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International Graduate Students' English Language Need

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ABSTRACT

This paper reports on a study of the English language needs of international graduate students in the National University of Singapore (NUS). Students from one of the Graduate English Courses were invited to participate in a needs analysis conducted via a questionnaire. In ranking a list of academic tasks in order of importance for their graduate studies programmes, the international graduate students revealed their language needs in the four skills of reading, writing, speaking, and listening. Also, the participants ranked a list of factors that impacted their studies and elaborated on any additional language needs/ factors that they considered important. Based on the results, recommendations were made to provide greater support to international graduate students in their language learning needs: incorporate more writing tasks into the Graduate English Courses, incorporate aural-oral tasks, tap on NUS's Writing and Communication Hub and local/competent conversational partners, and consider offering a new module with more speaking and listening components. To address factors that impact their learning, the support of the university or learning community is important. While this study was conducted in one institution (NUS), the findings and recommendations may apply to other educational settings.

INTRODUCTION

For over two decades, the English language learning needs of international graduate students in the National University of Singapore (NUS) have been served by the Graduate English Courses offered by the Centre for English Language Communication (CELC). There are three modules within the Graduate English Courses, namely ES5000 "Basic Level Writing", ES5001A "Intermediate Level Writing", and ES5002 "Advanced Level Writing". ES5000, which I recently taught and coordinated, aims to provide first-year international graduate students with the opportunity to enhance their basic proficiency in English academic writing.

ES5000 belongs to the English for Academic Purposes (EAP) genre based on its objectives, components, materials, and assessment methods. According to Dudley-Evans and St John (1998), EAP refers to "any English teaching that relates to a study purpose". This follows as students "whose first language is not English may need help with both the language of academic disciplines and the specific "study skills" required of them during their academic course" (p. 34). Indeed, for most international graduate students in the Graduate English Courses, English is not their first language. Furthermore, since the module is not discipline-specific, ES5000 may be classified as an English for General Academic Purposes (EGAP) course whose activities include listening to lectures, reading textbooks and other materials, writing essays, examination answers, dissertations, and reports (Dudley-Evans & St John, 1998). Thus, an EAP/EGAP course encompasses the skills of reading, writing, listening, and speaking as well.

Augmenting the fundamental EAP framework, other pedagogical approaches have been incorporated into ES5000, including academic literacies (e.g., Lea, 2004; Lea & Street, 1998) which consider the "interaction of students and tutors and is concerned with issues such as student and tutor assumptions and understandings of assignment titles, tutor feedback on students' written work and,…the importance of their [students'] own 'identity' as writers" (Lea & Street, 1998, p. 170). Another approach is the notion of cultures of learning; for example, Cortazzi and Jin (2013) assert that "teachers—by recognising positive features of their [students'] current learning cultures—can help students extend, adapt or adopt new approaches" (p. 2).

In ES5000, the writing assignments (WA) follow the process writing approach (Elbow, 1998) as well as an integrated skills procedure (Oxford, 2001). Pre-writing tasks such as reading articles and viewing videos kick start each WA, before students reflect on and discuss the topic. Students then generate

more content through print and Internet searches and further reflection. After completing the first draft and peer review, they revise their WA for a second draft for submission. Teacher-student conferencing follows before the final version is assessed. Throughout this process, expert-novice and novice-novice scaffolding are provided via feedback and support from the teacher and fellow students (Vygotsky, 1978).

This brings us to the rationale for and significance of the current study. During the two decades that Graduate English Courses have served international graduate students, many changes have taken place for the students and their faculties⁄departments. Thus, their English learning needs may also have evolved. Moreover, many of my international graduate students have sought advice and help related to speaking practice and oral presentations. These were needed when they communicated with supervisors, fellow students, the local community, and when they performed duties as teaching assistants and gave presentations at seminars⁄conferences. Finally, international graduate students may have specific needs for transitioning from their former English as Foreign Language (EFL) contexts to their current English as Second Language (ESL) ones. As such, they may need specific linguistic, academic, and sociocultural support for adjusting to their new context in NUS. It is possible too that the findings from this study can contribute to a better understanding and support of international graduate students in other higher education (HE) contexts.

To study how the Graduate English Courses can better meet the English language needs of international graduate students in NUS, a needs analysis seemed a move in the right direction. Thus, to obtain an "assessment of perceived needs of key stakeholders" (Hubball & Clark, 2010, p. 3), I conducted a survey with the following objectives:

1. To conduct an analysis of the English language needs of international graduate students in NUS
2. To recommend enhancements to the Graduate English Courses and similar courses for international graduate students in HE

LITERATURE REVIEW

International students in higher education

According to the literature on international students in HE, living and studying abroad seem to offer them opportunities of having contact with and practice in the target language; however, this is not always true. There can be obstacles to access to input and contact with members of the local community (Byram & Feng, 2006; Norton, 2000).

Different views have been proposed on how international students should respond to their study abroad contexts. One accepted notion is that they should adjust to the host countries' learning and teaching cultures. However, university teachers often fail to recognise that their international students face many challenges in acculturation (Bodycott & Walker, 2000). An alternative view is "cultural synergy" (Jin & Cortazzi, 2001) which calls for mutual and reciprocal effort from teachers and learners to learn about, understand, and appreciate each other's' cultures and perceptions of learning. Yet another perspective suggests that the cultural background factor may be overestimated as students generally adapt quickly (Rastall, 2004).

New learning cultures may also give rise to "learning shock" (Forland, 2006) such that students lose confidence, feel inadequately prepared and unable to engage with the learning environment. Reporting on international graduate students in the USA, Huang (2012) reports the transitioning challenges that they face, including dissonance with teachers in learning cultures, learning to live into adulthood and learning to learn in an adult learning setting. Thus, these international graduate student experiences can be both a culture and learning shock, and students need support mechanisms that "can be built into the mentoring culture to encourage communications" (p. 144). Bamford (2008), writing of the UK context, calls for HE institutions to reevaluate teaching and learning strategies to improve international students' experiences.

To enhance international students' experiences, many universities have provided pre-sessional and/or in-sessional EAP courses. More advanced levels of EAP may also introduce students to the common genres of their specific disciplines. An Australian study suggests that international graduate students who have undergone EAP modules are better equipped to discuss their learning strategy use, seemed more confident with written assignments, and appeared to have a better grasp of the requirements of their graduate courses (Terraschke & Wahid, 2011).

In another study in Australian HE, factors other than English language proficiency seem to have an impact on the performance of international graduate students (Son & Park, 2014). The seven Non-English Speaking Background (NESB) participants appeared to be sensitive to both the host and the academic cultures and faced challenges in developing their academic English writing skills. Adjusting from teacher-centred learning to their new student-centred learning contexts appeared difficult for these students. However, completing the EAP bridging programme provided them with knowledge about Australian academic styles and learning approaches. The most challenging and critical academic features they needed to acquire were "how to contribute and participate in group discussions and how to write English in an academic way" (p. 33).

The difficulties these NESB students encountered indicate that their reading, listening, speaking and writing skills needed to be strengthened for better success in their doctorate studies. With regard to their supervisors, all the participants seemed satisfied. This was an important finding as the lack of English language proficiency is one main reason for potential misunderstandings. Based on the above results, the authors assert that international PhD students should strengthen their spoken and written communication skills to pre-empt the abovementioned problem.

As for academic supervisors, they need to recognise the key factors that impact their supervisees' engagement: motivation to study, English language proficiency, and the supervisor-supervisee relationship. Critical thinking and family matters also seemed to be important factors. As motivation was perceived as crucial, international NESB PhD students need encouragement and guidance; conducting doctorate research in a new culture is daunting and the challenges they individually face may also differ. Son and Park (2014) thus call for more research to enhance our understanding of international NESB PhD students' experiences in a new academic environment and offer them "a better quality of international education experience and support for their academic success" (p. 34).

Needs analysis

Needs analysis has a long and well-documented history in English language teaching since Munby's 1978 seminal work, *Communicative Syllabus Design*. However, I will provide only a very brief sketch here.

Needs analysis is often seen as a necessary beginning of EAP syllabus design (Flowerdew & Peacock, 2001; Hyland & Hamp-Lyons, 2002). Yet, a needs analysis is inadequate for EAP course design if a variety of perspectives is to be included (Tajino, James, & Kijima, 2005). For example, Dudley-Evans

and St John (1998) assert that besides learners' needs and wants, their current skills, and their competencies and lacks, their cognitive styles and learning preferences should be considered. Jordan (1997) widens the requirements to include the legitimate demands of the institute and the purposes, priorities, needs, strategies, and constraints of teachers and course designers. Thus, "the definition of 'needs' in given contexts and the sources, methods and types of data that feed into contemporary needs analysis" (Hyland, 2006, p. 277) have evolved.

Jordan (1997) notes the diversity of ways in which the data for a needs analysis may be collected, for example, through questionnaires, interviews, tests, audits, self-assessment forms, diaries, and case studies. Duong (2007) also suggests formal and informal assessments, including entry tests, final evaluation/feedback, teaching and student performance video assessments, gap analysis and peer review (p. 344). To sum up, designing an EAP course is a complex process.

METHODOLOGY

Participants

The international graduate students taking the Graduate English Courses are Master's or PhD students with a large proportion from China and the remaining ones from countries around the world. English is not their first language and, for many, not even their second. As EFL learners in their home countries, they are identified by the NUS Diagnostic English Test (DET) as needing to raise their proficiency in writing and perhaps also reading.

This study was proposed in March 2015 while I was teaching and coordinating the ES5000 module and I decided to conduct opportunistic sampling. Thus, I invited the students from the AY2015/16 cohorts to participate in this research. Altogether, 116 students responded, with 90 (out of 96) in Semester 1 and 26 (out of 26) in Semester 2. The participation rate was thus 95% which could be considered an excellent response. A summary table of the participants' personal profiles is presented in Appendix A.

Instruments and data collection

The study was originally planned with two phases of data collection and two instruments: a questionnaire survey in Phase 1 and individual and/or group interviews in Phase 2. Questionnaires provide ease of administration for large samples but the information obtained "may be fairly superficial or imprecise and will often need follow-up to gain a fuller understanding of what respondents intend" (Richards, 2001, p. 60). Phase 1 was administered at the

end of Semesters 1 and 2 of AY 2015/16 respectively. The questionnaire was emailed to each semester's cohort with an accompanying message to encourage voluntary participation. Approval to use the data for research was also sought via email.

The questionnaire comprised five sections. Section (A) solicited the students' ranking of the importance of various academic tasks in their studies programme. These tasks were grouped under the headings of "Reading", "Writing", "Listening", and "Speaking". These four skills and the tasks were chosen based on (1) literature (Dudley-Evans & St John, 1998; Son & Park, 2014), and (2) information gathered from students during class discussions and informal conversations. As the literature review indicates that international graduate students are affected by factors other than language, Section (B) invited participants to rank the impact of certain areas of concern. These factors were culled from the categories that surfaced in Son and Park's 2014 study and included items relating to culture and literacy needs, including academic culture and intercultural communication.

For both (A) and (B), three choices of "High", "Medium", or "Low" were offered and respondents need only rank those tasks or areas relevant to them. Space was provided for students to add challenges/remarks. They were not asked directly what their English language learning needs were but, instead, their perception of the importance of the academic tasks they needed to fulfil. It was felt that this indirect approach would help participants to indicate their learning needs more accurately as they might not be in a position to articulate their needs directly due to language issues.

Question (C) asks whether there are any language needs/areas of concern/ challenges that respondents would like to elaborate on, and Section (D) requests students to share their personal particulars with the assurance of confidentiality. Lastly, (E) provides the opportunity for students who would like to (1) participate in a short follow-up interview/group discussion, and (2) nominate their supervisors to participate in a similar survey. See Appendix B for a copy of the questionnaire.

It was planned for the survey responses to be analysed to identify three focal groups for a follow-up interview lasting around 30 minutes. To triangulate the data as advocated by many scholars (eg. Hubball, Pearson & Clark, 2013), it is important to also explore the participants' language needs from the perspectives of their supervisors as co-stakeholders. The participants were invited to nominate their supervisors for a similar survey and interviews. The above steps would form Phase 2 of the data collection.

However, due to unforeseen circumstances, it is no longer feasible to conduct Phase 2 of the study with the original participants. Nevertheless, the results from Phase 1 can still contribute to the understanding of the learning needs of international graduate students.

Analysis

The responses were analysed manually for first-hand acquaintance with the data. The questionnaires were first divided according to faculties/schools to facilitate the forming of three focal groups later. It was then decided to group students from the Faculty of Science (FOS) and the Yong Loo Lin School of Medicine (YLLSoM) together as the latter had just five responses and also because of some overlap between the two faculties/schools. Students from the School of Computing (SOC) and the School of Design and the Environment (SDE) were also combined as the number of students from each was small.

To identify the foremost English language needs of international graduate students, I focused on the responses for the "High" column for Questions (A) and (B) for rational and pragmatic reasons. The *"*High" responses were probably the most important language learning needs and most impactful concerns. The "Medium" choice was provided as a buffer to pre-empt a dichotomous choice between "High" or "Low".

The results based on the above analysis for Question (A) on language learning needs are summarised in Table 1 (see Appendix C). Under the headings of "Reading", "Writing", "Speaking", and "Listening", the responses that equal or exceed 50% are highlighted in bold to reflect that they are *important* as they constitute a simple majority or more. Furthermore, responses at the 70th percentile or higher are shaded in yellow to denote that they are *very important*. The tasks are arranged in order of their overall percentages. The results of the analysis for Question (B) on areas of concern that have a high impact on the international graduate students in their graduate studies are summarised in Table 2 (see Appendix C).

The qualitative comments in response to Question (C) inviting respondents to elaborate on any language needs/areas of concern/challenges are categorised according to content (see Table 3, Appendix C) and collated in Figures 1A and 1B in Appendix C. The responses to Section (D), Personal Profile, are summarised in table form (see Appendix A) while the responses to Section (E), Follow-up, on possible participation in an interview/group discussion and nomination of supervisors, were noted.

RESULTS, IMPLICATIONS, AND RECOMMENDATIONS

The four skills

The three most important tasks for "Reading" were identified as reading journal articles, textbooks, and lecture notes/handouts. The implication for the Graduate English Courses is that these skills should continue to be included in the syllabi. The entry-level ES5000 students were regularly assigned to read journal articles, textbook chapters and lecture handouts, leading to discussions and writing. Specific lessons were also designed to help students read more efficiently.

For "Writing" needs, six tasks appeared to be important: essays, research proposals, examination answers, presentation slides, book/article reviews, and term papers. The Graduate English Courses already included essay writing and examination answers. As for research proposals and term papers, they are probably discipline-specific and may be best taught by content specialists of the students' faculties/schools. However, the skills for the last two tasks, presentation slides and article/book reviews, are more general and can be integrated with writing tasks.

33 of the 116 participants (28%) elaborated on their language learning needs and/or areas of concern. Of these, 6 commented on reading and writing, indicating additional needs, such as transitioning to English as their working language as well as learning writing conventions, register and organisation. Students commented on their need for practice, genre samples, and other resources to support their transitions. One participant mentioned writing in scientific work which would involve English for Specific Purposes (ESP). To aid these students' transition from EFL to ESL, ES5000 already assigns reading materials and writing assignments (with samples) of suitable difficulty levels on themes which include learning journeys, language learning strategies, international HE, and intercultural awareness and communication. They are also taught the Anglo-Saxon academic writing conventions and organisation patterns, and provided with vocabulary resources like Coxhead's *Academic Word List* (2002). With the above efforts, the Graduate English Courses have begun to meet the reading and writing needs surfaced by the study. We will discuss ESP later in this section.

The "Speaking" and "Listening" skills are perceived as being important to international graduate students; four of the speaking and six of the listening tasks were ranked highly. Both speaking with and listening to supervisors during consultations appeared to be very important. Listening to lectures/talks was also very important. Next, listening to/speaking in discussions

and presentations were important, whether it is individually, in groups or during seminars. These results are supported by the qualitative comments. Of the 33 participants who elaborated on learning needs∕concerns, about half (52%) commented on "Speaking" needs. This reflects the international graduate students' preoccupation that I have noticed in their conversations and requests about speaking. Some comments also specified the type of difficulties experienced (e.g. lack of confidence) and the areas of need (e.g. discussions, presentations, social exchange and intercultural communication). For these students, more speaking instruction and practice in the Graduate English Courses are clearly desirable. I highlighted in bold six representative comments in Figures 1A and 1B of Appendix C for readers who wish to have a more concrete idea of the comments: No. 3, 4, 8, 21, 25 and 26. Both the quantitative and qualitative results have implications for equipping international graduate students in their oral-aural needs.

If the Graduate English Courses remained as 48-hour writing modules per semester, it would be challenging to incorporate the speaking and listening tasks that international graduate students perceive as important. However, there are some possible options. One Graduate English Course that has incorporated academic conversation is the intermediate-level ES5001A "Intermediate Level Writing". Many of its students lack prior practice and hence confidence in open-ended conversations due to their previous EFL and test-oriented learning contexts (Tan & Lee, 2016). However, through the structured academic conversation practice, they became "more attentive to detail, became bolder to ask clarifying questions, and could work out for themselves when and how to elaborate or summarise and synthesize key points" (p. 58). Another resource is the Writing and Communication Hub (WCH) run by CELC, which provides group conversation practice with local∕competent students. Weekly∕fortnightly attendance at a conversation group could be required of students taking the Graduate English Courses. Alternatively, a conversation programme in an American university (Lee, 2016) could be modified for students taking the Graduate English Courses: international students are partnered with local counterparts in the English Conversational Programme over a semester. The benefits were mutual: the international students reported improvements in language proficiency, confidence and adjustment to local culture while their local counterparts developed greater intercultural awareness through learning about their partners' cultures and countries.

A last recommendation is to consider the development of another Graduate English Course module that includes more oral-aural skills in its syllabus. This will of course require research and consultation on the part of CELC, faculties∕schools and the NUS Board of Graduate Studies. For comparison,

ES1501 "Technical Communication for Engineers" is a module offered to PhD students of the Faculty of Engineering (FOE) and includes two speaking components, abstract presentation and critique presentation. Based on the feedback, FOE students have indicated that the module is useful for supporting their speaking needs.

To underscore the importance of meeting the language learning needs of international graduate students in NUS, I quote Craig (2013): "[L]anguage support for these students is fundamental to the success of international programs" (p. 153).

ESP and Writing/English Across-the-curriculum

We have earlier alluded to one respondent's comment on scientific writing. Teaching this genre would involve ESP which is not the focus of the Graduate English Courses. Moreover, currently serving six faculties/schools, the Graduate English Courses cannot make the modules specific to the needs of any one faculty. Prior research has also found that collaboration between language and subject specialists need to proceed with careful research, consultation, and planning (Balarbar, 1995; Fong, Ho, & Lindley, 2003).

Another approach that may offer a closer relationship between the international graduate students' disciplines and English is Writing/English Across-the-Curriculum (WAC/EAC). There has been considerable interest and debate on this approach, "which addresses the issue…that learning to write effectively is dependent on the students' knowledge of the subject matter as well as their understanding of the social context for the writing" (Dana, Hancock, & Phillips, 2011, p. 17).

One model of development in this direction can be seen in Hong Kong, where collaboration between English and subject teachers has been adopted to support tertiary students' writing in the disciplines (Lughmani, Gardner, Chen, Wong, & Chan, 2016). Collaboration in the different HK universities range from one-to-one collaboration between English and subject lecturers to team teaching. At the City University of Hong Kong, for example, English teachers interview lecturers and students for perspectives on students' English language, analyse key assignments, design materials, and develop language rubrics for the subject teachers and students.

From the cursory glance on ESP and WAC, it seems premature to recommend that the Graduate English Courses adopt the ESP or WAC model. Feasibility studies on such a move should be conducted before implementation.

Areas of concern that impact students in their studies

Besides language, four factors have a high impact on international graduate students taking the Graduate English Courses—motivation, academic culture, research culture, and intercultural communication—which closely parallel the findings of Son and Park (2014). As advocated by these authors, international graduate students should be offered constant encouragement and guidance to help them face the challenges of pursuing higher degrees in a new culture and learning context. They have many adjustments to make: academically, linguistically and socio-culturally.

At NUS, an office, for example, the Office of Student Affairs (OSA), may be appointed to coordinate and enhance existing orientation/acculturation programmes for international graduate students to help them better adjust to the institution's academic and research cultures, and its intercultural, multilingual milieu. Other offices or organisations can assist international graduate students in acquiring the necessary life skills and resources, and providing opportunities for these students to form social and academic networks. Supervisors, other teachers and mentors are also key in supporting the adjustments international graduate students have to go through and in monitoring their motivation and progress. CELC could continue to provide Graduate English Courses and other modules to support the linguistic needs of international graduate students.

As the findings of this study align with recent literature on international students, the recommendations may apply to other EAP contexts in international HE. For instance, a thematic analysis of 139 graduate dissertations, directly related to the challenges facing international students and published in 2016 in *ProQuest Dissertations & Theses Global,* surfaced a dozen themes. Among these, acculturation (32 dissertations), writing/academic skills (16), retention (13) and language (9) were the top four (Bista & Gaulee, 2017). Another study on Chinese students at U.S. universities identified three types of transitions, namely, academic, social/personal, and linguistic (Montgomery, 2017). These themes/transitions are similar to the findings on the academic language needs of the international graduate students in this study and their concerns relating to culture. To address these issues, researchers have recommended various measures. Based on her experience as a doctoral student in New Zealand, Lee (2017) asserts that peer support networks are important resources for international graduate students and advocates that universities support the establishment and funding of such networks. Writing from the perspective of a mentor and dissertation supervisor with a US international college programme in Prague, Starr-Glass (2017) sees "inbound migrant students" as bringing "a richness of creative diversity and a wealth of much-needed cultural capital" (p. 1131). In order "to bring about richer, more

stimulating communities of learning [universities] need to provide appropriate care and assistance" (p. 1132). As Director of Campus Life at a U.S. university, Montgomery (2017) recommends a comprehensive approach to supporting international students: multi-faceted, mandatory orientation programmes; ongoing workshops and resources beyond orientation; and improvements to housing and residential life opportunities and experience.

As the factors of motivation, acculturation (academic/research and sociocultural) and intercultural communication, along with linguistic needs, impact international graduate students in their progress, supporting students in managing these areas of concern should be a priority for HE.

Personal profiles

The students who participated in the study were fairly well distributed in terms of gender, with 46% males and 54% females. In terms of age, they were mainly clustered in the 21 to 25-year-old range (71%). The next biggest age group was 26 to 30 (21%). Together, the 21 to 30-year-old range accounted for 92% of the participants. There was diversity of nationalities and cultures, with the 116 students hailing from over 10 countries from Africa, the Americas and Asia, and speaking 10 first languages. However, there was another side to this apparent diversity: 83% were from China and 87% had Chinese as their mother tongue. The six faculties/schools represented were FOE (34%), FASS (28%), FOS (24%), SOC (6%), SDE (4%), and YLLSM (4%). For degree type, it was also almost equally distributed: 48% were enrolled for a Master's degree while 52% were pursuing a PhD. Finally, the length of time that the students had spent in NUS confirmed that most were in the first year of their graduate programmes. 71% had been in NUS between one and six months while 17% had enrolled for seven to twelve months, making up 88% overall.

Based on the personal profiles, most of the international graduate students were relatively young and probably living away from home for the first time. Generally, such students may need some guidance to grow into adulthood and to learn in an adult learning setting (Huang, 2012). In addition, it may be helpful for teachers and curriculum designers of the Graduate English Courses to be acquainted with research on cultures of learning to better serve the learning needs of the different groups (e.g. Cortazzi & Jin, 2013) while avoiding the pitfalls of stereotyping (Ryan, 2013).

Follow-up on questionnaire

Fifty-five students (47%) provided their names, email addresses and mobile telephone numbers for follow-up. Seven of these students nominated their supervisors from FASS, FOE, SOC and FOS for a similar survey on the English language needs of international graduate students at NUS. However, because Phase 2 of the project has been shelved, this information will not be used.

LIMITATIONS

This needs analysis has certain limitations, including the lack of triangulation of data. Nevertheless, it extends our understanding of the language needs of international graduate students and other factors that impact their progress. This in turn can help us better support them in their graduate studies.

The study also has limitations relating to the demographics of the sample, as 88% were first-year graduate students; the language learning needs surfaced by the study are thus those of new international graduate students. Their language learning needs may change over time as they progress through their programmes. However, this may not be a serious disadvantage. We would expect the learning needs of the international graduate students to be most acute as recent arrivals transitioning into a new context, and their need for support most urgent. It is thus helpful to capture their needs at this stage. Their language needs towards the latter part of their studies could become a follow-up study

Another limitation is the fact that 83% of the participants were from one country. Thus, the results seem to be skewed. However, it is also true that students from the People's Republic of China (PRC) form the largest sub-population of international graduate students in NUS and in many other international HE contexts in what seems a continuing trend. The Ministry of Education, China, reported that 523,700 Chinese students went abroad in 2015 (ENGLISH.GOV.CN, 2016). In 2016, 544,500 Chinese studied abroad (Luo, 2017). In view of the above statistics, the high proportion of PRC students in the sample is not unexpected. While the study notes their language learning needs as probably representative of the majority of international graduate students, we should not neglect the parallel needs of international graduate students of other nationalities.

CONCLUSION

Though "teachers cannot be expected to have familiarity with the linguistic and cultural heritage of all their students from diverse backgrounds" (Canagarajah, 2016, p. 1), we can attempt to identify their learning needs. This study set out to investigate the language learning needs of international graduate students in NUS and to make recommendations for the Graduate English Courses based on the implications drawn from the findings. The results indicate that the EGAP syllabus of the Graduate English Courses have met most of the language learning needs of the international graduate students in terms of reading and writing. While there are some writing tasks, like book/article reviews and presentation slides, which can be incorporated into the Graduate English Courses, others like research proposals and term papers may be too discipline-specific and best taught by the subject teachers. On the other hand, many speaking and listening tasks deemed important by the international graduate students are not the focus of the Graduate English Courses, which are essentially writing modules. These include consultations with supervisors, discussions and presentations. Possible solutions to these outstanding needs are to incorporate aural-oral tasks in the Graduate English Courses, to tap on the WCH and local/competent conversational partners, as well as to offer a new module with more speaking and listening components. The ESP and WAC models were also briefly discussed, but these approaches call for collaboration with subject specialists to varying degrees. Since the Graduate English Courses currently serve at least six faculties/schools, feasibility studies and needs analyses should be conducted with stakeholders before any adoption and implementation. Besides the language learning needs, it was found that the international graduate students are also impacted in their learning process by their motivation, NUS' academic and research cultures, and intercultural communication. The NUS community's support will certainly enhance the experiences of these students. An African proverb says that it takes a whole village to raise a child; it may take the whole NUS community, including the OSA, CELC, WCH, supervisors, (peer) mentors, and conversation partners, to assist an international graduate student to make the necessary transitions.

While the study was based on the international graduate students in NUS, I believe that the results and discussion may apply to other international HE contexts and offer insights on how international graduate students can be supported to better manage their language learning needs and studies. Looking forward, the positive experiences of international graduate students create the potential for their contributions to their alma maters, not least by establishing their reputations as destinations of choice for international HE.

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APPENDIX A. COMPOSITE SUMMARY OF PARTICIPANTS' PERSONAL PROFILES

Gender	Age	Country of origin	First language	Faculty/ school	Masters/ PhD	Months in NUS
M: 53	20/below: 2	Algeria: 1	Arabic: 3	FOE: 39	M: 56	1-6: 82
F: 63	21-25: 82	China: 96	Cantonese: 2	FASS: 32	PhD: 60	7-12: 20
	26-30: 24	Egypt: 1	Chinese: 101	FOS: 28		13-18: 9
	31-35: 7	Iran: 1	Korean: 2	SOC: 7		19-24: 2
	51-55:1	Japan: 1	Japanese:1	SDE: 5		46-48: 2
		Korea: 2	Persian: 1	YLLSoM: 5		Blank: 1
		Malaysia: 3	Spanish: 2			
		Mexico: 2	Thai: 2			
		Saudi Arabia: 1	Turkish: 1			
		Singapore: 1*	Vietnamese: 1			
		Taiwan: 3				
		Thailand: 2				
		Turkey: 1				
		Vietnam: 1				

Legend:

FOE: Faculty of Engineering

FASS: Faculty of Arts and Social Sciences

FOS: Faculty of Science

SOC: School of Computing

SDE: School of Design and the Environment

YLLSM: Yong Loo Lin School of Medicine

* I decided to include this student to capture all the responses though he is technically not an international graduate student.

APPENDIX B. ENGLISH LANGUAGE NEEDS OF NUS INTERNATIONAL GRADUATE STUDENTS AY2015/16

(A) Your English Language Needs in Learning Tasks

Please rank (use a √) the following learning tasks in order of importance to you in your NUS graduate studies programme. You only need to rank those tasks which are relevant to you. Your comments on challenges and other remarks are welcome.

	Reading Tasks	Importance			Challenges/Remarks
		High	Medium	Low	
1	Texts/other books (print/online)				
2	Journal articles (print/online)				
3	Lecture notes/handouts				
4	Group project reports				
5.	Email				
6	Others:				

	Writing Tasks	Importance			Challenges/Remarks
		High	Medium	Low	
1	Essays				
2	Term papers				
3	Book/article reviews				
4	Lab reports				
5	(Group) project reports				
6	Presentation slides				
7	Examinations				
8	Research proposals				
9	Email				
10	Others:				

	Speaking Tasks	Importance			Challenges/Remarks
		High	Medium	Low	
1	Consultations with supervisor(s)				
2	Group/class/lab discussions				
3	Seminar discussions				
4	Individual presentations				
5	Group presentations				
6	Seminar presentations				
7	Conference presentations				
8	Others:				

	Listening Tasks	Importance			Challenges/Remarks
		High	Medium	Low	
1	Consultations with supervisor(s)				
2	Group/class/lab discussions				
3	Seminar discussions				
4	Individual presentations				
5	Group presentations				
6	Seminar presentations				
7	Conference presentations				
8	Lectures/Talks				
9	Others:				

(B) Your Concerns in Other Areas

Please rank (use a √) the following areas of concern in order of impact on you in your NUS graduate studies programme. <u>You only need to rank those areas which are relevant to you</u>. Your comments on challenges and other remarks are welcome.

	Areas of Concern	Impact			Challenges/Remarks
		High	Medium	Low	
1	Academic culture eg., group work				
2	Research culture eg., lab work				
3	Perceptions of supervision				
4	Intercultural communication				
5	Intercultural adjustment				
6	Motivation				
7	Personal issues				
8	Family issues				
9	Others:				

(C) Are there any language needs/areas of concern/challenges that you would like to elaborate on? If so, please write them in the box provided below.

(D) Personal Profile

Please share some particulars about yourself. These details will be kept strictly confidential.

Gender	Age	Country of origin	First language	Faculty/ school	Masters/ PhD	No. of months in NUS

(E) Follow-up on This Needs Analysis:

1. If more information on the English language needs of NUS international graduate students is needed, would you be able to attend a short interview/ group discussion (maximum 30 minutes)? Please √ YES or NO below.

- **YES.** My contact details are

Name	Email address	Mobile no.

- **NO**

2. Would you nominate your supervisor(s) to take part in a similar survey on the English language needs of NUS international graduate students? Please √ YES or NO below.

- **YES.** His/Her/Their contact details are

Name	Email address	Mobile no.

- **NO**

THANK YOU VERY MUCH FOR YOUR CONTRIBUTION TO THIS NEEDS ANALYSIS!

APPENDIX C

(A) Your English Language Needs in Learning Tasks

Table 1

A Summary of (A) the Important and Very Important English Language Tasks

Tasks in Graduate Studies Programme (in order of their overall %)		HIGH Importance (%)				
Reading Tasks		**Overall**	**FOE**	**FOS & YLL**	**FASS**	**SOC & SDE**
1	Journal articles (print/online)	71	72	73	63	83
2	Lecture notes/handouts	69	74	76	56	67
3	Texts/other books (print/online)	58	41	73	63	58
4	Email	49	46	58	41	58
5	Group project reports	30	28	39	25	25
6	Others:	3	0	3	4	8
Writing Tasks		**Overall**	**FOE**	**FOS & YLL**	**FASS**	**SOC & SDE**
1	Essays	75	64	91	75	67
2	Research proposals	59	56	82	31	75
3	Examinations	55	49	67	47	67
4	Presentation slides	54	46	67	44	75
5	Book/article reviews	53	51	55	47	67
6	Term papers	51	49	52	47	67
7	(Group) project reports	43	44	52	34	42
8	Email	43	38	55	34	50
9	Lab reports	28	31	36	4	50
10	Others	2	0	3	0	8
Speaking Tasks		**Overall**	**FOE**	**FOS & YLL**	**FASS**	**SOC & SDE**
1	Consultations with supervisor(s)	72	64	85	69	75
2	Individual presentations	68	64	76	28	75
3	Group/class/lab discussions	65	54	82	59	67
4	Seminar presentations	50	41	67	41	58
5	Group presentations	49	41	55	53	50
6	Seminar discussions	47	41	67	38	33
7	Conference presentations	46	46	58	28	58
8	Others	5	3	6	3	17

	Speaking Tasks	Overall	FOE	FOS & YLL	FASS	SOC & SDE
1	Lectures/Talks	71	72	85	56	67
2	Consultations with supervisor(s)	69	74	70	59	75
3	Individual presentations	60	59	70	50	67
4	Group/class/lab discussions	57	62	61	50	50
5	Seminar discussions	55	54	73	41	50
6	Seminar presentations	52	62	55	38	50
7	Conference presentations	47	54	64	25	42
8	Group presentations	44	44	48	44	33
9	Others:	8	3	9	13	8

(B) Your Concerns in Other Areas

Table 2

A Summary of (B) Areas of Concerns that Most Impact Students

	Areas of Concern (in order of their overall %)	HIGH Impact (%)				
		Overall	FOE	FOS & YLL	FASS	SOC & SDE
1	Motivation	64	72	58	66	50
2	Academic culture eg., group work	63	56	70	28	75
3	Research culture eg., lab work	53	51	79	31	50
4	Intercultural communication	53	31	64	25	67
5	Perceptions of supervision	49	56	39	47	58
6	Intercultural adjustment	43	31	45	53	50
7	Personal issues	36	28	27	63	17
8	Family issues	17	18	15	25	0
9	Others:	3	3	3	3	0

(C) Are there any language needs/areas of concern/challenges that you would like to elaborate on? If so, please write them in the box provided below.

Table 3

Categories of (C) Qualitative Comments on Language Needs/Areas of Concern/ Challenges

Category	Frequency	Category	Frequency
Reading	1	Email	1
Writing	6	Making friends	3
Speaking	17	Singlish	3
Listening	2	Practice	3
Grammar	3	Culture/daily life	3

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1. Maybe there should be more practice about spoken English.

2. Singapore Local English listening

3. **I am still afraid of talking to others. I am willing to communicate with others, but I am afraid of making mistakes and saying something wrong.**

4. **I hope we can have more chance to speak in front of the class, such as give opinions on an article. In addition, I hope teacher can provide us with more great articles to read which is not compulsory. Maybe can elaborate on social psychology to learn others inner thoughts which will be interesting and useful.**

5. Actually, I do not know how to write a good email to teachers, because we have not learnt it in the IELTS.

6. I think it is better for us to do more topic discussion in class.

7. I would like more oral part in E5000 classes.

8. **I would like to have one English class focused on speaking. It would be helpful in seminar presentation and research presentation.**

9. I think learning how to do presentation is very important, from slides making to presenting.

10. I hope to get more chances to be professional on the usage of language and to be more organisational on the oral speaking.

11. I hope writing skill of international graduate students will be increased. At the first semester, I think it is quite difficult for any student who does not use English as the main language in University to write any things, from reports of modules to research proposal or just abstracts for papers. Not only because of the different writing style, but also they have to deal with the special terms of research or project. For example, for many reports which Engineering students have to do, my difficulty is how to write to link many parts of discussion, equation, determination and analysis. It is really different from the way to write an essay which I study for IELTS. I do not how to use many things I studied into what I have to write even I know that they are very helpful.

12. Maybe, some effort on teaching local accent? Though it is not a must-be in everyday academic communication with mentors, it is relevant to cooperation with local students in group work and adaptation to local life.

13. I still feel difficult to communicate with fellows in my lab, either in speaking and listening. I can only speak some simple sentences with SVA instead of more complicated sentences. Sometimes my sentences are ridiculous with many obvious grammar errors, such as tenses and singular/plural errors. They just comes out before I could think. I feel frustrated when I am faced with these problems.

14. Grammar

15. Skill of expressing.

16. I would like to improve much more my English speaking skills.

17. I think I need more practice about how to write a good research proposal or review, and some good samples and relevant resources are very much welcomed.

Figure 1A. Collation of (C) Qualitative Comments on Language Needs/Areas of Concern/ Challenges (Part 1)

18. Grammar is the challenging part.

19. English in Singapore is a bit different from American English or British English in pronunciation. Staying Singapore for a long time can lead our pronunciation to be a more Singapore way, which may not be very good at our global development.

20. I need more practice, but I have to spent more time on my specialized courses. So I want to find a balance between the time I used in English study and in my specialized which can be efficient.

21. **My skills of giving a good presentation is quite poor, which is very important for a PhD student.**

22. Chinese is important for communication in several part of Singapore. Also, writing in scientific work should be provided.

23. Academic writing.

24. Do not know how to make target language friends (less people around me is in English as first language).

25. **To know more about real Singlish in daily life and the culture differences between China and Singapore. Is there any chance that we can make friends or pair with local students through this English Module? For example, they can help us with our academic writing and local culture and we can help them to know more about China.**

26. **I think the communication skills are important for us not only in academic environments but also in our daily life. How to interact with people in a polite and efficient way? How to elaborate our thoughts clearly and simply and understand other people's way of thinking?**

27. Grammar check of academic writings.

28. Short period of time (in 1 semester) is really not enough to improve the English comprehensively. Part time student will be even harder to catch up. Hence, the main challenge for me is to find the balancing between work and study. (e.g.: English study)

29. If it is applicable, I hope there will be some academic writing courses for humanities, like Anthropology, Chinese Studies, and so on.

30. I would like to keep on improving my English until I could speak with native speakers confidently, and write essays and English articles well, Besides, I would start to learn German next semester.

31. How to improve my oral English in Singapore. I find I speak Chinese all the time.

32. Having more practice on oral English. Seeking more opportunities to communicate with native speakers. Want to have native speakers as friends to help me with my English, but cannot find suitable chances.

33. Daily News and Social issues ◼

Figure 1B. Collation of (C) Qualitative Comments on Language Needs/Areas of Concern/ Challenges (Part 2)