Original Paper

Needs Analysis for Nursing Students Utilizing Questionnaires and Interviews

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Abstract

ESP (English for Specific Purposes) is defined by Hutchinson and Waters (1987) as "an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning." Following on from this concept, it is essential to gain an understanding of the needs of our learners if we are to aid EFL (English as a Foreign Language) teachers in deciding what to teach and how best to go about implementing pedagogical-driven choices.

The aims of this paper were to explore the needs of our undergraduate, postgraduate and professional nurses through questionnaires and interviews based on a needs analysis and discuss the implications for EFL teachers. The focus of the investigation was on the balance between 'Social' and 'Technical' English in terms of syllabus design, classroom activities and professional requirements. An analysis of the results suggested that 'Social' English is more important as it enables nurses to communicate with patients and enriches them as individuals. It also insinuated that classroom activities should promote confidence in using social communicative English throughout a course focusing on speaking and listening. The results also suggested that 'Technical' English should be introduced incrementally and is better limited to basic technical vocabulary.

Introduction

What is English for Specific Purposes (ESP)? According to Hutchinson and Waters, "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning" (19). The notion of ESP being a separate and distinct branch of TEFL/TESOL (Teaching English as a Foreign Language/Teaching English to Speakers of Other Languages) has long been accepted. Howatt (1984) tells us that "since the 1960s, ESP has become a vital and innovative activity within the Teaching of English as a Foreign or Second Language movement (TEFL/TESL)" (Dudley-Evans and St. John 1-2). English for Science and Technology (EST) was the most flourishing area of ESP at the beginning. Hutchinson and Waters cite the works of Ewer and Latorre (1969), Swales (1971) and Selinker and Trimble (1976) as evidence of the particular attention being paid to specific varieties of written scientific and technical English after World War II (7). They also suggest that the economic and social upheaval brought

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about by the Oil Crises of the early 1970s accelerated a need for English for Business and Economics (EBE) and English for Social Sciences (ESS) (7). In their tree of ELT (English Language Teaching), they illustrate the development of sub-branches such as English for Academic Purposes (EAP) and English for Occupational Purposes (EOP), respectively (17). These sub-branches have diversified further to include English for Medical Studies, English for Technicians, English for Economics and English for Secretaries. This sub-division continues up to the present day. One of the driving factors behind this development is the necessity to address the needs of learners. According to Dudley-Evans and St. John, addressing the language required and learning context of learners is a cornerstone of ESP: "Need is defined by the reasons for which the student is learning English, which will vary from study purposes such as following a postgraduate course in an English-speaking country to work purposes such as participating in business meetings or taking hotel bookings" (3).

One way of assessing the needs of students is to carry out a needs analysis. Robinson states that a needs analysis aims to specify as closely as possible what exactly it is that students have to do through the medium of English (3). Dudley-Evans and St. John define a needs analysis as the process of establishing the *what* and *how* of a course (121). Accordingly, a needs analysis in ESP now encompasses determining:

- A. professional information about the learners: the tasks and activities learners are/will be using English for -target situation analysis and objective needs
- B. personal information about the learners: factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English wants, means, subjective needs
- C. English language information about the learners: what their current skills and language use are present situation analysis which allows us to assess (D)
- D. the learners' lacks: the gap between (C) and (A) lacks
- E. language learning information: effective ways of learning the skills and language in (D) learning needs
- F. professional communication information about (A): knowledge of how language and skills are used in the target situation linguistic analysis, discourse analysis, genre analysis
- G. what is wanted from the course
- H. information about the environment in which the course will be run means analysis (125)

The aims of this paper are to explore the needs of our undergraduates, postgraduates and professional nurses through questionnaires and interviews based on a needs analysis, utilizing the expressed ideas above as a guide, and to discuss the implications for EFL (English as a Foreign Language) teachers in designing classroom activities. In this investigation, we used the terms "Technical English" and "Social English" in the questionnaires and interviews. For us, "Technical English refers to the English content and functions likely to be encountered by nurses working in the medical profession." And "Social English refers to the wide range of language items and functions likely to be used in interactions with speakers of the English language."

Method

To accomplish our goals we used two mediums of research, questionnaires and interviews. The questionnaire respondents were as follows:

- 132 1st year undergraduate nursing students required to study English 4.5 hours per week
- 18 2nd year undergraduate nursing students studying English 1.5 hours per week as an elective
- 6 postgraduate students who work under 30 hours a week
- 11 professionals (5 postgraduate students and 6 professional nurses who work over 30 hours a week)

The undergraduates were asked 7 questions and the postgraduates and professionals were asked 9 questions. The 'extra' questions asked of the postgraduates and professionals took into account the need to elicit information about their work experience.

The interviews were held with two experienced professional nurses and two postgraduates who work over 30 hours per week. Each interviewee was asked three questions. All the interviews were carried out in Japanese to eliminate any misunderstanding that the use of a second-language might give rise to.

Results and Analysis

- 1. Questionnaires for undergraduates
- Q1. Why are you learning English?

(%)	lst year	2nd year
Course Requirement	31	0
Widen job	15	11
opportunities	15	11
NGO/Abroad	7	11
Entertainment	5	6
Improve skills	41	66
Other	1	6

Table 1 Results of Q1 (U)

Just over 70% of the 1st year students cited course requirements and a wish to improve English skills as their reasons for studying English. The 2nd year students study English as an elective, therefore, none chose it as a course requirement. The main difference between the first and the second year students is the increase in concern over improving skills evident in the choices of the older students. It should be noted here that the sample size for the 2nd year was much smaller. Further investigation is needed to elicit their reasons behind their choices. It might prove useful to offer them the opportunity to select more than one category in terms of improving skills in future investigations.

Q2. How many hours a week do you study English?

In general, these figures are only a reflection of class time. The vast majority of 1st year students maintain that they 'study' English between 2-5 hours a week. This is to be expected for our students as English is mandatory in the 1st year. This figure drops to between one and two hours of study per week for the 2nd year students. This decrease in study time is most likely due to the increase in demands on

their time from the Nursing department.

Table 2 Results of Q2 (U)

(%)	1st year	2nd year
Less than 1	3	0
One-two	7	94
Two-five	88	6
Five-ten	2	0
More than ten	0	0

Q3. What do you feel would be the best ratio of Technical to Social English in your first year of study?

Table 3 Results of Q3 (U)

(%)	1st year	2nd year
100% Technical	1	0
100% Social	6	6
50/50	58	38
75% Tech 25% Soc	11	17
75% Soc 25% Tech	23	39
Other	1	0

Nearly 60% of the 1st year students felt a 50/50 ratio is best in their first year of study. However, for the 2nd year this number drops to under 40%, with a consequential increase of those who favor a 75% Social English ratio and a 75% Technical English ratio. The drop in the number of 2nd year students who favor a 50/50 ratio and the increase of 16% in those who favor a 75% Social English ratio indicates that they wanted to learn more Social English than the 1st year students.

Q4. What do you feel would be the best ratio of Technical to Social English over the course of four years of study?

Again, over 50% of the 1st year students favor a 50/50 split, but the number who favors a 75% Technical English ratio increased from 11% (Q3) to 25%. With the 2nd year, the most noticeable change comes from the increase in 38% (Q3) to 72% in favor of a 50/50 split with a subsequent drop in the number of those that favor a 75% Social English ratio. These figures suggest that from the students' viewpoint, a more balanced approach in terms of Technical and Social English is required.

- Q5. After your studies are completed, where do you think you will work, and
- Q6. What are the reasons behind your choice?

Table 4 Results of Q4 (U)

(%)	1st year	2nd year
100% Technical	1	0
100% Social	2	0
50/50	55	72
75% Tech 25% Soc	25	17
75% Soc 25% Tech	15	11
Other	2	0

Table 5 Results of Q5 (U)

(%)	1st year	2nd year
Japan-City	40	55
Japan-Rural	43	22
Abroad-City	5	17
Abroad-Rural	4	6
0ther	8	0

Over 80% of the 1st year students chose Japan and they were almost equally divided between the city and rural districts. The main reasons for choosing a rural posting included a desire to return home, to live in a 'natural' environment and an admiration for the closer and more personal relationships one has with patients in rural areas. There was a 15% increase in the number of 2nd year students who want to work in the city. They spoke of the convenience of the city, the ability to keep up with the latest medical practices and the opportunity to work with the latest technologies. It might also indicate a 'loosening' of ties with home as they grow older. Only a small percentage of both 1st and 2nd year students chose the abroad options.

Q7. Do you have any comments on the role of your teachers and textbooks in the instruction of English in university or college?

The results of this question were rather inconclusive because more than half of the students chose not to answer. In general, for those students that did answer, their comments were limited to an individual course, textbook or teacher as opposed to a general comment on the instruction of English. Perhaps the 'ambiguity' of the question was to blame and the reluctance of our students in general to offer opinions.

- 2. Questionnaires for professionals and postgraduates
- Q1. Why are you learning English?

As for the postgraduate students, a large majority cited the need to 'improve skills' (33%), and 'other'

Table 6 Results of Q1 (P)

(%)	Postgraduates	Professionals
Course Requirement	0	0
Widen job	17	0
opportunities		9
NGO/Abroad	0	9
Entertainment	0	0
Improve skills	33	18
0ther	33	18
No Answer	17	46

(33%) as the purpose behind their studies, followed by 'widen job opportunities' (17%). To help us further in looking into their needs as a way to help them meet their goals, we need a further investigation in order to gain a much clearer picture of the categories 'skills' and 'other.' Forty-six percent of the professionals did not reply to this question, which indicates that they no longer study English. The rest were divided among those who want to 'improve skills,' 'other,' 'widen job opportunities' or 'want to join an NGO (Non-Governmental Organization)/Go abroad.' Naturally, there is greater diversity of purpose among the professional nurses.

Q2. During your studies of English at university or college, what was the ratio between Technical and Social English?

Table 7 Results of Q2 (P)

(%)	Postgraduates	Professionals
100% Technical	17	9
100% Social	0	9
50/50	66	0
75% Tech 25% Soc	17	9
25% Tech 75% Soc	0	9
Don't remember	0	37
No Answer	0	27

The answer to this question was inconclusive as over 60% of the professional nurses did not remember or failed to answer. Given the length of time that has passed since graduation, this outcome is not altogether unsurprising. In contrast, the outcome from the postgraduates was very clear. 66% recalled a 50/50 ratio of Technical and Social English. The remaining 34% of postgraduates were equally divided between those who remember a ratio of 75% Technical and 100% Technical English. The overall impression is one of a bias towards Technical English at the universities they attended.

Q3. During your studies of English at university or college, how closely did your English courses meet your needs and wishes at the time?

Table 8 Results of Q3 (P)

(%)	Postgraduates	Professionals
100% Satisfied	0	0
75% Satisfied	0	9
50% Satisfied	50	0
25% Satisfied	50	27
0% Satisfied	0	0
Don't remember	0	46
No Answer	0	18

The postgraduate students were equally divided between those who felt 50% satisfied and those who only felt 25% satisfied. As for the professionals, they had difficulty in recalling their feelings in detail. However, the number of respondents unsatisfied with their studies was greater than those satisfied. Overall the results of this question indicate that there is room for improvement in what and how we teach our students.

Q4. What do you feel would be the best ratio of studying Technical to Social English that is more likely to benefit nursing students in their working lives post-graduation?

Table 9 Results of Q4 (P)

(%)	Postgraduates	Professionals
100% Technical	0	0
100% Social	17	0
50/50	83	36
75% Tech 25% Soc	0	0
75% Soc 25% Tech	0	36
No Answer	0	28

Both postgraduates and professional nurses indicated that Social English is very important in their studies. This is borne out by the fact that 17% of postgraduates consider that a ratio of 100% Social English is best and 36% of professionals consider the best ratio to be 75% Social English. However, a high number of professional nurses (36%) and postgraduates (83%) still consider the best ratio to be 50/50. This feeling is further strengthened when we consider that not one respondent decided that a bias towards Technical English was the best way to go.

Q5. Please give more information based on the reasoning for your choice of answer for question 4 above.

The opinions from the professional nurses suggested that both Technical and Social English are both necessary and important. They further stated that Social English is essential as it allows them to communicate with patients and convey information to them. The postgraduates also felt both are important. The overall impression was one that suggests that Social English should be learnt primarily as a tool for communication with patients, and that the use of Technical English is somewhat limited in their professional lives. Below is a list of their comments.

Postgraduate Students:

- Both Technical and Social English are important.
- Technical English is important at work, and Social English is important to us as individual members
 of society.
- It is important to communicate with the patients.

Professional Nurses:

- It is more important to learn to speak English first before learning grammar and reading.
- Although it is important, learning only Technical English is not interesting. We should be encouraged to speak English.
- It is important to have fun while learning.
- We need to learn Social English to enable us to better communicate with patients.
- \bullet Both Technical and Social English are needed.
- Social English can be used in our daily lives.
- Social English is a foundation for learning Technical English.

Q6. After your studies are completed, where do you think you will go to work?

Table 10 Results of Q6 (P)

(%)	Postgraduates	Professionals
Japan-City	100	9
Japan-Rural	0	36
Abroad-City	0	0
Abroad-Rural	0	9
0ther	0	9
No Answer	0	37

With regard to professional nurses, the results for this question were a little inconclusive as 37% chose not to answer because they have already completed their studies. Of those that did, the majority want to work in rural areas in Japan, although a small number indicated a desire to go abroad. Quite the opposite

was true for the postgraduates who all want to work in Japanese cities. The reasons behind these decisions are discussed below in Question 7.

Q7. What are the reasons behind your choice of answer for question 6?

The professional nurses who expressed a wish to work in rural areas cited a love of nature and a preference for a peaceful working environment as important. The presence of the newest technologies and challenges were high on the list of remarks made by both professional nurses and postgraduates who chose to work in cities. Below are typical examples of the kinds of comments made:

Postgraduate students:

- Hospitals in cities have the latest technologies.
- I want to go back home.

Professional Nurses:

- I used to work in Laos as a volunteer, so I want to go back one day.
- I love nature. I hate competing with others.
- The latest technologies are found in cities, so I want to work there.
- I want to improve my knowledge of the techniques used in cities.
- I want to challenge myself.

Q8. If you indicated that you use English at work or university/college, please give further details.

An analysis of the results of Question 8 suggests that both professional nurses and postgraduates hold similar opinions. They indicate that Social English is necessary to communicate with patients and to enrich their personal lives. They also indicate that the Technical English that they come into contact with is mainly limited to medical vocabulary such as the name of sicknesses, symptoms, methods of operation and medical records. However, a need to convey emotions, thoughts and information was also mentioned by the professional nurses. They also said that they wanted to have fun while learning English. Below are typical examples of the kinds of comments made:

Postgraduate students:

- I use medical English when I write medical reports.
- I use medical English words, not sentences, on medical reports.

Professional nurses:

- It is necessary to learn English for conveying our thoughts and intentions.
- I only use English in single words with gestures, not in full sentences.
- I only write the name of sicknesses and procedures in English at work.
- I read research papers in English.

Q9. Do you have any comments on the role of your teachers and textbooks in the instruction of English in university or college classrooms?

The major concern of the respondents was that the idea of having fun while learning is very important. The professional nurses also added that speaking and listening are more important than reading and writing. The following is a list of comments made.

Postgraduate students:

• A class that is both fun and easy to understand is desirable.

Professional nurses:

- Speaking and Listening are more important than reading and writing.
- It is important to have clear objectives.
- It is important to have an enjoyable environment in which to learn English.
- It is important to be able to convey our thoughts and information.

3. Interviews

We asked the following three questions to the interviewees (experienced nurses and postgraduate working students).

- 1. What is the most important aspect of communicating with patients?
- 2. Is English needed in hospitals?
- 3. Do Japanese nurses need English to communicate with nurses coming from the Philippines?

In answer to question 1, the experienced professional nurses answered that the ability to elicit information from patients and an appreciation of the differences needed in conversing in different situations is important. For example, "Do you have an appetite this morning?" or "Did you have a good sleep last night?" The postgraduate/working students also said that an ability to talk to and empathize with patients is important, as is the ability to elicit information from them.

In answer to question 2, the experienced professional nurses informed us that some nurses are trained in English to prepare them for work in NPOs (Nonprofit organization) in hospitals. The postgraduate/working students believe that the ability to read English medical notes and reports is vital. They also added that an ability to speak to and elicit information from foreign patients, particularly in certain areas in Japan is needed in hospitals.

In answer to question 3, both groups of interviewees answered that Japanese nurses do not need English to communicate with nurses coming from the Philippines, because Japanese language proficiency is a prerequisite before arrival in Japan. They felt that an awareness of cultural differences is more important than language. However, they also mentioned that English can act as a linguistic bridge to aid in understanding each other when either of their respective mother tongues fails them in communication with foreign colleagues.

Conclusions and Implications

Most of the students attending this university felt that the best ratio of Technical English to Social English is 50/50. Moreover, the graduate students who work over 30 hours a week and professional nurses felt that Social English is actually more important to them as it enables them to communicate with patients and enriches them as individuals. Indeed, they question the emphasis on Technical English they encountered during their studies because the use of Technical English is very limited in the workplace.

Considering the results of our surveys, we feel that activities that promote confidence in using social communicative English throughout a course focusing on speaking and listening are essential for the students. Technical English should be introduced incrementally and limited to basic technical vocabulary such as patient illnesses and procedures. It should not dominate to the point where social communicative skills are abandoned. In terms of preparing Japanese nurses for the arrival of nurses from the Philippines, our respondents recommend that a cultural comparison component be included in language programs.

Limitations

The number of 2nd year student, postgraduate, and professional respondents was quite small. We hope to increase this number quite significantly in the second phase of our investigation. Furthermore, we will also seek to refine the questionnaire categories 'Improve English Skills' and 'Other' to allow for more informative answers. Finally, the question devised to elicit comments on the role of teachers and textbooks needs to be improved to allow for a more constructive response.

Further Research

We would like to extend this research to a wider area to test the theory that the conclusions from this paper apply to other institutions in Japan. We would also like to determine the variations (if any exist) in the desired ratio of Technical to Social English from region to region and from those working and studying in cities and rural districts. Additionally, our next line of investigation will look at the political and demographic changes that lie ahead and consider the resulting implications for educators, institutions and students in terms of syllabus design.

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