

Study on the Content-Based Instruction on English for Specific Purpose

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Abstract: Background/Objectives: As the world keeps growing closer through globalization, the need to nurture competent medical professionals fit for our times is increasing. **Methods/Statistical analysis:** The questionnaire consisted of a section on personal information and an opinion on English language training for dental hygiene students. In order to investigate learning needs and target needs, dental hygiene students were surveyed. **Findings:** The anonymous survey consisted of parts pertaining to personal information, learners' needs about dental hygienist' tasks, and open comments about English education for dental hygiene students. These finding includes the differences and similarities in the importance ranking of notion, function, and type of language skills between the three study groups. These results also show differences depending on categories such as grade levels, or the type of medical institute. **Improvements/Applications:** The selected concepts and functions of this study will be the basic information for developing the ESP course curriculum to train professionals in the medical field. Based on these results, a content-based teaching method for improving English for special purpose education for dental hygienists and students has been proposed.

Keywords: Content-based teaching method, Dental hygienist, Dental hygiene students, English education, English for specific purpose

I. INTRODUCTION

The importance of English as the world language is evermore growing, thus increasing the need to nurture competent professionals with high level of English proficiency in order to meet the global standards and empower national competence. This need applies to the medical field as well, leading to a higher emphasis on the teaching of English for Specific Purpose (ESP) in universities of health and medicine.

Berwick[1] investigated the EST courses provided by domestic universities and suggested how it can be improved for the future. According to Hwang[2]'s analysis on 885 courses from 59 domestic universities, Medical English was classified as ESAP as a course major, with the total of 36 courses including Medical English, Medical Terminology, Practical Medical English, Biomedical English, Practical Clinical English.

With regard to other fields associated with the study of medicine, the school of nursing and of pharmacy, six courses

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were open, including English for Nursing, English Conversation for Nursing, Practical English for Nursing, with one course of English for Pharmacy. Although universities provide such a variety of courses, Gardner[3] pointed out a number of problems including the lack of specialized textbooks for ESP and the shortage of professional staff members with expert knowledge in the field of medicine.

Hence this study attempts to suggest a teaching method for ESP based on the learner needs analysis conducted with students of dental hygiene, centering on the duties and services of a dental hygienist.

In order to suggest a future direction of CBI suited for the English course major for the dental hygiene program, a needs analysis was conducted with students of dental hygiene. In the process the need for the teaching method was verified, with which students can develop specialized knowledge in their study of major and English communication skills through the English course majors in the dental hygiene program.

This study looked into the current English education provided by the school dental hygiene by conducting and analyzing a survey with first-year students enrolled in the dental hygiene program of A University located in the Chungnam Province, and with second-year and third-year students who have completed all course majors required in the program and two practical training experiences from a general hospital and a private hospital. Based on these analysis, this study attempts to research and analyze the ESP learners' level of satisfaction on their achievement and their needs regarding the courses, further exploring how the English course majors for ESP in the dental hygiene program can be improved for the future. The study also attempts to present a suitable teaching method in order to reinforce the effectiveness of the English education for ESP students of dental hygiene.

The specialized English education provided by the dental hygiene program is a part of an ESP program. Unfortunately, the reality of the specialized English education in the dental hygiene program reveals its weaknesses with respect to the preliminary procedures for ESP education and the content of the education. Most universities have to be content with having students simply learn and remember terminologies in their field of study. Hence it is of the utmost priority to develop English teaching methods suitable for Korea's circumstances that aims for communicative English education and that embraces the specialties of Korea's dental hygiene program.

In order to meet globalization and enhance national competitiveness,

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it is urgently required to cultivate professional talent who can communicate in English. Therefore, it is a trend that foreign language education for special purpose English in the department of dental hygiene is becoming important. Investigated the EST courses provided by domestic universities and suggested how it can be improved for the future. According to Chia,H's analysis on 885 courses from 59 domestic universities, Medical English was classified as ESAP as a course major, with the total of 36 courses including Medical English, Medical Terminology, Practical Medical English, Biomedical English, Practical Clinical English[4].

With regard to other fields associated with the study of medicine, the school of nursing and of pharmacy, six courses were open, including English for Nursing, English Conversation for Nursing, Practical English for Nursing, with one course of English for Pharmacy. Although universities provide such a variety of courses, Park pointed out a number of problems including the lack of specialized textbooks for ESP and the shortage of professional staff members with expert knowledge in the field of medicine.

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II. MATERIALS AND METHODS

2.1. Survey

2.2. Subjects of survey

The total number of subjects of the survey are 240 students, which includes 97 first-year students who are enrolled in the dental hygiene program at a three-year college A located in the Chung-nam province but who have not yet participated in practical training, and 143 second- and third-year students who are currently in the program or finished both the program and the two-time practical training experiences in the same school.

2.2. Subjects of survey

A total of 240 dental hygienists and students participated in the questionnaire, but 215 opinions were used in the analysis except for 25 questionnaires that were not responded or were inadequately answered. In the distribution of the participating students, there are 97 students in the first grade, 55 students in the second grade, and 63 students in the third grade [Table 1].

Table 1. The Distribution of Subjects

Year (N=215)	First	Second	Third	Total
Frequency	97	55	63	215

Table3.Learners'purpose for learning English speaking

Skill area	Ranking of importance	Function	M (N=215)	SD
Speaking	1	to give advice on the proper diet for dental health	4.2	.775
	2	to give explanation about dental operation or procedure or treatment	3.82	.852
	3	to give explanation about cautions after dental operation	3.81	.872

Percent (%)	45.1	25.6	29.3	100
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III. RESULTS AND DISCUSSION

3.1. Listening

As shown in [Table 2], four of 14 items were significant in listening. 'Listening and understanding of dental hygienists' was the most important function in the field of listening, and 'cooperating in the medical practice', 'listening and understanding of the use of medical equipment' was 3.79 and 3.78, Third place. 'The discussion with colleagues' was also as important as the above two functions.

Table 2. Learners'purpose for learning English listening

Skill area	Ranking of importance	Function	M (N=215)	SD
Listening	1	to understand the language of a fellow dental hygienist	4.12	.803
	2	to properly collaborate in the doctor's office	3.79	.914
	3	to understand the language used in the training for the use of medical equipment	3.78	.889
	4	to engage in medical discussions with fellow dental hygienists	3.77	.891

3.2. Speaking

[Table 3] shows the learner's speaking position. As shown in Table 18, the 'oral advice on oral health', which showed an average of 4.2, was the most important difference between the learner and the other functions.

4	to inquire patients of their medical history, time of onset, major symptoms, etc.	3.8	1.045
5	to give explanation about sensitive issues	3.8	1.116
6	to request cooperation for medical activities	3.79	.971
7	to answer to questions from patients or guardians	3.75	1.014
8	to give explanation on the medical procedures of medical examination, inspection, treatment	3.75	1.02
9	to give presentation on medical cases	3.74	.834
10	to give explanation about causes of disease	3.73	.993
11	to request for help in the consulting room	3.7	.899
12	to give explanation on complications	3.69	1.027
13	to give suggestions on alternative treatments	3.64	.956
14	to give explanation on the effects and side effects of medicine	3.64	1.041

(1= highly unnecessary, 5= highly necessary)

3.3. Speaking/Listening

As shown in [Table 4], in the first place where the interaction is emphasized in the speaking / listening, the "understanding of the patient or the caregiver" is ranked first with an average of 3.77. In the second place, the average was 3.74 in the "discussion with colleagues", "the dialogue to

reassure the patient and the caregiver" was 3.73 and the third was in the average, and the "patient and caregiver education" 'Consultation for solving the problem of the patient', 'Consultation for the problem solving of the patient', 'The function of 'inquiry for patient reference' appeared in the speaking / listening area.

Table4. Learners' purpose for learning English speaking/listening

Skill area	Ranking of importance	Function	M (N=215)	SD
Speaking/ Listening	1	to understand the language of patients and guardians	3.77	1.119
	2	to engage in medical discussions with fellow dental hygienists	3.74	.89
	3	to engage in conversations to relieve the anxiety of patients and guardians	3.73	1.09
	4	to give demonstrations to patients and guardians	3.72	.884
	5	to collect consent forms regarding medical activities	3.69	.999
	6	to have phone conversations	3.67	.863
	7	to confirm patients' understanding of a given explanation	3.66	.953
	8	to give training to student trainees	3.66	.929
	9	to understand the language used in staff meetings at the hospital	3.65	.909
	10	to discuss solutions to patients' problems	3.64	.911
	11	to discuss the registration of patients	3.63	.886

3.4. Writing

As shown in [Table5], the most important items in the listening comprehension are the functions related to the contents of the patients' medical history, history of the illness, the average score of 3.89 was 2.89, and the average of 3.78 and 3.7 was the third and fourth place, respectively. The

records of "oral health education results", "medical records" Writing was also related to medical care and ranked in relation to daily work. In addition, 'writing research papers' and 'e - mail writing' appeared as a writing function for English language education for learners.

Table5. Learners' purpose for learning English writing

Skill area	Ranking of importance	Function	M (N=215)	SD
Writing	1	to record patients' medical history, time of onset, and major symptoms	4.07	.803
	2	to schedule an examination	3.89	.839
	3	to record examination due dates	3.78	.895
	4	to keep track of scaling records	3.7	.862
	5	to record the results of dental hygiene training	3.66	.898
	6	to write articles on specialized medical information	3.65	.924
	7	to read and understand medical records	3.65	.894
	8	to keep track of medical records	3.64	.89
	9	to write research articles	3.63	.947
	10	to write e-mails	3.63	.912

(1=Highly Unnecessary, 5= Highly Necessary)

3.5. Reading

As shown in [Table 6], dental hygiene students and students were ranked first with an average of 4.15 in 'Reading, understanding and installing facilities, maintenance and

safety management' and 'Reading and understanding about extraction management' of the total

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number of employees. 'Reading and understanding medical equipment manuals', 'Reading and understanding the contents of waste management', 'Understanding the result reporting of

medical equipment', 'Reading and understanding of test results', 'Reading comprehension', 'understanding e-mail contents', 'searching for information for self-management.

Table 6. Learners' purpose for learning English reading

Skill area	Ranking of importance	Function	M (N=215)	SD
Reading	1	to read and understand information about the development and maintenance of medical facilities and safety control	4.15	.789
	2	to read and understand information on surgical extractions management	3.99	.845
	3	to understand the written English about preliminary medical examinations	3.84	.944
	4	to read and understand manuscripts for medical equipment	3.74	.904
	5	to read and understand information about waste management	3.71	.881
	6	to read and understand the text about the performance of medical equipment	3.71	.898
	7	to understand test results	3.69	.902
	8	to read written explanations given by pharmaceutical companies	3.68	.833
	9	to read and understand medical record	3.66	.913
	10	to understand e-mails	3.65	.856
	11	to search and understand information regarding self-management	3.65	.873

(1=Highly Unnecessary, 5= Highly Necessary)

In the content-oriented teaching method, students do not focus on general language learning such as vocabulary and grammar as before, but they learn the content of the special field in preparation for special purpose or practice, and language learning takes place directly or indirectly in this situation[5]. As a result, students can study language through subject areas of their choice, thereby increasing learning motivation and enabling more interesting language learning[6]. In order to effectively implement the content-based learning method, various language teaching methods aiming at improving communication ability should be applied. It is necessary to use practical teaching materials that utilize the comprehensive functions of language, and to design creative learning tasks so that learning of new language functions and content-based learning can be harmonized. It should form a framework of dialogue through various contents of medical treatment and contents of medical treatment and encourage active class attitude using it[7].

This study suggests significant indications in the teaching methods of English course major program for EST students of dental hygiene. The effect of the teaching methods will multiply in the learning environment that is more communicative and learner-centered. Executing the duties and services as a dental hygienist will require the ability to effectively communicate with foreign patients, for which English course major must be preceded[8]. Considering the specific environment of the field of dentistry, in which dental hygienists are required to provide and explain medical services for foreign patients, and the current level of students who are future dental hygienists, the preliminary means and educational content of ESP reveal its limitations. Thus, along with ESP education, applying content-based teaching methods indicates the future direction of the English course major for the dental hygiene program[9,10].

It is meaningful that the demand survey based on the study of dental hygiene students has identified the concepts that are important to the job and suggested the ESP teaching method based on them. The significance of this study lies in identifying the areas of which students of dental hygiene consider highly in relation to the duties and services of a

dental hygienist through a needs analysis with those students, thus suggesting the ESP teaching method based on the results. The concepts suggested in the study may as well be applied in the development of ESP teaching methods in the field of dental hygiene. And when these teaching methods are applied in the actual learning environment, authentic follow-up research should be conducted on the evaluation of the ESP teaching methods that can provide practical contribution to nurturing competent medical talents[11].

IV. CONCLUSION

In order to effectively perform content-based language teaching, content learning and language learning must be satisfied at the same time for each specialization. Therefore, it is necessary to develop a course that meets the needs of learners. Indeed, curriculum development is accompanied by realistic difficulties. In other words, an English professor who teaches a content-oriented language should be familiar with the contents of the major field, and a professor teaching a major field should be able to know and use effective language teaching methods. Therefore, it is necessary to cooperate closely with professors of English and major subjects, and to continuously discuss and advise on all aspects of the class.

In the Department of Dental Hygiene, it is necessary to actively introduce English lectures using content-based teaching methods to the major subjects of English with special purpose in preparation for internationalization, and help students to advance into society. The development of a more specialized curriculum in a rapidly changing healthcare environment will require the role of medical professionals in society.

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