

STRATEGIC CURRICULUM CRAFTING: UNLOCKING THE POTENTIAL OF NEEDS ANALYSIS IN ENGLISH LANGUAGE EDUCATION FOR GENERAL DUTY NURSING STUDENTS AT ISTM KINSHASA

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Abstract

Assessing the needs of learners is an essential step in designing an appropriate syllabus that takes into account the real needs of students. This study aimed to investigate the English learning needs of ISTM Kinshasa general duty nursing students, using a qualitative approach and triangulated sources of data including students, current nurses, experienced content teachers, and the head of nursing section. The data were analyzed using a coding system that produced frequency scores of categories for the four sources. The findings revealed that the main topics to include in the English course content for general duty nursing are identification of people, departments, equipment, and objects in a hospital; contextualized key medical terms for professional communication; and basic general English knowledge. These topics are relevant not only for ISTM Kinshasa general duty nursing students but also for other nursing students with slight modifications. The study highlights the importance of collaboration between English language teachers and content specialists in designing course content that meets the needs of learners and that helps them develop the four language skills in nursing context. The findings also emphasize the need for a periodic review of the syllabus to ensure its relevance to the dynamic needs of the learners.

Keywords: learning needs, syllabus design, general duty nursing, nursing students, triangulated data, qualitative approach, ESP.

Introduction

A lesson learned from teaching English to nursing students at different colleges in Kinshasa, is that one of the most challenging issues in the process of the teaching of English for nursing purposes is the selection of course content. This is a real challenge because, in the DRC, most teachers are not trained to design courses for specific purposes. They usually teach English for general purposes using existing textbooks. For instance at ISTM Kinshasa where technical majors are organized into many different sections, it is difficult for a teacher himself/herself to design adequate courses for each of those majors. It is important to state that the instructional processes as well as the instructor become boring when the syllabus implemented does not meet the real needs of students. So assessing the learners' needs before designing a syllabus becomes crucial.

Considering the paragraph above, as far as research in ESP design is concerned, ISTM Kinshasa is a very large unexploited or less exploited field of as many investigations as possible. To narrow the scope of the work, general duty nursing has been selected as the focus of the study.

The key question asked in this research paper is to know what ISTM Kinshasa general duty nursing students need to study in their English course, so that an adequate syllabus can be designed for them. Apart from the introduction and the conclusion, the article deals with the literature review on necessity of needs analysis, methodology, data analysis, and findings including discussion.

1. Literature Review On Necessity Of Needs Analysis

Teaching English to students requiring a specific kind of language instruction has been challenging ESP teachers for a long time.

Some of the difficulties encountered by teachers are: the lack of appropriate materials and of teaching equipment, negative attitude of some learners toward the English language, lack of pre-service training and regular in-service training in the field, and so on (Ndoma 1996). Since an ESP course is based on actual learners' needs, a needs analysis should be an underpinning of the English course design (Smoak, 2003). For that reason, it is highly recommended to ESP designers to conduct a reliable needs analysis study, and then design a syllabus that can respond to the real-life situation requirements.

Needs analysis studies in language course design emerged in the 1970s and they were widely spread in the domain through the adoption of needs analysis by the Council of Europe's modern language project (Atefi and Moradian, 2013: 35). Needs analysis helps researchers have a clear view on not only the target and learning situation needs, but also the expectations of the stakeholders involved in the process. According to Flowerdew (2013:325), the first stage in ESP course development is to start with a needs analysis, followed by curriculum design, methodology, assessment, and evaluation. These stages should not be viewed as separate, proceeding in a linear fashion. Rather, as noted by Dudley-Evans and St John (1998), they are interdependent overlapping activities in a cyclical process.

English for nursing purposes is no exception for the considerations above. It is just one of the branches of ESP. So, all of the requirements of an ESP course design do apply to the overall instructional process of English for nursing purposes. Crawford and Candlin (2013) conducted a study on English language needs in nursing in Australia. The findings of the study revealed that the most important challenge of the students was the use of technical English required by higher education and healthcare settings.

Saragih (2014) and Gass (2012) studied designing ESP materials for nursing students from respectively Indonesia and Thailand. The findings stated that the predominant needs included speaking and listening skills, as well as vocabulary related to the real-life professional setting. According to the results, there were important topics to be addressed, such as: question formation used to collect patients' information, signs and symptoms, explanations about medication and their interactions, using expressions of time, accents and communication on the phone, basic English structures, giving instructions and advice, and checking understanding.

Bosher (2008) and Evans & Salcido (2011) also wrote books on English for Nursing. In these books, the authors attempted to include career-based vocabulary and contexts into lessons that build professionals' workplace English skills. The books addressed topics including: hospital departments, basic equipment, specific illnesses, nursing duties, and career options. A variety of real-world reading passages and career-specific dialogues were also included. These books give ideal series to help professionals and students develop the language items and skills they need to succeed in any professional work situation where English is the medium of communication.

In the Democratic Republic of the Congo, since English is viewed as a foreign language, there are very few healthcare settings where nurses can communicate in English. Student nurses have English just as one of the classes included in the nursing curriculum. That implies that nurses hardly ever use English from their colleges to their workplaces. So students from DRC require significant levels of support so that they can get involved in the English language learning teaching process smoothly, not only to achieve academically in their nursing program, but also to be able to use English for nursing purposes when and where necessary without any problem.

So far, there are very few books and articles published on English for nursing purposes in the Democratic Republic of the Congo. As a result, there is almost no book to refer to when one should teach English to student nurses. However, a few researchers have devoted time, money, and energy to investigate on challenging issues of ESP design at colleges and universities from DRC. Unfortunately, none of them dealt with nursing studies. The following paragraphs are an attempt to summarize some of their studies.

A study by Ndoma (1996) was conducted in order to examine why ESP teaching was not very successful in Zaire (DRC today), and what solutions could be suggested for improvement. The study revealed a number of issues including: teachers were not aware of the target situations of the learners, no collaboration between content teachers and ESP teachers, the objectives of ESP courses were neither clear nor realistic, and the courses were irrelevant to the specific needs of the learners. A spiral syllabus building up information relevant to the needs and content level of the learners was suggested by the author. Tshitenge (2019) in his study entitled "Investigating EMP (English for medical purposes) Content-Based English Instruction and Curriculum design in Medical Schools: A case study", investigated EMP Content-based Instruction (CBI) and Curriculum designed (CD) in medical schools in Kinshasa.

The author wanted not only to find out whether or not the Content-Based Instruction (CBI) used in different schools of medicine are relevant and effective, but also to work out an appropriate EMP Content-Based Instruction (CBI) for students from faculties of medicine. As we can notice, the work was focused on faculties of medicine.

Sangabau (2017), worked on Science Students' and Lecturers' Perceptions, Attitudes and Views of English for Academic Purposes (EAP) in English as a Foreign Language (EFL) Context. The main objectives targeted in this work were to observe, analyze and describe the student's and the lecturers' perceptions, attitudes and views so that more effective strategies could be worked out to improve the teaching and learning process in EAP at the University of Kinshasa. In order to solve difficulties encountered by both teachers and learners of EAP in DRC, the author proposed an effective teaching and learning approach he called „ANIE" (Awareness, Needs Analysis, Interactivity and Evaluation).

We can see that the researchers above made considerable contribution to the ESP field in DRC. We can even see that because the focus of this article is on what nursing students need in their English course content, Sangabau's approach „ANIE" can be applied.

2. Methodology

2.1. Research design

A qualitative approach with the use of triangulated sources of information was found the most appropriate for this study. To ensure validity of the results and a more reliable needs analysis research, different kinds of data were collected from multiple sources (Jasso-Aguilar, 2005).

2.2. Participants

To have data that could help the researcher reach the goal of the study, four sources of data were selected as target population for the study: third-year general duty nursing students, nurses presently on the job, experienced content teachers, and the head of nursing section of ISTM Kinshasa.

Due to the kinds of variables and the number of students in general duty nursing, only the third-year students were chosen to provide accurate information about the present and target situation needs. The number of respondents to be part of the sample was determined by the mathematical formula suggested by Taro Yamane (1970: 886-7) as cited in MALEKANI (2017:14) as: $n = \frac{N}{1 + N(e)^2}$, where **N** is the total population, and **e** is the confidence level. For this study **N** is 720 and the confidence

level α is estimated to 0.05. So the sample size for this study was: $n = 720 / (1 + 720(0.05)^2)$ which gave 257 after calculations.

Twenty nurses having some workplace English language experience were selected at random in order to provide relevant information about the target situation needs.

Five experienced content teachers were selected randomly to provide the researcher with some relevant viewpoints and suggestions about the English language instruction in nursing.

The stakeholders recommended the researcher to see the head of nursing section for providing the expectations of the stakeholders and his viewpoints about those expectations.

Apart from the data from nursing students, it is important to mention that after processing the data, to avoid the redundancy, responses from only ten nurses and two content teachers were considered for the analysis.

2.3. Instruments

The instruments used to collect data from the sample selected were questionnaire forms and unstructured interviews, in order to establish a full picture of the needs the work was investigating. The questionnaires given to nursing students and nurses on the job were composed of questions formulated both in closed-ended and openended formats. Because our target population could understand French better than English, the questionnaires were produced in two versions; the French version and the English one. The head of ITSM Kinshasa nursing section and experienced nursing content teachers were only interviewed. There was an interview guide to help the researcher focus ideas during the interviews. (See the appendices)

2.4. Data analysis method

Text data were analyzed using the inductive content analysis approach, which is a widely used qualitative research technique. In short, data were categorized, then the categories were coded; after that, patterns identified were grouped for the final categorization that allowed a better interpretation of the results.

As suggested by Buhendwa (2015:71), each categorization was followed by an evaluation for fit until the last categorization that established the fit, since all data should be accounted for.

Due to the size of the sample, technology through excel spread sheet was used to enter and code the variables for making the analysis easier and more effective. After coding the data as abbreviations with initials of different items on a raw data coding book, the codes were then used for analyses to give scores in terms of frequencies of categories occurrences. Due to the number of pages of the categories generated, only tables of most important variables of interest are presented in the following stage.

3. Data Analysis

3.1. Data from the Questionnaires

3.1.1. Data from the questionnaire given to student nurses

Fig.1. Distribution for the reasons of studying English

Reasons for studying English	Frequency	%
For having better grades(a)	6	2.33
For reading manuals & descriptions of medical products(b)	38	14.79
For reading professional literature(c)	11	4.28
For communication with other health professionals(d)	8	3.11
For communication with patients(e)	7	2.72
For attending meetings and conferences held in English(f)	6	2.33

For participating in trainings conducted in English(g)	18	7
For all of the above(h)	86	33.46
b, d & f	1	0.39
a & g	6	2.33
a, c, d, & e	1	0.39
b & f	1	0.39
d & g	3	1.17
b & e	6	2.33
c & f	1	0.39
b, e & f	1	0.39
b, c, d & e	1	0.39
a, d & e	1	0.39
b, c & g	1	0.39
b & d	3	1.17
e & g	1	0.39
b, d & g	1	0.39
a, b & d	1	0.39
b, d, f & g	2	0.78
d, f & g	1	0.39
a & d	1	0.39
b, c & d	1	0.39
b, f & g	2	0.78
c, d, e & f	1	0.39
b, c, d, e, f & g	1	0.39
b & c	2	0.78
b, d & e	1	0.39
b, c, e, & g	1	0.39
b, c, d, e, & g	1	0.39
Missing	31	12.06
Total	257	100

To summarize the table above, here is the taxonomy of the most important reasons: 151 respondents (38+86+27) representing 58.7 % for reading manuals and descriptions of medical products, 124 respondents (18+86+20) representing 48.2 % for participating in trainings conducted in English, 114 respondents (8+86+20) representing 44.3 % for communication with other health professionals, 109 respondents (7+86+16) representing 42.4 % for communication with patients, 108 respondents (11+86+11) representing 42 % for reading professional literature, and 103 respondents (6+86+11) representing 40 % for attending meetings and conferences held in English.

3.1.2. Data from the Questionnaire given to current nurses

Fig.2. Distribution for the reasons for which a nurse should study English

Reasons for nurses to study English	Frequency	%
Just for having better grade to pass the class (a)	0	0
For reading manuals and descriptions of medical products (b)	1	10
For reading professional literature (c)	0	0
For communication with other health professionals (d)	0	0
For communication with patients (e)	0	0
For attending meetings and conferences held in English(f)	0	0
For participating in trainings conducted in English (g)	0	0
For all of the above(h)	5	50
b & e	1	10
b, c, f & g	1	10
b & d	1	10
b, d & e	1	10
Missing	0	0
Total	10	100

The table above about the expectations of respondents/nurses for learning English shows that 0 respondent representing 0 % would like to learn English just for having better grade to pass the class, 1 representing 10 % would like to learn it for reading manuals and descriptions of medical products, 0 for reading professional literature, 0 for communication with other health professionals, 0 for communication with patients, 0 for attending meetings and conferences held in English, 0 for participating in trainings conducted in English, 5 representing 50 % would like to use English for all reasons mentioned by the researcher, 1 representing 10 % for b&e, 1 representing 10 % for b,c,f&g, 1 for b&d, 1 for b,d&e, and 0 missing.

To summarize the table above, here is the taxonomy of reasons for which a nurse should study English: 10 respondents (1+5+4) representing 100 % for reading manuals and descriptions of medical products, 7 respondents (5+2) representing 70 % for communication with patients and other health professionals, 6 respondents (5+1) representing 60 % for reading professional literature, attending meetings and conferences held in English, and participating in trainings conducted in English.

3.2. Analysis of the Data from the Interviews

The first interview was conducted with five experienced nursing content teachers and the second one was conducted with the head of nursing section taken as the representative of the stakeholders at ISTM Kinshasa. To avoid redundancy on variables of interest, responses of only two content teachers were considered for the analysis. The responses of the interviewees were recorded, transcribed, and then translated into English by the researcher. The raw data from content teachers are presented first, and then the ones of the stakeholders' representative. These responses are presented in turn in the next stage.

3.2.1. Data Related to the Interview with Content Teachers

3.2.1.1. First content teacher

The data presented here are from Mr. KAMBANJI Placide. He has been teaching various classes related to nursing since 1972. With his experience not only as a nursing content teacher, but also as a nurse, he provided very important data for this study which the researcher has translated and presented as follows:

- English is very important for professional communication in nursing
 - The nurse is as a bridge between different professionals, so learning professional English to communicate in medical settings is very important
 - Nurses need English for reading some posology and medication's indications
 - Nurses also need English to read professional texts written in English. For research purposes, they should be able to read and understand in English.
 - Basic Vocabulary and knowledge of English for nursing students should be based on nursing real world activities or nursing duties.
 - A lot of in-service training for nurses organized specially by nongovernmental organizations requires academic and professional basic nursing English knowledge.
 - English classes should be more practical rather than being focused on things nurses will never come across in their real professional life.
 - The stakeholders do not define clear objectives about English for nursing purposes. According to him the objectives should be defined in terms of real life tasks of a nurse.
- To summarize the above responses, we can clearly see that the interviewee would like English teachers for nursing purposes to provide practical English classes based on nursing real world activities, which can enable students to communicate in professional settings, to read some posology, medication's indications, professional literature for research, and to participate in training conducted in English effectively.

3.2.1.2. Second content teacher

The data presented here are from the interview with Mrs. NGANDJA Alphonsine. She has been teaching various classes related to nursing for more than twenty-five years. With her experience not only as a nurse, but also as a teacher, she provided very relevant information for this study which the researcher has translated and presented as follows:

- English is very important for nurses
 - They do need first basic general English knowledge before resorting to professional English
 - Because primary sources for research are published in English, nurses need to have English knowledge to read from the sources rather than from books already translated from English to other languages
 - They need English to participate in international conferences which are very often held in English
 - Nurses need to learn key medical terms including drugs' instructions in English
 - Most books on nursing are from English speaking countries, so learning English is crucial for nurses
 - Stakeholders do not give clear expectations in terms of competences to develop for real life professional activities. So, their expectations do not meet the real needs of the learners. The stakeholders only suggest some content of English class for nursing students but those classes do not define clear competences to be developed.
 - The class content should include key medical terms, such as: pathological notions, drugs, drug effects, side effects of drugs, specific illnesses, and basic equipment used in nursing, and so on.
 - Teachers for nursing purposes should have some basic knowledge on health majors or health vocabulary
 - Teachers cannot teach English to nursing students simply because the class is scheduled or to comply with the teaching load, but they should adapt their classes for the profits of the learners
- To summarize the responses above, we can say that the second content teacher would like English for nursing purposes to provide students first with some basic general English knowledge and then focuses on the teaching of key medical terms in the real life context of use. She thinks that these

medical terms in real world context can help students be able to read books on nursing which are mostly published in English and to participate in international conferences held in English. She also suggests to English language teachers for nursing purposes to have some basic knowledge on health sciences in order to teach not only because the English class is scheduled, but to the profit of the learners. She also notices that the stakeholders do not give clear expectations in terms of English competences to be developed in nursing.

3.2.2. Data related to the interview with the representative of the stakeholders

The responses provided by the head of the nursing section in charge of teaching, Mr. ZUNZA Euloge, are listed in the English translation below:

- The stakeholders recognize the importance of English as the most important international language that is why they added the number of hours per class and instructed the teaching of English at all levels and all majors of higher and university education. But they only focus on the research aspect of learning English; for them, nursing students need English only for research purpose. So, it is obvious that the expectations of the stakeholders do not match the real life nursing students' needs
- Health professionals in general and nurses in particular need to speak English, because they should be ready to rescue any one, any time, and anywhere. He or she can encounter a person suffering and explaining his or her pains in English, not understanding the language can prevent the nurse from helping the person.
- This can happen in any country where a nurse can be. The interviewee supposed that anyone from anywhere is expected to know how to speak English besides his or her national or local languages.
- Nurses are also expected to interpret medication package inserts or patients information leaflets which are mostly written in English
- Nurses should also learn some anatomy in English since most books on anatomy are published in English.
- According to the head of the section, the English class should correspond to the nursing technical notions. Teachers should be interested in nursing notions, they should make some research to know more about nursing contents before designing and teaching English for nursing. Students in nursing are expected to know some English of their important notions. For instance, the parts and organs of the human body in English, names of equipment in a hospital, how to write or document nursing care in English, ...
- Teachers should collaborate with nursing contents specialists to take what already exist in French and translate into English for his or her students.
- English is very important for general duty nursing students because they have to read books and other medical documents which are usually published in English
- They also have to participate in international training and conferences usually held in English
- Teachers of English should take the real needs of nursing students into account

As a summary, the head of nursing section in charge of teaching is aware of the importance of English recognized by the stakeholders; however, he thinks that the stakeholders' objectives focus on the research aspect only rather than on the real life activities in nursing. He requires teachers of English for nursing purposes to focus on health sciences notions in general and on nursing technical notions in particular. According to him, these notions can enable students to read books on health sciences and nursing, to read medical documents and medication package inserts, to participate in international conferences held in English, and to communicate with any patient speaking English. He also thinks that teachers of English should be interested in nursing contents and take the needs of nursing students into account. He also asks teachers of English for nursing purposes to

collaborate with contents teachers in order to have an idea of what they can include in their English classes.

It is obvious that the results of the data analysis of the variables of interest for the four sources are much related. Clear lists of findings and relevant conclusions are provided in the next chapter.

4. Results and Discussion

The needs we have been searching are presented in terms of topics in nursing academic and professional settings as shown in the following paragraphs, and further those topics will be expanded into necessary items to include in the course content for general duty nursing students. The findings from the nursing students' data analysis are discussed first, then the ones of current nurses. After that, the ones from interviews are provided, and last the summary of all key findings is given.

4.1. Findings from the Analysis of the Data from Student Nurses

The analysis of data from student nurses has revealed the following taxonomy of needs: reading manuals and descriptions of medical products (58.7%), participating in trainings conducted in English (48.2%), and communication with other health professionals in particular (44.3%), communication with patients (42.4%), reading professional literature (42%), and attending meetings and conferences held in English (40%).

Some respondents needed English for communication in general and some others suggested teachers of English to use more appropriate methods and techniques that can make the understanding easier.

4.2. Findings from the Analysis of the Data from Nurses on the Job

As for current nurses to whom the questionnaire was given, the key themes to focus on in the teaching of English for general duty nursing purposes have to be in the following taxonomy: reading manuals and descriptions of medical products (100 %), communication with patients and other health professionals (70 %), and 60 % for reading professional literature, attending professional meetings and conferences held in English, and participating in in-service trainings conducted in English.

They also would like teachers of English for nursing purposes to include professional presentations in their teaching, to teach nursing techniques in English, and to provide students with English basic knowledge for communication in any context.

As you can see, from these topics we can generate as many linguistic items as possible. These can range from dialogues and conversations as simulations of nursing or medical real-world to skimming and scanning nursing texts, documents, presentations, and any others for meeting the needs. In fact, it will depend on the kind of syllabus the teacher designer would like to work on.

4.3. Findings from the Analysis of the Data from Interviews

After grouping answers sharing the same meaning, the responses from nursing content teachers and the head of ISTM Kinshasa nursing section can be summarized in the following key topics and areas of language use: nursing real world activities or duties, such as: patients' identification, vital signs assessment, asking and reporting about health, processes and procedure in nursing care, writing or documenting nursing care in English, reading medical documents and medication package inserts, and taking and giving instruction about drugs; nursing careerspecific communication in professional settings (communication with other health professionals, patients, and patients' relatives); reading some posology, medication's indications, and professional literature written in English; appropriate language to participate in trainings and conferences conducted in English effectively; medical terminology/Key medical terms in the real world context of use, such as: parts and organs of the human body, description of the body systems, names of basic equipment in a hospital, names of specific illnesses and drugs; and skimming and scanning books on health sciences in general and nursing in particular.

4.4. Summary of the Findings

All findings from the respondents involved in the study can be grouped according to the principle of affinities into the following themes:

- Nursing professional communication;
- Key medical terms;
- Identification of people, departments, equipment, and objects in a hospital;
- Skimming and scanning professional literature; □ Documenting processes and procedure in nursing care; □ Basic general English knowledge.

CONCLUSION

The study aimed at finding out what ISTM Kinshasa general duty nursing students need to study in their English course. It has revealed that their course content should include the topics provided in the summary of the findings. Those topics are what respondents want their English class curriculum to cover from the first up to the last year, in the three-year nursing program. In addition, the course content should help learners develop the four language skills in nursing context. To that end, teachers of English, course designers, content specialists, learners, current nurses, and stakeholders, should work together for more reliable course content.

Even if it is not usually easy to generalize the results of a needs analysis study, it is still possible to find some common guidelines to be transferred or extrapolated to similar settings. Since needs are dynamic, revisiting needs for the readjustment and the improvement of the class content is crucial in ESP.

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