INVESTIGATING ENGLISH LANGUAGE NEEDS AT THE NATIONAL DEFENCE UNIVERSITY OF MALAYSIA

Mardziah Shamsudin [1]

Abstract

This study investigates the English language needs for a group of engineering students at a defence university in Malaysia as part of curriculum review for English Language subjects. In a curriculum review, students' perceived English Language needs are collected and taken into consideration towards any curriculum revision. The objective of this study is to investigate the perceived English Language needs for a group of Engineering Foundation students at the National Defence University of Malaysia (NDUM) to be used as a guideline as one of the attempt to revise the curriculum. A total number of 169 Engineering students from the Centre for Foundation Studies, NDUM participated in this study and using a set of questionnaire, their perceived English Language needs are examined. Data collected from the questionnaire are analysed using SPSS version 19.0. The findings suggest important implications for evaluating and redesigning the English Language curriculum for engineering students at the NDUM.

Keywords: Needs analysis, perceived language needs, defence university, engineering foundation students.

---

[1] mardziah@upnm.edu.my, Centre For Liberal and Language Study
  National Defence University of Malaysia

English language is undeniably becoming very crucial as the universal lingua franca. In order to be in line with the globalisation, the teaching and language learning has evolved tremendously that leads many course designers and language practitioners to improve their teaching methodology and approaches that suits the learners' needs and the expectation from the outside world. Needs analysis or also often called as need assessment is important as a principal stage in course design and is widely practiced before designing and revamping a curriculum (Dudley-Evans & St John, 1998; Long, 2005). Richards (2001) stated the significance of needs analysis in providing a reliable and valid basis for setting goals and objectives, developing syllabuses and teaching materials, as well as evaluation and renewal of a program.

Moreover, in spite of obtaining the specific language needed in particular situations by asking language experts, it has also become useful to determine the overall needs as perceived by the learners themselves. The term needs here takes on a longer meaning than often considered. In the article by Brindly (2004), he provides a wider definition of the term 'needs' as it is used in needs analysis for educational purposes. In this context it is sometimes used to refer to wants, desires, demands, expectations, motivation, lacks, constraints and requirements. The importance of this wider concept of needs is highlighted by the possible conflict that can arise when the curriculum and the students' beliefs and assumptions are not the same. It was also noted by Davis (1992) that the effectiveness of a language programme will be dictated as much by the attitudes and expectations of the learners as by the specifications of the official curriculum.

At the NDUM, the English language courses are compulsory university courses that must be taken and passed by all students. Determining the needs of NDUM students as a particular institution, students themselves are seen as a direct way to inform the curriculum developers of the possible goals and objectives necessary to create the curriculum. In the field of English as Second Language (ESL), the growing interest in the needs of the students has primarily focused on what types of linguistic output the students will need, often referred to as an 'ends-means' approach to curriculum design.

Hence, it is important to understand how students' perceived language needs change over the course of their English Language studies at the NDUM. This is possible by identifying the students' background and then conducting repeated measures of the students' perceived English language needs. Furthermore, determining the factors that cause changes in the perceived language needs would also serve as constructive information to curriculum review.

In many cases syllabus design is a greatly overlooked area of course planning with many EFL schools and institutions relying on a textbook as the sole syllabus. Such an outlook eliminates the need of a time consuming and often-expensive syllabus design process and is often adequate for many general English courses where a suitable textbook exists. However, such an approach ignores the specific learning needs of the target students, something that could be examined through a needs analysis process. Research has shown (Gardener & Winslow, 1983; Long, 2005; West, 1994) that there is often a lack of awareness of the existence of needs analysis as a tool in English language course design, especially in General English courses where the specific needs of students are difficult to determine. One area that has a higher regard for needs analysis is English for specific purposes (Jasso-Aguilar, 2005; West, 1994) as students' needs are often clearer and of such a nature that a published textbook would not adequately fulfill their needs.

Needs analysis is the crucial step to be taken in the design, development and evaluation of any educational programme. Altschuld and Witkin (1995) define needs analysis as a set of systematic procedures pursued in order to establish priorities based on identified needs, and make decisions attempting improvement of a programme and allocation of resources. Likewise, Grabe (2004) refer to needs analysis as the means by which an evaluator determines whether there is a need for a programme, and if so, what programme services are most appropriate to that end. This task involves constructing a precise definition of the problem, assessing its extent, defining and identifying the targets of the interventions, and accurately describing the nature of the service needs of that population.

Many needs studies have been carried out in order to analyze the students' needs, as well as to revamp or design various educational programme. In Asia, Cowling (2007) has conducted a survey of needs analysis in order to develop an intensive English course for a Japanese large company. Multiple methods were used in collecting the data and clearly, the needs analysis was proven to be extremely important in revealing the needs of the target group. Furthermore, in a study conducted by Kittidhaworn (2002) investigated the English language needs of 182 second-year undergraduate engineering students in a public university in Thailand. A two-part questionnaire was constructed. The first part of the questionnaire asked for demographic data: gender, specialty, years of studying English in the school, and English proficiency in Listening, Speaking, Reading and Writing skills. The second part dealt with 45 items of English-language needs in four major areas: Language Structures, Rhetorical Categories, Language Functions, & Language Skills (Listening, Speaking, Reading and Writing). The findings of the study indicated that the majority of Thai engineering students

have equal perceived English language needs in all four major areas, with all rated as moderately important or very important to learn in their program in engineering. The findings also revealed that perceived English language needs did not vary widely by demographic variables.

In Malaysia, a study has been done by Sarjit Kaur and Alla Baksh Mohd Ayub Khan (2010) to evaluate the perceptions of 47 final year diploma Art and Design students and 10 members of staff about the current English Language course in a private college in Penang using both qualitative and quantitative method. The findings of this study revealed that the 96% of students perceived the speaking skill to be important for their Art and Design courses and their career whereas the listening skill was rated the second most important skill by 95% of the respondents. Reading and writing skills in English were regarded as 'fairly important' by 80% of the respondents. The findings also revealed that the students were 'moderately satisfied' with the current English language course in their college. The results of the study indicate that a new ESP course focusing on speaking and listening skills should be developed at this college. The ESP course should include workplace-based oral presentations, specialised vocabulary activities and course materials and topics relevant to students' area of specializations. Language teaching strategies such as games, puzzles and riddles could also help improve the ESP students' proficiency in the English language.

Al-Gorashi (1988) investigated the English language needs for military cadets in Saudi Arabia as perceived by junior officers. Data were collected from 212 questionnaires distributed to officers representing different branches in the military to investigate the role of the English language in different activities required by their jobs and the kind of English language preparation that they undertake. The results showed that the English language plays an important role depending on the nature of each military branch. Some branches considered certain language skills important and others did not. The overall assessment considered reading and listening as the most important required skills. The result also indicated that the English language preparation that the officers received was poor. The study concluded that the language preparation does not meet the English language knowledge that the officers' jobs required.

To conclude, all these studies, which were conducted within the framework of needs analysis, emphasised the significance of assessing the learners' perceived needs prior to the design of an English language learning syllabus or curriculum. Although these studies were carried out in a different setting and were different in their focus, they followed the same procedure in collecting information about the learner's English language needs. It is important

to note that no recent study has looked specifically at the English language needs for students in a military university.

Institutional Context

This study was carried out in order to analyze the students' perceived language needs at the one and only military university in Malaysia, the National Defence University of Malaysia. The students of this university are divided into military cadets, and also civilian students. In order to graduate with a degree in respective areas, all the students must take a few English Language subjects, including 2 subjects during their foundation study. English subjects are for example, English for Academic Writing, English for Oral Communication as well as English for Academic Reading are designed to equip the students for their future needs. However, since the university's inception in 2007, there has been no attempt to revise the curricula and syllabi of all the English Language courses and therefore, the main purpose of this study is to get the insight of the students in order to design a new curricular suitable for their needs.

Methodology

A total of 192 engineering foundation students from the total of 6 classes were selected as participants in the study. The students' profile and perceived language needs of the foundation engineering students were gathered using a set of questionnaire. The questions for the questionnaire were constructed using modified sections of previously made analysis by Richards (2001) and Brown (1998). Additional items were added to collect data appropriate for NDUM students as they are divided into military cadets as well as civilian students. However, before that, a pilot test was conducted to refine the instrument with 60 Science and Technology Foundation students who will not be in the main participant group. The pilot test resulted in the removal of some items and the modifying of others. The final version of the questionnaire consists of 54 items anchored by 6 point likert-scale. The questions are also divided into five different parts, which are the demographic items, interest in English Language, necessary English Language skills, future English Language goals and the final part is the skills which are considered as a goal towards using English in the respondents' future.

The assessment was administered to 192 Engineering Foundation students during the subject of English for Academic Reading class at the 7th week of the semester. There are altogether six engineering classes for Foundation studies, and the instructors of the particular subject were given instruction to have all their students to complete the questionnaire at the beginning of class. The questionnaires were then collected and given to the researcher after

the class ends. However, only 169 useable sets of questionnaire are used to analyse the result of the study. All the collected data are evaluated using SPSS version 19.

Result and Discussion

Part 1 of the questionnaire is demographic data of the respondents. From the analysis of the data, 89.9% (n=152) of the respondents are male, while 10.1% (n=17) of the respondents are female. This is expected because more than 70% of the total numbers of students in NDUM are male students and most of them are cadet officers. The respondents are divided into four groups, with 48.5% (n=82) of the respondents are Army cadet officers, 21.9% (n=37) are Air Force cadet officers, 12.4% (n=21) are Navy cadet officers, while only 17.2% (n=29) of the respondents are civilian students. 92.9% (n=157) of the respondents consider Malay Language as their mother tongue, only 3.6% (n=6) consider English Language as their mother tongue, while the rest consider Mandarin/Hokkien and Tamil as their mother tongue with 1.2% (n=2) and 2.4% (n=4) respectively. This is expected since 90.5% (n=153) of the respondents stated that they are from non-english speaking background. However, the engineering Foundation students who enrolled in NDUM are among selected top students, with 59.2 % of them scored A and A- for English subject in SPM. Table 1 shows the percentage of SPM result for English subject that the respondents managed to obtain:

Table 1: SPM Result for English Subject

Grade	Frequency	Percent
A	41	24.3
A-	59	34.9
B+	40	23.7
B	28	16.6
C+	1	0.6
Total	169	100.0

Regarding the SPM result, majority of the respondents stated that NDUM was their first choice in choosing a higher learning institution to further their studies with 81.7% (n=138). The respondents has various expectation concerning English Language once they entered NDUM, where 71.6% (n=121) of them already know that they need to take English subjects during their period of studies in this military university. Meanwhile, 78.1% (n=132) expected that all the subjects were to be taught in English Language, only 21.9% (n= 37) were not aware of this matter. From the analysis, the respondents has given a positive perception towards English Language where it is a sign that they are fully aware of the importance of this global language because 83.4% (n=141) of them are willing to take English Language subjects even if it is optional, while the rest of them are against the idea.

14

Part 2 of the questionnaire examine the respondents' interest in English. It is very informative to get the perceived needs analysis of the Engineering Foundation students because some of the items in Part 2 target on the students' feelings about learning English and their motivation. For items 19, 20, 21, all were on the positive side with means of 4.39, 4.95 and 5.28 respectively. This indicates that the students see English as very valuable for general knowledge and their future as well as they perceived that English is challenging and also enjoyable. Additionally, Part 3 of the questionnaire observes the respondents' necessary English skills for their future. The respondents feel that academic English for example, English for Academic Writing, English for Academic Reading and English for Oral Communication are very important for their future needs with the average means of 5.12. Besides that, they also feel that general English is important for their future English Language needs with means 4.94. However, the most significant finding is that the respondents feel that Military English is also vital for their future with the means of 4.69. The high means of this item further confirms an interest in learning Military English for their future work as majority of the respondents are cadet officers. They might need a subject for example English for Military Purposes in order to equip them with extra English Language skills which are important when they need to use it in foreign missions later on. This matter is vital to be taken into consideration before designing a new curriculum for the students.

Table 2: The usefulness of military English for the future English Language needs

	Frequency	Percent
Not at all useful	3	1.8
Not so useful	5	3.0
Slightly not useful	11	6.5
A little useful	42	24.9
Somewhat useful	69	40.8
Very useful	39	23.1
Total	169	100

The fourth part of the questionnaire focuses on the respondents' future English goals. Items 28 and 29 which examine the importance of vocabulary and grammar practice in class scored a high means with 5.15 and 5.10 respectively. Besides that, the respondents stated that speaking is the most useful skill that they need to learn and practice for improving their overall English Language ability.

Table 3: The most useful skill to learn and practice for improving overall English ability

Skills	Frequency	Percent
Reading	21	12.4
Listening	6	3.6
Speaking	131	77.5
Writing	11	6.5
Total	169	100

The final part of the questionnaire observes the skills which are considered a goal towards using English in the respondents' future. The items are categorized according into four different skills which are reading, listening, speaking and writing. Two of the items for reading skills reveal that the students feel learning English should help them to read English Language articles on the internet (4.80) as well as reading newspapers in English Language (4.97). In addition, for listening skill, the respondents feel that learning English is important in helping them to listen to English Language music as well as watching movies in English Language with the means of 5.06 and 5.18 respectively. However, for speaking skill, the respondents stated perceived learning English Language may facilitate them to speak informally in English with foreign tourist with the means of 4.96 and to give formal speeches or presentations in English at work later on (4.86).

Finally, the respondents feel that English Language will contribute to the ability to do group research with classmates and co-workers in English Language with the means of 4.80, as well as it is important in to conduct research and get information in the target language.

Table 4: Reading Skills

	Mean
Reading English Engineering documents/report	4.59
Reading English articles on the internet	4.80
Reading English Novel for Pleasure	4.30
Reading English newspapers	4.97
Reading English emails from international friends	4.53
Reading English textbooks	4.28

Table 5: Listening Skills

	Mean
Listening to meetings or small group discussion at work with English speaking members	4.78
Listening to take notes of a class lecture in English	4.55
Listening to a speech in a conference/seminar given in English	4.67
Watching TV or movies in English	5.18
Listening to English language music	5.06

Table 6: Speaking Skill

	Mean
Speaking informally in English with foreign tourist	4.96
Giving formal speeches/presentations in English at work	4.86
Giving formal speeches/presentations in English at International Conferences	4.71
Giving formal speeches/presentations in English at university classes	4.73
Having discussions about general topics and current events in English with classmates	4.69
Having discussions about general topics and current events in English with foreign people	4.68

Table 7: Writing Skill

	Mean
Writing in English for university course papers	4.73
Writing Engineering documents in English	4.67
Synthesising information from more than one source	4.69
Writing email business letters in English	4.41
Getting the ability to research information in English	4.75
Doing group research with classmates or co-works in English	4.80

Conclusion

The findings of the study indicate that the learners' perceived English Language needs should be taken into account in designing a curriculum in the NDUM. It is clear that the ever changing learner, societal and institutional factors, current English Language curriculum in NDUM must include needs analysis as part of routine programme review. The process of collecting data for the needs of English Language of the students, including real linguistic needs as well as wants and desires is now viewed increasingly important and must not be overlooked, including indentifying and confirming the various perceptual needs and wants of the students' at the NDUM as a boutique university. The result from this analysis also can be guidance in selecting appropriate teaching materials relevant to the cadet officers, suitable to the discourse of military purposes as well as suitable to the level of future military officers and their target situation of English use. This is to motivate them to continue learning and

using English Language. However, future analysis of needs analysis from different scope and perspective needs to be done. Currently, the researcher is conducting needs analysis for an in depth research on the final year students as well as the stakeholders which are the Armed Forces. It is hoped that the description and analyses of the current needs analyses being conducted in NDUM serves as a model to what should be done in order to address curriculum development and review.

References

Al-Gorashi, A. K. (1988). The English communication needs of military cadets in Saudi Arabia as perceived by junior officers in the Saudi Army and air difference. *English for Specific Purposes, 21*(1), 59-79.

Altschuld, J. W., & Witkin, B. R. (1995). *Planning and conducting needs assessments: A Practical Guide*. USA: Sage Publications.

Brindly, G. (2004). Needs analysis and objective setting in the adult migrant education programme. *English for Specific Purposes, 26,* 135-155.

Brown, J. D. (1995). *The elements of language curriculum: A Systematic approach to program development.* Boston: Heinle & Heinle.

Cowling, J. D. (2007). Needs analysis: Planning a syllabus for a series of intensive workplace courses at a leading Japanese company. *English for Specific Purposes*, *26,* 426-442.

Davis, K. A. (1992). Validity and reliability in qualitative research on second language acquisition and teaching: another researcher comment. *TESOL Quarterly*, *26,* 605–608.

Dudley-Evans, T., & St John, M., (1998). *Developments in English for specific purposes: A multidisciplinary approach.* Cambridge: Cambridge University Press.

Gardener, P., & Winslow, J. (1983). Present and proposed methods of determining the needs of students in public sector higher education. In Richterich (Ed.), *Case studies in identifying language needs* (pp. 69–79). Oxford: Pergamon.

Grabe, W. (2004) Current developments in second language reading research. *TESOL Quarterly, 25*(3), 375-403.

Jasso-Aguilar, R. (2005). Sources, methods and triangulation in needs analysis: a critical perspective in a case study of Waikiki hotel maids. In M. H. Long (Ed*.), Second language needs analysis.* Cambridge: Cambridge University Press.

Kittidhaworn, P. (2001). *An assessment of the English-language needs of second-year Thai undergraduate engineering students in a Thai public university in Thailand in relation to the second-year EAP program in engineering*. PhD Dissertation, West Virginia University, United States.

Long, M. H. (2005). *Second Language needs analysis.* Cambridge University Press, Cambridge.

Richards, J. C. (2001). *Curriculum development in language teaching*. Cambridge: Cambridge University Press.

Sarjit Kaur, & Alla Baksh Mohd Ayub Khan (2010). Language Needs Analysis of Art and Design Students: Considerations for ESP Course Design. *ESP World*, *2*(28), 9.

West, R. (1994). Needs analysis in language teaching. *Language Teaching*, *27*(1), 1–19.