that led to his concern regarding the "death week" as an assignment deadline loomed.

It is noteworthy that, by the second year of their programme, language proficiency was of lesser concern to these L2 undergraduates than the types of challenge faced by many L1 students in terms of managing the writing process and mastering those writing skills needed specifically by undergraduate writers. Despite generally prevailing in the face of not-inconsiderable challenges by employing a variety of coping strategies, specific problems have been identified that this group of L2 learners faced in relation to their academic writing relating to two main aspects. The participants' poor management of the writing process, discussed in section 3.2.1, manifested itself particularly in their lack of formal planning and their ineffective time-management that clearly contributed to the level of stress participants experienced, while their generally superficial process of review and revision meant that only surface level revisions were generally made. As outlined in section 3.2.2, inter-textuality and information structuring presented the second major challenge for participants, due in main part to participants' ineffective reading and note-taking skills. For many, their failure to make even an attempt at taking notes in their own words led to them facing serious problems when attempting to paraphrase and summarise, and then incorporate source voices into their discourse.

These findings have implications for developers of tertiary writing curricula catering to a sizeable proportion of L2 speakers. While approaches to L2 academic writing development that focus primarily on the text and the modeling of text-forms

may well have their value, there is clearly a need to recognise the complexity and individuality of a writer's composing process itself. However, tertiary writing teachers have perhaps been slow to incorporate into the curriculum elements that would support students in the overcoming the types of challenges identified in this paper. Needs analyses have tended to focus on the needs of the disciplines, rather than on those of the individual writer's experience of the writing process. Less emphasis on the language forms and even the genre features expected of a particular discourse community may be of value. More emphasis might be placed on the practical issues relating to the management of the writing process, and to ensuring more effective reading and note-taking skills that will underpin the students' ability to structure their writing more effectively and incorporate the voices of authoritative others into their writing.

More broadly, universities might consider various ways of more effectively supporting L2 (and indeed L1) student writers. It may well be that more effective support in the early part of their studies, provided perhaps as part of a freshman seminar that focuses on learning management issues such as those identified in this paper would be an effective way of highlighting relevant issues early on in the students' tertiary journey. Writing centres can provide a useful focus for various types of learner support. They can, for example, provide not only mentoring sessions and tailored-made support for individual students, but also play a leading role in encouraging and developing in the student body as a whole a greater awareness of the importance of literacy - perhaps through initiatives such as a common book read by all students and faculty, invited speaker programmes and writing competitions.

In terms of future research, as Bitchener and Basturkmen (2006) noted with regard to post-graduate student thesis writing, it would be interesting to see the extent

to which the non-linguistic challenges these students have faced might also apply to L1 students. The ability to engage the types of strategies we have identified our participants as generally lacking may correlate with non-language specific writing skills such as logical structuring rather than only those skills with regard to English. A fuller understanding of the extent to which a lack of linguistic proficiency in the L2, as opposed to a lack of writing skills as evidenced in their own L1, impacts on a student writer's ability to produce a coherent text would also help to better inform and frame efforts by tertiary language teachers to effectively support their students in meeting the challenges they face L2 student writers in an English-medium university.

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Appendix A: Learning Activity Log

ELC Project Researching, Planning and Writing Assignments

This semester we would like to find out how you research, plan and write a major coursework assignment in one of your department's subjects. We are interested in the whole process of doing the assignment: from the moment you receive the assignment guidelines to the moment you submit your assignment to your subject lecturer.

Choosing an assignment

We would like you to choose one major written assignment you have been given this semester (e.g. report, essay, term paper, literature review, case study). Ideally, this should be an individual assignment as we are interested in finding out how you approach major assignments. If you have not been given an individual assignment, please choose a major group assignment.

Recording the assignment process

We would like you to keep a record of all your assignment-related activities (searching for material, taking notes, writing a draft, etc.) from the beginning to the end of the assignment process. When you record this process, please make sure it is exactly what you did!

These questions may help you when keeping your record:

- What did you do when you received the assignment guidelines?
- How quickly did you start work on the assignment?
- Did you discuss the assignment with your classmates or subject lecturer?
- Did you make a plan for managing the assignment process? (e.g. a weekly plan)
- How did you research the assignment? (e.g. conducting a literature search, collecting primary data)
- How much time did you spend collecting material for the assignment?
- How did you organise this material? (hand-written notes, computer files, etc.)
- Did you make a plan before you started writing your assignment? If you did, how did you do this? (e.g. detailed section-by-section plan, rough written outline)
- When, where and how did you write your assignment? What problems did you encounter?
- Did you revise your assignment before submitting it? If you did, which aspects did you focus on? (content, organisation, grammar, style, etc.)
- Did you proofread your assignment before submitting it?
- How close to the deadline did you complete your assignment?

We would also like you to reflect on your approach to the assignment after you have submitted your work.

- How effectively did you manage the assignment process?
- What problems did you encounter during the process?
- Were these problems related to locating and reading sources, managing your time, planning your assignment, writing your assignment?
- How can you improve your approach to researching, planning and writing major assignments?

Please make notes on your activities during the assignment process on the log below (which you can adapt as necessary).

Your first entry should be in the week when you were given the assignment guidelines. For example, if the assignment guidelines were distributed in Week 3 of the PolyU semester, please note this (together with any activities you engaged in after receiving the guidelines).

Week	Activities in the assignment process
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
Reflection	

Appendix B: Campus-wide survey

English Language Centre (ELC) English-language needs at the PolyU

The ELC would like to have a better understanding of the English-language needs of PolyU students. The information that you provide will be treated in the strictest confidence. Thank you for taking the time to complete this questionnaire.

Please answer each item by filling in the appropriate oval on the scale.

1. Personal Information

Department: Programme:

2. Assignments

How important are the following assignments and activities in your department's subjects?

	Not at all important	<	<	>	>	Very important	
1. Essays	(1)	(2)	(3)	(4)	(5)		■
2. Reports	(1)	(2)	(3)	(4)	(5)		■
3. Term papers	(1)	(2)	(3)	(4)	(5)		■
4. Case studies	(1)	(2)	(3)	(4)	(5)		■
5. Literature reviews	(1)	(2)	(3)	(4)	(5)		■
6. Problems	(1)	(2)	(3)	(4)	(5)		■
7. Projects	(1)	(2)	(3)	(4)	(5)		■
8. Oral presentations	(1)	(2)	(3)	(4)	(5)		■
9. Seminar discussions	(1)	(2)	(3)	(4)	(5)		■
10. Tutorial discussions	(1)	(2)	(3)	(4)	(5)		■

3. Academic Writing Skills

How easy or difficult do you find the following writing skills? (i.e. when you are writing assignments in your department)

	Very Difficult	<	<	>	>	Very Easy	
1. Planning written assignments	(1)	(2)	(3)	(4)	(5)		■
2. Expressing ideas in correct English	(1)	(2)	(3)	(4)	(5)		■
3. Revising written work	(1)	(2)	(3)	(4)	(5)		■
4. Using appropriate academic style	(1)	(2)	(3)	(4)	(5)		■
5. Writing a bibliography / references section	(1)	(2)	(3)	(4)	(5)		■
6. Proofreading written work	(1)	(2)	(3)	(4)	(5)		■
7. Referring to sources in written work	(1)	(2)	(3)	(4)	(5)		■
8. Summarising / paraphrasing ideas in sources	(1)	(2)	(3)	(4)	(5)		■
9. Organising ideas in coherent paragraphs	(1)	(2)	(3)	(4)	(5)		■
10. Expressing ideas clearly / logically	(1)	(2)	(3)	(4)	(5)		■
11. Linking ideas from different sources	(1)	(2)	(3)	(4)	(5)		■
12. Writing the introduction to an assignment	(1)	(2)	(3)	(4)	(5)		■
13. Writing the body of an assignment	(1)	(2)	(3)	(4)	(5)		■
14. Writing the conclusion to an assignment	(1)	(2)	(3)	(4)	(5)		■
15. Linking sentences smoothly	(1)	(2)	(3)	(4)	(5)		■

4. Academic Reading Skills

How easy or difficult do you find the following reading skills? (i.e. when you are reading academic articles, books, handouts, etc. for assignments in your department)

	Very Difficult	< <		> >	Very Easy
1. Understanding specialist vocabulary	(1)	(2)	(3)	(4)	(5)
2. Working out the meaning of difficult words	(1)	(2)	(3)	(4)	(5)
3. Reading carefully to understand a text	(1)	(2)	(3)	(4)	(5)
4. Reading quickly to find specific information	(1)	(2)	(3)	(4)	(5)
5. Identifying supporting ideas and examples	(1)	(2)	(3)	(4)	(5)
6. Reading quickly to get overall meaning	(1)	(2)	(3)	(4)	(5)
7. Identifying the key ideas of a text	(1)	(2)	(3)	(4)	(5)
8. Taking brief, relevant notes	(1)	(2)	(3)	(4)	(5)
9. Using your own words when taking notes	(1)	(2)	(3)	(4)	(5)
10. Understanding the organisation of a text	(1)	(2)	(3)	(4)	(5)

5. Academic Speaking Skills

How easy or difficult do you find the following speaking skills? (i.e. when you are giving presentations or participating in seminar/tutorial discussions in your department)

	Very Difficult	< <		> >	Very Easy
1. Speaking accurately (grammar)	(1)	(2)	(3)	(4)	(5)
2. Speaking clearly (pronunciation)	(1)	(2)	(3)	(4)	(5)
3. Presenting information / ideas	(1)	(2)	(3)	(4)	(5)
4. Participating actively in discussions	(1)	(2)	(3)	(4)	(5)
5. Communicating ideas fluently	(1)	(2)	(3)	(4)	(5)
6. Speaking from notes	(1)	(2)	(3)	(4)	(5)
7. Asking questions	(1)	(2)	(3)	(4)	(5)
8. Answering questions	(1)	(2)	(3)	(4)	(5)
9. Communicating ideas confidently	(1)	(2)	(3)	(4)	(5)
10. Using visual aids (e.g. PowerPoint)	(1)	(2)	(3)	(4)	(5)

6. Academic Listening Skills

How easy or difficult do you find the following listening skills? (i.e. when you are in lectures, seminars, tutorials in your department)

	Very Difficult	< <		> >	Very Easy
1. Understanding the main ideas of lectures	(1)	(2)	(3)	(4)	(5)
2. Understanding the overall organisation of lectures	(1)	(2)	(3)	(4)	(5)
3. Understanding key vocabulary	(1)	(2)	(3)	(4)	(5)
4. Taking brief, clear notes	(1)	(2)	(3)	(4)	(5)
5. Recognising supporting ideas and examples	(1)	(2)	(3)	(4)	(5)
6. Understanding the lecturers' accents	(1)	(2)	(3)	(4)	(5)
7. Following a discussion	(1)	(2)	(3)	(4)	(5)
8. Identifying differing views and ideas	(1)	(2)	(3)	(4)	(5)
9. Understanding questions	(1)	(2)	(3)	(4)	(5)
10. Understanding classmates' accents	(1)	(2)	(3)	(4)	(5)

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Appendix C: Confidence questionnaire

	Not at all confident		← →	Very confident	
Reading	1	2	3	4	5
Speaking	1	2	3	4	5
Listening	1	2	3	4	5
Writing	1	2	3	4	5
Vocabulary	1	2	3	4	5
Grammar	1	2	3	4	5
Pronunciation	1	2	3	4	5