Needs Analysis and Strategic Study of ENP in Medical Colleges

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Abstract: *Objective: To learn about students' needs for English for nursing purposes (ENP) and study how to better improve the current situation of ENP teaching in medical schools. Method: A voluntary service questionnaire was used to evaluate nursing students from three medical colleges in Yunnan province, Hebei province, and Anhui province by random sampling. Results: 1. Most nursing students are willing to acquire ENP but deem that the present ENP teaching cannot meet their needs. 2. Owing to the lacking of professional medical knowledge, current ENP teachers have been considered less than perfect. 3. A large number of students pay more attention to the teaching method, which combines improving practical ability and acquiring professional knowledge. 4. Students request the teaching materials relevant to nursing majors. Conclusion: In order to increase the training of professional nursing knowledge for some ENP teachers who have graduated from normal colleges, it is suggested to design an engaging education model that blends teaching content with practical work and compile the ENP material that suits nursing characteristics and is consistent with the actual English level of nursing students.*

Keywords: ENP; needs analysis; strategic study

1. Introduction

With China's remarkable economic progress and the implementation of a policy of openness, internationalization is proceeding seamlessly, resulting in more significant exchanges and cooperation. Therefore, the requirements for English talents with firm English skills, interdisciplinary knowledge, and professional capabilities are growing rapidly, so English for Specific Purposes (ESP) courses are receiving more and more attention. Meanwhile, since the outbreak of COVID-19, China has witnessed the unprecedented growth of the need for international nursing talents who are mastering English for Nursing Purposes (ENP).

As a sub-branch of ESP, ENP is of crucial importance for nurses to meet the climate of the aging population and nursing shortage. Over the last few years, some vocational medical colleges have been offering ENP courses to support students' future careers. However, there are many deficiencies in teaching effectiveness. Most nursing graduates' practical English abilities cannot meet the career demands. According to the investigation, most of the nursing graduates' practical English abilities cannot meet the career requirements. Some colleges have organized the ENP courses randomly or do not have a systematic organization. ENP courses should incorporate learning requirements and target needs, thus allowing learners to proceed according to their requirements. Therefore, the actual ENP needs of nursing students should not be neglected.

A questionnaire on nursing English was developed to assess the current state of nursing English instruction in medical facilities. This paper will present the needs of nursing English learners and provide pertinent strategies based on the needs analysis. It is vital to ENP courses in theory and reality. Theoretically, the study of the survey results provides a theoretical foundation and guide for the ENP course set. Practically, with needs analysis investigation, it offers ways to resolve the challenge of ENP in medical colleges and improve teachers' teaching to meet students' needs.

The research focuses on the following questions:

(1) What are the nursing major students' needs for ENP courses?

(2) What are students' attitudes toward current ENP courses?

(3) How can the needs of ENP learners be met?

2. Literature Review

English for Special Purposes(ESP) is presented in *The Linguistic Sciences and Language Teaching* by Halliday (1964) for the very first time. It has been studied for 57 years since 1964, and its definition has been modified and refined during that time. Peter Strevens(1977:89) defines ESP by distinguishing between the absolute and variable characteristics of ESP.

With further research on ESP, ESP has been categorized. Hutchinson and Waters (1987) classify ESP into three branches by means of a tree structure. Dudley Evans and St John (1998) deem that English Language Teaching (ELT) is a process of transition from English for General Purposes (EGP) to English for Specific Purposes (ESP). Later, Jordan (1997) further divides EAP into English for Specific Purposes (ESAP) and English for General Academic Purposes (EGAP). According to his classification, ENP can serve academic purposes and occupational purposes.

As nursing English is a sub-branch of ESP, its study should follow the theory of ESP. Needs analysis is an integral part of ESP research. Many scholars (e.g. Munby 1978; Brown 1995; Richards and Schmidt 2010; Alsamadani 2017; Shehni 2021) have underlined the importance of needs analysis. For example, according to Brown (1995), needs analysis is necessary for satisfying the language learning needs of students. Shehni (2021) asserts that ESP courses are to be tailored according to target learners' varied needs. In China, Cai (2018) states that the needs of the scientific and technical staff and engineering staff were not satisfied, so English education has not attained the intended success. Wen (2012) observes that there is an increasing shortage of foreign language specialists with global and Chinese perspectives.

However, past research emphasizes one side of needs and disregards the other side. And the detailed contents of ENP needs have not been identified. Researchers always focus on nursing English skills such as listening, speaking, reading, and writing, but ignore the precise content of these skills, such as reading dispensatory, writing a report, etc. In addition, the previous research fails to link up the current condition where pre-service learners acquire ESP and the target status where students will apply the newly learned knowledge.

3. Data and Methods

3.1. Data

The participants in this research are derived from a survey of undergraduate students from nursing majors at medical colleges. 211 valid questionnaires were collected, including 11.85% of subjects from Kunming Medical University and 32.70% from Hebei University of Chinese Medicine. The rest 55.45% are from Bengbu Medical College. 10.9% of participants are males, and 89.1% of them are females. 75.35% have passed the CET-4 test and 32.7% have passed the CET-6 test. What' s more, 14.22% have passed neither CET-4 nor CET-6 tests.

3.2. Tools

3.2.1. Questionnaire

In order to identify students' needs concisely but clearly, a questionnaire designed for collecting information from ENP learners, is based on Hutchinson and Waters's framework with some adjustments and modifications according to the present status. This questionnaire is composed of four sections which consist of 22 questions. The first part (item 1, 2) is the respondents' basic information, including gender and current English level. The second section (item 3-9) aims to research students' attitudes toward ENP. The third part focuses on students' needs which are subdivided into three aspects, including needs about teaching faculty (item 10), needs about teaching method (item 11-16) and needs about teaching materials (item 17-21). The last part involves an open-ended question (item 22) that aims to collect students' suggestions for improvement in ENP courses. For the sake of students' exact understanding and to facilitate the survey, Chinese is used as the working language.

3.2.2. Reliability and Validity of Questionnaire

The Cronbach's α of the questionnaire is 0.8. In other words, the reliability of the results is high. At the same time, the KMO of the questionnaire is 0.812, which exceeds 0.8, the study data that fits perfectly in extracting information mirrors that the validity is good.

According to the reliability and validity of this questionnaire, the quality of the questionnaire, to

summarize, is relatively high.

3.2.3. Data Collection

The questionnaire is distributed to three schools, including Kunming Medical University, Hebei University of Chinese Medicine, Bengbu Medical College. Students respond through computer or phone by clicking the link provided. The whole questionnaires are collected by an APP named Questionnaire Star, a platform offering functions equivalent to MTurk.

3.2.4. Data Analysis

The data of questionnaires are analyzed with the help of the software SPSS23.0. Descriptive statistics are used as the method of data analysis.

4. Results and Discussion

4.1. Students' Attitudes, Self-cognition, Motivation and Opinions on the Importance of Learning ENP

Question 3 aims to find out students' attitudes towards nursing English. According to the Natural Approach that Krashen and Terrell (1983) put forward, motivation is key to learning a language. In their view, humans can aquire additional languages, provided they have a desire to learn the language and the ability to utilize the language for real-world communication. The questionnaire results show that 83.89% of students believe learning nursing English improves English ability and are willing to learn it. 2.84% of them chose B "wasting time", and 9.48% of them viewed nursing English as a burden and stress source. The overwhelming majority of the students choose the first choice, presenting that they have the motivation to acquire ENP and, thus the opportunity to study nursing English effectively.

Question 4 is supposed to study students' main purpose in learning nursing English. 31.28% of subjects chose " fulfillment of self-worth or personal interests", 29.38% of them selected "job requirement", and the remaining 22.75% and 16.59% selected "passing the final exam" and "taking postgraduate exams or studying abroad," respectively. The result shows that students have definite goals and a rational mind while learning ENP.

Question 5 is designed to study students' thoughts about the importance of ENP in the future practical job. 43.12% of students said it is extremely significant, and 42.65% selected "important" . The responses indicate that the majority of students recognize the significance of ENP.

Question 6 is a sorting question aimed at eliciting students' perspectives on the application of ENP. According to the findings, "promotion" is regarded as the most important use of ENP, indicating that the majority of students are pragmatic and utilitarian. The result suggests that students have considered the practical application of ENP.

Question 7 focuses on how students perceive the usefulness of ENP. 18% of students selected "extremely satisfied," while 33.6% selected "satisfied." 38.39 percent of them were unaware. The percentages for "unsatisfied" and "extremely dissatisfied" are lower, with 9.48 percent and 0.47 percent. It is true that students affirm ENP's utility.

Question 8 is designed to elicit information about students' self-cognition of their drawbacks. 45.5% of students believe they have weaknesses in listening, and 13.27% chose "conversation". 5.21% of them selected "reading speed," and 4.73% chose "writing". There are 28.9% for "increasing vocabulary" and 2.37% for "translation". According to the data, most students think listening and vocabulary are the skills they need to improve urgently. It also shows that students have engaged in introspection.

Question 9 concerns students' degree of satisfaction with current ENP courses. 37.91% of students chose " very satisfied" and 52.6% selected "satisfied". "dissatisfied" accounts for 8.53% in all subjects. At the same time, nobody chose " unsatisfied". The result reflects that most students are satisfied with their current ENP courses. However, we cannot deny the fact that 8.53% of students are discontent with it, indicating that ENP courses still have room for improvement.

In conclusion, the majority of students have a positive attitude towards ENP, which is beneficial to improving and conducting ENP courses. Furthermore, it implies that students are motivated to learn ENP. The more motivated a student is, the more progress they make.

4.2. Needs about Teaching Faculty

Question 10 of the questionnaire aims to investigate students' expectations of teachers of ENP. There are four options available: English teachers with an English degree, professional course teachers with a high level of English proficiency, collaboration between English majors and professional teachers, and no opinion.

Previous research shows that most of the teachers of ENP are generally English majors who graduated from normal universities. Therefore, they lack knowledge of the nursing profession. It is not difficult to see that 42.18% of students' ideal teachers were professional course teachers with high English levels, and 40.76% preferred "cooperation between English major teachers and professional teachers". Only a minority of 12.8% of them chose "English teacher graduated with English major". The result shows that an ENP teacher who is an English major and unfamiliar with nurses' work content, in a sense, has deficiencies. Students hold that the current teaching faculty is not perfectly adequate. This is because most ENP teachers lack professional knowledge and are unfamiliar with nurses' work content, so they cannot meet students' needs practically.

4.3. Needs about Teaching Method

Question 11and 12 are designed to study the students' opinions on the teaching method. There are three ways students can receive knowledge: teacher teaching, student practicing, and combining the two. According to the results, we can find out that most students(66.82%) prefer a combination of teaching and practicing, whether at present or in expectation. It shows that not only does the combination of teaching and practicing follow objective rules of acquiring language, but also concerns the subjective needs of students, so it should be attached importance in ENP courses.

Question 13 aims to analyze students' expectations of language learning in ENP courses. 13.74% of students chose "mainly Chinese, with English as a second language". 61.61% of them chose "both English and Chinese are used in equal proportions," and 23.7% preferred "mainly English, with Chinese as a second language". The rest 0.95% chose "total English". The tendency of teaching language shows that current students are willing to accept most English teaching. As the students' native language, Chinese was also used in class. When it comes to complicated knowledge, especially the nursing terminology, students expect Chinese.

Question 14 is designed as a multiple-choice to determine what should be focused on in the ENP courses. 82.46 percent of students believe that English language competency should be prioritized in ENP courses. They chose "master important nursing skills" 65.88 percent of the time, and selected "master relevant nursing professional knowledge" 75.36 percent of the time. "Deep grasp of worldwide nursing culture" is chosen by 60.19 percent of students. Students value both English practical competence and nursing professional knowledge, as seen by the results. Teachers should use an appropriate teaching style to satisfy the demands of their students.

Question 15 and 16 are multiple-choice questions that examine the current and expected teaching styles in ENP courses. According to the survey, it is apparent that lecture is widely employed in ENP courses and is the favored teaching mode for most students. In turn, multimedia education and demonstration are used. Compared with existing teaching ways, student preference is rather balanced. Internship in a hospital is used least during ENP courses, whereas self-study is the teaching style most students dislike. By contrasting the current and expected teaching styles, we can not ignore the distance between them; thus, the present ENP teaching method needs to be improved.

In conclusion, it is widely acknowledged that the real and simulated environment is vital to stimulating students' interest in ENP learning. However, there is a certain distance between present and expectation. Since ENP courses are a new field for nursing students, students think the lecture is the best teaching form.

4.4. Needs about Teaching Material

Question 17 aims to investigate students' opinions on supplementary material. 66.35% of students were interested in "Some relevant reading materials should be appropriately supplemented in class". 30.81% of them chose "Should send us some relevant materials to read after class." It shows that most students agree with adding relevant materials both in class and after class. In other words, they expected to keep step with the progress of nursing through reading additional nursing material.

28.44 percent of students chose "very satisfied" and 52.61 percent selected "satisfied" in response to question 18 regarding their level of satisfaction with current course material. 17.54 percent of individuals were unsure about this problem. 0.95 percent of all subjects reported being "dissatisfied." In contrast, 0.47 percent of respondents selected "dissatisfied." Students who are unsatisfied with textbooks should not be overlooked, despite the fact that the majority of students have a favorable view of the current instructional materials. Regarding interest, satisfaction plays an essential function. Therefore, it is vital to identify the deficit in the instructional materials and enhance them in a timely manner. Questions 19, 20, 21 are designed to find out more about learners' views of teaching material.

It is evident from question 19 that 33.18% of students selected "very close" and 52.13 percent selected "close" considering the materials utilized in ENP classes that are closely related to their majors. As a character of ESP, the material should combine with the profession. Since ENP is a sub-branch of ESP, the ENP textbooks need to select properly.

Question 20 reveals that 48.81% of subjects believed the expected textbook should include basic knowledge related to the field of expertise. On the other hand, 11.37% of them deemed that ENP textbooks need to contain new knowledge related to the profession. The rest 39.81% chose a "combination of the two". We can learn that teaching materials that combine fundamental professional knowledge and new specialized knowledge are exactly the materials students need.

Question 21 is designed as a multiple-choice to examine students' preferences for genres of teaching material. We know from the result that the number of subjects choosing the options is relatively balanced. Moreover, only the vivid and diversified teaching material can satisfy learners and draw their interests.

In conclusion, students are generally drawn to interest by diversified teaching material, whereas current teaching materials are essentially written material in a single form. It is necessary to offer more reading ma

terials that are vivid and helpful. Only properly teaching materials are greatly beneficial to students.

5. Conclusion and Implications

As an ESP sub-branch, ENP has recently attracted attention, especially in China. This study conducts an empirical inquiry to explore nursing students' needs. The result indicates that the majority of students have a favorable view of ENP and are eager to learn it. The primary objective of learning ENP is to prepare for future jobs, such as promotion, providing medical services for foreigners, and consulting English nursing literature. Most students are satisfied with their current ENP courses. However, we cannot deny that there are still students who believe the ENP curriculum does not satisfy their needs. In addition, more than half of the students are in dire need of hearing and vocabulary. Students agree that present ENP teachers could be improved. The fundamental factor is a lack of professional expertise. Students prefer English as the major teaching language with Chinese supplied. Many students pay greater attention to the teaching method, which combines with growing practical ability and obtaining professional knowledge. Although most learners are satisfied with the current teaching material, they hope that some relevant teaching materials can be supplied.

Based on the findings, we attempt to determine the pedagogical implications for ENP courses.

5.1. Implications for ENP Teaching Faculty

In view of the above problems about teaching faculty, the author makes some suggestions as follows.

Firstly, attaching importance to nursing professional knowledge is necessary for in-service teachers. They should be encouraged to acquire more systematic nursing knowledge in order to counteract their weaknesses. The basic listening, speaking, reading, and writing skills should be taught, as well as the content related to the practical job. In addition, teachers should keep up with the latest information on nursing and use it as an extension to update students' knowledge.

Secondly, pre-service training related to nursing is of key importance for novice teachers. Since students are eager to acquire more specialized knowledge to meet their professional needs, teachers need to master some relevant expertise. It's not practicable for teachers not to know about professional knowledge or to have a poor understanding of specialized information. Meanwhile, teachers should raise awareness of their self-development.

Thirdly, it is vital for medical universities to recruit nursing professors with high English levels.

5.2. Implications for ENP Teaching Method

We attempt to solve problems of teaching method through the following methods:

Since ENP involves a great deal of academic knowledge, the teaching procedure is relatively monotonous. The teaching style should be adaptable and dynamic to attract students' attention. Additionally, multimedia instruction must be leveraged to encourage students. Ultimately, the characteristics of ENP should be followed.

The profession of nursing is also a practical one. Consequently, practice is adaptive. Teachers should encourage students to speak English frequently by employing methods such as situational dialogues, simulations of real-world scenarios, etc. In addition, mixing content-based instruction with practical activity is an effective method for allowing students to practice and apply their knowledge.

Teachers must recognize the variances in English competence among their students in order to treat them as individuals and tailor their instruction accordingly. Moreover, to retain students' self-esteem and prevent them from tiring studying, teachers can mark students' errors in class and correct them after class.

5.3. Implications for ENP Teaching Material

According to the actual needs of nursing major students, three recommendations are provided as follows:

Firstly, suiting for nursing characteristics is one of the important elements for teaching material to ensure the implementation of ENP courses. Qualified teaching material can be informative, entertaining, practical, professional, and logical.

Secondly, the level of difficulties of the teaching material should be consistent with the actual English level of students, and the practicality of the teaching material should be highlighted. The content of teaching material should include basic nursing terms and vivid and imaginative dialogues in nursing work.

Thirdly, some relevant materials, like videos and stories in English related to the nursing profession, should be provided, so that nursing students will not feel that the learning of ENP is tedious, and their interest in ENP can be enhanced. In addition, the term for medical tools of indication can convert to English. Therefore students can always feel the presence of English.

Acknowledgment

References

[1] Alsamadani, H. A. (2017). Needs Analysis in ESP Context: Saudi Engineering Students as a Case Study. Advances in Language and Literary Studies, 6, 58–68.
[2] Brown, J. D. (1995). The Elements of Language Curriculum: A Systematic Approach to Program Development. Boston: Heinle and Heinle.
[3] Berwick, R. (1989). Needs assessment in language programming: From theory to practice. Cambridge: Cambridge University Press.
[4] Cai, J. G. (2018). Exploration on the paradigm of English as a second language teaching in "foreign language environment" -- review and reflection on foreign language education in Chinese colleges and universities on the 40th anniversary of Opening and Reform. Journal of Northeast Normal University (Philosophy and Social Sciences), (05), 12-17. doi:10.16164/j.cnki.22-1062/c.2018.05.002.
[5] Dudley-Evans, T. & John, M. J. S. (1998). Developments in ESP. Cambridge University Press.
[6] Hutchinson, T. & Waters, A. (1987). English for Specific Purposes. Cambridge University Press.
[7] Jordan, R. R. (1997). English for Academic Purposes. A Guide and resource book for teachers. Cambridge University Press.
[8] Munby, J. (1978). Communicative Syllabus Design. Cambridge University Press.
[9] Robinson, P. (1991). ESP Today: A practitioner's Guide. Prentice Hall International (UK) Ltd.
[10] Richterich, R. (1972). A Model for the Definition of Language Needs of Adults Learning A Modern

Language. Council of Europe.

[11] Richterich, R. (1983). Case Studies in Identifying Language Needs. Pergamon Press.

[12] Richards, J. C. & Schmidt, R. (2010). Longman Dictionary of Language Teaching and Applied Linguistics. Longman.

[13] Strevens, P. (1977). New Orientations in the Teaching of English. Oxford University Press.

[14] Shehni, M. C. (2021). EAP learners' perceptions towards the use of tasks in their books: Focusing on Needs Analysis. Theory and Practice in Language Studies, 3, 268–274.

[15] Widdowson , H. G. (1981). Teaching English for special purposes : Objectives and approach. Etudes De Linguistique Applique, 43, 8–21.

[16] Wen, Q. F. (2012). Challenges and countermeasures of college English: from the perspective of curriculum theory. Foreign Language Teaching and Research, 44(2), 283-292.