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교육학박사학위논문

**ESP Course Development and
Implementation:
Action Research for Healthcare College
Students in Korea**

특수목적영어 강좌 개발 및 실행:
한국 보건의료계열 학생들을 위한 실행연구

2015년 8월

서울대학교 대학원
외국어교육과 영어전공
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by

Soo-Jin Shim

A Dissertation Submitted to
the Department of Foreign Language Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in English Language Education

At the
Graduate School of Seoul National University

August 2015

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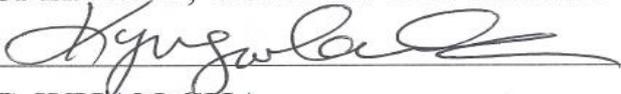
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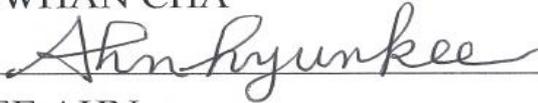
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ABSTRACT

ESP Course Development and Implementation: Action Research for Healthcare College Students in Korea

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This study explored the viability of ESP and its course by introducing ESP, by conducting needs analyses (NA), by developing an ESP course or ‘GHEC’ (General Healthcare English Course) here for the students of a healthcare college in Korea, and then by implementing the tailored course accompanied by subsequent course evaluation. The incubation of this study started from seeking an alternative for a more effective and needs-focused college English education under the background of EFL Korea in a knowledge-based society. Recognizing the necessity to develop and implement GHEC as well as the problems of current uniformed college English curriculum in my local context, I had an emancipatory potential to make a change through this action research (AR) project.

This study had five goals: (1) to put the need for change into action in a bottom-up way from a mere powerless inside instructor, (2) to listen to the voices around me and communicate openly, (3) to have ‘our course’ containing our voices of me and my students, (4) to spread ESP as a solutional clue not just as an approach, and (5) to learn more and develop professionally. With those goals, this study was

motivated by three research questions: (1) How will the tailored ESP course for EFL healthcare students be designed through NA, subsequent syllabus design, material development and relevant decision making in the framework of an action research?, (2) How will the domain students react to the tailored ESP course after they have taken the course?, and (3) What could be reflected and suggested for the next upgraded course design?

Literature on ESP in Korea has focused almost exclusively on NA and previous studies on EMP have largely dealt with medical English for doctors and nurses. To bridge this literature gap, ESP-AR course development research design model was posited. The model allowed the study to connect ESP course design with implementation systematically according to AR spiral cycle and it included multidimensional NA through a mixed method combining both quantitative and qualitative ways in an AR paradigm. For the NA, I collected survey data from 1244 students, 123 graduates and 30 domain instructors, and also interview data from 35 students, 12 graduates and 10 domain instructors of the healthcare college comprising eight departments of occupational therapy, hospital management, optometry, biomedical laboratory science, radiological science, dental hygiene, physical therapy, and emergency medical service.

Based on the results of multidimensional NA and decision making process, the course was created as an ESP course for general healthcare occupational purposes, GHEC which equipped content-based syllabus with speaking skill focus and task-based methods. This wide-angled EOP-oriented undergraduate pre-experience English course consisted of a format of four modules – (1) ‘Healthcare news and my study’, (2) ‘Human body and medical terminology’, (3) ‘Health and

hospital’, and (4) ‘Medical Korea and my job’ – narrowing down from broad and general themes to more specific and specialized themes. Course objectives were described as ‘can-do’ statements and four representative lesson plans were constructed to implement four model units, which involved a series of tailored tasks of Ebola poster presentation, anatomy micro-teaching, hospital tour guide, and my job field role-play. In terms of materials preparation on the principles of authenticity, audio/visual aids, and realia, I provided the students with CNN Student News with authentic photos about Ebola, various anatomy parts worksheets for the micro-teaching task of several discipline-domains, genuine hospital brochures/hospital tour, and OET (Occupational English Test) speaking-task samples for role-plays. Twenty-four second-year students took GHEC and the students showed a positive reaction with their active participation through course evaluation survey, teaching/learning logs, and class observation by a colleague. The course evaluation results indicated an average satisfaction level of 3.9 out of 5 including high values on especially the GHEC materials (4.21) and tasks (4.08). Students expressed that they have become more ‘active’, ‘confident’ and ‘professional’ with less affective filters and less boredom. However, class time management has been at issue to be addressed.

For future course re-planning suggestions as a beginning stage of another action-research cycle, some pedagogical implications through reflections were presented: (1) ESP can perplex general learners or a teacher, but also freshly challenge, (2) A facilitative teacher and team-directed tasks can make ESP learners more active, and (3) Tailored ESP content enabled learners to productively elicit their background domain knowledge and interest. Further, constructive suggestions for upcoming upgraded GHEC and similar courses were made: i.e., considerations

of students' entry level of English proficiency, content specificity issue, class combination of discipline departments, target hospital situation, speaking boost with the whole-language approach, flexible adoption of TBLT (Task-Based Language Teaching)/PBL (Problem-Based Learning)/PBL (Project-Based Learning), e-learning system for efficient time management, and ESP practitioner's roles as facilitator and learner in the ESP teaching context.

Meanwhile, in the course of conducting this action research in a local natural setting, the concept of ESP has been spread by means of the teacher/researcher and study participants, and then some good signs of changes toward the ESP course have appeared. Some example signs were CPR (cardiopulmonary resuscitation) presentation in English and the request for an intensive healthcare English course during vacation. This suggests that as an alternative or an additive to general college English education, the GHEC study could open a real possibility of ESP with more needs-focused effectiveness and efficiency in a higher education of the EFL setting in Korea.

Key words: English for Specific Purposes (ESP), ESP course development, needs analysis, action research, college English education, course implementation, course evaluation, curriculum change, healthcare English, medical English, EMP, EOP

Student Number: 2010-30386

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LIST OF ABBREVIATIONS

CBE	Competency-Based Education
CBI	Content-Based Instruction
CBLT	Competency-Based Language Teaching
CBME	Competency-Based Medical Education
EAP	English for Academic Purposes
EFL	English as a Foreign Language
EGAP	English for General Academic Purposes
EGHP	English for General Healthcare Purposes
EGP	English for General Purposes
EGSP	English for Specific Academic Purposes
ELF	English as a lingua franca
ELP	English for Legal Purposes
EM-EP	English for Medical-Educational Purposes
EM-OP	English for Medical-Occupational Purposes
EMP	English for Medical Purposes
EM-SP	English for Medical-Specific Purposes
EOP	English for Occupational Purposes
EPP	English for Professional Purposes
ESCP	English for Sociocultural Purposes
ESL	English as a Second Language

ESMP	English for Specific Medical Purposes
ESP	English for Specific Purposes
EVP	English for Vocational Purposes
GHEC	General Healthcare English Course
GE	General English
NA	Needs Analysis (Analyses)
OET	Occupational English Test
PBL	Problem-Based Learning
PBL	Project-Based Learning
PSA	Present Situation Analysis
SCLT	Sustained-Content Language Teaching
TBLT	Task-Based Language Teaching
TSA	Target Situation Analysis

CHAPTER 1

INTRODUCTION

This study of an action research project demonstrates the process of how the tailored ESP course is developed for healthcare college students in Korea and in turn, implemented. The designed and implemented ‘General Healthcare English Course’ (hereinafter, it is called as ‘GHEC’¹) is followed by the course evaluation and subsequent implications are suggested. This chapter introduces background and problem statement in section 1.1, and its research context in section 1.2. Section 1.3 presents the goals of the study with the research questions pertaining to the study. In section 1.4, the significance of the study is included. Finally, section 1.5 describes an outline of the remaining chapters of the thesis.

1.1 Background and Problem Statement

When a certain language is widely and dominantly used as a means of communication in the world of this ‘global village’, it can be transformed into a power tool which every nation or individual is required to utilize for a particular purpose. In this respect, English has long been highly influential and powerful in communication activities as the language of business, science, ICT (Information and Communications Technology) and academia regardless of the participants’ first

¹ GHEC is coined here in this study for ‘General Healthcare English Course’, which is the tailored ESP course for the students of a healthcare college in Korea.

language². In 1997 David Crystal published a book entitled *English as a Global Language* and in this new millennium, “English as a lingua franca” (ELF) has already become a cliché title on the books of many authors studying the status of English language throughout the world (Canagarajah, 2007; House, 2003; Jenkins, 2006; Seidlhofer, 2005). Bolton (2008) mentioned that English is now even “an Asian language”³ (p.3). This dominant role of English might be reflected in the fact that there are no universities or colleges in Korea that do not run mandatory English courses as general liberal arts subjects and/or discipline-required subjects.

Then, what kind of English courses would be most desirable and effective at the tertiary level in order to conform to the contemporary interdisciplinary and practical academic demands in the globalized world of complexity and dynamism? Should additional language command of English or bilingualism including English become an essential prerequisite for students’ future careers as well as their graduation? The answer to such questions could be associated with what the learners need for their particular purposes. Many Korean universities seemed to have run college English courses without distinct goals and plans, which might result in little substantial benefit for the students and allow the students to turn their direction to private institutes (Park, 1997). This can be in line with existing English courses having been established in a top-down management process by the policy decision

² Although English is not ranked firstly in terms of the population of first-language speakers but rather ranked thirdly following Chinese and Spanish (Paul, Simons, & Fenning, 2015), the dominant use of English have already been reflected through a multitude of second or foreign language users.

³ Bolton (2008) stated, “English is now an Asian language, but governments and businesses are concerned about proficiency”(p. 3). Also, Kachru (1998) and MacArthur (2003) published the articles entitled “English as an Asian language”.

makers or relevant faculty and administrative committees rather than by the students and the instructors involved in which the actual English teaching and learning occur (Kim, 2009). Although the attention of college English courses has been diversified from mainly reading and grammar to speaking of communicative approach and practical courses for high-stakes test preparation, students' satisfaction level is not likely to be seen as high as desired and further, there still have been critical voices about the efficiency of college English education (Oh, 2009; Yu, 2010).

In particular, a majority of local universities in several provinces of Korea provide TOEIC-oriented college English courses aiming to raise students' competitiveness in TOEIC. Even if this reality reflects one of the students' demands and requirements for their survival on the fierce job market, there have been problematic concerns about the discrepancy between the TOEIC score and practical English ability in the real English using situation. A newspaper headline said, "Test scores don't guarantee English skills: Korea's exam-driven education system does little to help students actually use English" (Yoon, 2014)⁴. This phenomenon may be attributed to training just the test-wise skills focusing on simply two hundred items of TOEIC listening and reading questions as is often done at cram schools. Although the rich business-related TOEIC content can be applied to the college English course in more communicative ways, a practical language-use factor can be sacrificed for the immediate purpose of raising the test score raise as soon as possible. Under the circumstances, students seem to have the burden and pressure tests give instead of gaining interest and motivation which diverse ways of English learning can give. It is said that young job seekers in Korea get stressed and feel uncomfortable until they

⁴ Yoon, Min-sik. (2014, February 5). Test scores don't guarantee English skills. *The Korea Herald*. Retrieved from <http://www.koreaherald.com>.

get at least a 900 on their TOEIC (Hadid, 2014; Lee, 2014)⁵.

However, if students want different kinds of English courses such as English conversation and writing other than test prep ones, they might quench the thirst for English use by taking the courses at extra effort whether the school curriculum provides or not. In most universities of metropolitan area, English conversation courses prevail and other elective English courses are provided (e.g., writing and listening).

Even so, there still exists the discrepancy between general English and domain-specific English. For example, dental hygienist-patient conversation about *bruxism* (grinding the teeth) may not be a common matter for general English courses such as English conversation, writing, TOEIC, etc. Unlike other general English courses, it is not easy for external establishments like a private educational institute to deal with such special English courses relating to particular domain. Rather, inside a university, it would not be difficult to find a homogeneous group with specific goals and needs. The special English course for the group could respond to focused English competencies which are required for specific academic or career fields.

Therefore, the notion of English for Specific Purposes (ESP) could be a viable alternative to problematic concerns of current college English education. Well in line with this, Oh (2009) also suggested ESP and Content-Based Instruction (CBI) with more diverse courses, and Park (2003) envisioned college English education

⁵ Hadid, A. (2014, October 18). English education in Korea: Unrealistic expectations. *The Diplomat*. Retrieved from <http://thediplomat.com>
Lee, Claire. (2014, March 26). TOEIC adds to stress for young job seekers. *The Korea Herald*. Retrieved from <http://www.koreaherald.com>

using a content-based English textbook⁶. Unlike English for General Purposes (EGP), ESP courses can meet more narrowly focused learners' needs and purposes, and integrate language and specific subject matter content, allowing the learners to learn English in a meaningful context which is directly linked to them. ESP can cover a variety of domains on a continuum ranging from EST (English for Science and Technologies) to EGBP (English for General Business Purposes) to name a few. This study addresses, inter alia, English for Healthcare Purposes in an EFL setting, which may not be identical to English for medical doctors and English for nursing, although somewhat similar.

As the medical or healthcare industry accounts for an enormous proportion of an advanced country's economy and Korea cultivates its competitiveness in the emerging global healthcare market through medical tourism and Korean hospitals' overseas expansion. For example, medical tourism can be a strategy for economic growth through revenue from international patients (Bookman & Bookman, 2007). In fact, it has been reported that "the revenue of medical tourism has more than tripled since 2006" (Korea Health Industry Development Institute [KHIDI], 2014)⁷. Also, Seoul National University Hospital (SNUH) made a contract to manage a

⁶ There are some example ESP courses running in the curriculums of a few universities: i.e., Academic English, Business Writing at Korea University; English for Business, for Technology, for Travel and Tourism, for Hotels and Restaurants, for Computers and Data Processing, Lecture Comprehension and Note-taking, Academic Writing, etc. at Hanyang University (Yu, 2010); Nursing English at several universities.

⁷ KHIDI, (2014, December 26). South Korean Medical Care Recognized Over \$100 million generated through Medical Tourism. Retrieved from <https://www.khidi.or.kr/board/view?pageNum=1&rowCnt=10&no1=1&linkId=145355&menuId=MENU00825&maxIndex=00001453589998&minIndex=00001453559998&schType=0&schText=&boardStyle=&categoryId=>

medical center in Abu Dhabi, the United Arab Emirates (UAE) with a budget of 1 trillion won or \$987 million (Jung, 2014)⁸.

The healthcare sector comprises not only doctors, nurses and pharmacists but also ‘allied health professions’ (Ward, 2010; Wikipedia)⁹ such as occupational therapy, optometry, physiotherapy, paramedic, medical laboratory science, and so forth. These disciplines tend to assume high degree of specificity in terms of domain-specific knowledge and skills including medical terminology and special training, which could be consistent with the concept of ESP. Whereas there has been a considerable body of research on English for Medical Purposes (EMP) including particularly English for doctors and English for nursing (see Allwright & Allwright, 1977; Ferguson, 2013; Maher, 1986; Kim, 2008; Lee & Kim, 2011; Shi, 2009; Soh, 2004), English for (potential) allied health professionals has little light shed on it as a research subject despite the fact that there are many engaged in the area and specific needs for English relevant to them. Without doubt, it is necessary to handle such English courses as well in tertiary education.

In keeping with the strong demands and in response to the problems occurring in the same macro background reviewed above, this study has derived from perceiving the following problems in its local context. Firstly, as mandatory college English curriculum at the university and adjacent province to which this research site belong is primarily focusing on TOEIC preparation courses, students suffer from test pressure with forced interest and motivation, and many of them are

⁸ Jung, Min-ho. (2014, August 17). SNU Hospital to manage medical center in UAE. *The Korea Times*. Retrieved from <http://www.koreatimes.co.kr>

⁹ Wikipedia. Allied health professions. Retrieved February 5, 2013, from https://en.wikipedia.org/wiki/Allied_health_professions

not supposed to try diverse contents and ways of English learning due to scheduling conflict, priority of course choice, and misleading concept about English learning, etc. The college students, in effect, are not allowed to select various English subjects because of their other domain courses and inflexible timetable. A majority of students might think that English study equals to test prep from their English-learning experience in high school for College Scholastic Ability Test (CSAT) and college English teaching for TOEIC.

Secondly, the top-down process of curriculum management does not seem to meet the needs of learners satisfactorily with uniformed decision making and practice. On top of that, the courses of general education/liberal arts departments tended to lag behind other domain courses in terms of importance attributed to the students and the school authority. Also, the relatively weak power positionality of English instructors at university has meant that they have not likely been allowed to voice their professional opinions. Lastly, influenced by knowledge-based society, globalization, healthcare industry and the specificity of the healthcare domain, the healthcare college needs to yield competent specialists in regard to both healthcare and its related English use. But the reality does not appear to accept such demands effectively. A new paradigm is required in a different way from existing English courses.

Along with the growing English demands of a healthcare college in Korea as well as in the world, thus, this study presents an ESP course as a viable alternative or as additional specialty to a general college English course. In this study, I will develop a custom-tailored English for General Healthcare Purposes (EGHP) course for EFL healthcare college students at the tertiary undergraduate level in Korea and

then put the course into practice. For this, an action research approach is adopted, which shows not a suggested course design in virtual reality but a real situation. Also, the adjunctive needs analysis, syllabus design, material development, and course evaluation are carried out via the stages of an action research cycle. The findings from the process and the implementation of the course development provide pedagogical implications for university English programs in an EFL setting.

1.2 Research Context

The context of this action research project can be narrowed down from ELF through EFL Korea context to a local healthcare college site, for a close-up context. The global context pertaining to English language and English education seems to derive from ‘English as a lingua franca’, which is the preferred term when English is used as the means of communication and a ‘contact language’ among ‘non-native’ speakers of English with different first-language backgrounds (Firth, 1996). This tendency has resulted in English being the foreign language for the majority of its nonnative users as a global/international/world lingua franca. Kachru’s ‘concentric circles’ model outlining the spread of English regarded Asia as an integrated profile of English: (a) the ‘inner circle’ of Australia and New Zealand with English as a first language; (b) the ‘outer circle’ of India, Singapore, and the Philippines with English as an institutionalized additional language; and (c) the ‘expanding circle’ of China, Thailand, Taiwan, and Korea with English as a foreign language (Kachru, 1998, pp. 93-94), where many world English users live in this nonnative-English-speaking region. There are few in-country authentic English uses for real-life survival

communication and English is taught only through educational establishments. When assessing English proficiency, a high-stakes test like TOEIC has a crucial role. In particular, high scores in TOEIC in Korea are of paramount importance for college graduates who are competing for jobs.

In conjunction with the features of the expanding circle, the popular dichotomy, EFL vs ESL terms have been spread widely. Basically, the term ESL, English as a Second Language, is used commonly in the immigrant countries such as USA or Canada, where many immigrants' mother tongue is not English but they should acquire the dominant language to live their lives as a member of the new land. EFL, namely English as a Foreign Language, implies the teaching of English in an expanding circle. Typically, in EFL settings, people learn English to pass exams as a requisite part in national and school curricula and to develop his/her career either domestically or internationally.

Korea has become a developed country with a high income and one of the OECD members with G-20 major economies. Korea can be said to have a very effective education system, if academic results are regarded as the sole criteria for such a judgment¹⁰ and Koreans are towards the top achievers of PISA results as well as good performers in various international competitions measuring academic achievement (Park & Kim, 2014). In the case of higher education, it has expanded rapidly, but the rapid expansion of higher education is not always seen as desirable, as some scholars and policymakers are concerned about potentially decreasing job prospects of college graduates and deteriorating quality of higher education which

¹⁰ In 2010, Korea ranked in the first place in mathematics and reading and in the third place in science in the OECD PISA (Program for International Student Assessment) (Yu, 2014).

can result from a rapid increase of the number of youth completing tertiary education (see Yu, 2014).

College education is gradually putting more emphasis upon practical and field-applicable skills along with humanities and liberal arts. The core competencies identified to develop through higher education include academic knowledge in the field of study, thinking skills, communication skills, self-directed learning skills, leadership, problem-solving skills, and teamwork (Yu, 2002 as cited in Yu, 2014). In addition to these elements, Korea's representative global enterprises including Samsung, LG, and SK seek those with an international mind-set and challenging spirits. According to Yu (2014), to respond to the demands of a knowledge-based society, identifying what kind of knowledge and core skills need to be discussed. She pointed out that despite many colleges' efforts to adopt courses in English for global capacity, it is still insufficient to turn to a competency based curriculum. In particular, these days, many colleges in Korea are restructuring organizations as well as their educational system since their management innovation seems to be associated with their survivals in the upcoming phenomenon where the number of students matriculated in universities of Korea will exceed the number of high school graduates in a few years.

The final destination of the research context from Korea and college education is a college at a local university in a medium-sized city of Korea. The university, founded in a local city in 1991, has become a distinguished university with an employment rate by graduates of more than 90% each year. Its motto is a 'student-centered' teaching university, which assumes its limitless responsibility for the student's employment as well as the student's graduation. The founder was a

prestigious doctor and the university has three hospitals including a general hospital affiliated with the university. It in turn has three medical sciences-related colleges: i.e., college of medicine, college of nursing, and college of medical sciences (healthcare)¹¹. The site of the action research project reported in the dissertation is the healthcare college comprising eight major departments: Department of Occupational Therapy, Department of Optometry, Department of Biomedical Laboratory Science, Department of Radiological Science, Department of Dental Hygiene, Department of Physical Therapy, Department of Hospital Management, and Department of Emergency Medical Service. This study looked at English education of, in, and for the healthcare college. The healthcare college students are supposed to take College English Course I, II, III and IV as compulsory subjects for four semesters in their first and second school years. The courses are TOEIC-preparation courses and the college students should get at least 650 of TOEIC score to meet one of their graduation requirements. English conversation and/or TOEC Speaking courses can be available upon the request of each department.

1.3 The Goals of the Study

The starting point of this study was a critical reaction to existing college English curricula including only general English and test prep in my research surroundings, and an automatic response to social, industrial, national and

¹¹ The official college name is 'College of Medical Science' but here in this study, I call healthcare college since the connotation of the term 'healthcare' seems to be more generic and somewhat differentiated from the term 'medicine' or 'medical' area.

educational demands. That means I had an emancipatory potential by seeking a change and a challenge from tamed me and my students along with liberation from existing paradigm. Thus, the goals of my study were firstly to put the need for change into action in a bottom-up way from a mere powerless inside instructor and secondly to listen to the voices around me, communicate openly and for us to understand better each other. Thirdly, I wanted to have our course containing our voices – those of my students and me – not somebody else’s. Fourthly, I also wanted to spread ESP not just as an approach but as a solutional clue to the problems mentioned above. Lastly, these goals gave me another goal to learn more and develop professionally with my expectation of satisfactory course design.

Bearing those goals in mind, this study adopted an action research paradigm which can make the study goals possible in a single authentic place not by using sample population in a normal research way. The action research included designing a custom-tailored ESP course called GHEC here. GHEC was designed for EFL healthcare college students in Korea, pertaining to adjunctive needs analysis, syllabus design and material development, and then, put the course into practice. The findings from the development process and the implementation of the course may suggest pedagogical implications for EFL English programs at a tertiary level. The study posits the research questions as follows:

1. How will the tailored ESP course for EFL healthcare students be designed through needs analyses, subsequent syllabus design, material development and related decision making in the framework of an action research?
 - a. What kinds of needs analyses will be conducted for this course design?

- b. What types of syllabi are to be designed on the basis of a combination of needs analyses results and decision-making process?
 - c. From a material development perspective, what can be the characteristics of GHEC (General Healthcare English Course)?
2. How will the domain students react to the tailored ESP course after they have taken the course?
 3. What could be reflected and suggested for the next upgraded course design?

1.4 Significance of the Study

Based on the conceptual ESP framework, the motive for the study responded to specific English needs of healthcare college students in EFL Korea at a local level. The development of GHEC is to reflect the comprehensive needs including lacks, wants and goals of the target students. In other words, the students could have the tailored English course for their needs, which could, in turn, satisfy their demands, enhance their motivation, and consolidate their basic domain knowledge in English. At a global level, the design output of the study can become a useful model for similar groups such as those studying healthcare and medical sciences in Korea and elsewhere in the outer and expanding circles.

In addition, the procedures of the course development may give a prototype for ESP course design process along with an action research paradigm. The multidimensional needs analyses employed in this study may be a useful tool for identifying special English needs of healthcare-related domain students. Through the survey and interviews, we could listen to students', healthcare-domain instructors', and graduates' voices without making any adjustments. The voices have been

combined in this action research project study in both quantitative and qualitative ways, thereby contributing to adding the results to the database of EMP (English for Medical Purposes) related needs. Also, the accompanying authentic materials here played a vital role for the GHEC course and the students were impressed with the course materials¹². This implies that ESP domain-related authentic course materials could make an important contribution to the course and the students. The materials may be a good example for ESP-oriented course development.

Given the surroundings of this action research, the target students have been faced with the vast increase of English use in a variety of their domain-related areas depending on the opening of the healthcare market, the expansion of medical institutions, and the rapid development of medical technology. The students have been thirsty for ESP, and at a global level, universities, international medical centers and the government would welcome this healthcare related English competitiveness. Thus, taking all the attention into consideration, this study could be significant as a pioneering base study for the improvement of healthcare English use and corresponding English courses.

Although there have been quite a few number of studies on EMP, most of them have been oriented towards medical doctors and nurses in ESL settings along with genre analysis and EAP (English for Academic Purposes). Potential allied healthcare professionals in an EFL setting, who are the target learners of GHEC, have been left unattended for years. On top of that, while many studies have had

¹² When asked to submit the learning materials and the learning logs together, one of the students said, “You should return it to me for sure. I like it very much. I think it’s really valuable.” Other students told me that whenever they got the materials presented by me they were stunned. They did not express this kind of reaction to the previous English textbooks and materials.

needs analyses (NA), language analysis and constructive suggestions for EMP related courses, there seems to be little all-round research including its implementation as well as course development. In this respect, this study is one of the rare studies which embrace course design and subsequent implementation for healthcare college students in an EFL Korea setting and it therefore has its own particular significance for the implications of English education.

1.5 Organization of the Study

This dissertation consists of seven chapters. Chapter 1 introduces this study by dealing with the background and the problem statement, research context, the goals and research questions, and the significance of the study. Chapter 2 reviews related literature and previous studies with three key subheadings: i.e., ESP course, ESP course development and action research. The concept and the approach of ESP are defined in detail and how ESP can be applied to the action research context of a tertiary education level of EFL is covered. Chapter 3 depicts the research design and the methodological approach adopted in the study. In order to enrich the data from different perspectives, a multidimensional and mixed-method design was employed in the conceptual framework of ESP along with action-research paradigm. Chapter 4 demonstrates how to develop GHEC under the systematic procedures and sets out a master action plan to put it into practice. Chapter 5 describes the implementation of the tailored course, which consists of ‘Unit 1. Topical news about healthcare: Ebola’, ‘Unit 2. Human body anatomy’, ‘Unit 3. Hospital tour’, and ‘Unit 4. Medical Korea and my field role-play’. After the implementation of GHEC, chapter 6 reports the

results of the course observation and evaluation along with reflection. Finally, chapter 7 makes suggestions by presenting a better action plan for a future course, and then it ends with a narrative account on the good signs of ESP and concluding remarks.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I review the previous literature in reference to ESP course (section 2.1), ESP course development (section 2.2), and action research (section 2.3), on which this study can set a flagpole of theoretical background.

2.1 ESP Course

This section reviews ESP as a big picture in section 2.1.1, English for Medical Purposes (EMP) as a type of ESP in section 2.1.2, and more specifically, ESP/EMP in Korea in section 2.1.3.

2.1.1 English for Specific Purposes (ESP)

The first section of literature review investigates English for Specific Purposes (ESP) by providing its definition and characteristics, demands, differences from general English, classification, and advantages of ESP.

2.1.1.1 ESP: Definition and Characteristics

ESP has become a separate branch well established as a significant and

prominent property of ELT for about 50 years since 1960s¹³. ESP is generally accepted as “a very active, even ‘feisty’ movement” with its own approaches, materials and methodology, (Dudley-Evans, 2001, p. 131, [emphasis in original]) and thus, it has had a considerable impact over general activities of TESOL and applied linguistics.

The leading scholars of ESP, Paltridge and Starfield (2013) present a clear succinct definition of ESP and a key defining feature of an ESP course in *The Handbook of English for Specific Purposes*:

English for specific purposes (ESP) refers to the teaching and learning of English as a second or foreign language where the goal of the learners is to use English in a particular domain. . . .

A key feature of an ESP course is that the content and aims of the course are oriented to the specific needs of the learners. ESP courses, then, focus on the language, skills, and genres appropriate to the specific activities the learners need to carry out in English. (Paltridge & Starfield, 2013, p. 2)

“Particular domain” can refer to the content to particular disciplines, occupations and activities (Strevens, 1988) or “specific disciplines” (Dudley-Evans & St John, 1998, p. 5). The idea of specificity makes a distinction between ESP and general English by emphasizing “students’ target goals and the need to prioritize competencies” (Hyland, 2002, p. 386). Thus, ESP courses are not confined to a particular methodology or kind of material, but rather founded and developed on the results of needs analysis, focusing on learners and their associated language more

¹³ At that time , the seminal work was *The Linguistic Sciences and Language Teaching* by Halliday, MacIntosh, and Strevens (1964).

specifically. More detailed characteristics are here with the definition version of Dudley-Evans and St John (1998) popularized as landmark knowledge on ESP:

<Absolute characteristics>

- ESP is designed to meet specific needs of the learners;
- ESP makes use of the underlying methodology and activities of the disciplines it serves;
- ESP is centered on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities.

<Variable characteristics>

- ESP may be related to or designed for specific disciplines;
- ESP may use, in specific teaching situations, a different methodology from that of general English;
- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be used for learners at secondary school level;
- ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, but it can be used with beginners. (pp. 4-5)

According to these defining features, the idea of ESP is embodied through its “goal-directed” courses (Robinson, 1991), which are normally built upon the identification of various needs for a homogeneous group of ESP, starting from the essential questions: why do the learners need to learn and use English in their domain?¹⁴, what elements of English do they need to learn? and how can they achieve their learning goals effectively and efficiently? Such questions are consistent with the emergent rise of ESP and its courses in the following chapter.

¹⁴ It was adapted from the question by Hutchinson and Waters (1987): “Why do these learners need to learn English?” (p. 53).

2.1.1.2 ESP Demands and Differences from General English

ESP was not just a sudden fad but it is more likely the sine qua non for language learning in human activity. Three main background reasons Hutchinson and Waters (1987) posited support the demand of ESP historically, linguistically and educationally: i.e., firstly, as English has become the international language of two dominant forces – technology and commerce with the economic power of USA since the Second World War in 1945, learners of English have been conscious of the clear purpose for learning English. Whether they were businessmen or doctors, they needed English and they knew “why they needed it” (p. 6). Large funds through Oil Crises in early 1970s instigated English to be commercial enterprise and in turn, the need for “cost-effective courses” (Hutchinson & Waters, 1987, p. 7) with clear goals was generated.

Secondly, the demand for English courses tailored to specific needs has grown thanks to a revolution in linguistics, in which particular varieties of English by contexts were studied and language usage was emphasized. Thus, between 1960s and 1980s, there was extensive research especially in English for Science and Technology (EST) area such as Ewer and Latorre (1969), Ewer (1976), Hutchinson and Waters (1984), Swales (1971), and Trimble (1985). This paradigm shift gave birth to an important catchphrase of ESP courses, “Tell me what you need English for and I will tell you the English that you need” (Hutchinson & Waters, 1987, p. 8).

Lastly, learner-focused educational psychology has contributed to the development of ESP courses on the grounds that learners have different needs and interests and accordingly, this view influences their learning motivation, resulting in

their effective learning. In other words, Hutchinson and Waters (1987) stated that “the clear relevance of the English course to their needs would improve the learners’ motivation and thereby make learning better and faster” (p. 8). Ultimately, all three factors were pointing at the same direction, so to speak, ESP as more specialization in language teaching/learning and then its age had come.

But despite such demands, it could be argued that the focus on learners and their needs are not exclusive to ESP. For example, an English conversation course and a nursing English course are both on a college timetable waiting for its own student-clients who need and expect each course. Then, what makes these courses different? To answer this intrinsic question, it is necessary temporarily to differentiate ESP and ‘General English’ (GE) or English for General Purposes (EGP) accepting the phrase, ESP in contrast with GE (Strevens, 1988). The vital clue to the question can be found in the connotation of the term ‘specific’ which can suggest ‘special’, ‘specified’ and ‘specifiable’. Munby (1978) explained why the word ‘specific’ was preferably used for the term ESP with some restricted and intended meaning of ‘special purpose’ or ‘special English’ and he highlighted the feature of ESP focusing on the learner, the purposes, and even the whole language program. Hutchinson and Waters (1987) argued that the needs of GE learners can be “not specifiable” though identifiable and particularly, “the awareness of a need” can distinguish ESP from EGP. Secondary-level learners’ teaching mostly in school-based situations can be regarded as what Abbott calls TENOR or “Teaching English for No Obvious Reason” (1981, as cited in Sifakis, 2003, p. 200) in that their needs could not be defined precisely though still identifiable and their motivation can be leveled low or vague. Long (2005a) likened general courses to a “one-size-fits-all

approach” mentioning that “General (language for no purpose) courses at any proficiency level almost always teach too much, e.g., vocabulary, skills, registers or styles some learners do not need, and too little, e.g., omitting lexis and genres that they do” (Long, 2005a, p. 19). On top of that, Belcher (2009) intimated that the purposes in language instruction may look to learners like even “language for other people’s purposes (i.e., individuals or even national entities in positions of power)” (p.1).

ESP is commonly distinguished from EGP in terms of “training” and “education” accepting claims by Widdowson (1983). He argued that ESP deals with the predetermined skills and the development of restricted competence while EGP refers to a general capacity. He mentioned that the feature of EGP is rather more difficult to select the course content as the learners’ future needs are not possible to predict. According to Tudor (1997), a significant feature of ESP is that it addresses “domain of knowledge which the average educated native speaker could not reasonably be expected to be familiar with” (p. 91). For instance, in teaching English to a group of nurses, course content might involve items such as medical terminology, nurse-patient interaction patterns, and patients’ record writing. Hutchinson and Waters (1987) put the difference between ESP and GE succinctly, “in theory nothing, in practice a great deal” (p. 53).

Basturkmen (2010) made a cogent summary that “ESP courses are narrower in focus than general ELT courses” (p. 3) based on analysis of learners’ needs, referring to ‘tasks prescribed by their work or study situation’, ‘narrowing down the

spectrum’, and ‘a narrower range of topics’¹⁵. According to her, ESP courses are concerned with particularly work- or study-related needs, not personal ones and there have been a number of specific work and study roles such as an air traffic controller, an engineering student, a science student and a businessperson. Additionally, she explained the fact that ESP includes analysis of texts and language use in learners’ work and study situations with an example of ‘description of laboratory procedures’ (Banard & Zemach, 2003). However, more importantly than this dichotomy, ESP and/or GE could be located each in complementary positions, providing curricula in accordance with the needs of people and organizations concerned. It is also essential to consider ‘which course’ within a big ESP category.

2.1.1.3 ESP Classification

Anyone approaching ESP would be surprised at increasingly growing sub-branches of ESP and their various acronyms. But this trend can be the evidence that the earliest version of ESP synonymous with EST has expanded with more specialization. Without a doubt, there can be as many classifications of ESP as the types of specific learner needs and target communities (Belcher, 2009). As a basic classifying source, the popular ‘Tree of ELT’ (Hutchinson & Waters, 1987, p. 17) separated ESP from GE under the trunk of EFL and further, divided ESP into English for Science and Technology (EST), English for Business and Economics

¹⁵ Basturkmen (2010, pp. 2-3) referred to Dudley-Evans & St John (1998), Holme (1996), Bernard & Zemach (2003), and Nunan (2004).

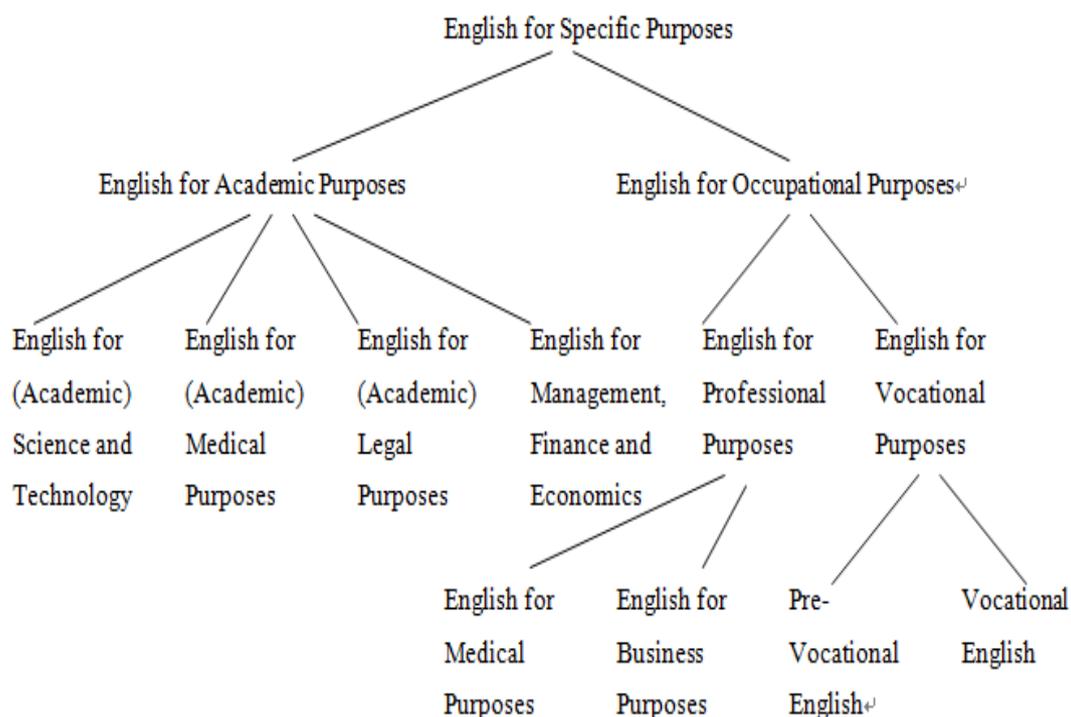
(EBE) and English for Social Sciences (ESS). Then, the three main branches of subjects are sub-divided into two types of EAP (English for Academic Purposes) and EOP (English for Occupational Purposes) respectively. There is English for Medical Studies as a thinner branch of EST – EAP connection and English for Technicians under the EST – EOP connection. The tree makes us grasp the big picture of ESP with binary representation of EAP and EOP. But the developers of the tree revealed that English for academic study (EAP: English for Academic Purposes) and English for work or training (EOP/EVP/VESL: English for Occupational Purposes/English for Vocational Purposes/Vocational English as a Second Language) is not a clear-cut distinction mentioning that “people can work and study simultaneously” (p. 16). In the meanwhile, EVP in the U.S. often refers to teaching English for specific trades or vocations (Dudley-Evans, 2001).

In addition to this dichotomy between EAP and EOP, Dudley-Evans and St John (1998) made a distinction between ‘more general ESP’ and ‘more specific ESP’ employing Blue’s idea (1988 as cited in Dudley-Evans, 2001): e.g., English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP). While EGAP is designed to teach study-related skills for all heterogeneous disciplines or pre-study groups such as ‘listening to lectures’ and ‘reading textbooks’, ESAP tries to deal with the actual subject tasks for a homogeneous group beyond ESAP skills. Such ESAP can be frequently regarded as content-based instruction (CBI) in the U.S. (Brinton, Snow, & Wesche, 1989). For example, EGBP refers to general business-related language and skills usually for pre-experience learners and ESAP is tailored to focus on specific business language and skills for job-experienced learners.

There exists another tree diagram of ESP sub-categorized by discipline or profession (Dudley-Evans & St John, 1998, p. 6) as shown in Figure 2.1. This classification features (a) four sub-categories of EAP, (b) one more layer of English for Professional Purposes (EPP) – English for Vocational Purposes (EVP) broken down under EOP, and (c) Pre-Vocational and Vocational right under EVP.

Figure 2.1

ESP Classifications by Professional Area



(From Dudley-Evans & St John, 1998, p. 6)

In particular, one can find the same labels, namely, English for (Academic) Medical Purposes (EMP) within EAP and EMP under EPP within the EOP branch. When referring to a more specialized domain like Medical English, it can in turn be segmented into more differentiated needs groups of medical students (EAP), practicing doctors (EOP), and consultants in hospitals (EOP) (Dudley-Evans & St John, 1998; Dudley-Evans, 2001). Also, PVE regarding skills associated with job application and VE concerning on-the-job language/skills are distinguished as sub-sections of EOP in the U.S. (Dudley-Evans, 2001).

More recently, Belcher (2009) added English for Sociocultural Purposes (ESCP) to existing tradition of ESP types consisting of EAP area and EOP area in the book of *English for Specific Purposes in Theory and Practice*. She stated that there are constantly expanding offshoots of EOP such as EBP (English for Business Purposes), ELP (English for Legal Purposes) and EMP (English for Medical Purposes). Also, she exemplified other varieties of EOP, such as English for Air Traffic Controllers, English for Tourist Guides, English for Horse Breeders, and English for Brewers. On top of that, what she calls, “numerous hybrid permutations of EOP and EAP” are presented (p. 2): e.g., EAMP, English for Academic Medical Purposes (for health science students); EABP, English for Academic Business Purposes (for students majoring in business), and EALP, English for Academic Legal Purposes (for law students). Meanwhile, socially conscious ESP specialists distinguished ESCP from both EOP and EAP (See Belcher, 2009; de Silva Joyce & Hood, 2009). ESCP as a subcategory of ESP can address ‘all-encompassing’ purposes for learning English with neither academic nor occupational focus. In line with this realm, de Silva Joyce and Hood (2009) presented English for Community

Membership (ECM) with rather an interaction focus and Morgan and Fleming (2009) explored aspects of ESP relevant to citizenship-preparation education suggesting a critical sub-field of ESP, English for Self-Defense called ESD.

2.1.1.4 Advantages of ESP

When it comes to the advantages of ESP, I would like to presume the ‘Principle of Parsimony’ or ‘Ockham’s razor’ above all, which can be consistent with other beneficial factors of ESP. The principle implies that “among competing hypotheses that predict equally well, the one with the fewest assumptions should be selected” (Wikipedia)¹⁶. In line with ESP and its courses, this principle can involve three praxes of effectiveness and efficiency plus authenticity. In other words, although there are many choices of English courses such as English conversation, Test preparation, Writing, Medical English, Nursing English, etc., tailored ESP courses may be selected on the premises of three praxes if the situation allows only a couple of courses including the content of domain specificity.

In terms of the effectiveness of ESP teaching, several studies can respond to whether ESP courses are more effective than GE courses, even though empirical investigation results have been limited (Master, 2005). With regard to ESP discipline-content, CBI programs were reported to enhance self-esteem and confidence to function well in an ESL academic environment (Kasper, 1995; Smoke

¹⁶ Regarding the principle, the maxims are popularly cited that “Plurality must never be posited without necessity” and “Entities must not be multiplied beyond necessity” translated from “Numquam ponenda est pluralitas sine necessitate” and “Entia non sunt multiplicanda praeter necessitate” in Latin originally from Wikipedia (http://en.wikipedia.org/wiki/Occam's_razor).

& Haas, 1995). Kasper's experimental study (1997) verified the effective use of 'content-based' ESL instruction where one group of ESL learners received ESL reading instruction with their discipline-related passages and the students in the non-content-based group used a reading textbook not related to specific disciplines. The findings of the study suggested that the CBI had positive influence on the students' academic progress and success. Likewise, Song (2006) supported that CBI could allow the students to achieve better results in their ESL course and better long-term academic success compared to those with non-content-based instruction. In foreign language education, there have been several studies on the positive language impact of theme-based courses, one type of CBI (Corin, 1997; Klahn, 1997; Milk, 1990; Rodrigo, 1997, etc. as cited in Dupuy, 2000) and on higher results compared to those of students in skill-based courses (Chadran & Esarey, 1997; Dupuy, 1996; Sternfeld, 1993, etc. as cited in Dupuy, 2000). It can be argued theoretically that ESP learners will become more motivated and interested, because their needs and interests are directly applied to their ESP courses and thus learning outcomes can be more likely favorable (Basturkmen, 2010). Besides, ESP yields authentic materials closely relevant to a particular group of learners in essence and accordingly, it can also boost learners' interest and motivation. According to Dupuy (2000), research findings suggest that students in content-based courses show more positive attitudes and increased self-confidence about the target language, and interest in the subject matter study.

The effectiveness of ESP can lead to the efficiency of English teaching/learning as well directly. Considering time, cost, and energy for language learning, ESP may enable learners to focus on their specific learning content,

language items, goals, skills, and tasks in the range of restricted spectrum established for their particular needs. Similarly, from the side of language course developers and other stakeholders, well organized ESP course can offer a credible alternative to those with limited time and curriculum. For instance, an ESP course can be customized for a given context in case just one English course is available due to limited curriculum allowance of a certain department. The ESP course can involve not only ESP but also EGP elements in a wide angle if necessary.

Therefore, to make the benefits of ESP plausible in reality, ESP practitioners are encouraged to accept their new multi-roles. Since ESP teaching is absolutely dependent on NA, they need to be ‘first researchers and then teachers’ (Belcher, 2006). Also, to prepare the most appropriate teaching materials customized for their learners, they can be a material developer frequently. It may not be easy to prepare and teach unfamiliar specific content, particularly if the content takes high degree of content specificity such as medical fields or engineering. However, ESP practitioners can become ongoing learners as well as researchers and further, such concern rather helps change from a teacher-centered stance to learner-/learning-centered stance, and enables learners to have more self-/team- directed learning. The teacher can play roles as a facilitator and elicitor to give more options to learners so that they can lead their learning in keeping with their wants.

2.1.2 English for Medical Purposes (EMP)

In this section, turning to a more specific picture closely influencing the current study, EMP is reviewed by providing the background of the dominance of English in medical field, definition and characteristics of EMP, and EMP courses.

2.1.2.1 Dominance of English in Medical (academic) Field

English has already become an ultimate lingua franca that can be found as ‘world’s premier scholarly/research language’ (Swales, 1985; 2004) and further, as a predator metaphor like ‘Tyrannosaurus rex’ eating other language-preys (Swales, 1997) in ‘an English-only research world’ (Belcher, 2007). After World War II toward the turn of new millennium, English has become the ‘language of science’ (Benfield & Howard, 2000) pertaining to the centralized political, economic and scientific power of English speaking nations. English use in medical publications cited in MEDLINE was reported to go from 72.2% in 1980 to 88.6% in 1996 showing a rapid increase of English use (Benfield & Howard, 2000). Besides, throughout the 20th century, well over 90 percent of the articles, especially in the natural sciences field of international periodical publications, were written in English (Hamel, 2007). Nowadays, the world’s most widely cited medical journals are published in English (Ariza & Navarro, 2006 as cited in Shi, 2009).

On the other hand, German, which was the most prominent language of science in latter 19th century and early 20th century, has decreased from 5.8% in 1980 to 2.2% in 1996 (Benfield & Howard, 2000). Latin was the lingua franca of Western medical texts for centuries (e.g., Taavitsainen, 2006 as cited in Shi, 2009). It is no wonder that the popularity of English led to the downfall of other international languages, namely German, French, Russian, Spanish and Japanese as languages of science and even to publish only in English has been inevitable (Hamel, 2007). In the case of Sweden, the last full medical journal wholly in Swedish has been lost on account of an all-English policy (Swales, 1997). Maher’s intensive

study (1986) of medical literature revealed the increasing dominance of English not only as an international but also intra-national medium of medical communication. This tendency occurred consistently even in the countries like Germany, France, and Japan where English has been employed in the growing number of medical articles by gradually taking over their mother tongue's place (see Table 2 of Maher, 1986, for complete data).

2.1.2.2 EMP: Definition and Characteristics

As noted previously, there are two kinds of EMP in the classification of ESP by Dudley-Evans and St John (1998). One is English for (Academic) Medical Purposes or E(A)MP within EAP and the other is EMP under EPP within EOP branch. In the category of more common term *Medical English*, it may not be clear the needs of which group are associated with it. For example, medical students following a degree course in medicine can have EAP needs to read textbooks and articles, and write essays and short clinical reports whereas practicing doctors can have different needs for EOP; e.g., preparing conference presentation, using English to interact with patients (Dudley-Evans & St John, 1998; Dudley-Evans, 2001). These can be similarly applied to nursing students at school and nurses when on the ward, and further to other healthcare-major related students and in the workplace. The generic term, EMP can be classified into macro/micro level sub-categories (Shi, 2009). According to Maher (1986), the two main branches of EMP are EM-OP (English for Medical-Occupational Purposes) for existing medical professionals and EM-EP (English for Medical-Educational Purposes) for potentially-becoming professionals, namely students on the macro level.

When discussing EMP, the scope of EMP usually tends to be confined to the perspective of EOP in ESL setting, according to which Shi (2009) defines EMP as follows:

As a type of EOP, EMP refers to the teaching of English needed by ESL-speaking medical personnel such as doctors, nurses, dentists, pharmacists, paramedical staff, laboratory technicians, healthcare workers, medical researchers, professors and students in medical/nursing schools, as well as patients (p. 206).

This definition connotes a greater variety of EMP learners than other definitions, wherein several kinds of healthcare personnel are involved by exemplifying other than common medical professions, doctors and nurses. It is common that most EMP is more likely centralized on English for medical doctors and English for nursing.

The above Shi's definition seems to be restricted to just the EOP division. Even if we acknowledge that both types of EMP learners are ultimately oriented towards healthcare-related professions, their specific English courses should be differentiated in a strict sense. Maher (1986) also pointed out that there are distinctions between training provided for doctors and for medical students in regard to the teaching procedure, knowledge levels, and specific purpose, even though the two parties share the same content area and required skill areas.

At the micro level, on the other hand, EMP can be segmented on the basis of professional, functional or hierarchical categories within the medical professions (Maher, 1986; Shi, 2009). These further distinctions of EMP can bring forth more narrow-angled specialized domains which may be named EM-SP (English for Medical-Specific Purposes) or ESMP (English for Specific Medical Purposes).

Refined examples of sub-categories are provided by Shi (2009, p. 207): e.g., (1) English for Anatomy, Surgery, Dentistry, Nursing, Pharmacy in terms of specialties or subject areas, (2) English for health care, medical conference preparation, journal article writing in terms of professional skills, (3) English for nursing assistants, ESL patients, doctor-patient interaction in terms of roles of the participants. To be more specific, there can be also a category of a department head, a lecturer and a laboratory assistant and a diversity of basic vs. clinical vs. experimental discipline (Maher, 1986). For instance, it was found that the role of English in Japanese medicine was penetrated more greatly in 'basic' field research and publication as opposed to in the clinical field (Maher, 1985 as cited in Maher, 1986).

Then, how could EMP appear in an EFL setting of outer circle like Japan or Korea, and do we need to discriminate EFL-based EMP from the classification above? Shi (2009) referred EMP as 'the teaching needed by ESL-speaking personnel' as quoted in the above, which seemed to overlook the dominant spread of English to the outer circle and more specified need for EMP by healthcare personnel in an EFL setting. It could be argued that the same EMP course specifications for ESL-speaking personnel or medical students do not always agree to the courses for EMP target learners in EFL environments. In particular, given that the use of English in an EFL setting could not be as much as that in an ESL setting, EMP course developers must consider the target learners' English entry proficiency, their specialized needs and surrounding English environments. Thus, the definition of EMP should be extended from the need of ESL-speaking target learners to the need of ESL/EFL-speaking learners. To acknowledge this variety is one of the benefits of ESP, and to design the tailored EMP course is seen as an important asset of the detailed categorization.

2.1.2.3 EMP Courses

The dominant status of English in international healthcare (or medical) contexts has triggered the significant developments of EMP courses concurrently with the domestic demands and learner needs. Maher (1986) reminded us that EMP courses - like all kinds of ESP - should be tailor-made to the learners' purposes and needs, i.e., by first thinking about who these medical learners are and what their purposes are. He also pointed out the need for a specific syllabus, which will enhance the communicative effectiveness of an English language course. In order to design such specific courses for medical learners, several examples of courses, materials and strategies have been discussed in the literature.

Given the medical area requires high specificity, the content of general English cannot cover EMP at all and the medical content could not be dealt with in the same manner as general English in terms of topic, theme, or task of English. In this regard, Content-Based Instruction (CBI) could be a practical alternative for those who need to acquire both language and specialized content. In CBI, language acts as a medium for learning content and content works as a resource for mastery of language (Stoller, 2002), which indicates what Snow (1993) states: "language is learned best as a vehicle of instruction, not as the object of instruction" (p. 37). Like the basic principles of ESP, CBI programs provide the topics relevant to the learner group and the class activities associated with the learners' needs in the future (Brinton, 2000), and the use of authentic language and tasks in the learners' realms. Bailey (2000) organized a course to improve the students' learning with the concept of health in an ESL context. The course started with journalistic writing, using *Time*

magazine, and proceeded with reading books on health-related topics, academic texts and autobiographies. Then, after watching medical issues-related movies, dramas were finally performed. Bailey (2000) suggested that the learners found the course authentic and useful and their English learning made good progress showing the improvement of communicative skills through discussions about health-field controversial issues, and thus, he concluded that while the learners are focusing on real and engaging health-field issues in groups, they experience learning pleasure.

There is another study on a CBI-oriented academic medical English program and its effectiveness in a Colombian university of EFL context. The study (Corrales & Maloof, 2009) employed the qualitative methods such as classroom observations, learning journals, and interviews, and the categorized data findings showed that the students' oral and discourse skills improved because the course approach integrated language and content. Also, the CBI materials of the course could activate the students' prior knowledge, reduce anxiety, boost self-confidence, and raise motivation for language learning.

In addition to CBI, another significant EMP approach is Problem-Based Learning (PBL), which originated in medical education, has had a substantial impact on medical education and has been widely applied in many medical schools throughout the world (Norman & Schmidt, 2000; Wood, 2003). In PBL, unlike a typical teacher-centered/lecture-based method, students perform more active roles engaged in group work/discussion to make solutions to a problem case or scenario after studying it autonomously. Hmelo-Silver (2004) described the goals of PBL as the development of (a) flexible knowledge, (b) effective problem-solving skills, (c) self-directed learning (SDL) skills, (d) effective collaboration skills, and (e) intrinsic

motivation. In light of its effectiveness, PBL is deemed as a more “challenging, motivating and enjoyable approach to education” (Norman & Schmidt, 2000, p. 727) even if we accept the claim by Colliver (2000) that PBL does not verify the improvement of basic knowledge and clinical performance. In addition to medical education, PBL has been thus applied to language teaching and particularly, EMP courses targeted at healthcare professionals and medical learners.

Wood and Head (2004), in the first instance, designed and taught a course in English for Biomedical Science based on PBL principles for medical faculties at the University of Brunei Darussalam (UBD). The goal of their web-based course was to encourage students to study medical topics using English communicatively, and the EAP class received positive feedback from instructors and students. The students generated a ‘disease problem’ themselves, and they discussed it to solve the problem in groups like being in a simulation appearing in their medical field. Such application of PBL to EAP not only satisfies the students’ needs directly, but also presents something more beyond typical EAP approach with the skills PBL developed. Kimball’s study (1998) indicated that the syllabus equipped with PBL tasks through the web provided authentic sources for the medical students considering their medical target settings and needs. The problem/task-based and learner-centered activities on the web enabled the students to experience real medical field discourse.

Along with the use of the internet, video cameras have proved invaluable for contextualized learning in EMP curricula (Belcher, 2004). Some researchers have tried to bring real-life communication into the classroom by using video tapes. For example, a study to design a course for medical students at the University of

Hong Kong was conducted by Shi, Corcos and Storey (2001) using authentic videotaped communication data. The researchers used them to assess the difficulties learners encounter when making diagnostic hypotheses with doctors and to identify the discourse of diagnostic linguistic skills students need. They used videotaped ward teaching sessions over three months at two hospitals, along with teaching tasks, to raise students' awareness of some discourses and to improve students' performance through practice. In the study, they tried to analyze and use performance data as teaching materials in the classroom to cater for the special needs of the medical students. Shi et al. (2001) concluded that the use of videotaped data is useful both for the design of an EMP course and as teaching materials by involving the students in the process of curriculum design, thereby enhancing the students' motivation.

2.1.3 ESP/EMP in Korea

Turning to Korea, ESP has been in demand in relation to college English education. Changes of college English education have been made with the ultimate aim of enhancing students' communicative competence depending upon the current social and industrial demands. However, as the domains of English education are wide and extensive, courses given for a limited time period could not produce the English competence that industrial fields expect. Therefore, it is necessary that English courses be provided according to students' fields and their target career domains, which can be directly linked to ESP. ESP can meet social, educational and learners' demands by applying their specialized field to English education with more

focus on learners' needs and purposes. In the case of the domains with a high degree of discipline specificity, if the course can integrate specific domain and English, it is hypothesized that more effectiveness and efficiency can be gained for students' practical ends.

For example, healthcare sector students are part of an organization similar to where they will likely work after graduation. Their domain is quite particular to what they study and where they work. Thus, English courses involving their specific disciplines and domains are getting more support than English courses based on existing EGP, which means that English courses for healthcare related professionals should be considered as ESP oriented courses (Lee & Kim, 2011). In fact, college English courses, which liberal arts departments have provided so far, have been conducted as EGP courses stressing general English grammar and communication ability (Joh, 2002). However, there have been an increasing number of universities which offer various major-related courses in English and are developing diverse programs and courses for better English communication.

Kim (2008) examined the status of ESP courses in relation to domestic medical English. From 885 courses of 59 universities, she found that there were 36 medical English courses as ESAP, with such names as *Medical English*, *Medical terminology*, *Practical medical English*, *Biomedical English*, and *Clinical practice English* courses. In terms of nursing and pharmacy, there were *Nursing English*, *Nursing English conversation*, *Nursing practice English*, and *Pharmacy English* courses. Despite the fact that these courses are needed and are open, there are not sufficient specialized materials and related ESP course practitioners in reality. Seong, Chang and Kim (2007) reported that not only medical-school-related English

courses but also English courses related to allied health sciences were requested through her survey, of which the respondents were 845 first-year students. They showed their preference for English courses related directly to their careers and authentic English development.

Soh (2004) researched into nursing English course design through a survey questionnaire and recently, Shim (2010) carried out language NA for healthcare domain undergraduates by surveying 40 nursing students and 2 nursing professors. The findings showed the distinctive discrepancy between students' opinions and professors'. While professors were more likely to put an emphasis on academic reading skills, students tended to have more need of oral communication skills. The majority of the student respondents (80%) revealed the significance of English by mentioning that English is critical for their future careers and they need to study particularly important contents such as medical terminology, writing patient charts, and academic reading. Kim (2008) introduced Occupational English Test (OET), which is an English language proficiency test for trained healthcare professionals from overseas who want to study or work in Australia or New Zealand. It currently tests the following professions: dentistry, dietetics, medicine, nursing, occupational therapy, optometry, pharmacy, physiotherapy, podiatry, radiography, speech pathology, and veterinary science. If a test taker obtains at least B for all four sub-tests of listening, speaking, reading and writing, he/she is eligible to work as a professional in Australia, where professionals in the healthcare sector are likely to depend on immigrants to a considerable degree currently and for upcoming ten years (Hawthorne, 2007 as cited in Kim, 2008).

Almost all the studies on ESP in Korea seem to have been centered on NA

research and making suggestions for ESP courses. In line with such research findings and by extension of it, the present study seeks to conduct NA, subsequent course planning, and to the end, implementation of the tailored ESP course.

2.2 ESP Course Development

This section makes way for ESP course development by reviewing the approaches and parameters to course design (section 2.2.1), needs analysis (section 2.2.2), syllabus (section 2.2.3), and material preparation (section 2.2.4) in regard to the ESP realm.

2.2.1 Approaches to ESP Course Design

Outlining ‘A learning-centered approach to ESP’, Hutchinson and Waters (1987) involved ‘ways of describing language’, ‘models of learning’, and ‘NA’ as basic principles and techniques in course design, which are followed by practical applications of a syllabus, materials, methodology and assessment. They also identified three main approaches to ESP course design: language-centered, skills-centered and learning-centered. Being simply logical but prevalent in ESP, language-centered course design makes a direct connection between the analysis of target situation and the content of the ESP course from identifying the learners’ target situation and linguistic features of target situation and through creating a syllabus, thence to designing materials according to syllabus items, and finally to evaluating the mastery of the syllabus items. Taken as synonymous with ‘process-oriented’

approach by Widdowson (1981 as cited in Hutchinson & Waters, 1987), skills-centered course design has been spread widely in many countries. This model tries to devise an ESP course which helps learners develop their skills and strategies required to cope in target situation.

According to Hutchinson and Waters (1987) the most advanced approach to ESP course design might be a learning-centered approach which is based on the principle that “learning is totally determined by the learner” (p. 72) as an internal process in which the learners use what knowledge or skills they have in order to make sense of the flow of new information. A language-centered approach primarily deals with the nature of the target situation performance and a skills-centered approach tries to discover processes behind the target performance data, and on top of that, a learning-centered approach highlights how the learner can acquire the competence most effectively as well as the competence itself. Unlike the previously discussed approaches, this model takes the learner into account at every stage of course design process which can be dynamically negotiated. The process includes the identification of skills and knowledge of the target situation, and even attitudes/wants/potential of learners and needs/potential/constraints of learning/teaching situation, which are reflected into the syllabus and materials.

Dudley-Evans and St. John (1998) established nine parameters to be considered when approaching ESP course design: (a) whether the course should be intensive or extensive; (b) whether the learners’ performance should be assessed or non-assessed; (c) immediate needs or with delayed needs; (d) the role of the teacher as the provider of knowledge or as a facilitator; (e) a broad or narrow focus; (f) pre-study or pre-experience or parallel with that study or experience; (g) materials as common-core or specific to learners’ study or work; (h) homogeneous or heterogeneous learners; and (i) the course design worked out by the language

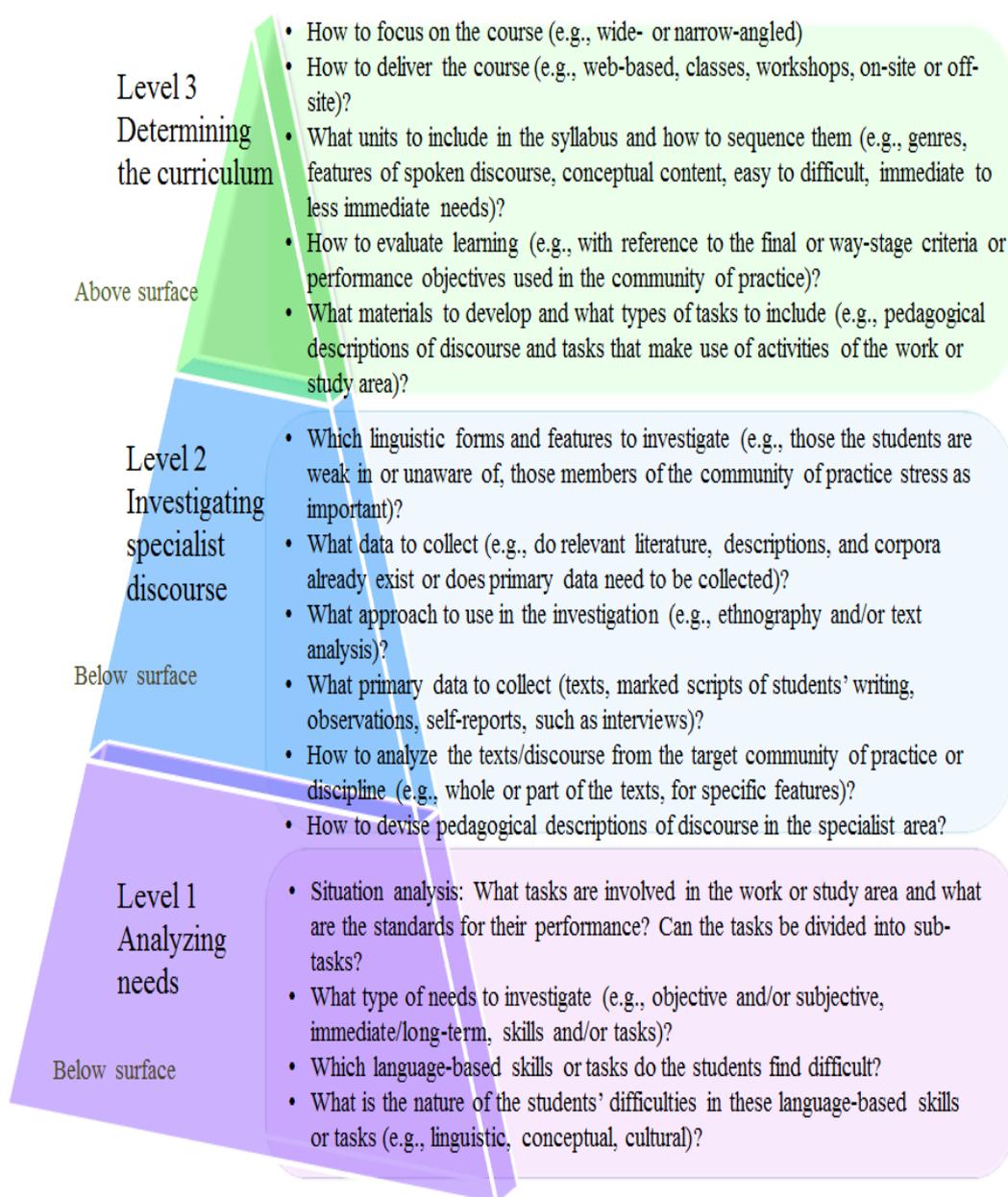
teacher or being subject to a process of negotiation with the learners (pp. 145-146). Similarly and succinctly, Basturkmen (2006) investigated four important topics such as varieties of language, needs analysis, types of syllabi, and narrow/wide-angle course designs. According to her, narrow-angled courses may be appropriate for learners with more similar and specialized needs compared to wide-angled courses.

In light of various EMP courses around the world, Ferguson (2013) organized the following dimensions: (a) duration (i.e., short intensive vs. longer courses); (b) target audience (e.g., clinicians vs. medical researchers vs. pre - medical students vs. medical students in the clinical phase of their training); (c) medical specialty (e.g., cardiologists, oncologists, etc.); and (d) skills, genres, and medical situations (e.g., English for doctor – patient consultations, English for medical congresses, English for report/journal article writing, etc.) (p. 254).

Going into more detail, Basturkmen (2010) generated a schematic representation of ESP course development more recently in the form of a pyramid to indicate that ESP courses (the curriculum and materials) are constructed on the foundations of needs analysis and investigation of specialist discourse. Figure 2.2 shows three areas and their relationship engaged in ESP course development: (a) *Level 1 Analyzing needs*; (b) *Level 2 Investigating specialist discourse*; and (c) *Level 3 Determining the curriculum* [emphasis added]. The pyramid model with its three-level structure builds the course/curriculum on the bedrock of the investigation of needs and specialist discourse below the surface level, with the determining parameters of the course/curriculum appearing above the surface. She gave detailed considerations with essential questions for each level. This representation gives the most recent step-by-step guide to developing an ESP course and to calibrating it. Therefore, this study tried to adjust this ‘pyramid model’ to action research and consider some important questions in the level boxes.

Figure 2.2

Stepwise Representation of ESP Course Development



(Adapted from *Developing courses in English for specific purpose* (p. 143), by H. Basturkmen, 2010, New York, NY: Palgrave Macmillan.)

In the meantime, it can be argued that designing a course is not just a matter of theories in the textbooks but of theoretical application to real contexts including the researcher oneself. The outcome of needs analysis can be influenced by the analysts' ideology (Robinson, 1991), and also founded on teachers' interests, values and beliefs about language, learning and teaching (Hyland, 2008). As 'needs assessors' first and then designers and implementers in response to the identified needs (Belcher, 2006), ESP specialists are subject to their beliefs or perspectives whether they like it or not. A self-generating needs bias can be avoided by reviewing other studies.

2.2.2 ESP Needs Analysis

In ESP, the primacy of NA cannot be emphasized enough. For more concrete theoretical background, this section delineates various needs and NA, and presents former NA studies relating to EMP as typical cases as well as across several countries.

2.2.2.1 Needs and Needs Analyses

NA is regarded as an essential prerequisite for whichever language-course design. Long (2005b) stressed the importance of the language teaching program accompanied by a thorough needs analysis by using a metaphor of medical intervention prescribed after a thorough diagnosis. Combining the best features of three definitions (Pratt, 1980; Richards, Platt & Weber, 1985; Stufflebeam,

McCormick, Brinkerhoff & Nelson, 1985 as cited in Brown, 1995), Brown (1995) drew up the comprehensive definition of NA:

Needs analysis and needs assessment will be used interchangeably to refer to the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular institutions that influence the learning and teaching situation. (p. 36)

Going further to ESP, the key phrase “to validate defensible curriculum purposes . . . within the particular context” in general definition of NA seems to be consistent with the nature of ESP course in that ESP courses require more accurate justification for specific groups of learners and the English learning/teaching context. Long (2005b) also claimed that “Instead of a one-size-fits-all approach, it is more defensible to view every course as involving specific purposes . . .” (p. 10). Meanwhile, an ESP-fashioned definition is provided with Basturkmen’s version (2010):

Needs analysis in ESP refers to a course development process. In this process the language and skills that the learners will use in their target professional or vocational workplace or in their study areas are identified and considered in relation to the present state of knowledge of the learners, their perceptions of their needs and the practical possibilities and constraints of the teaching context. The information obtained from this process is used in determining and refining the content and method of the ESP course. (p. 19)

Note that this version gives a more specific view in keeping with the attributes of ESP. Without exaggeration, it can safely be said that NA is “the most characteristic

feature of ESP course design” (Hutchinson & Waters, 1987, p. 63) and it acts as ‘foundation’ like a cornerstone on all decisions made for ESP course (Belcher, 2006). In other words, through and by NA, a course can be defined with specific purposes and characteristic ESP courses can be realized.

By definition, NA is performed to establish ‘what’ and ‘how’ for effective and efficient course development (Dudley-Evans & St John, 1998; Hyland, 2006; Flowerdew, 2013), and NA can be a continuous process “since we modify our teaching as we come to learn more about our students, and in this way it actually shades into *evaluation* [emphasis in original] - the means of establishing the effectiveness of a course” (Hyland, 2006, p. 73). Through procedures as systematic as possible, it can fulfill its purposefulness toward a specific end of course outcome and evaluation. Ultimately, identifying the needs of a course correctly at the very first stage can provide a comprehensive road map to getting satisfactory course results and evaluation by most students, instructors, and stakeholders involved. In addition, NA can play a crucial role in “refining and evaluating ongoing ESP courses”¹⁷ (Basturkmen, 2010, p. 25).

When it comes to what is to be analyzed, the concept of *needs* can cover many necessary aspects as an ‘umbrella term’ (Hutchinson & Waters, 1987) including various perspectives such as course content variables, course participant variables, and other context variables in a given setting. First appearing in India in

¹⁷ One can also refer to the cyclical representation of NA processes by Dudley-Evans and St John (1998, p. 121).

the 1920s when Michael West¹⁸ introduced it, the concept of ‘need’ embraced “what learners will be required to do with the foreign language in the target situation, and how learners might best master the target language during the period of training” (as cited in West, 1994, p. 1). Over the inactivated period of some decades on account of teachers’ intuitive course planning (West, 1994), the advent of ESP in 1960s awakened the winter sleep of NA and further, it has been expanded from target situation analysis addressing objective needs with some sophistication and various methodologies.

There has been a vast body of research on different concepts and classifications in regard to needs and NA (see Dudley-Evans & St John, 1998; Flowerdew, 2013; West, 1994). Hutchinson and Waters’ categories of needs¹⁹ (1987) have taken firm root in a wide swath of NA studies: In terms of target situation, (a) *necessities* are “the type of need determined by the demands of the target situation, that is, what the learner has to know in order to function effectively in the target situation” (p. 55); (b) *lacks* can be discovered by investigating “what the learner knows already, so that you can then decide which of the necessities the

¹⁸ Saluting West and his achievement, Tickoo (1988) stated:

West also found support for such bilingualism in a longitudinal survey that he conducted in British Bengal. This survey of the learners’ need for English showed that it was absolutely futile to pursue a policy of active bilingualism in a system of enormous educational wastage (where more than 80 per cent of school entrants dropped out before the end of school) which, in the vast majority of cases, produced little by way of what he called ‘surrender value’. He therefore saw no reason to invest in building the pupil’s productive (especially oral) skills and abilities; they took far too long to develop, produced few usable returns and had little relevance to the average child’s life after school.” (p. 295)

¹⁹ The terms of *needs*, *wants* and *lacks* Allwright (1982) categorized matched those by Hutchinson and Waters (1987) later (Jordan, 1997).

learner lacks” (p. 56); and (c) *wants* can be seen as “what the learners want or feel they need” not “as perceived by sponsor or ESP teacher” (p. 57). They considered lacks as the starting point, necessities as the destination, and wants as “what that destination should be” in a journey of ESP course (p. 60). Besides, they added learning needs as the route of an ESP journey: (d) *learning needs* can deal with “*how* the expert communicator *learnt* the language items, skills and strategies that he or she uses” [emphasis in original] (Hutchinson & Waters, 1987, p. 61), and include the needs of the *learning situation* and *constraints* of the route.

Richterich (1973) regarded the necessities as *objective needs* and Munby (1978) produced communicative syllabus design based on objective needs with his specified communicative activity and event. Brindley (1989) also offered the typology of objective and subjective needs, of which the former is concerned with “factual information about learners, their use of language in real-life communication situations as well as their current language proficiency and language difficulties” (p. 70). The latter refers to “the cognitive and affective needs of the learner in the learning situation . . . such as personality, confidence, attitudes, learners’ wants and expectations with regard to the learning of English and their individual cognitive style and learning strategies” (p. 70). Similarly, Berwick (1989) made a distinction between ‘perceived’ needs and ‘felt’ needs: *perceived needs* can be “judgments of certified experts about the educational gaps in other people’s experience” (p. 55) also described as ‘normative’ (Griffith, 1978), ‘real’ (Chambers, 1980), or ‘objective’ needs (Richterich, 1980 as cited in Berwick, 1989, p. 56) whereas *felt needs* are “those which learners have” (p. 55) sometimes referred to as ‘expressed’ needs, ‘wants’ or ‘desires’. Briefly, according to Dudley-Evans and St John (1998) who

established current concept of NA, objective and perceived needs are regarded as derived from outsiders but subjective and felt needs from insiders. They also deemed product-oriented needs²⁰ as the goal or target situation-related and process-oriented needs as learning situation-related.

Apart from these needs, West (1994) pointed out that it could be better to put more consideration on “the course objectives as short- or medium-term *goals* or *aims*” rather than target necessities” (p. 4) in case the target necessities cannot necessarily fit into the objectives of language courses, which cannot be terminus courses either. Such goals or aims can represent practical learning goals as noted by Morrow (1983 as cited in West, 1994) directly connected to the end-of-the course examination.

Importantly, the account of various perspectives of needs can correspond roughly to a series of NA such as a target situation analysis (TSA), a present situation analysis (PSA), deficiency analysis, strategy analysis, means analysis, and task-based NA, etc. The most recent explanation of noteworthy needs analyses are provided as follows with Basturkmen’s version (2010):

- Target situation analysis (TSA): Identification of tasks, activities and skills learners are/will be using English for; what the learners should ideally know and be able to do.
- Discourse analysis: Descriptions of the language used in the above.
- Present situation analysis (PSA): Identification of what the learners do and do not know and can or cannot do in relation to the demands of the target situation.

²⁰ Brindley (1989) noted ‘narrow’ or ‘product-oriented’ and ‘broad’ or ‘process-oriented’ interpretation of needs.

- Learner factor analysis: Identification of learner factors such as their motivation, how they learn and their perceptions of their needs.
- Teaching context analysis: Identification of factors related to the environment in which the course will run. Consideration of what realistically the ESP course and teacher can offer. (p. 19)

This version appears to embrace Dudley-Evans and St. John's comprehensive description of needs analyses (1998). According to them, TSA and objective needs are concerned with professional information about learners including tasks and activities. They mentioned linguistic analysis and genre analysis as well as discourse analysis about professional communication information. Also, PSA²¹ deals with learners' current language use and skills, and accordingly, can entail the assessment of learners' lacks or the gap between learners' target situation proficiency and current existing proficiency. This concept was expanded into 'deficiency analysis' (Allwright & Allwright, 1977). 'Learner factor analysis' seems to contain 'personal information about the learners': i.e., "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 and subjective needs" (Dudley-Evans & St John, 1998, p. 125). Moreover, 'strategy analysis' is associated with students' preferred conditions and strategies for achieving their wanted skills, which can involve group size, correction procedures and evaluation methods relating to teaching/learning situation (Allwright, 1982).

'Teaching context analysis' can be related to 'means analysis' (Holliday & Cooke, 1982 as cited in Jordan, 1997) which concerns social and contextual aspects

²¹ Richterich and Chancerel (1977, 1980) proposed a present-situation analysis, PSA (as cited in Jordan, 1997).

of language-teaching environment pertaining to the running of a course. Hutchinson and Waters (1987) put an emphasis on the potential and constraint of the learning situation when analyzing learner needs usefully. It can involve external factors such as staff, accommodation, time, prevailing attitudes or culture, the materials, aids, and methods that are available and it can be regarded as central to the process of designing a course (West, 1994). Flowerdew (2013) claimed that these days, the importance is increasingly imposing on the consideration of constraints (refer to case studies in Bastukmen, 2010; Flowerdew, 2013). In practice, it seems to be common that ESP course designers want to consider information on both TSA and PSA, which results in a combination of the two analyses (Jordan, 1997).

In terms of linguistic elements in ESP, the main attention of NA shifted from register to discourse and rhetoric in authentic target discourses over the 1960s, 1970s, and 1980s: prevailingly, investigating the discourse of EST, English for science and technology (see Swales, 1985; Trimble, 1985). In the 1980s and 1990s the focus moved to genre analysis. Most genre-based research to date has paid attention to academic text, research articles especially with spoken text seldom studied (Jordan, 1997). Swales (1990) stated that “a genre comprises a class of communicative events, the members of which share some set of communicative purposes” (p. 58) and he also proposed three key concepts in genre analysis including discourse community, genre and language-learning task. Recently, corpus linguistics has allowed ESP specialists to use big/small language data through computer-assisted collection and analysis with a wide range of authentic language sources (see Gavioli, 2005; see also Belcher, 2009, for useful corpus websites).

Through *Second language needs analysis* (2005) with several exemplar

studies (Jasso-Aguilar, 2005; Chaudron et al, 2005; Winn, 2005 in the same volume), Long set out task-based NA by using *task* as the unit of analysis in that task-based language teaching (TBLT) can fit well with task-based NA in course design. It could address learner needs and syllabus content in terms of not just linguistic items but rather tasks. Long (2005a) put forward more justification for task-based NA: (a) Job descriptions offered by domain experts regarding background knowledge, performance standards and tasks can be more valid than those constructed by language teachers and applied linguists; (b) Linguistically based NA might lead to decontextualized structural items little used in the target domain; (c) Task-based analyses reveal more dynamic qualities of target discourse than text-based analyses can give; (d) It can help circumvent both the usual lack of domain expert's linguistic knowledge and the usual lack of applied linguist's content knowledge by mutual complement; and lastly, (e) "The results of task-based needs analyses readily lend themselves as input for the design of a variety of analytic, task-based and/or (a small minority of) content-based second and foreign language courses . . ." (p. 23).

Ethnographically oriented NA that Hyland (2006) called for has gained more attention these days. The approach involves "gathering naturally occurring data under normal conditions from numerous sources, typically over a period of time" as well as analyzing the data to reveal the participants' subjective experiences (p. 65). According to him, its strength may be that it can provide a deep understanding with a comprehensive, detailed and "thick" description of a particular context (Geertz, 1973 as cited in Hyland, 2006) although the results are not seen as generalizable to other contexts. NA has developed and expanded with a long history from objective needs to ethnographically oriented views and from register to genre

(see West, 1994; Jordan, 1997; Johns & Makalela, 2011; Flowerdew, 2013 for comprehensive information of NA development).

In the meantime, Long (2005a) elucidated five major information sources for NA with referencing sample studies (p. 26): (a) published and unpublished literature, (b) learners, (c) teachers and applied linguists, (d) domain experts, and (e) triangulated sources. In light of the literature, he provided ideas on how to get detailed job descriptions including lists of tasks, performance standards or evaluation procedure/checklist, etc. Needless to say, learners, teachers/applied linguists and domain experts are very important subjects with privileges of ESP courses either directly or indirectly. The triangulation process can help validate a range of data and enhance the credibility of the data interpretation by comparing “among two or more different sources, methods, investigators or (according to some experts) theories, and sometimes combinations thereof” (Lincoln & Guba, 1985 as cited in Long, 2005, p. 28).

Jordan (1997) summarized methods of collecting data for NA in fourteen sections: i.e., advance documentation, language test at home, language test on entry, self-assessment, observation and monitoring, class progress test, surveys, structured interview, learner diaries, case-studies, final tests, evaluation/feedback, follow-up investigations, and previous research (pp. 30-39). Additionally, the method can involve focus group discussions, participants’ logs, biographical and literacy histories, and analysis of text, documents and artefacts, referring to Hyland (2006). In a nutshell, it can be seen as literature review, questionnaires, interviews, observations, discussions, language analysis and assessments in both quantitative and qualitative ways.

What's more, Hyland (2006) maintained that the findings of NA can assume both reliability (interpreting the features consistently) and validity (reflecting the features being studied accurately) in three main ways:

Triangulation. Conclusions are developed using a range of data sources, research methods or investigators.

Prolonged engagement. The use of repeated observation and collection of sufficient data over a period of time.

Participant verification. The analysis is discussed with participants and its "reality" verified by them. (p. 68)

On practical note, however, most NA methods and choices are subject to restraints of time, money and resources (Jordan, 1997) plus its peculiar cultural, social, situational context. With systematic planning in advance, NA and its results can be incorporated into ESP course design considering prioritized selection and focus.

2.2.2.2 Previous Needs Analysis Studies on EMP

Although each ESP domain has its own specificity and specialism, EMP could be by far the most specialized with regard to content knowledge and expertise, and it could also have more specific varieties within the domain. This implies that each group of EMP students should be researched to meet their needs and tailor the course for them.

As a representative model of needs analysis in ESP, Munby's *Communicative syllabus design* (1978) is well-known and influential as a referencing mark for ESP course design. In line with the importance of

communicative competence (Hymes, 1972), Munby approached target situation analysis by seeking 'objective needs' about learners' real world communication. Prior to and for a syllabus specification, he posited the Communication Needs Processor (CNP), which is then turned to a *communicative competence specification*. The input to CNP consists of basic information on an L2 participant (individual or stereotype) including identity and it is then, through CNP, processed with the parameters (Munby, 1978) – (a) 'purposive domain' about the type of ESP, (b) 'setting' dealing with the physical and psychosocial setting, (c) 'interaction' associated with the participant's position, role-set, role-set identity and social relationships, (d) 'instrumentality' such as medium, mode and channel, (e) 'dialect' remaining regional, social class and temporal, (f) 'target level' (of command) about dimensions and conditions, (g) 'communicative event' regarding communicative activities and subject-matter, and (h) 'communicative key' including attitudinal-tones - in a dynamic relationship. In this process and flow, the profile of needs is set out and goes towards the final destination of communicative competence specification via 'language skills selector', 'meaning processor', and 'linguistic encoder' in Munby's model (see also Figure 4 in p. 31). Despite the substantial positive effect of this exhaustive model as a standard needs specification instrument, it is true that many have criticized it and West (1994) summarized some of its shortcomings: i.e., inflexible, complex and time-consuming, not learner-centered, failure to consider socio-political, logistical, administrative, psycho-pedagogic and methodological constraints, and failure to provide a procedure to convert from a learner profile into a language syllabus (West, 1994, pp. 9-10). But these drawbacks have contributed to the advances in NA studies until these days.

Turning to needs analysis in EMP around the same time, Allwright and Allwright (1977) set up a deficiency analysis, for which they drew up a helpful list of 12 conditions in a questionnaire on English-contact situations which non-native English doctors may feel difficult potentially: (1) Rapid reading of textbooks/professional journal/papers for information; (2) Detailed study of textbooks/journals/papers, etc.; (3) Writing papers/reports/articles in English for publication/symposia/conferences; (4) Corresponding with English-speaking colleagues on professional matters; (5) Understanding lectures/papers in English delivered orally at conferences/medical meetings/symposia, etc.; (6) Giving papers/lectures in English at conferences, medical meetings/symposia, etc.; (7) Participating in formal discussion at conferences, etc.; (8) Participating in informal discussion at conferences, etc.; (9) Participating in post-graduate courses in English-speaking medical institutions; (10) Entertaining/being entertained; (11) Doing clinical work with English-speaking patients; (12) Doing clinical work/research with English-speaking colleagues (p. 58). The method used here is to ask learners to identify whether each potential need is an actual need or not and thence, to mark their difficulty level. Such a questionnaire does not only provide the prospective students' perceptions of their needs for the course-designer, but it also serves to suggest to the prospective students that, for once, "a teacher is interested in their particular needs, and is prepared to go to some trouble to find out about them in advance" (Allwright & Allwright, 1977, p. 58).

Reflecting advances much over recent years, in *From needs analysis to curriculum development: Designing a course in healthcare communication for immigrant students in the USA*, Boshier and Smalkoski (2002) conducted a needs

analysis to identify the needs of immigrant nursing students in US, particularly to determine what made them unsuccessful in nursing program by using several sources and methods. Their NA combination of TSA and PSA made use of interviews, observations and questionnaires with the sources of ESL nursing students, ESL program directors and nursing faculty members. The NA results indicated that the major difficulty for the students was ‘communicating with clients and colleagues in the clinical settings’ and an example of such cases is commented by a student:

Doing a procedure on a mannequin in lab is easy because you can memorize how to do that, but when you have to do it to a real-life client who is talking to you, it’s a different situation. You worry they won’t understand you when you are telling them what you are doing to them. Sometimes I just forget what I’m doing because I worry so much if what I’m saying to the client is right or wrong. (Bosher & Smalkoski, 2002, p. 63)

Such comment was consistent with interview results the faculty provided. Based on the NA, the course *Speaking and Listening in a Health-Care Setting* was designed including special emphasis on role plays and the content of four units: assertiveness skills, therapeutic communication, information-gathering techniques, and the role of culture in health-care communication. The course has been reported as useful and successful since it could fulfill the objective, subjective, and learning needs of the nursing ESL students and help refugee/immigrant students learn more effective communication in clinical settings. As far as ESP instructors are concerned, Bosher and Smalkoski (2002) noted that the more knowledge and experiences ESP instructors have about/in the target field, the more effectiveness they will have in

setting the course objectives and helping students master the target language and cultural aspects. In their final words of conclusion, they assert:

Recognizing and promoting the importance of cultural diversity in health-care professions is a necessary first step in removing any obstacles or constraints on developing programs and initiatives that will help ESL students succeed academically in health-care programs and beyond in their respective professions. (Bosher & Smalkoski, 2002, p. 76)

Moving across EFL settings in other countries, we see a number of EMP-oriented NA studies little cited internationally and reviewing such studies can shed light on the ESP context in some local situations. In Taiwan, partly accepting the criticisms that English requirement course did not satisfy the students' needs, the Ministry of Education has not opened the required English course any more since 1993 and as a result, some colleges have developed specific English courses with a content-base or skill-focus (Chia, Johnson, Chia, & Olive, 1999). However, since the courses had been designed without needs analysis, Chia et al. (1999) conducted a needs analysis study to describe the perception of 349 medical college students and 20 faculty members at Chung Shan Medical College. The survey results suggested that students perceived English as important for their academic studies and their future work, and therefore, they wanted a basic English course which can improve listening skill mostly at the freshmen level, and both students and the faculty desired English study for over a year.

In Spain, the Faculty of Medicine and Odontology at the Universitat de València carried out a survey of the students in an elective Basic English Course for Medical Students to investigate the demand of a similar kind of compulsory course

and to identify their specific wants and the academic stimuli (Ostbye, 1997). The results indicated the paramount importance of reading and listening over speaking and writing, although reading is considered the prime need within post-secondary learning in Spain (Posteguillo, 1994 as cited in Ostbye, 1997). Also, students needed a language ‘survival kit’ including sufficient practice with combined skills which might allow sufficient linguistic autonomy to interact with the international academic community.

According to Allouche (2012) in Algeria, ESP courses have been operating but still at an experimental level, wherein a case study was conducted in the Department of Medicine at University of Tlemcen with postgraduate medical students. The first purpose of the study was to recommend the official implementation of an ESP course as part of curriculum. The second purpose was to discover the ESP situation in the Department of Medicine by identifying target students’ needs, by eliciting ESP teaching problems, and by remedying the existing lacks in response to global changes. The Algerian doctors were reported to need English to consolidate their position in the international medical network through the activities and tasks: i.e., reading scientific texts and medical articles, keeping in touch with foreign colleagues, and attending international conferences. Also, the study revealed that medical students showed considerable motivation/enthusiasm to learn English although they have poor manipulation of English. This phenomenon is attributed to the lack of practice and instruction. Their primary need was to improve reading and listening skills first and then speaking and finally writing. Given that Algeria is getting globalized and accordingly, the scientists must build knowledge bases by accessing it via English, Allouche (2012) thus strongly recommended that English be a compulsory subject in the curriculum of medical school.

2.2.3 ESP Course Syllabus

As a blueprint of course construction, syllabus design plays a pivotal role for the current ESP project. This section investigates considerations for such crucial syllabus design, syllabus types, and other influential context variables which can happen with this kind of action research real situation.

2.2.3.1 Considerations for Syllabus Design

Constructing a syllabus is an indispensable duty for course/curriculum development and implementation as an ideal guide to the teaching/learning process. A well-established syllabus can contribute to the entire phases of the course as a planned model pertaining to language, content, materials, evaluation, teaching methods, classroom management, and underpinning learning theories; although what are supposed to be taught as stated in the syllabus is not always consistent with what actual learning students will experience during the course.

As far as syllabus is concerned, curriculum is concurrently addressed. The term *syllabus* can be briefly seen as “a plan of work to be taught in a particular course” whereas *curriculum* can involve even policy, planning and the educational environment (Robinson, 1991, p. 33). Breen and Candlin (1980) included language teaching, methodology and evaluation in major curriculum components. Kumaravadivelu (1993) regarded the syllabus as “a pre-planned, pre-ordained, pre-sequenced inventory of linguistic specifications imposed in most cases on teachers and learners” (p. 72) and more broadly, Breen (1987) described it as “the meeting

point of a perspective upon language itself, upon using language, and upon teaching and learning which is a contemporary and commonly accepted interpretation of the harmonious links between theory, research, and classroom practice” (p. 83).

When creating a syllabus, Breen (1987) claimed four organizing principles to be taken into account. The course designer should “(a) focus upon, (b) select, (c) subdivide, and (d) sequence the particular knowledge and capabilities which are seen as appropriate outcomes of language learning” (Breen, 1987, p. 83). He also noted general requirements in designing a syllabus as a decision-making process. A syllabus should give an accessible framework of the knowledge and skills to be achieved as well as continuity to direct its users. It can also be a retrospective account for evaluation and it should assume accountability to concerned parties of learners, colleagues, institution and society. Besides, the syllabus should be precise enough to be assessed through implementation in light of the appropriateness to its purposes and users. The last of Breen’s (1987) requirements is that the syllabus should be appropriate and sensitive to curriculum, classroom group and educational-social situation within its environment.

In line with a recent learning-centered perspective for millennials in general, O’ Brien, Millis and Cohen (2008) provided what the syllabus should do: i.e., (a) course description including goals and objectives, (b) outline of course structure and significance, (c) obligations for learning outcomes, (d) assessment and evaluation practices, and (e) logistic and procedural information about what, when and where to happen including activities and assignments (p. 39). In an ESP syllabus, meanwhile, a key issue is the relationship of language, pedagogy and content of the students’ specialist subject domain (Robinson, 1991). According to Hutchinson and Waters

(1987) concerning the role of the syllabus in a learning-centered approach²², the ESP syllabus has been derived from analysis of learning and target situations, and, further, it outlines the topics and the tasks, creates interesting and enjoyable materials, and produces a detailed language/skills syllabus, all of which is finally included in language/skills content of materials with necessary adjustments.

Under a syllabus, course objectives are to be set. It is recommended that course objectives ideally be described with action verbs and clear objectives, giving motivation for learning along with a focus (O'Brien et al., 2008). According to Widdowson (1983), 'objectives' refers to the pedagogic intentions to be achieved during the course period and to be assessed measurably at the end of the course. 'Aims' can be more general statements of the program goals often accompanied by statements of more specific 'objectives' of a learning outcome (Richards, 2001).

These considerations may be carefully dealt with in both understanding the important role of a syllabus and balancing the influential factors of it depending on needs analysis results. The ESP course syllabus designer is expected to integrate general syllabus elements into a customized syllabus for ESP.

2.2.3.2 Syllabus Types

There have been a number of different syllabus types (see Flowerdew, 2005; Hutchinson & Waters, 1987; Jordan, 1997; Richards, 2001 for explanation of different syllabi) and typology (see White, 1988) progressed with various language

²² One can refer to the figure for more complete representation (Hutchinson & Waters, 1987, p. 93).

learning theories. According to Jordan's overview (1997), 'Type a' category or content/product types of syllabus focusing on the means to an end comprise grammatical/structural/language form, notional-functional, situational, topic, and content-based syllabi. 'Type b' category or skills-based syllabus can entail sub-skills or micro skills as well as traditional macro language skills: e.g., skimming, scanning in reading and summarizing in writing and speaking. 'Type c' or method/process types of syllabus include process, procedural/task-based, learning-centered/negotiated syllabi, in which pedagogic tasks can be selected through teacher and student' negotiation after target tasks analyzed. In addition to those syllabi, text-based syllabus and competency-based syllabus have received attention in ESP curriculum development since 1990s.

When it comes to the content-based syllabus, the approach is associated with CBI whose principles are "(a) to base instructional decisions on content rather than language criteria, (b) to integrate skills, (c) to involve students actively in all phases of the learning process, (d) to choose content for its relevance to students' lives, interests, and/or academic goals, (e) to select authentic texts and tasks, and (f) to draw overt attention to language features" (Brinton, 2003, pp. 205-209). Brinton (2003) presented CBI classroom techniques and tasks inducing learner's active participation in the exchange of theme information or content such as information gap, jigsaw, discussion, role-play, survey task, problem-solving, sequencing, and pair/group work. According to her, CBI has three prototype forms. In theme-based language instruction, the English teacher uses themes as a starting point in dealing with reading, listening, speaking and writing skills with the primary aim to help students with second language competence, whereas in sheltered content instruction,

the teacher's goal is to help students understand and master content materials (e.g., science). In adjunct instruction, two separate instructors teach the linked courses such as an English language instructor and a psychology instructor with lesson focus on both language and content. More recently, an evolved model of CBI is Sustained-Content Language Teaching (SCLT) that entails both a focus on "the exploration of a single content area, or carrier topic" and "a complementary focus on L2 learning and teaching" and further, the difference from theme-based model is that language learning happens through the medium of a single 'sustained' content area not several topics over a period of time (Murphy & Stoller, 2001, p. 3).

Task-Based Language Teaching (TBLT) has drawn growing worldwide attention in many countries as powerful language pedagogy (Branden, Bygate, & Norris, 2009). Swales (2009) defined a task as "one of a set of differentiated, sequenceable goal-directed activities drawing upon a range of cognitive and communicative procedures relatable to the acquisition of pre-genre and genre skills appropriate to a foreseen or emerging sociorhetorical situation" (p. 48) and Skehan (2009) described it as "an activity in which meaning is primary, there is some sort of relationship to the real world, task completion has some priority, and the assessment of task performance is in terms of task outcome" (p. 83). In a task-based syllabus, the course aim is usually to complete the task while focusing on meaning and pedagogic tasks that can involve purposeful activities (Jordan, 1997). A consideration of task-based syllabus design is that sequencing tasks for effective learning and task sequencing features can involve code complexity of syntactic and lexical difficulty, cognitive complexity with content, and communicative stress such as time pressure, modality, control, etc. (Skehan, 2009).

Long and Crookes (2009) investigated three approaches to course design using task-based syllabi: procedural syllabi, process syllabi, and TBLT. In a procedural syllabus, tasks should be challenging to keep students' interest for task completion and the example tasks can be opinion-gap, information-gap and reasoning-gap activities (Prabhu, 1987 as cited in Long & Crookes, 2009). In a process syllabus, learning can be the product of negotiation and the course design can provide the resources and materials for alternative procedures, tasks and activities (Breen, 1984 as cited in Long & Crookes, 2009).

A text-based syllabus is built on the whole texts and discourse samples and it can be considered as a kind of situational approach on account of analysis of the learner's target contexts (Richards, 2001). The course content is selected with respect to learner needs and the social contexts (Feez, 2002 as cited in Flowerdew, 2005). Richards (2001) gave some proper examples (p. 163): spoken texts such as 'presentations of report findings at meetings' and 'telephone negotiations with contractors' for an engineers' group (referring to Burns and Joyce, 1997) and text types such as descriptions, explanations, reports, directives, and texts combining more than one text types in terms of information texts (referring to Feez, 1998). This approach is associated with Australian tradition of 'genre' and the pedagogy is concerned with the mastery of key genres (Flowerdew, 2005). In fact, a text-based syllabus is more likely to accommodate the elements of different syllabi as an integrated or mixed syllabus (Flowerdew, 2005; Richards, 2001).

In the meantime, course design reality does not seem to fall into a single discrete syllabus category but rather, it appears to reflect integrated aspects of several syllabus types such as "*tasks* combined to *topics* and *functions*" (Richards,

2001, p. 164, [emphasis in original]). Jordan (1997) also mentioned ‘multi-syllabus’ as a combination of different syllabus layers adopted in an EAP syllabus. In her article named *Integrating traditional and critical approaches to syllabus design*, Flowerdew (2005) described an EOP-oriented course design while in an academic setting to satisfy students’ future communication needs after their graduation. This EOP-oriented course took a wise eclecticism by using elements from a content-based, a task-based, and a text-based syllabi. Whether to choose a specific syllabus or to integrate some syllabi for a course, the bottom line for a custom-made ESP course is that course designers can be influenced by knowledge about the subject area, research including NA, theories, common practice and (national or international) trends²³.

2.2.3.3 Other Influential Context Variables

ESP course design can be modified by the contextual constraints (Robinson, 1991). No matter how perfectly the course is devised, some degree of flexibility may be required in practice because of unexpected external variables. Thus, it is necessary to consider such factors possible in advance and make compromises with them.

The local educational-philosophical context of the course has been pursuing and executing the university-wide organizational change movement toward Competency-Based Education (CBE) under the slogan of more practicality with

²³ This tentative conclusive comment on ESP syllabus design was adapted with my opinions by referring to the factors Richards (2001) mentioned when choosing a general course syllabus.

more outcomes and ‘active learning’ methodology emphasizing students’ doing. CBE is historically based on experimentalism representing ‘learning by doing’ by John Dewey. In response to the increased demands “for teacher accountability, for measurable assessment of student progress and for skills-based curricula” (Auerbach, 1986, p. 411), CBE had briskly been applied to many educational sites of North America in 1970s and its associated CBLT (Competency-Based Language Teaching) was widely employed in vocationally oriented education and in adult ESL, spreading out to other parts of the world such as Australia (Richards, 2001) and even here in Korea as the mainstream of higher education program planning. CBE had been accepted carefully through CBME (Competency-Based Medical Education) in our university at first with the modular instruction methodology and then, the positive effects of competency-based curriculum now prevail over the university-wide faculties regardless of discipline. Thus, it is no wonder that our course should be run as a kind of the competency-based education and curriculum.

Competency-based education has much in common with such approaches to learning as performance-based instruction, mastery learning and individualized instruction. It is outcome-based and is adaptive to the changing needs of students, teachers and the community. Competencies differ from other student goals and objectives in that they describe the student’s ability to apply basic and other skills in situations that are commonly encountered in everyday life. Thus, CBE is based on a set of outcomes that are derived from an analysis of tasks typically required of students in life-role situations (Schneck 1978 as cited in Richards, 2001). In relation to it, CBLT has been spread in the ELT field. In relation to job performance, Docking (1994) pointed out that a job can be seen as a collection of competency

units and a unit of competency can be “a task, a role, a function, or a learning module” including “specific knowledge, thinking processes, attitudes, and perceptual and physical skills” in an academic or work setting (as cited in Richards, 2001, p. 129).

Another important constraint to be considered can be time. Time management can involve identifying priorities, drawing up action plans, and sequencing a timetable planning that are concerned with the course and course components, session length, teacher hours, teachers’ responsibilities, areas of expertise and preferences, vacations, room availability and cost (White et al., 1991 as cited in Jordan, 1997). Also, in implementing a designed course, there can be insufficient time to cover all desired plans for it (Jordan, 1997). It is thus desirable to apply feasible criteria of selection and concentration as much as possible considering both NA and other constraints.

2.2.4 ESP Material Preparation

Materials can encompass both texts in paper-based or audio/visual forms and language-learning tasks such as exercises and activities relating to such texts (Harwood, 2010). Materials writing is considered as a characteristic feature of ESP in practice (Hutchinson & Waters, 1987) and there are four significant reasons for using materials in the ESP context: as a source of language, as a learning support, for motivation and stimulation, and for reference (Dudley Evans & St John, 1998, pp. 170-171). Tomlinson (2001) mentioned that “an effective classroom teacher needs to be able to evaluate, adapt and produce materials so as to ensure a match between the

learners and the materials they use” (p. 67), but Dudley Evans and St John (1998) pointed the fact that “only a small proportion of good teachers are also good designers of course materials” (p. 173).

Then, what can make ESP materials and ESP teachers good? According to Hutchinson and Waters (1987), “Good materials do not teach: they encourage learners to learn” by providing a stimulus to learning (p. 107). As far as ESP teachers and course developers are concerned, the use of authentic texts and tasks can be a valuable asset for effective ESP teaching (Basturkmen, 2010). Employing authentic materials can improve learners’ motivation and allow them to reflect positively on the process of learning (Hyland, 2003, p. 94). Also, through those, learners can prepare for real life by satisfying their needs and teachers are encouraged to adopt effective teaching methods (Peacock, 1997).

The term ‘authentic’ can denote ‘ordinary materials designed not for pedagogical aims or not specifically for language teaching purposes, but for real world situations’²⁴ referring to Herod (2002), Jordan (1997), and Tomlinson (2001). ‘Authenticity’ is seen as “a principle emphasizing real-world, meaningful language used for genuine communicative purposes” in the glossary of Brown’s book (2007, p. 377). Mainly as a provider of materials, ESP teacher selects available material, adapt it, and supplement it but it can be better to employ the authentic materials which ESP learners can offer in some cases (Dudley-Evans & St John 1998). However, as it is not easy to find appropriate authentic texts for the understanding of students,

²⁴ This tentative definition is an incorporated version from three notable references: i.e., (1) According to Herod (2002), authentic learning 'materials and activities' are designed to imitate the real world situations, (2) Jordan (1997) defines authentic texts as the ones which are not designed for pedagogical aims, and (3) Tomlinson (2001) described authentic texts as "ordinary texts not produced specifically for language teaching purposes" (p. 68).

course developers may edit or modify authentic ones, or create theirs (Basturkmen, 2010).

Genhard (1996) presented three categories of authentic listening, visual, and printed materials: e.g., (1) radio news, cartoons, songs, etc.; (2) street signs, magazines, newspaper pictures, post cards, etc.; (3) sports reports, newspapers, restaurant menus, train tickets, etc. In spite of ESP's purpose of language proficiency, the materials should not be entirely on the language basis and accordingly, the audio visual elements such as audio and video recordings should be included in all ESP materials (Noordin & Samad, 2003). Besides, Dudley-Evans and St John (1998) supported that visual elements often show effectiveness because they become greater in variety and help to avoid much of the writing for reading and understanding.

In the meanwhile, in practice of EMP courses in Iran, there was a review of four medical ESP textbooks in Shiraz Medical College (Ghalandari & Talebinejad, 2012): i.e., (a) *Improving Reading Skills*, which is a general English book focusing on reading skills with general and academic vocabulary for low intermediate students; (b) *Reading Science and Medicine*, which is a semi-specialized book aiming at improving reading comprehension for intermediate students; (c) *English in Medicine*, which is a specialized book and is designed for students of medicine to handle academic written English; and (d) *College Writing*, which specializes in advanced writing course of medicine. As a result of the textbooks evaluation, the study revealed that the ESP textbooks in medicine could be effective regarding content and needs achievement in reading and writing for medical students, showing little difference among the books in value. Although their textbooks and study did

not concern speaking and listening such as medical conversation, it seemed that grading from semi-specialized to specialized content according to learner's levels could be a good way of systematic curriculum development.

2.3 Action Research

The last section of the literature review chapter addresses action research in terms of changing agent and professional development (section 2.3.1). The action research paradigm of this study is compatible with the cycle of action research that is also introduced (section 2.3.2).

2.3.1 Action research as Change and Professional Development

Action research (AR henceforth) is derived from both 'action' which refers to "taking action to improve practice..." and 'research' which means "finding things out and coming to new understandings, that is, creating new knowledge²⁵" (McNiff & Whitehead, 2011, p. 10). As shown in the word combination of 'action plus research', its notion literally can entail 'doing something with studious inquiry and careful investigation or experimentation for a particular purpose bringing about a positive alteration' when referring to several dictionary sources. Unlike 'thought', 'action' is "a full activity of the self in which all our capacities are employed"

²⁵ "In action research the knowledge is about how and why improvement has happened." (McNiff & Whitehead, 2011, p. 10)

(Arendt, 1958 as cited in Keiny & Orland-Barak, 2009, p. 176).

The potential power of the activity can be a driving force for viable changes and resolution of a problematic issue, making AR distinctive from other conventional research. Reason and Bradbury (2008) sets forth AR as “a practice for the systematic development of knowing and knowledge” with different purposes, different relationships, and different ways from traditional academic research (p. 4). It is important to use the verbal form ‘knowing of the third kind’ rather than the noun *knowledge*, highlighting that such knowing is not just a thing to be stored in journals, but occurs in the process of living (Shotter, 1993 as cited in Reason & Bradbury, 2006). The father of AR and inventor of the AR term, Kurt Lewin (1946) said, “Research that produces nothing but books will not suffice.”²⁶ (p. 35). Based on Lewin’s writings, Bargal (2008) suggested the importance of a small group in AR with significant roles in making democratic decisions and achieving change in people.

In addition, Winter (1996) claimed that practitioner AR can be an ideal of professionalism, clarifying two points that the process involves reflection and changes in practice, which is indicative of ‘professional development’. Over the professional, personal, and political dimensions of AR Noffke (1997) analyzed, AR can be a useful means “for personal and professional development (for which as a form of learning it is used), and for contributions to social justice (which its articulation to social movements and social change demonstrates)” (Noffke, 2009, p.

²⁶ “The research needed for social practice can best be characterized as research for social management or social engineering. It is a type of action-research, a comparative research on the conditions and effects of various forms of social action, and research leading to social action. Research that produces nothing but books will not suffice.” (Lewin, 1946, p. 35)

21).

When it comes to the concept of AR, Reason and Bradbury (2001/2008) provided a working definition of AR recognized widely from the first edition (2001) of the *Handbook of Action Research*:

Action research is a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities (2008, p. 4)²⁷.

In regard to the participatory aspect of inquiry, Reason (1994) mentioned that Participatory Action Research (PAR) is the most widely practiced participatory research approach among the three participative inquiry approaches of co-operative inquiry, PAR, and action inquiry. Leading scholars of this field, Kemmis and McTaggart (2008) identified seven highly characteristic features of PAR other than the dominant nature of the self-reflective spiral in general AR process: PAR is a social process, participatory, practical and collaborative, emancipatory, critical, and reflexive (e.g., recursive, dialectical), and PAR aims to transform both theory and practice.

Turning to the education field, educational action research can be defined as a systematic process of inquiry conducted by practitioners (e.g., teachers) themselves to change and improve their pedagogy. AR researchers can be teachers, principals, school counselors, or other stakeholders, and the like involved in their

²⁷ This version was slightly revised from the first version.

educational activities. According to Ferrance (2000), AR can entail individual ‘teacher research’ focusing on an issue in the classroom, collaborative AR working with a group of teachers together, school-wide AR investigating a school- or district-wide issue. Incorporating several prominent definitions (Holly & Kasten, 2001; Mills, 2000; Noffke, 1995; Lewin, 1946; McNiff, 1988 as cited in Phillips & Carr, 2010), Phillips and Carr (2010) presents general themes of AR : AR (1) involves a systematic or organized approach to problem-solving; (2) requires active engagement and interaction between groups of people; (3) insists upon reflection, critical analysis, and revolving assessment; (4) analyzes systems of power; (5) deconstructs taken-for-granted assumptions; (6) results in *action* as a practical outcome; (7) results in transformation, in a rediscovered or new sense of self and other, in empowered teaching and learning; (8) relies upon democratic and ethical principles that value and respect all participants; and, finally, (9) focuses on a single place of inquiry (p. 17).

Although as a generic term, AR has established a variety of its definitions and types since its inception in 1940s and it shares some important commonalities in educational settings. Above all, the most significant tenet is the link between not only the researcher and the teacher but also research and teaching (Dörnyei, 2007). Besides, it is accepted without question that AR is conducted in the cycle of self-reflection and in collaborative participation. With a huge growth of interest, AR has been “a methodology well suited to exploring, developing and sustaining change processes both in classrooms and whole organizations such as schools, colleges and university department of education” (Noffke & Somekh, 2009, p. 2) in all settings over the last two decades across the Americas, Europe, Australia and Africa, as well

as in educational action research in Asia and Eastern Europe since the early 1990s. Meanwhile, in PAR and especially, critical participatory action research, AR seems to become more than a research methodology used as an instrumental means (Kemmis & McTaggart, 2008; Kemmis, McTaggart, & Nixon, 2014) in that the authors see critical participatory action research as a special kind of *social practice* to aim at transforming other practices or as a “practice changing practice” (Kemmis et al., 2014, p. 27). However, whether AR is a methodology or more than that, it would be true to say that positive changes are made and professional development is embodied through systematic, self-reflective, cyclical, and more or less emancipatory AR practice.

2.3.2 Action Research Cycle

Around the world, the most popular aspect and image of AR could be the AR cycle model, in which the research proceeds step by step. Despite subtle variations and varieties of AR, all action researches appear in the cycle of AR process with reflexivity. Lewin, who first coined the term “action research” published his seminal article “Action Research and Minority Problems” in 1946, where he defined action research as “a comparative research on the conditions and effects of various forms of social action, and research leading to social action” (Lewin, 1946, p. 35). Also, he left a historical legacy, what is called *Lewinian spiral* or “a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about the results of the action” (Lewin, 1946, p. 38). Considering the essential functions of Lewin’s model, Kemmis and McTaggart developed a well-

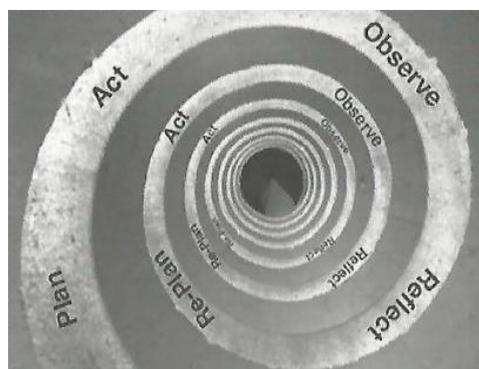
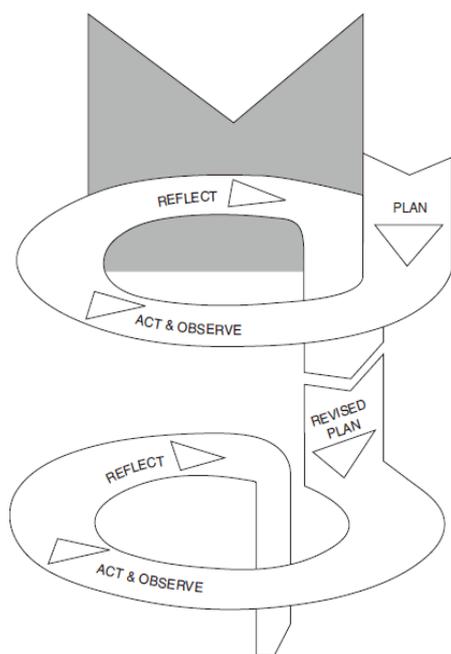
known action research spiral in an earlier edition of *The Action Research Planner* in 1988, when they presented the spiral of self-reflective cycles consisting of:

- *planning* a change,
- *acting* and *observing* the process and consequences of the change,
- *reflecting* on these processes and consequences, and then
- *re-planning*,
- *acting* and *observing*,
- *reflecting*, and so on ... (Kemmis et al., 2014, p. 18)

The stages in the AR cycle are visually embodied in Figure 2.3.

Figure 2.3

The Action Research Spiral



(From Kemmis & McTaggart, 2008, p. 278 on the left; Kemmis et al., 2014, p. 19 on the right)

The left one in Figure 2.3 is the early version of the AR spiral and the right one is its updated representation. The latter shows more convergent image compared with the former as the AR elements spiral according to the stages of the cycle. This four phase model of Plan-Act-Observe-Reflect has become classical and symbolic of educational action research even though it tends to be too fixed and complex in the actual process (Burns, 2011).

With regard to this spiral and its application, Kemmis et al. (2014) admitted that AR process appears likely to be more fluid, open and responsive in reality, and they emphasized the participants' strong and authentic sense about their practices and situations for successful AR. According to Kemmis et al (2014), critical participatory action research can exert its best when co-participants work collaboratively through each step of AR process whereas not all AR theorists agree on the importance of collaboration, claiming that a solitary process of systematic self-reflection occurs frequently. The discrepancy in opinions can be absorbed into the statements that educational AR is depicted as 'chameleon-like' (Somekh, 1993), and Creswell (2006) described AR process as dynamic and flexible. Besides, Hendricks (2009) highlighted the principle of AR following "systematic inquiry based on ongoing reflection" (p. 9).

On the other hand, AR cycle by Calhoun (1994) included selecting an area or problem, collecting data, organizing data, analyzing and interpreting data, and taking action. Wells (1994) presented an Idealized Model of the Action Research Cycle with observing, interpreting, planning change, acting, and the practitioner's personal theory, and Stringer (2004) described AR Helix of looking, thinking and

acting as phases repeated over time (as cited in Mills, 2014). Referring to some common elements, Mills (2014) offered namely, Dialectic Action Research Spiral including four steps (p.19): (1) identifying an area of focus, (2) collecting data, (3) analyzing and interpreting data, and (4) developing an action plan. He explained that his model is a dynamic and responsive research model by teachers and for teachers and students, which can be adaptable to different contexts. It seems to be common that whichever models of AR process are, AR works in cycles.

CHAPTER 3

RESEARCH DESIGN AND METHODS

In this chapter, I depict what ESP-AR design model devised for this study is like and how it operated with this highly context-dependent action research with ESP (section 3.1), and what methods were adopted for data collection (section 3.2).

3.1 ESP-AR Design Model

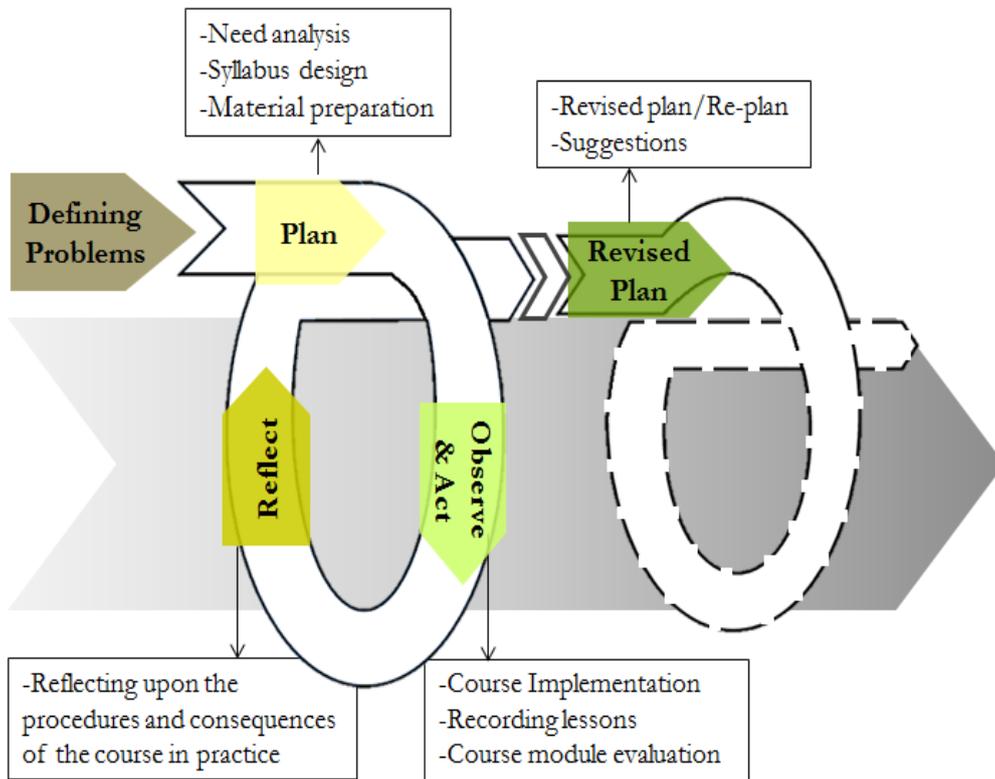
This section posits namely what is called ‘ESP-AR course development research design model’ (section 3.1.1). At the center of the model, there is conceptual ESP course design methodology accommodated in this study (section 3.1.2). Also, characteristic multidimensional NA and decision making process are rooted at a depth of this research design (section 3.1.3).

3.1.1 ESP-AR Course Development Research Design Model

The ‘ESP-AR Course Development Research Design Model’ was designed in the current study for the systematic and logical inquiry to incorporate both the action research paradigm and conceptual ESP methodology. Figure 3.1 illustrates the model at a glance. The model was adapted readily for the study purpose from both AR cycle and ESP course development process.

Figure 3.1

ESP-AR Course Development Research Design Model



The initial idea of this study was conceived at the very beginning stage of ‘defining problems’ which was provided in the problem statement of the study (see section 1.1). The spirals in the above figure indicate the processes of AR cycle and the boxes imply the procedures of ESP course development methodology. The first full-scale big cycle of this action research project began with ‘Phase 1. Planning: Needs Analysis and Course Design’ including multidimensional needs analyses, syllabus design and material preparation. ‘Phase 2. Action: Course Implementation’ and ‘Phase 3. Observation: Course Evaluation’ involved implementing the planned

GHEC, observing and recording lessons, and evaluating the course units. 'Phase 4. Reflection' indicated reflecting upon the processes of the course and the consequences of the course action in reality.

Then, another big cycle spun starting from 'Phase 1. Re-plan' in which revised plans and suggestions were engaged. The scope of this study covered from the four phases of the first cycle to the first phase of the second cycle. The remaining phases of the second cycle were left with dotted lines.

3.1.2 Conceptual ESP Course Design Methodology

The main purpose of this study was above all to develop the tailored ESP course. While this study is working in the paradigm of AR, the central concept of the study is in ESP and its course development. This provided the justification to comply with the procedures of ESP course design methodology. In particular, the study followed the ideal of a learning-centered approach by Hutchinson and Waters (1987) as much as possible. The approach stressed how to acquire the competence most effectively along with the competence itself. Also, it considered the learner at every stage of course design process and thus, the process could be negotiated and dynamic including the identification of skills and knowledge of the target situation, and even attitudes/wants/potential of learners and needs/potential/constraints of learning/teaching situation, which were reflected into syllabus and materials.

In terms of methodological framework, the detailed codes of conduct of this study were associated with the step-by-step guide representation in developing an

ESP course that Basturkmen (2010, p. 143)²⁸ organized. But investigating specialist discourse of level 2 was not employed in this study in that the study did not deal with linguistic analysis such as text or genre analysis. The major considerations of this study are presented as follows from Basturkmen's model: when analyzing needs, (1) What tasks are involved in the work or study area?, (2) What type of needs to investigate?, (3) Which language-based skills or tasks do the students find difficult?, and (4) What is the nature of the students' difficulties in these language-based skills or tasks?, and further, when determining the curriculum/course, (5) How to focus on the course (e.g., wide- or narrow-angled), (6) How to deliver the course?, (7) What units to include in the syllabus and how to sequence them (e.g., conceptual content, easy to difficult, immediate to less immediate needs)?, and (8) What materials to develop and what types of tasks to include? These standard questions were put into the multidimensional NA.

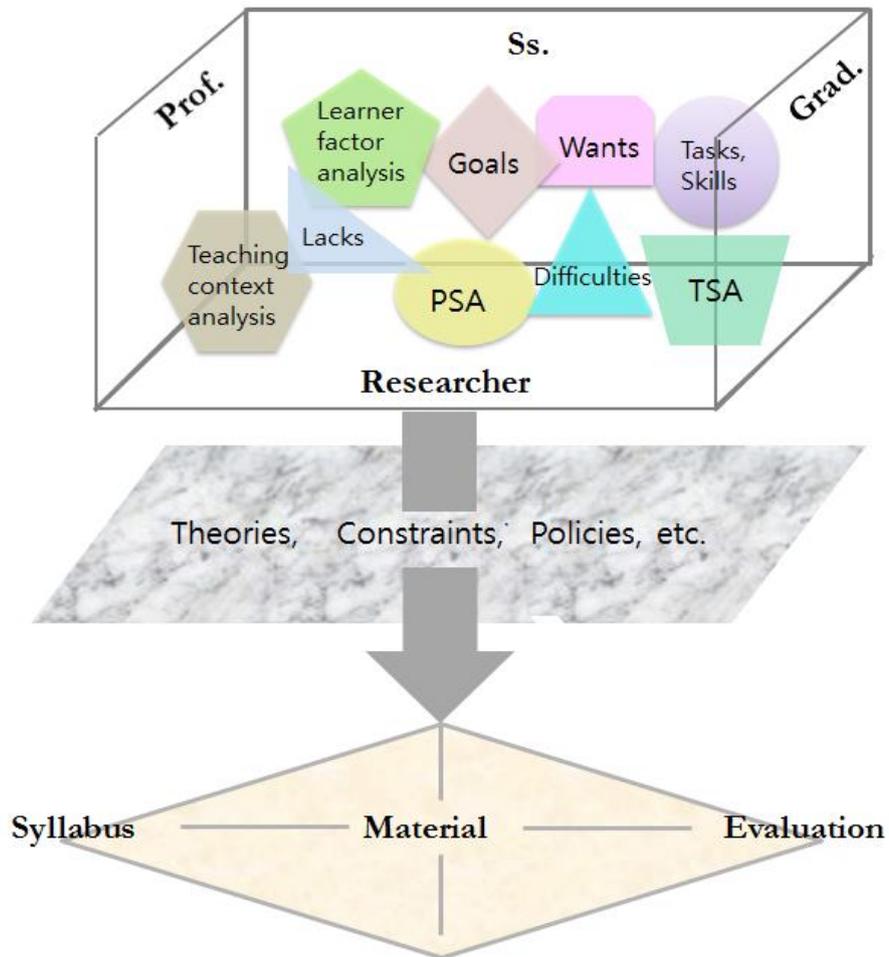
3.1.3 Multidimensional Needs Analyses and Decision-making Process

The key part of ESP course development was considered as needs analysis. Without thorough and systematic analysis of needs, the course could not be tailored. The current ESP-AR Model involved multidimensional NA as shown in Figure 3.2. The figure shows multiple dimensions of the NA, the flow of the analysis results, the filtering layer of other influential variables including theories, constraints, policies, and so on., and the final output of syllabus, material and evaluation.

²⁸ It was cited in the chapter of literature review in this study (cf. Section 2.2.1 and figure 2.2 of this study).

Figure 3.2

Multidimensional Needs Analyses and Decision-making Process Approach



What could be highlighted in the approach is that the multiple dimensions consist of students', domain instructors' and graduates'/target situation workers' dimensions rooted upon the researcher's base dimension, and accordingly, a variety of needs relating to the dimensions could be mutually connected and incorporated within three-dimensional cubic structure. This seems to reflect a 'needs complex' working in the dimensions not by the clear-cut classification of needs. As illustrated

in the figure, a variety of needs such as tasks, skills, goals, wants, lacks, and difficulties are intermingled in the needs complex of the multiple dimensions concerned. Also, several sub-needs-analyses such as TSA, PSA, learner factor analysis, and teaching context analysis coexist in a whole NA. Then, the results of the NA can be passed through the filtering layer of other influential variables such as language teaching/learning theories, several unavoidable contextual constraints and upper rank policies, etc. Passing through this decision-making flow, there can come out the tailored course syllabus, appropriate material preparation and evaluation.

3.2 Methods

This section provides details of methods for data collection including research sites and participants (section 3.2.1), mixed methods and triangulation (section 3.2.2), instruments (section 3.2.3), and data analysis (section 3.2.4).

3.2.1 Research Site and Participants

The first sub-section reviews the research site this action research project took place as well as the researcher. The rest addresses the participants of this study. There are three types of participants for multidimensional needs analyses of the current study: (1) all undergraduate students of the corresponding healthcare college, (2) discipline-domain instructors in the college faculty, and (3) graduate students from the college and some target situation workers. In addition, as for GHEC, the students taking the course and a colleague observer were included.

3.2.1.1 Research Site and the Researcher ‘I’

The research site of the study was Healthcare College at a local university (hereafter in this study referred to as ‘A’ (pseudonym) University), where I have taught college English courses to freshmen and sophomore students mainly for five years. I described the context in which this research site is engaged in chapter 1 of this dissertation. As a researcher of the study, I performed multiple roles with complex positionality. I was a researcher, course developer, and instructor in the research site. At the same time, I was a postgraduate student at a graduate school as well as a college English instructor at my workplace of A University.

3.2.1.2 Students, Graduates and the Faculty

The student-participants were a group of adult learners enrolled in academic year 2013. Almost all healthcare college students (N=1244: 98.2%)²⁹ participated in the questionnaire survey although the response rate varied considerably between departments as shown in Table 3.1. They had had to take compulsory ‘College English’ courses, which are TOEIC preparation-oriented, for four semesters of the first two years. The graduate participants graduated from the healthcare college of A university. The questionnaires for them were distributed to the subjects selected randomly considering the proportion of the total number of students, target

²⁹ The total number of the participating students was a little different from that of the students as expected at the research design stage. The change from 1210 to 1267 was attributed to the unexpected college register including returning students from the army, transfer students and students through special admission, etc.

workplaces and accessibility. It was 123 graduates who responded to the survey. Some of them were interviewed in more details. Also, some of the target situation workplaces were included in telephone interviews. There were thirty-seven healthcare college faculty members who are in charge of the departments. It was believed that they could be informants and a focus group about the prospective course. Consequently, they were surveyed with questionnaires and ten of them were interviewed. Thirty content instructors (81%) out of thirty-seven responded to the survey.

Table 3.1
Respondents' Status of NA Questionnaires and Interviews

	Occupational therapy	Hospital management	Optometry	Pathology	Radiology	Dental Hygiene	Physical therapy	Emergency Medical Service	T
Ss.									
QR	147	218	176	190	157	223	80	53	1244
Int.	5	4	4	6	4	5	5	2	35
Grad.									
QR	12	28	15	25	14	24	5	0	123
Int.	2	2	2	2	2	2	1	n/a	12
Prof.									
QR	3	4	3	4	4	4	4	4	30
Int.	1	1	1	2	1	1	1	2	10

Note. Ss. stands for the students in the corresponding college, Grad. for the graduates of the college, Prof. for the content-domain instructors of the college departments, QR for questionnaire respondents, Int. for interviewees and 'n/a' for 'not applicable'. Similar shorter names were used in the cases of long official ones: e.g., pathology was used as a substitute for the department of Biomedical Laboratory Science; radiology for the department of Radiological Science.

Interviews were conducted with 35 students, 12 graduates and 11 content instructors. The students were randomly selected from each department and each grade including first, second, third, and fourth years. The professors interviewed were mostly department heads, a college dean and an academic-affairs dean of the medical campus. Some of graduate interviewees were selected by recommendation of the department and others by random selection. The professor and graduate interviewees were referred to as focus groups.

The number of students' admission quota from each academic year for each department was not identical. The healthcare college has had an increase in the number of the students over a few years. The department of Emergency Medical Service (EMS), which was newly established, comprised only first- and second-year students without any graduates. The physical therapy department had its first graduates of twenty students in 2013, resulting in the fewest survey participating graduates. Information on eight discipline-domain departments can be found in Table 3.2, and in the departments, the participants of this study were majors in the corresponding college. The right column is indicative of major-related information the school publicized on its website.

Table 3.2
Participants' Discipline-domain Information in Healthcare College³⁰

Dept. (student quota)	Information on the students' discipline-domain
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³⁰ This information is from the home page of A University.

Department of Occupational Therapy (160)	Occupational therapy is a professional area of medical rehabilitation that treats people who physically cannot live up to their will in daily life due to inherent problems, accidents, diseases or aging so that they can go back to their normal life. The department produces occupational therapists that can use physical, emotional, social mediation methods for the successful rehabilitation of patients.
Department of Hospital Management (220)	In relation to national health, the importance of hospitals is increasing. The department provides students with industry-academy cooperation and practical business education to produce working level administrators, middle managers, and CEO's in hospital management, who understand various hospital management systems caused by the trend of hospitals getting bigger in size.
Department of Optometry (160)	For the purpose of promoting national eye health, the department is aimed to produce optometrists who have not only knowledge of eyes, eyeglasses, and contact lenses but also competence in filling a prescription of eyeglasses and contact lenses, refraction tests, and eye function tests. Optometrists have bright prospects for overseas employment.
Department of Biomedical Laboratory Science (180)	The department is the nation's first one and only department with 100% passing rate at the national clinical pathologist's license examination, a student topping the list on the national clinical pathologist's license examination, and 100% of employment rate of its graduates. Being a part of the diagnosis/examination field of medicine, this department trains professionals in clinical pathology who can present the direction of treatment as well as find out the reason for a disease, using scientific and professional technology.
Department of Radiological Science (160)	To get the exact diagnosis of diseases, the Department of Radiology, which is praised as the eye of medical science, is training experts who provide information and care in cancer treatment.
Department of Dental Hygiene (200)	The department trains professionals of dental hygiene who can prevent mouth disease and take necessary measures as dentist's helpers on hygiene of the mouth and teeth and the treatment of mouth diseases.

Department of Physical Therapy (80)	The department produces physical therapists who seek ways to rehabilitate people who have temporary or permanent disabilities due to diseases, accidents, or hereditary diseases. Exercise therapy or physical elements such as water, rays, electricity, and heat are used to rehabilitate damaged function of body.
Department of Emergency Medical Service (60)	The necessity and importance of emergency rescue staff are growing with rapid increase of demand for emergency medical service due to recent large scale accidents, aging population, and changes of people's way of thinking. The department produces emergency rescue professionals who seek the truth, create history, and serve for the community based on A University's educational creed.

3.2.1.3 GHEC Students and Colleague Observer

GHEC was taken by 2nd grade students who were assigned to College English Course by class allotment administration. I could not anticipate who would be in my class exactly at the incubation period of this study. But I asked the administration to assign relatively advanced level of students to my class. I heard that the department of occupational therapy decided not to take a college English course for the fall semester of the students' second year and the department of EMS decided to take an English conversation course with TOEIC Speaking focus. The two departments' students were not considered for GHEC.

While implementing GHEC, another participant besides a teacher and students was included. This was Ms. Huh, a participant-observer and colleague. Ms. Huh had lived and studied in U.S. for ten years. She has been teaching English conversation courses for five years in Korea. She hasn't taught an ESP course so far.

She happily accepted my invitation of class observation. She was asked to write an observation sheet and to be interviewed.

3.2.2 Mixed Methods and Triangulation

This study adopted a mixed method design combining quantitative and qualitative research approaches in order to respond to the posited research questions best adequately and accommodate ESP readily onto action research paradigm of the natural setting. Johnson and Onwuegbuzie (2004) mentioned ‘mixed methods research’ as “the third research paradigm in educational research” and clarified their position that “the goal of mixed methods research is not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both in single research studies and across studies” (pp. 14-15). Dörnyei (2007) made a recommendation that “it is worth considering applying a mixed methods research design in every situation” (p. 313), citing Lazaraton’s explanation (2005 as cited in Dörnyei, 2007) that each quantitative/qualitative method highlights ‘reality’ differently, yet complementarily.

Further, this study applies Greene, Caracelli, and Graham’s (1989) five purpose³¹ for mixed-methods designs: triangulation, complementarity, development, initiation, and expansion. In accordance with such rationale, our study project employed *triangulation* by conducting multidimensional needs analysis and presenting qualitative data findings along with quantitative data results.

³¹ Cf. the table of purposes for mixed-method evaluation designs (Greene et al., 1989, p. 259). It will support more concrete rationale and key theoretical sources.

Triangulation can also be a strong theoretical base behind mixed methods using multiple methods and/or sources in search for the same phenomenon to converge³² the results and enhance the validity. The use of both a quantitative questionnaire and a qualitative interview in this study can illustrate the triangulation intent.

With regard to *complementarity*, a mixed-method study can yield an enriched and elaborated understanding by measuring overlapping but also different levels of a phenomenon through both qualitative and quantitative methods, which can be analogized with peeling the layers of an onion (Green et al., 1989). Patton (2002) highlighted that “qualitative and quantitative data can be fruitfully combined to elucidate complementary aspects of the same phenomenon” (p. 558). In mixed-methods research, the researcher can use one method to help inform the *development* of the other: e.g., a quantitative survey can be used for a purposive sampling for more in-depth interviews in a qualitative approach and implementation. *Initiation* intent can seek discovering paradoxes, contradictions, and fresh perspectives rather than forming a planned intent, leading to new research questions. Finally, with a mixed-method *expansion* purpose, the researcher can extend the breadth and the range of a study as a “multitask” inquiry in Cook’s (1985 as cited in Green et al. 1989) multiplism framework by including multiple components.

3.2.3 Instruments

This section deals with questionnaires, interviews, observation, and artifacts as instruments to collect data.

³² “Triangulation seeks convergence, corroboration, correspondence of results from the different methods” (Greene et al., 1989, p. 259)

3.2.3.1 Questionnaires

The study made use of four surveys including three online questionnaires in Korean for NA and a course evaluation questionnaire in English: one for healthcare college students, another for their discipline-domain instructors, a third for the college graduates in multidimensional NA and finally one for GHEC students in course evaluation. The NA questionnaires consisted of three sections of ‘Section A. Personal Background Information’, ‘Section B. Students’ English Learning and College English’, and ‘Section C. ESP Course: GHEC’ with several types of questions including a 5-point Likert scale that ranged from ‘strongly agree’ to ‘strongly disagree’, multiple-response questions and open-ended questions. Personal information section included participants’ majors, gender, grade, future plan, and present/future occupation, etc. Students’ English learning and college English section investigated students’ English learning and college English experience until now. ESP course section addressed the necessary elements for the GHEC. The questionnaire items comprised various types of needs such as objective/subjective and immediate/long-term needs, goals, skills, tasks, lacks/difficulties the participants encounter, affective factors, learning needs, and teaching context needs. See Appendix A for students’ questionnaire of NA, Appendix B for domain instructors’, and Appendix C for graduates’. The course evaluation questionnaire in Appendix D included 5-point Likert scale questions from ‘very satisfied’ to ‘not at all satisfied’ and particularly, sentence completion questions as well as other typical types of open-ended questions. The questionnaires were drawn up by referring to Allwright and Allwright (1977), Dudley-Evans and St. John (1998), and McKernan (1996).

3.2.3.2 Interviews

In terms of interviews, it is important to document the contents of the interaction with the respondents. See Appendix E Interview protocol about semi-structured interview themes for domain instructors. Other interviews were also semi-structured with the similar contexts of interview themes. This study used tape-recording and note-taking at the same time so that the data could be reviewed later but the interviewees who did not want to be recorded were not recorded. While having interviews, I could summarize points and write down direct quotations which were considered particularly relevant. There were four types of interviewees: randomly selected 35 students, 10 discipline-domain instructors who were in charge of heading the department or the college, 12 graduates and 4 personnel department staff of target hospitals who could be interviewed on the phone. The interviewees accepted their interviews with me by signing the informed consent form (see Appendix F).

3.2.3.3 Observations

Whereas questionnaires and interviews elicit what respondents think, say and do, observation methods can provide the objective evidence of what the participants actually do. In this study, observations were used to supplement the main methods and to gain more insights about unfamiliar domains and unexpected behaviors by documenting. As an observer and researcher, if necessary, I observed

the class activities as well as the learning contents in health-sciences courses which the domain professors recommend as needed and took notes about what appears to be relevant to the tailored ESP course. Also, I made direct observation while teaching GHEC, which were noted in teaching logs. Moreover, colleague observation was done in class, and my colleague observer was asked to write observation sheet including key observational themes and questions related to class. The observation sheet included comments items such as content relevance, methods, classroom interaction, materials, learning experiences, overall impression, course developer's strength, and suggestions³³.

3.2.3.4 Learning Artifacts

There were two kinds of learning artifacts regarding the units of GHEC. One was speaking outcomes of the students during the course that were recorded. The other was students' learning logs. Every time the students took the units, they were asked to write their learning logs. Their learning logs included some key themes and questions about their learning experience and reflection: what the students did/felt, what they wanted to say but did not, how well/badly the class went, what they learnt, what/how they will do differently next time, what they achieved, how they can use this to plan for the future/new learning experience³⁴.

³³ The items of the observation sheet were referred to 'classroom observation worksheet' at https://www1.umn.edu/ohr/prod/.../ohr/.../@ohr/.../ohr_46462.doc.

³⁴ These items of the learning log were from www.hull.ac.uk/php/cesagh/.../LEARNINGLOG.doc.

3.2.4 Data Analysis

Since the study was conducted in action research paradigm centered on conceptual ESP methodology, it was reported and shared on the basis of qualitative narratology, which can be one of AR features. According to Patton (2002), “narratology or narrative analysis extends the idea of text to include in-depth interview transcripts, life history narratives, historical memoirs, and creative nonfiction” (p. 115). The participants of the study were invited to voice and share their stories through all walks of research phases in the natural setting of our action research.

Considering the criteria of mixed methods that Combs and Onwuegbuzie (2010) proposed, this action research study gave both qualitative and quantitative methods equal status in the sequential and parallel mixed analysis. In other words, it combined both quantitative multi-questionnaires and qualitative interviews in multidimensional NA. However, even within questionnaires, several open-ended questions would act qualitatively. In the subsequent course evaluation following the course implementation as well, an ‘explanatory’ type of mixed-methods design (John W Creswell, 2013) was performed: i.e., quantitative data of closed-ended evaluation questions were collected and analyzed first, followed by qualitative data of open-ended questions, learning/teaching logs, students’ performance results, colleague’s observation sheet, and an interview with the colleague. Thus, a priori decision-making could occur in most phases but a posteriori modification was also possible, and vice versa, which implies iterative-analytic decisions happening commonly in mixed research.

Put more specifically regarding data types, data analysis and interpretation of quantitative data involved the use of descriptive statistics mostly. The data were presented in either tables or graphs form including frequency distributions, measures of central tendency, and measure of variability (standard deviation). With regard to qualitative data including texts from open-ended questions, interviews, and several types of logs, classifying and identifying themes techniques were employed. Then, in a big narrative of this study story, the results have been presented (in a form of categories) with either direct or indirect citations by means of complementing and elaborating real situation/experience stories behind the main questions and themes. As the qualitative data such as interviews provide additional illustration, tape analysis and partial transcription can be used (Dornyei, 2007). This means taking notes while listening to the recordings, marking the key points and indicating which parts to be transcribed. However, when a certain qualitative component contained new categories or provided a fresh perspective, the data was qualitatively interpreted and/or “quantitized: i.e., transformed into numerical codes that can be analyzed statistically” (referring to Miles & Huberman, 1994 in Combs & Onwuegbuzie, 2010, p. 4).

CHAPTER 4

PLAN: COURSE DEVELOPMENT

The planning stage, i.e., the first phase of the action-research cycle in this study, laid the pre-conditional groundwork for the follow-up ‘action’. The success of this phase hopefully built the course on rock rather than on sand. Given the ESP course I was going to customize, this phase explored the results of NA synthesizing data from both three-dimensional questionnaires and interviews. By doing so, I tried to contain a variety of voices into the study for the eventual course. GHEC is constructed of building blocks of all data types possible.

4.1 Multidimensional Needs Analysis

This section gives a comprehensive account of results from multidimensional NA by dealing with the themes of participants’ demographic/background information, their English learning and college English study, affective factors, various needs for the ESP Course (GHEC), and other teaching/learning context factors revealed through surveys and interviews. Such subsections concurrently entail the combined information of a variety of needs and needs analyses. These needs can be necessities, wants, lacks in terms of target needs and learning needs including constraints and the learning situation (Hutchinson & Waters, 1987) and otherwise. The needs can be objective and subjective (Richterich, 1973; Brindley, 1989). Relating NA can be TSA, PSA, deficiency analysis, learner

factor analysis and teaching context analysis (cf. section 2.2.2). But as the needs are complex, the categorization of them is not likely to be clear-cut and neither, to some degree, are the analyses.

Moreover, in effect, given that the eventual goal of the current study was the development and implementation of GHEC, the responses of the three parties were compared, incorporated, or converged in view of a three dimensional sphere as suggested in Figure 3.2 of the multidimensional NA and decision-making process approach in section 3.1.3. It appears that this way of NA interpretation led to more direct and integrative decision-making for the tailored course rather than analyzing discrete needs and different sources separately. For example, the perspective of graduates could represent the target situation and target needs, and that of students could tell about the present situation. If after investigating the needs of both parties separately, the two needs conflict (see Hutchinson & Waters, 1987; Basturkmen, 2010, for such conflicting cases), another deliberate consideration should be processed to make plausible decisions for the course. However, if the perspectives of the parties concerned are considered together in multidimensional ways from the analysis and interpretation stage, decision-making process can occur sooner than expected, because it can reduce several analyzing steps of discrete items and sources. This is what was done in the GHEC project.

The results of the NA in this study thus were mainly provided by means of comparison and/or synthesis of multidimensional sources as well as connection of several needs for GHEC. It is also to be noted that two ways of looking at data of mixed methods from interviews and questionnaires could allow deep exploration of NA complementarily, and three-dimensional subjects of students, graduates and

domain instructors could let out their voices unreservedly in closed-/open-ended questions and interviews.

4.1.1 Background Information

The student-participants were 1244 adult learners (98.2%) enrolled in academic year 2013 (cf. Table 3.1 for complete data). The ratio of male vs. female was 26% to 74%. These learners were from Korea with the same L1 (Korean) background. Almost all had studied English as a foreign language for six to ten years or so in their regions of Korea. Most of the students could be classified as being between beginner and intermediate levels judging from their average TOEIC score (566.4). 123 graduate participants were the graduates from the healthcare college of A university and they were currently working in the target career situations such as major tertiary hospitals. Most of the graduate participants (91.8%) had graduated from A University within last five years and the rest for over five years.

In terms of overseas experience, most of the students (84.2%) reported that they had never stayed overseas, 14% for less than a year, and 1.5% for more than a year, whereas 73.8% of the graduates indicated no overseas stay along with 24.6% for less than a year and 1.6% for more than a year. This implies that short-term overseas stay tends to increase after the students finish their university lives. On the other hand, many professors (60.9%) had had overseas experience from short-term stay to long-term study in several countries such as the US, Germany, Japan, China and Europe.

4.1.2 Exploring Target Situations

When it came to the target situations connected to our target students for the course, two kinds were considered: One was the academic-survival situation, which can lead to EAP direction, and the other was the employment situation, which can lead to more EOP direction. Considering interview results and educational context, EOP direction was to be considered in that almost every department requested English courses to improve students' employability. Only interviewees from the occupational therapy department expressed difficulties reading original textbooks, but they also agreed on the demand for English conversation whether generally or specifically.

The graduate subjects were almost all from allied health professional fields as expected. Among the fields, the target occupations fall into occupational therapists, clinical laboratory (medical) scientists and technologists, physical therapists, dental hygienists, emergency medical technicians, paramedics, medical radiation scientists, diagnostic radiographers, radiotherapists, optometrists, medical coders, medical record officers, managers, administration staff, and so forth. To help grasp the term *allied health* and *allied health professionals*, the following definition is presented:

Allied health (or health-related professions) is a term used to identify a cluster of health professions that encompasses over 200 health careers. In general, the allied health professions are clinical health care professions distinct from medicine, nursing, and dentistry. (Ward, 2010, p. 90)

Almost all undergraduate students were aware of their target jobs at hospitals. There were some other but related target occupations such as healthcare-related civil servants, graduate studies, working at healthcare related-companies or institutes.

In terms of detailed task situations at work in which they felt English was necessary, graduates expressed their opinions as shown in Table 4.1. These data were categorized and quantified from the response of the open-ended question “Q_{Grad.} 13. Please write down specifically when you felt the necessity of English at work”.

Table 4.1
Task Situations at Work about Necessities of English: Graduates’ Responses

Category	Percentage
1. International patient/client service: telephone appointment, guide, case explanation, therapeutic communication, small talk, training (presentation, etc.)	43.8%
2. Discipline-domain related information: articles, textbook, overseas data, medical terminology	19%
3. Work-field-related information: healthcare equipment/medicine manuals, charting, documenting and checking test results, etc.	10.2%
4. Work with overseas accounts: contracting, communication, e-mailing, etc.	7.3%
5. Participation in international functions (conference/seminar): preparing presentations, etc.	5.8%
6. Opportunities for career progression/move: English scores/proficiency are needed	2.2%
*Missing data (no answer)	11.7%

Graduates in their present situations working in their fields acknowledged that they needed English when they encountered foreign patients at hospitals even if in Korea. They had not had any learning experience of healthcare-related English

before. Only 2.2% of the graduates emphasized the certified test scores of English in case they would apply for a better job position, whereas 86.1% of the graduate participants expressed the necessity to learn English relating to their fields (refer to the categories 1 through 5). The top response category was about ‘international patient/client service’ (43.8%) that can happen usually at normal general hospitals these days, and its diverse sub-responses included the elements of general hospital affairs and tasks such as appointment scheduling, hospital admission and treatment, consultations, follow-up care, medical travel, and education for foreign hospital staff, etc. Category 2, 3, 4 and 5 are also closely associated with their allied healthcare fields. The difference from category 1 is that category 1 seems to involve hospital-related tasks while the others are more likely linked to content/information managing ability relating to their specific domains.

A graduate commented that “I wish the college could have a course to learn English conversation we can use at hospital considering we are engaged in the healthcare field” in the suggestion about English courses of Q_{Grad.} 19. Also, there was advice on English study (Q_{Grad.} 18) by some graduates as follows:

- (1) *You just need a somewhat moderate TOEIC score to get a job at local hospitals, but in order to get a better job, for example, to work for university hospitals in Seoul, high score of TOEIC or speaking is basically required. If I had obtained an U.S. license for a medical and clinical laboratory technologist (scientist) for which I should have passed an exam in English, I could have had an overseas job. However, I had not been ready for that and that’s why I could not have more chances for a better job. (Translated from Korean into English, A graduate of Biomedical Laboratory Science dept.)³⁵*

³⁵ The respondent revealed 650 of TOEIC score in his questionnaire.

- (2) *Most of the students were preoccupied with TOEIC score to be recruited but after getting a job, in real job duties, there are few chances to use it. I think English communication ability like speaking and listening is more recognized in the workplace. (Translated from Korean into English, A graduate of Hospital Management dept.)*
- (3) *In fact, in the healthcare service industry, listening and speaking English seem to be most important. I think if anyone has no problem in English communication, he/she will be more recognized in the workplace. (Translated, A graduate of Optometry dept.)*
- (4) *Most of all, we should be able to speak in English. When foreign patients visit the hospital we are working for, if we can communicate each other and make them comfortable, it will be good to the patients and at the same time, my work life will be better off. (Translated, A graduate of Radiological Science dept.)*
- (5) *After the graduation of healthcare field, we can decide our careers in a variety of directions. Wherever we go, English ability is considered to be essential (by experience). English is not built overnight but it is important to study English steadily day by day. (Translated, A graduate of Dental Hygiene dept.)*

As shown in the excerpt (1) of the questionnaire response, the priority of college English study seemed to be the acquisition of acceptable English test scores for more and better career opportunities³⁶ and this belief prevailed across the school,

³⁶ The highest percentage of the graduates (25.2%) showed that they had failed to have better and more job opportunities because of their low TOEIC scores while a majority of the respondents (39.8%) did not answer in terms of Q_{Grad.} 14. “With regard to career, please indicate what gave you trouble with English”.

which I could also confirm through the interviews with students, graduates and domain-instructors. However, after being employed, many of the graduates including the excerpts (2), (3) and (4) indicated that it should be considered to prepare and use practical English like communication with foreign patients at hospital situations. The excerpt (5) reminds us of the necessity of English learning and steady efforts to study English.

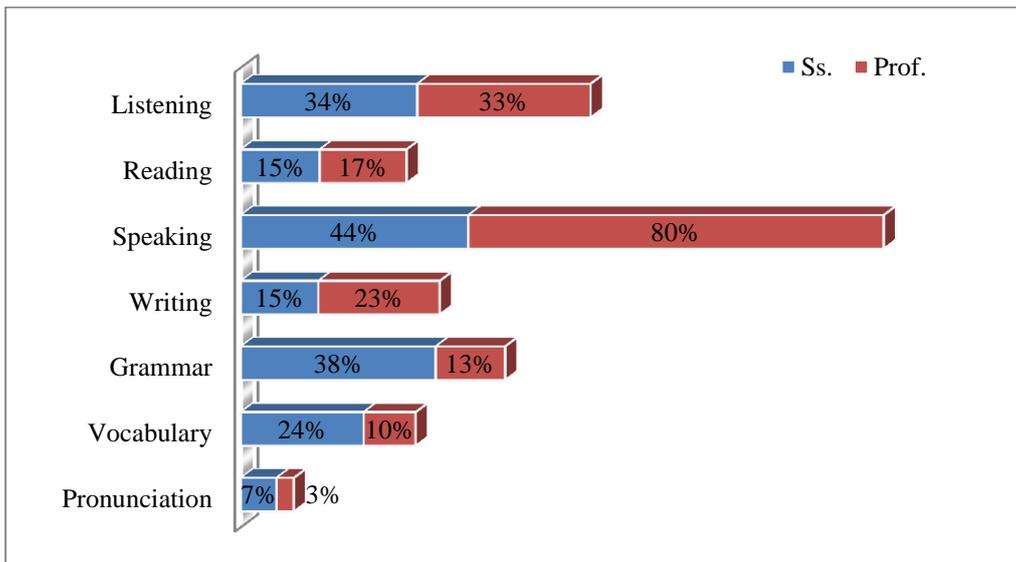
4.1.3 Diagnosing English Learning and Current Status

After exploring the target situations through graduates' current situations and hearing their advice on English study, the NA attention turned to diagnose the students' current situations, in particular, their lacks and difficulties so far. Also, how the three parties concerned perceived the importance of English learning was illuminated.

4.1.3.1 Lacks & Difficulties

Students' 'lacks' in English learning so far were measured by Q_{ss}. 11 for students and Q_{Prof}. 7 for what the professors are responding to. Figure 4.1 shows that both groups see the lacks of speaking skill as foremost: 44% of the students perceived their lacks in speaking while 80% of the professors indicated the students' lacks in speaking. It is surprising that even though students had studied English grammar for a quite a long time of at least six years, 38% of the students still expressed their lacks in grammar and 34% in listening.

Figure 4.1
Lacks in English Learning Until Now
(Q_{Ss.} 11 & Q_{Prof.} 7)



Similarly, in terms of the difficulties (Q_{Ss.} 12 & Q_{Prof.} 4), 40% of the students indicated difficulties in speaking and 42% in grammar (see the figure in Appendix G for complete comparative data), which implies that students still felt their thirst for grammar and speaking considerably. Listening ranked in the third place for students but in the second place for the professors.

Generally, as far as English proficiency level is concerned (Q_{Ss.} 15 & Q_{Prof.} 10), only 7% of the students and 1% of the professors thought that the students' level of English proficiency was high. The remainder deemed English level not high (see the figure in Appendix G).

4.1.3.2 Importance of English Learning

One of the necessities in TSA can start from being conscious of the important necessity of studying English for their target situations. As expected for the importance of English study, most of all of the three groups (over 80%) reached a consensus and confirmed the significance of English (Q_{Ss.} 14, Q_{Grad.} 16, Q_{Prof.} 9). In regard to a conversely worded question, 75% of the students and 73% of the graduates disagreed with the statement, “I don’t think I have any problem in my future career, even if I don’t study English” when seeking a job (Q_{Ss.} 13, Q_{Grad.} 15, Q_{Prof.} 8). But note that there is some portion of the respondents who did not think that way (see Appendix G).

In a phone interview, one graduate commented that he couldn’t apply for his dream hospital because he gave up English study with his relatively low TOEIC score and he also expressed his anxiety and fear about English-speaking foreigners, saying “I could come to this hospital to avoid English but I didn’t think of encountering foreigners here”. Most interviewees of the three groups agreed on the absolute importance of English learning for their target employment as well as their college study. They prioritized English study: TOEIC first and then conversation either generally or specifically. This reflects the highly competitive Korean society, which requires job seekers to verify their English proficiency via the results of high-stake tests such as TOEIC for the initial screening in the application process and, further, TOEIC Speaking and OPIc for additional speaking proficiency.

4.1.4 Affective Elements: Learner Factor Analysis

Given that students and professors did not think of students' current English proficiency level as high, it is assumed that students have affective filters with respect to learning the language. Let us check the factors. In light of 'anxiety' as an affective filter (Q_{Ss.} 16, Q_{Prof.} 11), the professors seemed to observe their students' high anxiety by showing 83% with agreement. 60% of the students indicated high anxiety about English, while 11% indicated they did not have high anxiety about English and 29% in neutral position (See Appendix G). The statement that "I will study English until I achieve my goals necessary about English." in the questionnaires (Q_{Ss.} 17, Q_{Prof.} 12) estimates the willingness to study English toward the necessary goal. The professor group expressed strong agreement with their students' willingness (94%) and the student group showed rather less than that (70%) (see Appendix G).

Both the students and their professors evaluated the degree of motivation for learning English (Q_{Ss.} 18, Q_{Prof.} 13) and showed similar percentage of positive 52% and 57% by students and professors, and neutral 37% and 30% respectively (see Appendix G).

An English coordinator of a nearby general hospital expressed her small desires as follows:

- (6) *Most doctors manage to speak English well but many of other staff including nurses and allied health professionals seemed to have 'English phobia' or 'foreigners fear'. For example, I've been asked to interpret simple English like "Please roll up your sleeve." in a blood-gathering*

room, "Please embrace the machine tightly." in an X-ray room. . . . I wish they could use casual hospital-related English at least only in their work post each in case I can't cover the situation. I think they can improve their English ability easily if they practice a bit more with some confidence because they've been already familiar with their work field and job duty. In my case, my major was English literature, so I'm having difficulties in learning technical terms here coming up throughout the hospital. Frankly, these days, I'm considering of studying nursing major for my job.
(Translated, English coordinator Ah at a hospital, Interview)

The interviewee Ah pointed out that allied health professionals at the hospital she is working seemed to have low confidence and high anxiety about English. Further, she mentioned that they could practice focused conversation about their work field and she fully agreed on the idea of running a healthcare-related English course for them.

4.1.5 College English Course

Before moving on ESP course section, this section examines general goals and objectives of College English Course in light of three parties concerned. The current level of college English course satisfaction is also reviewed.

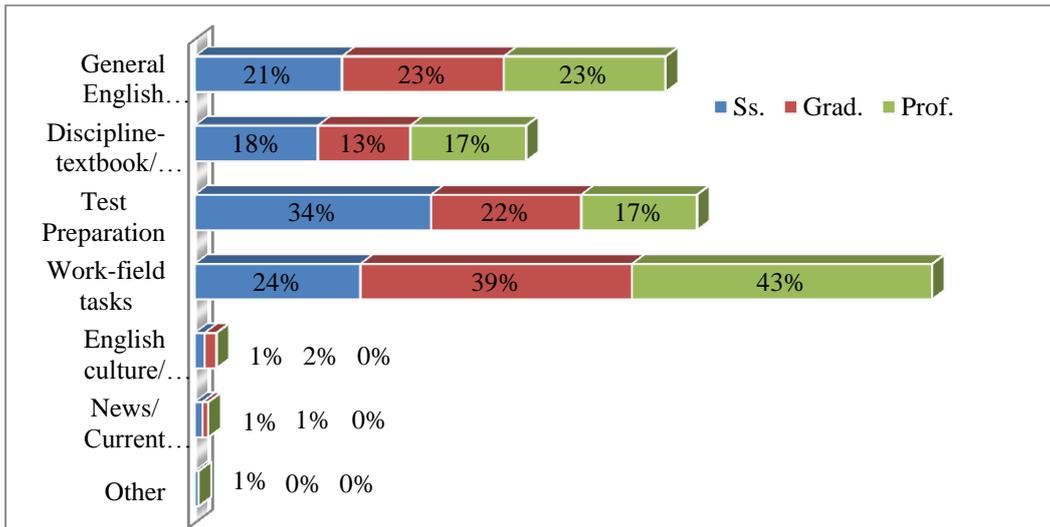
4.1.5.1 Goal of English Learning & Course Objectives

In regard to the general goal of the students' learning English (Q_{Ss}. 21, Q_{Prof}. 16), 42% of the students showed their interest in jobs within Korea and 27% in test

score, whereas 21% of the professors saw their students' goals in learning English as getting domestic jobs, getting overseas jobs (14%) and test score (24%) (see Appendix G). Their goal for improving test scores such as TOEIC may reflect the crucial role of TOEIC in the job market in Korea and the accompanying pressure from school authorities and college English courses. Besides, 29% of the professors marked other and gave their opinions, e.g., "improving a good command of English related to working after employment, discipline-related knowledge and training, reinforcing competency or what they can do, building up broader view of values rather than just getting a job, developing oneself through English, responding to globalization, sustaining English, learning a language to express oneself and communicate with others."

In terms of the objectives of English courses running in the healthcare college (Q_{Ss} . 22, Q_{Grad} . 17, Q_{Prof} . 17), all three groups showed considerable interest in work-field tasks, test preparation, general English conversation, and discipline-domain related academic study in that order of importance as a whole. Their priorities were a little different: more students listed test preparation as the prime objective (34%) than any other objectives, whereas more graduates (39%) and professors (43%) listed work-field English as shown in Figure 4.2.

Figure 4.2
Objectives of College English Course
(Q_{Ss.} 22, Q_{Grad.} 17 & Q_{Prof.} 17)



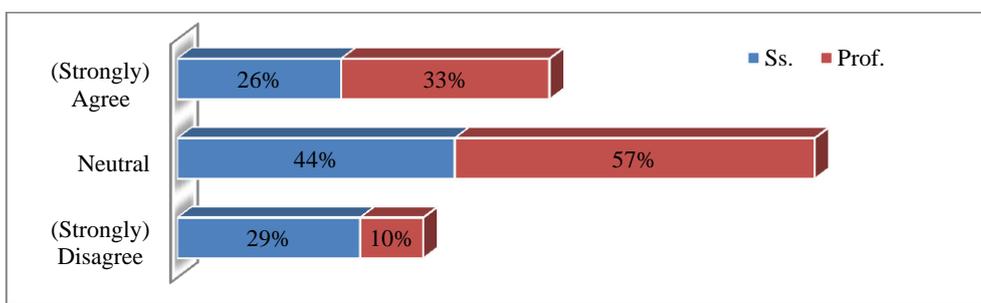
It is enlightening that although all three groups wanted general English conversation courses and, particularly, they were listed by the second highest number of graduates and professors, the school curriculum provides only a few English conversation courses that the students in some departments can take.

4.1.5.2 Satisfaction with College English Course

As to how satisfactory and helpful the college English courses are to the students (Q_{Ss.} 23/24, Q_{Prof.} 18/19), more than half of the professors (56%) agreed on the helpfulness of TOEIC-focused College English Courses, but only 33% agreed on the satisfaction but not strongly as shown. The students expressed the helpfulness

with 32%, the unhelpfulness with 24%, the satisfaction with 26%, and the dissatisfaction with 29%. Many of both groups (44% and 57%) remained neutral. See Figure 4.3 for complete comparative data representation of students and professors.

Figure 4.3
Satisfaction with College English Course
 (Q_{Ss.} 23 & Q_{Prof.} 18)



As shown in the figure, satisfaction degree with TOEIC courses was not detected as high. Such phenomena were predicted from before the starting stage of this study although the causes of this matter could be various. One of the assumed causes can be the gap between the expected goals and the course provided by school. The school mainly provided single uniform TOEIC courses for mandatory college English courses. Even if this concentration on TOEIC might achieve higher scores faster, some diversification of English courses could not but be sacrificed. Several students mentioned that they had expected to have some choices of English courses. In the reality of their college lives, for which they should prepare for a national license exam for their professional qualifications as well as TOEIC, they cannot

afford to have extra credits and timetable slots for other English courses. Thus, the mismatch between the expectation and the reality may contribute to a large percentage not being strongly satisfied.

4.1.6 Needs for ESP Course (GHEC)

Well in line with the goal and the objectives, the needs for an ESP course, GHEC, were investigated. The needs transformed target needs into learning needs that could be contained in the course.

4.1.6.1 ESP Needs: Learning Needs

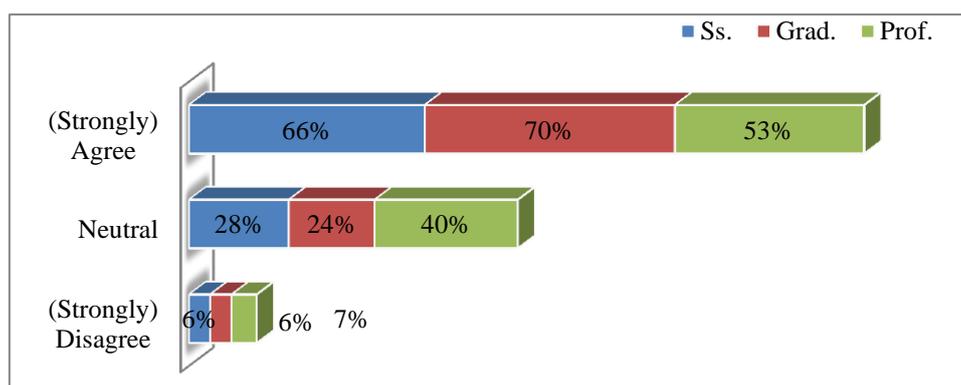
Turning to the main ESP-related section, the need for “GHEC” (Q_{ss.} 29, Q_{Grad.} 20, Q_{Prof.} 26) obtained the support of 53% through 70%. The graduate group showed the highest percentage (70%) and among them, almost 30% indicated “strongly agree”. On the other hand, 40% of the content academics adopted a neutral position of neither agree nor disagree, and one professor in optometry and radiology departments each disagreed about the need for ESP. Within each discipline group, 9% of the occupational therapy students and graduates each marked disagreement (including strong disagreement). Hospital management department showed 6% of the students, 12% of the graduates in disagreement, and all the professors in neutral stance, which also showed the noticeable discrepancy between the learners’ side (including graduates) and the teachers’ side with 60% of agreement by students plus 64% by graduates and 0% of agreement by professors. Seven percent of dental

hygiene students disagreed on the need of ESP but none of other groups. It was the departments of occupational therapy, pathology, and physiotherapy that showed the most ardent supports for ESP course. Among the graduates, 100% from the physiotherapy department indicated agreement on ESP, and more than 70% of pathology, radiology and dental hygiene departments, *inter alia*, indicated a need for ESP.

Figure 4.4

Need for ESP Course

(Q_{Ss.} 29, Q_{Grad.} 20 & Q_{Prof.} 26)



Regarding this matter, there are some conflicting opinions among content instructors interviewed by me. As shown in the excerpts (7) through (10), their opinions cannot be well converged unanimously, but they may welcome more English courses of choice not just one course:

(7) *Most medical sciences are academically thought to have originated in Western countries. Actually, our department like many other universities is*

seeking for a global leader. Therefore, the need for English is desperate, particularly in speaking and listening. During the short-term training in Australia last vacation, I could see even the students with advanced level of English having difficulty listening to the lecture. . . . I wish our students had more variety of English courses, not just TOEIC. (Translated, Pathology Prof. Y., Interview)

- (8) *I don't think this kind of English course is absolutely necessary. Our students are busy studying test preparation for national license and TOEIC as top priority. For employment, TOEIC is the best policy here you know. Our discipline-related English includes technical terms with pictures in our textbooks mostly. Our students feel difficult in the first grade but they soon get used to studying the field. (Translated, Radiology Prof. L., Interview)*
- (9) *German companies as well as English speaking companies tend to employ those who can speak English very well. Basically, English ability is a strong quality for sure. . . . Being under pressures of TOEIC scores throughout the school, is it possible to pursue changes? To alleviate the stiff atmosphere for English qualification, how about putting fun factors in an English course? (Translated, Optometry Prof. K., Interview)*
- (10) *As a matter of fact, I think every single student don't have to be committed to studying English. It's a matter of departmental and personal preference and it depends on individual competence, target job needs and requirements. Generally speaking, it is not desirable to apply uniform English education to all across the school. (Translated, Hospital Management Prof. S., Interview)*

While interviewing students, I could have heartfelt sympathy over their pressures and burdens on English test scores. They were under a lot of discipline-related assignments plus English-related stress. Most students were wondering what an ESP course can be; they didn't have any grasp of it. Many expressed its usefulness but at

the same time they were worried about the possibility of one more burden. Some pointed out that the course cannot be for all the students but for some who have already got satisfactory TOEIC score and taken other compulsory discipline subjects. It was obvious to nearly all that they want more variety of English courses and more optional rights and timetables.

However, to make their wishes into reality, I know there remain a number of things to do. In other words, it requires another compromise between domain subjects and liberal arts subjects in the current curriculum and what makes it worse, the liberal arts department, including the college English team, is relatively weak in power relations. It may be so, but let us listen to our students' voices:

- (11) *When I was trained at the dentist's, I was almost in a panic because I couldn't use any English when I talked to a foreigner on the phone. Also, I had to serve some foreign patients. I was trembling with nervousness. Still, I managed to get through the situation by using some English. . . . Even though I've got level 7 of TOEIC Speaking fortunately, I think I need kind of practice about my field situation in English. By the way, what is 'machy' (anesthesia) in English? I wanted to say that. (Translated, Dental Hygiene St. Joo., Interview)*
- (12) *Obviously, the continuous need for English study occurs but we have a lot of excuses like group activity for other subjects, volunteer work, etc. More than intermediate level of students need several kinds of English courses. In the case of our discipline, occupational therapy, we have trouble reading our major-related textbook. It is difficult for us to comprehend and translate the text like statistics results accurately. However, if we have a separate course about it, I feel like there will be another burden. I would rather recommend domain textbook reading section within TOEIC course. (Translated, Occupational therapy St. Hwan., Interview)*

(13) *College English course is too TOEIC textbook dependent so it's not much interesting to me. Further, most of us feel our major-related courses as more important rather than liberal arts courses. . . . I hope we have options in choosing English courses among conversation, something like English presentation relating to our expertise, etc.*
(Translated, Pathology St. Young., Interview)

Although such voices by the students cannot represent all the opinions of the whole student population, we should listen to them. They have the rights to express their opinions about their English courses and they can desire and expect what they envision. Then, what can be the decision of course providers? One could think of at least the possibility of a diversity of courses not just a uniform one.

4.1.6.2 Teaching Context Analysis: Skills, Tasks & Methods

As to which skill should be focused on in GHEC (Q_{Ss.} 33, Q_{Grad.} 23, Q_{Prof.} 30), speaking was ranked first overwhelmingly by all three groups: students – 59%, graduates – 66%, professors – 80% allowing multiple responses as shown in Figure 4.5. It is noteworthy that the graduate group put listening in the second place (51%) and reading in the third place (34%), while the student and professor groups showed smaller proportion of listening (approximately 30%).

In light of the tasks and the activities associated with the groups' major-domains or disciplines (Q_{Ss.} 34, Q_{Grad.} 25, Q_{Prof.} 31), students distributed their attention evenly into three items: domain-related work-field conversation (27%), domain-related textbooks reading (23%) and domain-related vocabulary learning (20%) as shown in Figure 4.6. Graduates preferred their work-field conversation

(42%) the best, and professors also showed their interest in work-field conversation (33%) the most.

Figure 4.5

Key English Skills for GHEC

(Q_{Ss.} 33, Q_{Grad.} 23 & Q_{Prof.} 30)

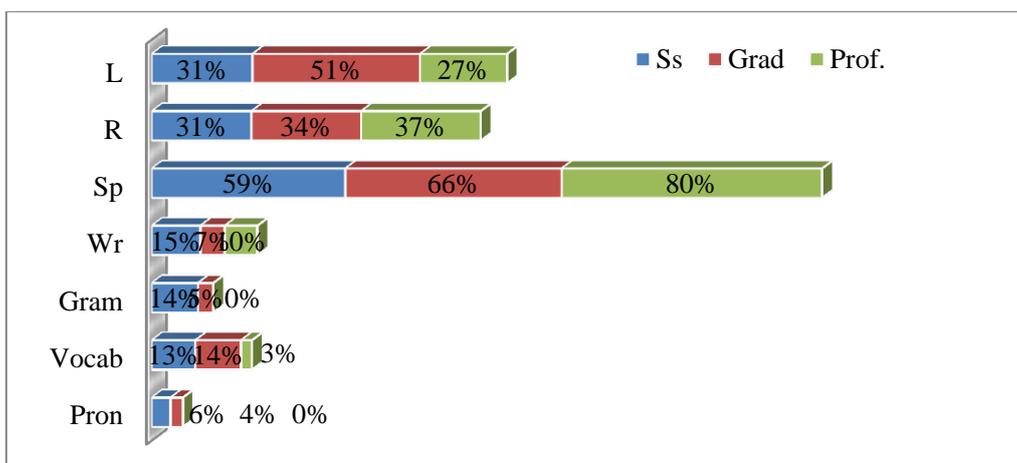
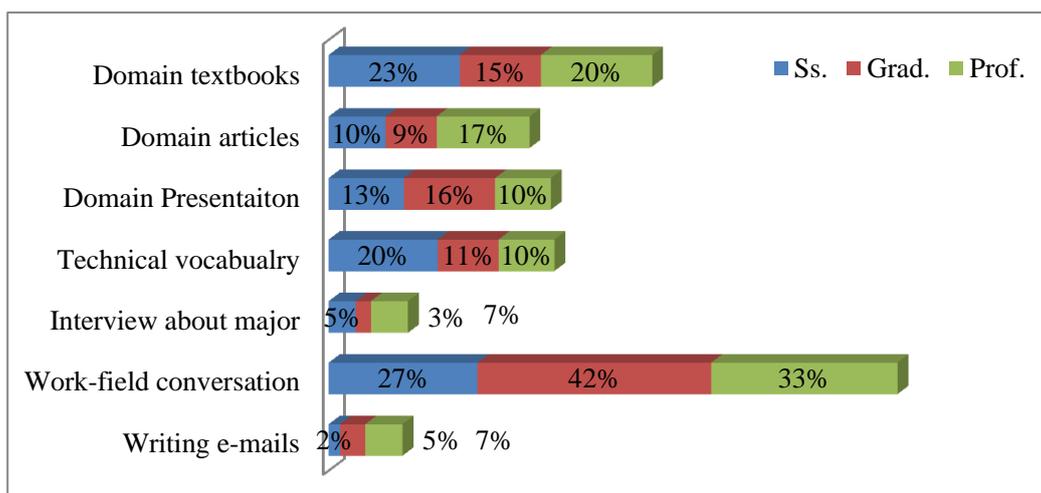


Figure 4.6

Domain-related Tasks and Activities for GHEC

(Q_{Ss.} 34, Q_{Grad.} 25 & Q_{Prof.} 31)

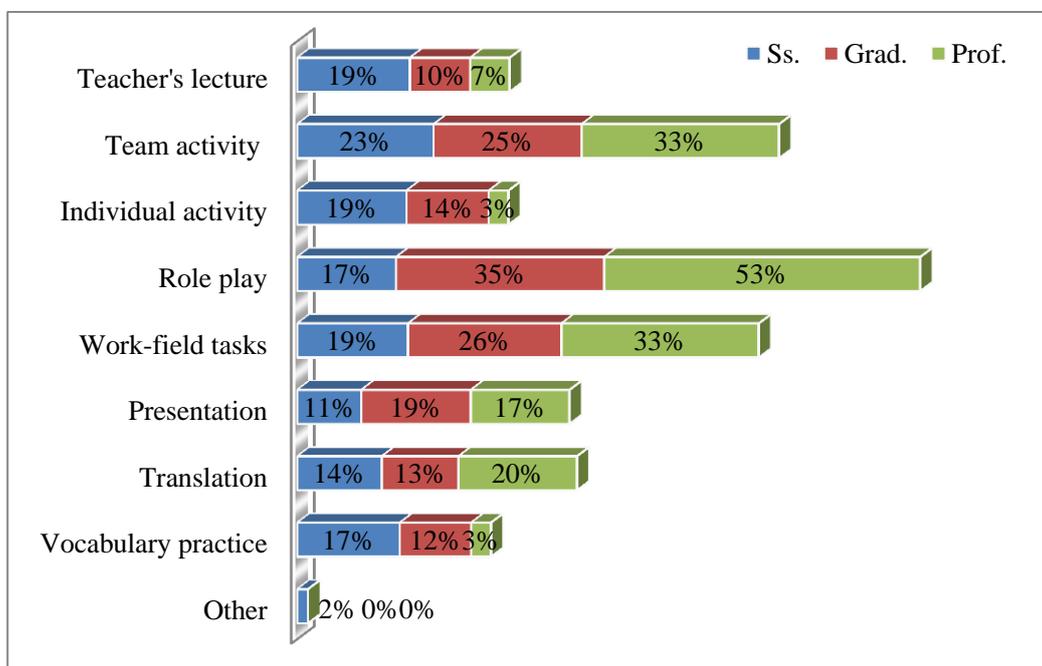


In terms of teaching methods for GHEC ($Q_{Ss.}$ 36, $Q_{Grad.}$ 27, $Q_{Prof.}$ 33), students expressed similar attention (10% to 20%) to all the items with 23% of team-based collaborative learning in the first place as indicated in Figure 4.7. Professors and graduates preferred role-play the most with 53% and 35%, respectively. They also liked situational tasks, collaborative learning, presentations and translation in descending order. When designing a course in reality, most methods can be used complementarily and diversely considering other elements. For example, role-play can involve work-field tasks, and work-field tasks can involve presentation and translation in a team-based way.

Figure 4.7

Effective Teaching Methods for GHEC

($Q_{Ss.}$ 36, $Q_{Grad.}$ 27 & $Q_{Prof.}$ 33)



The results of teaching context analysis revealed that the three top-ranked factors are ‘speaking’ in terms of skills, ‘work-field conversation’ in terms of tasks, and ‘role-play’ in terms of teaching methods. However, it is recommended that a course developer employ major skills, tasks and methods appropriately for the purpose of each lesson in the teaching/learning context. For example, to elicit more speaking outcome from students, sufficient input and/or receptive knowledge through listening and reading should be provided first. The explored target situations and specific content could be taken into consideration together.

4.1.7 Other Teaching Context Factors in GHEC

This section gives the important information on teaching/learning context of GHEC including timing, teaching language, and class allotment. Also, there are several concerns that appeared during NA and they are to be addressed.

4.1.7.1 Timing, Teaching Language & Class Allotment

As for when GHEC should be offered (Q_{Ss.} 37, Q_{Prof.} 34), both the students and the professors preferred the second year: 45% by students and 57% by professors. The appropriate number of hours for GHEC (Q_{Ss.} 38, Q_{Prof.} 35) was suggested as two per week, which implies GHEC can be a two-credit course. Regarding the number of students in GHEC (Q_{Ss.} 39, Q_{Prof.} 36), both students and professors preferred up to twenty students in a class. They also agreed on the preferred instructor (Q_{Ss.} 40, Q_{Prof.} 37), i.e., the combination of a Korean English

instructor and a foreign English native instructor on a fifty-fifty basis. This implies that two instructors can teach the GHEC alternating class hours or team-teach the GHEC together during the class.

However, the two groups indicated conflicting opinions about class teaching language for GHEC (Q_{Ss.} 41, Q_{Prof.} 38). Whereas 46% of the students wanted the use of English and Korean to be half and half, 32% liked English and Korean in 80% to 20%. On the other hand, content academics indicated their preference in 80% to 20% English-Korean (45%), full English (31%), and 50% to 50% English-Korean (21%). Meanwhile, both students and professors wanted the course takers to be allotted by English proficiency level (Q_{Ss.} 42, Q_{Prof.} 39) with the support of 55% of students and 76% of professors.

4.1.7.2 Concerns

The in-depth interviews revealed growing concerns about GHEC. Firstly, several professors expressed concerns about a 'one for all' prescription, i.e., one course for all eight discipline departments. It was said that there could not be a substantial portion that all the departments could share commonly in terms of their domain content. Although all the students in the healthcare college learn anatomy, the teaching focus must be different, e.g., special focus on skeletal and muscular system for physiotherapy and occupational therapy disciplines versus human tooth structures for the dental hygiene discipline. Most professors seemed to like a discipline-own content English course, not a mixed class. As a second best option, they reached an agreement that the course could deal with very basic knowledge on

general medicine and public health in the course, and they mentioned that if the course is possible, it could be worthwhile and meaningful for the students to try their field expertise in English.

Secondly, a couple of professors brought forth a question about whether English instructors can handle their domain competently or not. For example, a professor emphasized that the meaning of ‘occupation’ is used differently in the context of occupational therapy.

Thirdly, both students and professors were concerned about some burden that can be added to the present condition. Even if they admit that their domain expertise and target employment necessitate such type of English course, they doubt the available extra time for it considering the current curriculum. Moreover, since English education policy here is monolithically standardized, it requires drastic measures to make flexible changes and decisions.

Lastly, when examining the results of open-ended items of questionnaires and interviews, it was noted that the respondents have some degree of anxiety and uncertainty about a ‘new unknown thing’. Such concerns can be positively converted into intellectual curiosity rather than negatively into fear.

4.2 Reflection of Needs Analyses

At this point, I had finally finished with the NA to which I had devoted myself with positive expectations. But I felt like this was not the end, rather another beginning. I realized I was on another small cycle of AR within the first planning phase in a big macro cycle of AR in this study. As a teacher-researcher, I was on my

way through a step-by-step process to the final destination, an appropriate ESP course for our students. I planned comprehensive NA, performed the organized action of questionnaires and interviews, observed the results by deconstructing and synthesizing the collected data, and now at this point, I am reflecting on the whole process about the NA. Applying the AR paradigm, the characteristic AR process makes me grow. I was looking at “my selves” or personas at the same time by listening to others’ voices and sometimes even hidden low voices. ‘Is it possible to absorb a number of voices? What is my inner voice?’ I was losing my pre-occupied voice behind others’ voices. . . .

To be honest, I had been inclined to be quantitative-natured. I liked numbers and their statistics stories coming out through tools like SPSS or R. By the way, I was living and panting in a deluge of information data from too many items in three questionnaires and many talks with interviewees. This phenomenon I made and I should manage. There was overwhelmingly too much that I’d wanted to know and inquire about. It was actually from good intentions. Through various channels and dimensions, I had wanted to listen to them engaged in the context. But, who said, “Too many cooks spoil the broth”? At this point, I had to ask, “Am I going in the right direction?” Can thousands of voices converge on a focal point while whirling? If the voices could be melted into our course adequately and smoothly, it couldn’t be better, though I was having trouble managing huge data.

Indeed, a big gap was discovered between before the NA and after the NA. Anticipation had been made through pilot study and some talks with students and professors around me. I had said to myself, “Okay, the course should cover the reading content of and skills for students’ textbooks and key articles, and domain-

related technical vocabulary.” I was overestimating my insight and several supporting sources. I was too preoccupied with my own thoughts to notice anything different. I might have listened to what I had wanted to. I should have paid attention to one of the warnings in the literature I surveyed. It warned of the difference between professors’ and students’ opinions. The results of NA are telling me clearly, “speaking rather than reading” in terms of skills. This could be one of the best lessons that this study gave to me. But note that speaking output can be realized based on reading/listening input.

In sum, the overall NA data were pointing at an EOP-oriented course covering work-field situational tasks and simulated role-plays. Additionally, they needed to use their domain knowledge and discipline-technical vocabulary like medical terminology. Only the occupational therapy department seemed to need an EAP-oriented course with a focus on reading skills. The three groups all want to focus on speaking. English is absolutely important to the students. The top priority as a means of English study to them was TOEIC preparation and, then, their second priority could be English conversation associated with their future career or work field. In this respect, it is recommended that GHEC not be a mandatory course. It is still true that there is a minority who does not accept the importance and the demand for English.

On top of that, the course was going to be context-dependent under some unavoidable constraints. Even if the majority agreed to have a small class size of ESP course, the decision makers and certain people in the administration might not have wanted it. Unfortunately, some things were beyond my control and I was not in a position of authority. Nonetheless, I cannot help going on this trial as it comes out

of my educational philosophy and I am aware of its helpfulness for my students.

Now, I am facing up to numerous voices of desires on the one hand, but the reality on the other hand. Like the model I planned previously, the results of the multidimensional NA will be embodied through the filters of theoretical/practical consideration and other uncontrollable elements. However, regardless of my intention, this effort might become a bud not to be blooming unless I couldn't be given the approval to the course implementation plans. Whether this study could proceed to the next stage or not depended on the school authorities. Even so, from that point on, I decided to envision the next stage and I tried to build up the course set on priorities with selection and focus principles.

4.3 General Healthcare English Course (GHEC) Action Plan

The results of multidimensional NA and subsequent reflection led to syllabus design and the prescribed syllabus is described in section 4.3.1. The next section 4.3.2 offers the lesson plans for GHEC, and section 4.3.3 presents the materials prepared for the model lessons.

4.3.1 The Syllabus

Between analyzing multidimensional needs and implementing the tailored course, building an appropriate syllabus was an inevitable element. It was also an

answer to the research question regarding “what types of syllabi are to be designed?” for the customized GHEC in a given local setting.

In keeping with the results of the NA that were conducted and considerations of other variables, the key characteristics of the tailored GHEC syllabus were presented in terms of fundamental direction and applicable/variable methodological elements as follows:

<Fundamental direction>

- Wide-angled EOP-oriented pre-experience course with basic discipline content
- Communicative approach on a speaking outcome basis using the students’ discipline domain-related themes and vocabulary.
- Content-based instruction (CBI) with discipline content-specific input of listening and reading using authentic healthcare related texts (e.g., textbook texts, ‘Ebola’ virus article, etc.) and ‘realia’ (e.g., the university hospital itself, brochures, booklets, laboratory, lab instruments, etc.).
- Task-based language teaching (TBLT) and/or problem-based learning (PBL): e.g., tasks/problem solution and role-plays associated with hospital situations, poster-presentation, etc.
- In compliance with “competency-based curriculum” setting and “active learning”-oriented instruction under the environmental constraint as the course is part of the local A university context.

<Applicable/variable methodological elements>

- Active learning: e.g., a collaborative learning group, learning by teaching, reaction to a video, etc.

- Self-Directed Learning (SDL)

SDL puts emphasis on learners’ responsibility and control not teachers’. According to Bolhuis (1996), the role of domain-specific knowledge building is important in SDL and so is the familiarity with the subject. He mentioned that “knowledge domains have their own networks of meaning consisting of concepts and rules and expressed in a (partly) domain-specific language” (p. 9) and that teachers should make the focusing shift from only content to knowledge

building methods/procedures in the specific domain.

- Critical pedagogy

Benesh (2001) makes the following suggestion: “the most effective way to engage students might be to try a mix of teacher and student choice with whole-class selection of a theme as a third alternative” (p. 82).

- Experiential learning: e.g. job-shadowing, field-trip, tour, etc.

- Modular instruction

Modular instruction is defined as “instruction which is either partly or entirely based on modules” (Goldschmid & Goldschmid, 1972, p. 5) which has been widely used in higher education and ‘module’ is defined as “a self-contained, independent unit of a planned series of learning activities designed to help the student accomplish certain well-defined objectives” (p. 5).

Those directions and variables were seen as the best policy based on multidimensional NA and decision-making process along with the literature review. Although there are not many studies similar to this one, the previous studies reviewed had laid a foundation for this syllabus design and I sought to synthesize various voices from multiple sources in compliance with contextual constraints. NA results led to an EOP focus and content base concurrently with speaking emphasis. Also, the target tasks in an EOP situation could be reflected upon pedagogic tasks based methodology. Note that the most favorite choice of the NA respondents was role-play. Further, considering the contextual factors I tried to accommodate the educational policy of the school such as CBE and active learning by employing ‘can-do’ objectives and some teaching methods including group activity and ‘micro-teaching’ activity. Those applicable and variable elements resulted from considerations of surrounding contextual factors, which contributed to devising various activities in the tailored syllabus and lessons.

Under these customized syllabus guidelines, the following course outline

was planned including objectives as a form of competencies and a modular format table. In setting up course objectives, the highest priority was speaking English of the students' disciplines, accompanied by affective factors such as confidence, familiarity with medical contexts, and the use of medical vocabulary in role-plays or other tasks. Thus, eventually, GHEC students were expected to raise their English speaking level from novice into intermediate by not just listing some words but connecting related words to construct a sentence and a text. In order for GHEC students to achieve those competencies, listening and reading activities were provided as input with visual aids, and writing activities were regarded as pre-practice for speaking outcomes. In addition, four themes of a modular format were selected considering the range shift from more general content to more specific content. Suitable tasks were designed in accordance with the themes.

<Course Outline>

1. Course goals Competencies

(Under the competency-based curriculum, the goals of the course can be converted into the concept of competencies, viz. 'what the students can do'.)

Through and by the end of this course, students will be able to

- (1) use a general English medical vocabulary repertoire through related listening and reading input;
- (2) be familiar with the medical texts and contexts of English;
- (3) introduce themselves relating to their specific disciplines in English to prospective employers;
- (4) make good use of given information and background discipline knowledge for speaking output;
- (5) carry out self/team-directed tasks/activities in English for the communicative purpose;
- (6) perform role-plays or simulate their target field tasks which can take place in hospital-related situations or laboratory-related situations;

- (7) build up confidence and self-efficacy in using English in general medical contexts;
 - (8) move from novice level into intermediate level by using understandable sentences and intelligible pronunciation.
2. Course credit: 2 credits (two fifty-minute course periods per week)
 3. Contents including themes and topics according to modules

Table 4.2
GHEC Modular Format of Four Themes

Module 1	Module 2	Module 3	Module 4
Healthcare news and my study	Body and medical terminology	Health and hospital	Medical Korea and my job
Model unit 1	Model unit 2	Model unit 3	Model unit 4
Topical news about healthcare: Ebola	Human body anatomy	Hospital tour	Medical Korea and my field role-play

As shown in Table 4.2, the first module started with a more general news topic in which the ‘Ebola’ unit was implemented as a representative model. The news about Ebola has been a hot issue around the world. The second module was concerned with medical terminology related to the human body, covering anatomy and diseases. The model unit of the second module was ‘Human body anatomy’ which was more closely associated with the healthcare/medical discipline. The third module dealt with the hospital situation with the title of ‘Health and hospital’ and as the start of the module, a hospital tour in English was arranged. The last module was called ‘Medical Korea and my job’, in which students could be conscious of their

roles in rising medical Korea and they could position themselves somewhere around their discipline area in their future job field. When considering the themes, I intended students to connect a meaningful story about their present study and their prospective target field.

4.3.2 The Lesson Plans

There were four model lesson plans designed for GHEC modules. Each unit had its own theme and developed from a general theme to a theme close and specific to the students. Also, all classes included some activities and tasks in accordance with each theme, which were various from individual through pair to group work. The lesson plans were mainly devised on the basis of the PPP method, i.e., Presentation – Practice – Production. The final speaking outcome was to be completed through receptive input presented and controlled practice as the phases of class proceeded. The teacher was to act and work as a facilitator and to assist their tasks as necessary. Four lesson plans are presented here:

<Example Lesson Plan 1>

- Unit Title: Ebola
- Grade: 2nd grade (Sophomore)
(50 minutes*2 times, mixed ability class of 24 students)
- Lesson Focus: Mainly Speaking with elements of listening, reading & writing
- Objectives: Unit outcomes (competency-based objectives/‘Can do’ description)
 - 1) We can understand and use common vocabulary and expressions regarding healthcare related issues, particularly, Ebola.

- 2) We can orally convey English information using given information or searching for necessary information on Ebola connecting our prior discipline knowledge.
- 3) We can speak and produce sentence-level utterances, not word-level, by using healthcare domain specific vocabulary and collocation such as ‘hemorrhage’ and ‘contract-disease’, etc.
- 4) We can describe Ebola-related photos according to the context and extend stories based on the photos.

Procedures	Details	Learning considerations
Introduction (5 min)	• Presenting the unit objectives or outcomes	
	• Declaring the unit outcomes together in the statement of "we can do" version e.g., "We can understand and use . . ."	Read-aloud
Warm-up (5 min)	• Brainstorming - Ebola?	
	• Mind mapping	
Presentation & Practice (40 min)	• Vocabulary & Reading: Receptive knowledge, input + practice (use in context) + practice	vocabulary, collocation
	• CNN student news: watching news(context), note taking, question & answer	From receptive input to controlled productive output practice
	• ‘phrase match’ activity: consciousness raising before sentence level utterance	
Production task (50 min)	• Describing photos practice/production: Students can write some key words or sentences to prepare and practice speaking.	Guided sentence production
	• ‘Pair rotation’ activity: describe your photo to a partner in a pair and change the partner.	Text level practice collaboratively
	• ‘Poster presentation’ task: Group activity Make a poster about Ebola using your photos and story in your group collaboratively. Present your	Final outcome production

	group poster to the audience in class. After the presentation, the group gets feedback from the teacher and classmates.	
Extra task or assignment	• Write a magazine article about Ebola using your photo and story. You may include imaginary interviews or stories with people who are in West Africa or Korea.	

<Example Lesson Plan 2>

- Unit Title: Ebola
- Grade: 2nd grade (Sophomore)
(50 minutes*2 times, mixed ability class of 24 students)
- Lesson Focus: Mainly Speaking with elements of listening, reading & writing
- Objectives: Unit outcomes (competency-based objectives/'Can do' description)
 - 1) We can read and then talk about human anatomy using related terminology.
 - 2) We can rephrase and retell information on anatomy based on our domain knowledge and given input.
 - 3) We can raise our consciousness for English pronunciation and contextual meaning related to anatomy: we can distinguish Korean-accented English ('Konglish' way) pronunciation from English one.
 - 4) We can consolidate anatomy-related knowledge and teach it in English to others.

Procedures	Details
Introduction (5 min)	• Presenting the unit objectives or outcomes
	• Declaring the unit outcomes together in the statement of "we can do" version e.g., "We can read and speak ... "

<p>Warm-up (10 min)</p>	<ul style="list-style-type: none"> • Reviewing on Ebola unit focusing more on symptoms and affecting body systems and connecting it with today's unit: e.g., internal hemorrhage in internal vascular system and external body parts, • Reminding basic knowledge on anatomy through question and answer.
<p>Presentation (15 min)</p>	<ul style="list-style-type: none"> • Body system and organs: being familiar with English names and pronunciation <p>All students are distributed a certain set of worksheet handouts consisting of (1) general body system materials, (2) their domain-group expert materials and (3) other groups' materials. With the help of the teacher, they complete general body system worksheets for all groups.</p>
<p>Practice (25 min)</p>	<ul style="list-style-type: none"> • Sharing their domain-specific knowledge by filling in the given gaps in the expert materials about a particular body system or part in the same discipline students group: e.g., Dental Hygiene group studies and discusses their dental-anatomy material together in their group and fill the gaps on it. Then, they should prepare for the next stage of 'micro-teaching' activity. <p>Visiting groups, the teacher can encourage and facilitate their group-directed learning; in particular, she can correct the English pronunciation of medical terms and help construct English sentences.</p>
<p>Production (35 min)</p>	<ul style="list-style-type: none"> • 'Information gap & Micro-teaching' activity: <p>After they are ready to teach their domain-related worksheet, they meet other domain classmates and share mutual specialized anatomy knowledge. For example, when a dental hygiene student meets a physiotherapy student, they teach each part such as teeth structure and muscular system alternately, and complete their worksheets. Then, they look for other expert partners to fill the remaining information gap and rotate their teaching/learning roles.</p>
<p>Wrap-up (15 min)</p>	<ul style="list-style-type: none"> • Quiz activity: individual/team competition, English-English explanation: <p>Each team presents their domain-specific quiz.</p>

<Example Lesson Plan 3>

- Unit Title: Ebola
- Grade: 2nd grade (Sophomore)
(50 minutes*2 times, mixed ability class of 24 students)
- Lesson Focus: Mainly Speaking with elements of listening, reading & writing
- Objectives: Unit outcomes (competency-based objectives/‘Can do’ description)
 - 1) We can experience the hospital ourselves through hospital tour field trip in English.
 - 2) We can be part of real hospital situations by seeing our target situation and listening to people there.
 - 3) We can introduce where we will work for and what we will do there at a hospital specifically.

Procedures	Details
Introduction (5 min)	• Presenting the unit objectives, or outcomes
	• Declaring the unit outcomes together in the statement of "we can do" version e.g. "We can read and speak ... "
Warm-up (10 min)	• Watching a promotional English video clip of A Hospital • Brainstorming and reminding the students of departments where the students will work in the future
Presentation (60 min)	• Hospital tour: field trip experience Cancer center, VIP ward, Robot cyber knife & PET CT, Physiotherapy & Occupational therapy room, Blood collection room, Ophthalmology department Medical examination center, Registration, Offices, Emergency center, etc.
Practice & production (30 min)	• ‘Hospital tour guide’ simulation presentation: Each domain students group or pair can choose their task considering their specialty area.

Wrap-up (5 min)	• Feedback & Reflection
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<Example Lesson Plan 4>

- Unit Title: Ebola
- Grade: 2nd grade (Sophomore)
(50 minutes*2 times, mixed ability class of 24 students)
- Lesson Focus: Mainly Speaking with elements of listening, reading & writing
- Objectives: Unit outcomes (competency-based objectives/‘Can do’ description)
 - 1) We can summarize the content of the video clip about medical Korea by grasping the gist of it.
 - 2) We can search for information on various healthcare jobs overseas and healthcare profession-related English tests such as OET (Occupational English Test).
 - 3) We can create our own target situational scenario and role-play/simulate it collaboratively by using our background knowledge and information retrieval.
 - 4) We can role-play the task according to a given OET speaking-task sample.

Procedures	Details
Introduction (5 min)	• Presenting the unit objectives, or outcomes.
	• Declaring the unit outcomes together in the statement of "we can do" version. e.g., "We can read and speak ... "
Warm-up (15 min)	• Watching the video clip "Medical Korea Inspires the World" and comprehension check-up
Presentation (20 min)	• Presenting 'Popular healthcare jobs in U.S.' and introducing 'OET (Occupational English Test)' for the whole class.
Practice (30 min)	• Group/pair practice about OET speaking-task samples or their own tasks they created: creating plausible scenarios happening in their target situations.

Production (25 min)	<ul style="list-style-type: none"> • Role-playing the scenarios they constructed.
Wrap-up (5 min)	<ul style="list-style-type: none"> • Feedback & Reflection

4.3.3 The Materials

As a material developer, I prepared a variety of materials for each unit. While searching for suitable materials, I borrowed a number of books ranging from anatomy to radiology textbooks and the like that domain instructors recommended through NA. Faced with the difficult healthcare books, I came to be humble. I hadn't read most of the books or similar books even in my first language, Korean, and, further, each domain book looked very different with high content specificity. But I found a common thing in the books, which was that they all contained explanations with visual representation such as pictures and figures. On top of that, looking through the books, I became interested in anatomy and hematology as well as medical terminology so I dared to visit an anatomy room to see a cadaver. I also visited A Hospital next to A University medical campus to arrange for the tour and obtained authentic promotional brochures and booklets about the hospital. Besides, I reviewed EMP-related course books and I could see good materials – but ready-made course books could not tune in on diverse channels of GHEC students' majors and provide the latest news in the students' context either. Thus, I made up some parameters to prepare in-house materials for GHEC model units and started to work on it. There were five in my material prep parameters: (1) 'authenticity', which can be a golden rule of ESP, (2) 'familiarity and closeness' with content and interest, (3) basic 'usability', 4) 'visibility' or 'realia' and 4) teacher's 'accessibility and

manageability'. As a result, I prepared the following materials in light of each unit. These materials can be best referred to in procedural order of the lesson plans above.

- Unit 1: (see Appendix H and I)
 - a. Useful vocabulary about Ebola
 - b. “Ebola Virus Infection”
 - c. CNN student news “Ebola Outbreak Devastates African Villages”
 - d. Phrase match for CNN student news script
 - e. Teacher’s material: CNN student news script
 - f. Ebola-related photos for poster presentations

- Unit 2: (see Appendix J)
 - a. Advanced matching – “The Organ Systems”
(General body system material for all the class)
 - b. “Human Skeleton”
(Expert group material for physiotherapy/radiology majors)
 - c. “Label the Bones”
(Bones-related worksheet for all the class)

- Unit 3
 - a. “A Hospital” brochure
 - b. “A Hospital” promotional video clip and hospital tour
(Hospital tour can provide as much experiential learning as the material itself.)

- Unit 4: (see Appendix K and L)
 - a. Best healthcare jobs examples (Physical therapist and Dental hygienist)
 - b. OET speaking-task samples (Optometry and Physiotherapy)

The above materials were not all the worksheets and materials that were handed out to GHEC students. Some examples were presented here in the corresponding appendices.

CHAPTER 5

ACTION: GHEC IMPLEMENTATION

GHEC was formatted as thematic modules. On behalf of four modules, a unit out of each module was implemented as a model case. Twenty-four students of six departments took this GHEC model case, and they had heard of this action research in advance before the college English course began. The total number of students was eight bio-medical laboratory science (clinical pathology), seven dental hygiene, four hospital management, two physiotherapy, two radiological science, and one optometry students from six departments. I did not have the right to choose my course students, and the students were assigned to my college English class by the administration according to their TOEIC level. My action project was scheduled as a month-long part of the College English course. This was approved by the academic dean of the medical campus and the course students.

GHEC action in the real situation could not be the same as planned and anticipated. In each of the four model units, things played out differently the way they had been planned. Sometimes, I had to abandon my pre-planned itinerary and adjust to an unexpectedly changed situation. In this chapter, I reveal the real stories of four model units mostly focusing on what happened unexpectedly during the class under the following titles: Unit 1. Topical news about healthcare: Ebola (section 5.1), Unit 2. Human body anatomy (section 5.2), Unit 3. Hospital tour (section 5.3), and Unit 4. Medical Korea and my field role-play (section 5.4).

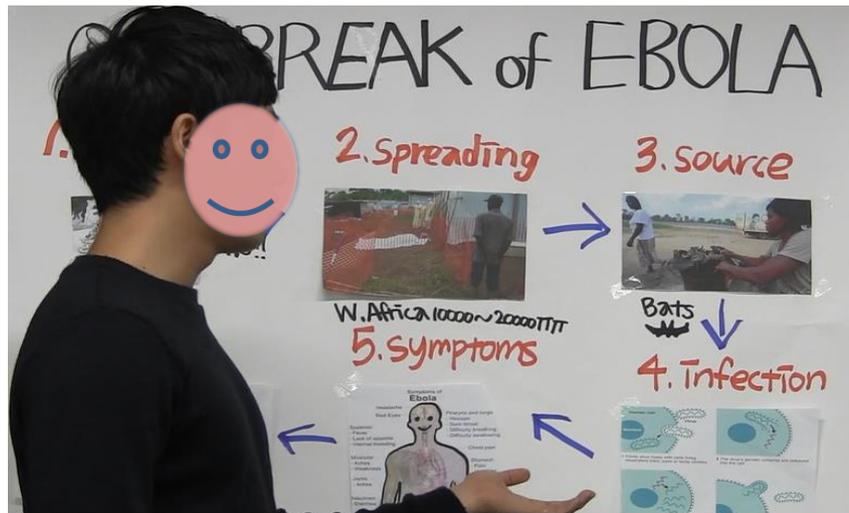
5.1 Unit 1. Topical News about Healthcare: Ebola

The first lesson was implemented on September 3, 2014 and influenced considerably by an uncontrollable factor, ‘time constraint’. The students seemed to need more time to change from their former learning mode to a new, unfamiliar one. Although for their approval I explained GHEC and action research to them a couple of weeks before the class and in the very beginning of the class, they looked a little uneasy when they were asked to declare the unit objectives. But they participated in the brainstorming stage with their curiosity limpid bright eyes. The topic ‘Ebola’ seemed to stimulate them. During ‘CNN Student News’, they were completely accustomed to the content and the method, but I had to allow them to have more time than I had planned. One of my mistakes was a miscalculation of how long it would take for classes with mixed levels of speaking ability. Some of the students told me that they hadn’t had the opportunities to speak in English. Even though I had already been aware of such circumstance, I could find myself hastening to catch up with predetermined procedures in the recorded class video clip. The Ebola photo-description activity took the most time. Students wanted to have more preparation time and wanted to share their photos with as many classmates as possible. No picture was the same as any other. To get information or understand the material, students asked each other or me and sometimes referred to smartphones. I just gave a simple instruction, “Try to make a full sentence when describing photos.” It was my teaching intention to raise their word-level speaking to sentence and text level. I tried my best to listen to them face-to-face and one by one during the activity. At last, it was time to do the highlighting outcome, poster presentation. See Figure 5.1 for a

vivid scene of a poster presentation of a group.

Figure 5.1

Ebola Poster Presentation Example



The student pictured is playing his role to present viral infection of Ebola and the other members of his group also took their turns explaining their focus areas. The class had six Ebola posters. However, it was not possible physically to deliver all the presentations during the class, so the presentation session was delayed to the following time. They liked the decision and could prepare it more in their groups with my assistance.

5.2 Unit 2. Human Body Anatomy

This unit was implemented on September 10, 2014. After the Ebola poster presentations were delivered, the second unit lesson got started with animation.

Unexpected delay enabled us to have a more dynamic beginning and to connect the previous unit with the present one. Our students expressed a good surprise at the new type of task called ‘micro-teaching’ activity, which became both the goal and the preparation process. To teach their domain anatomy to other domain groups, they discussed and studied it actively in their group. Not all of the discussion was in English, but the students did try to mix English and Korean into their discussions. When they taught others, they used all English with some hesitation. Although they had already learned basic anatomy in their first language before, they seemed to have a bit different learning experience as they explained it in English. My role was to make them be conscious that their pronunciation of the medical terms is different from authentic English pronunciation and while Korean colleagues can understand them in their community, foreign patients cannot always understand them. They need to be able to manage two kinds of pronunciation. They were used to pronouncing English anatomy terms as Korean words, which sound different from the original English ones.

5.3 Unit 3. Hospital Tour

This hospital-tour unit was implemented on September 17, 2014. Hospital tour seemed like a faultless fascinating idea, but in reality something very significant happened. A few hospital staff who were supposed to give the tour in English in fact spoke in Korean when they saw the audience was not foreigners but all Koreans. It was the truth of the moment that my arrangement and teaching intention became useless. Nevertheless, our students liked their target workplace field trip. They told

me this was the first hospital tour so far. Further, their tour guide simulation was impressive. It was more than I expected. In accordance with each discipline group/pair, the problem/issue was different and so were the characters. I could confirm self-directed learning as one of ESP course benefits and the advantage of critical pedagogy (Benesh, 2001). The students knew what they should do, which I couldn't cover in detail. I just opened the space so they could practice and produce their expertise in English. Each discipline group was going in a different direction and all respected the others' areas as if a radiologist worked in harmony with a physiotherapist or the like at a hospital.

The highlighting-production stage of this class time was postponed to the following week due to the lack of time and students' request. I suggested that they could have two task options: to perform 'Hospital tour guide' or 'Medical job fair booth'. In the tour-guide simulation activity, a clinical pathology discipline group of three students presented "What are a laboratory scientist, a blood collection room and a pathology department?" showing some relevant pictures in a hospital. The next team, from hospital management department, guided us through the whole hospital building and especially, put emphasis on the sunlit skylight. The remaining teams showed their task performances in my office during the appointed time as they needed more preparation time and my help. The physiotherapy group included Snoezelen room, about which we had felt curious during the tour.

5.4 Unit 4. Medical Korea and My Field Role-play

This unit was implemented on September 24, 2014. I hoped that this unit would make the starting point to locate our students' position in medical Korea and

also, this trial of GHEC would free our students from the heavy pressure for English test scores. I sincerely hoped they could realize their potentials to speak English. Indeed, they did. Without any interference from a teacher, they could role-play their created situational scenarios. A team had even a lab gown ready at hand during the break time. Most students liked the OET speaking task samples and other supplementary materials. My efforts were rewarded with their role-play performances.

Two hospital management students set up a complaining circumstance at a hospital and played the roles of a hospital administration staff and a patient with a complaint. A team of three pathology students showed a simulated role-play acting as a doctor, a patient and a lab scientist during doctor-patient consultation, a blood collecting situation, and a doctor-lab scientist phone conversation. See Figure 5.2 for their role-play.

Figure 5.2

My Field Role-play Example



In the role-play, the students used appropriately some sentences of the material that I had given out. The student with a pathologist character in the middle is acting as if she is collecting the patient's blood with a syringe using a piece chalk (see the arrow in the picture above), and she could completed her role successfully with the help of the handout that I provided. The student on the right wore the white lab gown to act his doctor character.

Only one student from optometry did role-playing with me on the spot. He invited me in his role-play and showed me his scenario script. Based on the OET speaking sample (see Appendix K), I acted a patient with a patch over an eye and he became an optometrist. I had to express my anxiety because I would get married in a week and my future spouse would not want his fiancée to have a patch over her eye. The situation and our acting got a big laugh from the class. Using some technical terms, he seemed to perform his role confidently and competently. Two physiotherapy students carried out the role-play of a physical-therapy situation for a patient with chronic arthritis, using material guides they'd been given. Then, because of time constraint, three groups of dental hygiene students showed their role-plays about bruxism and sore gums referring to OET samples in my office later.

CHAPTER 6

COURSE OBSERVATION AND REFLECTION

One could observe what happened during GHEC through colleague observation (section 6.1), students' learning artifacts or their performance outcomes (section 6.2), and course evaluation survey (section 6.3). Moreover, in the subsequent reflection phase one could ponder some implications through students' and teacher's reflection shown in their logs (section 6.4).

6.1 Colleague Observation

One of my colleagues, Ms. Huh, observed GHEC and was subsequently interviewed by me. The class observation sheet consisted of the comments on content relevance, methods, interaction, materials, learning experiences and difficulties, and overall comments including impression, instructor's strength and suggestion. The colleague had lived and studied in U.S. for ten years. She has been teaching English conversation courses for five years in Korea. She hasn't taught an ESP course so far. She accepted my invitation of class observation and wrote down her comments. Also, I interviewed her about GHEC for about an hour.

In light of content relevance and the materials of our course, she commented on the appropriateness of unit topics, in particular, Ebola that was a serious issue around the world as shown in the excerpt (14).

(14) *The unit topic, Ebola virus was enough to attract the students' attention because all students were part of the college relating to medical field and these days, the virus has become a hot issue in the world. . . . CNN news and the relevant photos, as authentic materials, informed the students of the real status of the virus impact. It could touch the students' interest and curiosities and as a result, the students became more concentrated and positively active in the class. By doing so, the students could access naturally to real English language. . . . The instructor's anatomy material preparation fitting into each domain's nature seemed to be very appropriate because students' interest and concern were melted in the class above all. Most students took very active and serious attitude toward their class and materials.*

When it came to methods, Ms. Huh mentioned an activity, where after a word item and its derivatives, I had explained some collocation examples and encouraged the students to make their sentences using them, e. g., 'contract – disease'. She described the collocation activity as very useful and dynamic but she pointed out that it could be better if they had more chances to present the sentences they created. For this I wanted to make an excuse of time limit. However, apparently, I was too greedy for as many activities as possible.

In terms of interactions and learning experiences/difficulties, as she observed our class, she agreed that the approach gave more active roles to the learners in their group activity compared to teacher-centered class. She observed students' active efforts to explain body organs even with their body language but she could also observe some students just copying others' answers under the pressure of completing their information gap material within a given time. Also, she could see the students speaking in English as much as they can although they didn't usually speak in English and they couldn't do it well. But they were seen to mix English and

Korean immediately to answer the questions of the instructor since they couldn't come up with proper English words. Nonetheless, she revealed her surprise at our students' speaking performance, saying that one surprising thing concerning students' presentations was that most students spoke English, especially difficult medical-related topics, with a degree of fluency that she hadn't expected because concentrating on TOEIC preparation had taken so much of their time.

I could discover some reiteration of key words such as 'active' and 'impressive' in her observation sheet. The following excerpt (15) could be shown as a condensation of her overall impression:

(15) *It was very impressive that the students could explain in English about their hospital as a hospital guiding staff after the hospital tour. Since it was directly associated with students' discipline domain and such practical elements must have stimulated their interest, they seemed to approach English study more actively. Even the students, who didn't used to talk well and didn't try to give a speech in public, did their best towards class and presentation preparation, which can be seen as an advantage of this course.*

In spite of such advantage, there were some concerns. As far as she was concerned, it was not easy to force the students to use more or only English in this EFL classroom. As they had to complete some of their tasks in the classroom, they often used their first language in order to efficiently achieve their outcomes. As to this matter, she suggested discussion activity, saying that the students could discuss their interest area in English even if they have some hesitation. She also commented that discussion can be challenging for them but sufficient preparation time in advance could allow them to speak English more in a meaningful context.

6.2 Course Learning Artifacts (Performance Results)

There are two artifacts regarding the units of GHEC. One is speaking outcomes of the students during the course that were recorded (section 6.2.1). The other is students' learning logs. Every time the students took the units, they were required to write the learning logs (section 6.2.2).

6.2.1 Students' Production Outcomes

The speaking outcomes of the students were produced through their tasks. It was remarkable to see their speech production at the level of sentences and text. Unlike my anticipation, they could manage difficult themes associated with their background knowledge. They knew how to use their smartphones as well as me to find appropriate vocabulary. What's more, their cooperative teamwork additionally generated a “synergistic effect” for their outcome (Translated, Radiology St. Tae, Learning log).

Although their speaking output included noticeable grammatical mistakes and wrong word choice, it contained their discipline knowledge showing attention to their field. It seemed that GHEC elicited their speaking potentials associated with their field through various tasks. They showed more than what I expected. The following excerpts were from their work that was not corrected by me.

<Performing 'Hospital tour guide' task>

(16) Hye: *We will show several things, what is the new thing in the hospital and what is consisted of the hospital and structure. First, you come in hospital, there is a skylight in the ceiling.*

Kil: *Skylight can make warm atmosphere and not make cold and scary atmosphere in the hospital. Second, nowadays there is a café in the lobby, so it can make hospital smell coffee not medicine smell. . . .*
(Hospital management Ss. Hye & Kil, Learning outcome)

(17) Joo: *Here is a blood collection room. We collect blood from patients and do some tests using blood samples. And then we diagnose anemia and bleeding disorders. . . .*

Song: *Finally, we are in last location. This is Department of infectious disease. In here, we diagnose disease by microbes, parasites, fungus, virus and bacteria. For example there are Ebola virus, Malaria, Influenza virus and so on.* (Pathology Ss. Joo & Song, Learning outcome)

(18) Mi: *Finally, this is Snoezelen room. Have you ever heard of a Snoezelen room? Snoezelen is a revolutionary therapy for people with autism and similar sensory processing disorders. The rooms are designed to enhance relaxation and comfort, exposing users to multiple sensory stimulation. The element of this therapy is vision, sound and touch. . . .* (Physiotherapy Ss. Mi & Ju, Learning outcome)

<Performing 'My field role-play' task>

(19) Se: *But you would not worried about your eye. Cornea's epithelial cell have self-regeneration system, so if you follow these indication, you can go your wedding without patches. . . .* (Optometry St. Se, Learning outcome)

(20) Hwa: *First of all, we need to take X-ray to find out where the wisdom tooth is. And after that the doctor will remove that tooth.*

Jin: *Do I really need to remove my tooth?*

Hwa: *Yes, you need to. It can cause the caries on the second molar. And it can also bring the inflammation on your jaw. . . .* (Dental hygiene St. Hwa & Jin, Learning outcome)

It was not a surprise that they could talk about *diagnosing disease by microbes, parasites, fungus, virus and bacteria, Snoezelen, multiple sensory stimulation, Cornea's epithelial cell containing self-regeneration system, and inflammation on jaw*. However, it was surprising that they could manipulate their specific background information in English speaking because they were assumed to be in the beginner or intermediate level of speaking. The excerpts just did verify that through the ESP course, students could produce speaking outcomes in relation to their specific domain without previous general English conversation learning and without a teacher's lengthy lesson.

6.2.2 Learning Logs

The learning log included a series of questions which asks students' learning experience and their reflection. Students were free to write their learning logs in either English or Korean. As to the questions, "What have I achieved?" and "What did I learn?", students answered each unit content theme instead of saying that they learned a certain grammar item like conjunction/preposition. Of this course, such comments can be taken for granted. Below I cite what the students commented. Korean version of log records was translated into English. See also learning-log examples written by a student in Appendix M.

- (21) *I learned Ebola virus and how to debate with group members.* (Dental hygiene St. Bi, Learning log about Ebola unit)
- (22) *We learned organ system, eye diagram, digestive system and human skeleton of other majors.* (Dental hygiene St. Jin, Learning log about Anatomy unit)
- (23) *I came to know medical terminology we dealt with before are pronounced differently in English.* (Radiology St. Ji, Learning log about Anatomy unit)
- (24) *I have learned a lot of other medical words and I have learned other majors are also extension of medical study.* (Pathology St. Sung, Learning log about Anatomy unit)
- (25) *I could advance my knowledge from guessing to perceiving “Ah, they are doing such a job” about radiologists and emergency medical workers.* (Translated, Physiotherapy St. Woo, Learning log about Hospital tour unit)
- (26) *I came to know practical expressions on our job field and our discipline domain vocabulary.* (Translated, Hospital management St. Dong, Learning log about Field role-play unit)
- (27) *It was really good to experience the roles of clinical laboratory scientist in advance even if it was just a simulation.* (Translated, Pathology St. Soo, Learning log about Field role-play unit)
- (28) *The ability listening, reading, writing and speaking skill is seemed to improve.* (Physiotherapy St. Mi, Learning log about Field role-play unit)
- (29) *I could think of more specific situations and tried finding many words.* (Pathology St. Eun, Learning log about Field role-play unit)

As to their learning, they did scarcely comment on language items, but they rather set forth specific contents, experiences, and situations that GHEC expected. Regarding language learning, they seemed to think that they directed themselves to use more relevant vocabulary and their whole language including all four skills.

6.3 Course Evaluation Survey

This section gives the direct answer to research question 2. “How will the domain students react to the tailored ESP course after they have taken the course?” After twenty-four students took part in four units of GHEC, a course-evaluation survey including short interviews was administered. Given the healthcare college of a local university in Korea, it consists of eight departments, among which only six discipline department-students were included in GHEC. The course evaluation questionnaire was composed of twenty-eight questions including nineteen closed-ended questions and nine open-ended questions.

6.3.1 5-Point Likert-scale Questions

In the closed-ended questions, there were sixteen 5-Likert-scale questions and three multiple responses questions. Reliability statistics of the Likert items was Cronbach’s Alpha 0.93, which is quite reliable. The first half part of all sixteen items with 5-Likert-scales is related to general satisfaction about course components: Q1) achievement of the course objectives, Q2) content relevance to healthcare field, Q3) English input (e.g., listening, reading), Q4) English output (e.g., speaking, writing), Q5) effectiveness of teaching strategies/methods (e.g., learner-centered, task-based, communicative approach), Q6) materials (e.g., handouts, CNN, video clips, etc.), Q7) tasks and activities (e.g., poster presentation, tour, role play, etc.), and Q8) overall evaluation of the course. The remaining 5-Likert-scale eight questions of the latter half part are the statement items of learning experience from the students’ perception

including affective aspects, English improvement, assessment methods and the need for the course: Q9) “I, as a student of the course, participated actively in the course”, Q10) “The course stimulated my interest in English and my major”, Q11) “The tasks and activities contributed to an increase of knowledge/skills in my major”, Q12) “I think I made progress in English while performing given tasks”, Q13) “I was prompted to speak English more through the course”, Q14) “The materials were relevant and useful for me”, Q15) “The assessment methods such as role-play and presentation were reasonable”, and Q16) “This course is necessary for the healthcare college students here”. The following table 5.1 indicates frequencies and basic statistics about the responses to sixteen 5-Likert-scale question items. See also Appendix D for the course evaluation questionnaire.

A distinctive characteristic of the questionnaire results is that there were no responses of ‘not at all satisfied’ or ‘strongly disagree’. The overall course satisfaction question Q8 had positive answers from 20 students (84%=17%+67%) including ‘very and somewhat satisfied’ items, and only 4 students (17%) expressed neutral position, i.e., neither satisfied nor unsatisfied.

Table 5.1
Response Frequencies to 5-Likert-scale Questions of Evaluation Survey

Qu #	Question keyword	Very satisfied	Some-what satisfied	Neutral	Not very satisfied	Not at all satisfied	M	SD
Q1	Objectives achievement	2 8%	14 58%	8 33%			3.75	.61
Q2	Content relevance	5 21%	10 42%	9 38%			3.83	.76

Q3	English input	5 21%	13 54%	5 21%	1 4%	3.92	.78
Q4	English output	7 29%	11 46%	5 21%	1 4%	4.00	.83
Q5	Teaching methods	3 13%	19 79%	2 8%		4.04	.46
Q6	Materials	9 38%	11 46%	4 17%		4.21	.72
Q7	Tasks	5 21%	16 67%	3 13%		4.08	.58
Q8	Overall satisfaction	4 17%	16 67%	4 17%		4.00	.59
		Strongly agree	Agree	Neutral	Dis-agree	Strongly disagree	
Q9	Participation	2 8%	8 33%	13 54%	1 4%	3.46	.72
Q10	Stimulus to English and major	5 21%	13 54%	5 21%	1 4%	3.92	.78
Q11	Task contribution to domain expertise	6 25%	8 33%	9 38%	1 4%	3.79	.88
Q12	English progress via tasks	5 21%	11 46%	8 33%		3.88	.74
Q13	Speaking elicitation	4 17%	13 54%	6 25%	1 4%	3.83	.76
Q14	Material usefulness	7 29%	13 54%	4 17%		4.13	.68
Q15	Assessment reasonableness	4 17%	11 46%	8 33%	1 4%	3.75	.79
Q16	Need for GHEC	4 17%	11 46%	8 33%	1 4%	3.75	.79
Sum (Q1 ~ Q16)		77 20%	198 52%	101 26%	8 2%	3.90	.51

Note. N=24

The means of 'English output', 'Teaching methods', 'Materials', 'Tasks', as well as 'Overall satisfaction' item were 4 and over, which indicates a quite high level of satisfaction. The most satisfactory course component was 'Q6 Materials', with a mean of 4.21, and twenty respondents (83%) were (very) satisfied with the course materials. 'Q5 Effectiveness of teaching strategies/methods' question recorded the highest satisfaction proportion, 92% (13%+79%), with only two students (8%) indicating 'neutral'. The student-centered communicative approach seemed to satisfy students while they were performing tasks themselves with a minimized teacher-centered role.

In regard to the latter part of Q9 to Q16 about learning experience statements, the course takers disclosed relatively lower satisfaction compared with the data of Q1 to Q8. Among the items, the mean of 'Q14 Material usefulness' marked the highest 4.13 with 83% (29%+54%) including 'very much and somewhat satisfaction', which was the same percentage as Q6 Materials item. The rest of the items indicated less than 4 in each mean. In particular, the perception of the students' active participation (Q9) recorded the lowest mean score 3.46 out of all the sixteen questions. Indeed, the average was fairly high since it was way over the half point 2.5 out of 5, in that one respondent checked in 'disagree' box and thirteen (54%) marked in 'neutral' box. In the last 5-Likert-scale question 'Q16 need of GHEC', fifteen students (63%) expressed the need for this course. This result showed a little inconsistency in the overall course satisfaction level (Q8: 83%) and, accordingly, to be satisfied is one thing and to be necessary is another.

Nonetheless, the Likert-item results taken as a whole suggest that 72% of the students felt some degree of satisfaction with GHEC without any lowest point

(‘strongly disagree’) and with the mean score of 3.90. Overall, I believe this shows that the specialized course was comparatively successful.

6.3.2 Multiple Responses Questions

The course evaluation questionnaire included three multiple-response questions with nominal-polytomous scale, wherein the respondents can choose more than two unordered options: Q20) “What were the major English learning experiences in this course?”, Q21) “Which task/activity was most interesting and conducive to you?”, and Q22) “Which materials were most interesting and conducive to you?” Table 5.2 is the multiple responses results of major English learning experiences.

Table 5.2
Multiple Responses Statistics of GHEC Learning Experiences (Q20)

Skills	Responses		Percent of Cases
	N	Percent	
Listening	16	21%	67%
Speaking	21	27%	88%
Reading	10	13%	42%
Writing	11	14%	46%
Vocabulary	9	12%	38%
Grammar	2	3%	8%
Pronunciation	8	10%	33%
Total	77	100%	321%

As intended and expected, the students reported that they experienced learning speaking the most (88% out of 321%) and listening the second most (67%). The data also indicated that all the factors of English learning skills were included in the GHEC, which agrees on the basic premise of ‘Whole-Language Approach’. In particular, although the course designer did not consider grammar elements in the course, two students (8%) admitted they came to learn grammar through the course. Overall, the GHEC as implemented seems to be largely consistent with the course action plan designed in terms of English learning experiences.

With regard to the most interesting and helpful tasks/activities (Q21) that the course students were conscious of, ‘role-play’ ranked in first place (75% out of 204%) and ‘hospital tour’ accounted for 50% in second place (refer to Appendix N). Most of the students confirmed their responses again when asked during the interviews. They mentioned that they could make it based on the materials the teacher prepared including OET speaking-task samples. In an attempt to apply ‘experiential learning’, the tour of healthcare college students’ future workplace could provide them with precious experience learning through observation and interaction with the hospital environment, as opposed to learning through indirect materials such as brochures and video clips. They could see and feel the real-time hospital environment: e.g., observing state-of-the-art Robotic Cyber Knife, observing physiotherapy patients, interacting with the field-expert guide by questions and answers, observing CPR (cardiopulmonary resuscitation) in an emergency center, etc. The remaining two tasks, poster presentation and anatomy micro-teaching gained positive responses from nine (38%) and ten students (42%) respectively.

Similarly, the responses of the most interesting and helpful material (Q22) showed higher positions of role-play and hospital tour materials over the others. However, it is different in that hospital tour (63% out of 209%) and role-play materials (63%) were tied in first place, and anatomy materials trailed Ebola materials (cf. Appendix N). The respondents reported that Ebola materials (54%) were more interesting and conducive to them than anatomy materials (29%).

From the results, it is obvious that the students preferred the hospital tour and role-play materials. More closeness to their field and a variety of materials for each major may account for this phenomenon. In sum, it could be found that the students considered the class with role-play related to their fields as the best in terms of task and material helpfulness. It could be assumed that speaking and listening experiences occurred vigorously in this ESP class.

6.3.3 Open-ended Questions

On top of the quantitative statistics, qualitative types of open-ended survey questions provide us with an explanation concerning a certain phenomenon. In particular, sentence-completion questions 17 and 18 were created for this course evaluation. They were designed to induce a more focused key word from a probable variety of responses. Students were asked to fill in the missing word in the sentences: Q17) “I became more _____ in this course compared to other English courses”, Q18) “I became less _____ in this course compared to other English courses”. The follow-up question 19 asked the students the reason why they thought that way. Typical open-ended questions 23 to 28 included English improvement elements, the

best/least course aspects, differences/changes from other courses, and suggestions: Q23) “What improvements did the course make in terms of English learning?”, Q24) “What were the best aspects of the course?”, Q25) “What were the last satisfactory aspects?”, Q26) “Are there any differences/changes from other English courses?”, Q27) “Are there any differences/changes of myself from other English courses?”, and Q28) “Are there any suggestions for the course?”. Table 5.3 shows the responses coding results of Q17 to Q19.

Table 5.3
Response Results of ‘More/Less’ Blank Sentence Completion Types

Q17 More _____		Q19 Reasons why	Q18 Less _____	
categories	cases	(Because (of) ---)	cases	categories
•active (11)	<i>active (7), efforts to do well (2) and reflected my English ability(1), voluntary (1)</i>	<ul style="list-style-type: none"> • <i>A lot of activities; Many chances to speak in English and to give presentations; I was forced to try English speaking,</i> • <i>Atmosphere to work together in a group; Everyone was great and helped me so my willingness sprang up,</i> • <i>This course became a stimulus to make more efforts although I have been easygoing about English so far.</i> • <i>I have to make an outcome like presentation so we need to find more materials. *Therefore unavoidably input was less than in other English class; When I was preparing the class, I need to learn more.</i> 	<i>hesitated in speaking (1), shy(1), bored (2), speaking Korean (1), negative (1), remain still (1), Indolent about my English ability (1), *input(1)</i>	<ul style="list-style-type: none"> ••affective filters (4); <i>negative, burden, fear, repulsion,</i> ••bored (3), ••passive (3); still, passive,

•confi- dent (5)	<i>confident</i> (5),	•Many opportunities to speak and use English (2) and I was okay to speak easy and plain English,	<i>burden</i> (1), repulsion about English (1)	<i>hesitant</i> ,
•pro- fessional (4)	<i>professional</i> (1), <i>proud of my major</i> (1), well aware of my major (1) and my field related English expressions (1)	•Communicative way of English course, • <i>Just do the major</i> (discipline) <i>studies</i> , •I became better at listening and speaking but *grammatical error was not corrected.	I didn't come to use Korean (1), <i>*time to perfect prepare</i> (1), *English grammar (1)	•speaking Korean (2), •indolent about English ability (1),
•inter- ested (3)	<i>interested</i> (2), enjoying English (1)	•The course needed direct participation not just rote learning, •Efforts to speak in English and the course was not the test preparation focused course, so I could come up with overseas job seeking and overseas travelling.	<i>passive in presentation</i> (1), fear about foreign countries (1)	•*input (1), •*grammar (1), •vocabulary* (1), •*knowledge
•speaking (2)	<i>familiar with English speaking</i> (2)			about TOEIC (1),
•useful- ness (2)	<i>knowledge-able</i> (1), usefulness (1)	•Not the TOEIC focused course, •*I don't know what is left after the course time passed by.	<i>bored</i> (1), knowledge about TOEIC (1)	•time to prepare* (1),
		•*Focused on speaking so I felt lack of vocabulary.	<i>vocabulary</i> *(1)	

Note. *mark implies the inclusion of negative connotation. Students' own writing was presented in italics while translated scripts from Korean into English were not presented in italics.

As shown, the students reported that they became more 'active', 'confident', 'professional', and 'interested' with 'more speaking' and 'usefulness'. On the other

hand, there were some concerns about less grammar, TOEIC knowledge and vocabulary input attributed to what they viewed as a speaking-focused class. However, it can be highlighted as an advantage of our trial of GHEC that students could reduce their affective filters about English such as ‘negative’ feeling, ‘burden’, ‘repulsion’ and ‘fear’. That could result in less ‘boredom’ and ‘passiveness’ including hesitation. These results were also revealed in their learning logs: “all members were enthusiastic” (Dental hygiene St. Ji, Learning log), “Frankly, I was negative about it at the beginning. But more and more as we did it, it was interesting doing with my group.” (Dental hygiene St. Ri, Learning log), “I was reluctant to do this course before but I came to achieve confidence and experience I can make a presentation in English” (Translated, Hospital management St. Ah, Learning log). The colleague observer mentioned these changes in attitude as well.

6.4 Reflection: Implications

This chapter and the next answer the research question 3. “What could be reflected and suggested for the next upgraded course development?”.

6.4.1 Students’ Reflections

GHEC students’ reflections can be seen through their learning logs. One may refer to students’ learning logs examples in Appendix M. As the teacher/researcher/course developer, I wanted my students to reveal what they think and feel about the course and themselves through such questions as “How do I

think/feel about this?”, “What have I learned about myself?” and “How can I use this to plan for the future?”. As a matter of fact, I had some concerns, but my students alleviated them although I did not ask directly.

My first concern was the difficulty level of the content and the speaking tasks they encountered. I hoped it could be just challenging not too much hard to manage. Ah, a student from hospital management department didn't like this action research course before the course began but she acknowledged that she could build up her confidence with English presentation experience. In the first Ebola unit, students expressed difficulties, strangeness, and even initial reluctance but they soon showed their attitude changes, which may have resulted from topics like Ebola, anatomy, hospital and the OET speaking tasks. As I turned the pages of their logs, I saw their descriptions of the lessons go from being described as “unfamiliar, confusing, negative and hard” to “fresh, refreshing, unique, unusual, special, meaningful, useful, professional, enjoying, fun, exciting and interesting”. Conversely, a student from dental hygiene department said, “As I usually acquire dental terminology in English, I was rather at a loss for what to call them in Korean. Still, I came to feel much easier when I made English expressions based on my dental knowledge” (translated).

The second concern about GHEC was students' domain combination and its related tasks. Several domain instructors recommended not mixing all the eight domain departments for more focused course content. I was worried about the harmony of much different domains even within a healthcare field. Even though human anatomy was very important to them, different majors focus on different aspects of it and the students cannot know all of them. As an idea, I arranged a

micro-teaching task for each domain-focus anatomy part. In such a kind of information gap task, our students had to restudy their part in their domain group, and spread to teach their expert knowledge to other domain students and to share mutually. Many liked the activity saying, “good and interesting” and there were many opinions that it was great and fun to know about what other students learn in their departments. They commented “easy teaching but hard learning”, “more learning to teach”, “fresh interest to learn other body systems” and “nice variety of other departments” including hospital tour. A physiotherapy student stated that it could be good to study knowledge on other domains in case they work together with other departments.

Thirdly, I was concerned about their team/pair directed role-play in which I played a facilitating role as just a provider of relevant materials. I wondered if they could do it well themselves. Let us listen to their voices:

(30) *I learned about my major in details. For example, workplace, what they do, what kinds of departments related to us, each function of department, and other kinds of jobs related to us and so on.* (Pathology St. Joo, Learning log)

(31) *I will apply this role-playing which I did to my future workplace where I may meet foreign patients so that it would be helpful to treat them.* (Translated, Physiotherapy St. Mi, Learning log)

(32) *I could discover another me in making a presentation and preparing materials.* (Pathology St. Song, Learning log)

(33) *If somebody asks me to explain in English about my major, I can do it.* (Translated, Hospital management St. Kil, Learning log)

On the other hand, a radiology student reported that it seemed really nice to experience the future jobs, but he felt a little distance between the given situation and their real job. It might be attributed to a gap between OET speaking tasks in Australia and the expected situation in Korea.

Apart from my concerns, there were surprising comments on students' target consciousness which can be connected to intrinsic motivation and willingness to study. Joo from pathology department, who was interested in immunology, mentioned that she came so close to her dream through the Ebola unit and role-play unit that she could use the experience to decide her future and make a plan for her future. Se from optometry department said, "I got to know that the field trip of tour was so good. With my feeling that my purpose is getting definite, I will try any internship or field trip relating to my occupation. . . . I want to be an expert like them" (translated). Further, some students reported that they searched for their domain-related technical vocabulary and our themes more even after the unit ended. Mi from physiotherapy department made her determination firmly that she would cultivate her competency by trying to express the new knowledge of upcoming discipline courses in English like she did in this course. Nearly all students had a complaint about lack of time in common and such petition may show their eagerness to do better.

6.4.2 Teacher's reflection

The course designer/instructor, 'I' reflected as follows in my teaching logs. Some reflections are here cited along with key implication themes bolded, for which original chronological writing were mixed, edited, and rephrased.

(34) • **The first experience of ESP can make general learners/a teacher perplexed but freshly challenging.**

Today was the first day of the GHEC which I designed. I was looking forward to seeing it. I am still nervous even after finishing the first unit. I feel like I first appeared on the theater stage in my life time. I made an ESP stage debut. . . .

This course is going to be kind of a challenge to me as well as to my students. Most of the students looked somewhat cautious and a little bit hesitant about the strange class content and atmosphere. But I could realize they were just warming up and awakening their learning curiosity and potentials. CNN Student News was a learning booster for them and so were the related hand-outs. . . .

I was amazed at how many of my students are active learners. Unlike in previous TOEIC focused teacher-centered lessons, they seemed pretty interested in the Ebola stories prepared today. Although they sometimes showed signs like “what am I doing? and what am I gonna do?”, they soon put themselves into their boots with some help from a peer or me, mostly in their pair and group.

(35) • **Facilitative teacher and team-directed tasks can make ESP learners more active.**

After the first class, I was determined that I should do my role more as facilitating (being passive): I had to wait for my students to build their teamwork, let me not interfere much. As I know myself, I am rather a layman in the healthcare field. I can arrange everything behind and by them for their stages. I could find such a position not false. After giving the guideline about tasks, the more teaching I do, the more students looked yawning with their eyes and even mouths; their eyes were telling me like ‘we need more time for us so please make your teaching brief’. They were happy and busy carrying out given tasks in their pairs and teams. Whenever needed, I was there near them.

Actually I could see a couple of students a bit absent-mindedly participating in our class. Their attitude was irritating me a little all the way through the class and hurting my confidence and conviction that all my students would like this ESP-oriented course. I knew exactly why

they showed such an attitude: they thought TOEIC prep is more desperately needed. But my uncomfortable feeling for them disappeared when they opened their eyes and mouths widely through the tasks. Although they were not forced to produce a final speaking outcome like presentation and role-play, they visited my office on purpose to show their speech with slides on their smartphone and described the tasks as “nice and helpful” in their learning logs. Honestly, I was not interested in their slides with some hospital equipment but I was amazed at their speaking trial and their active efforts in teamwork. Some students were too shy to present their output in public so they dropped by my office for their presentation and role-play. And I could see and feel their pride in what they were doing in English with smiles.

(36) • Tailored ESP content enabled learners to elicit their background domain knowledge and interest productively.

I had had a troublesome question when I was in charge of speaking classes such as English conversation, TOEIC speaking and OPIC as I saw some apparently introverted students: what if people really don't like talking in whatever languages and don't want to speak sincerely about a certain topic or theme? One of the best ways to elicit students' speaking in a foreign language may be to give topics or themes that stimulate their background knowledge or about which they have much to say.

When I cast Ebola to my students, they reacted vigorously and differently according to what they were interested in. Pathology students dealt with the spread of virus and immunology based upon their prior knowledge. I was somewhat reluctant to even see Ebola photos because some included 'gory' scenes uncomfortable to look at, but my students dealt with them unreservedly. When I presented OET speaking samples, the students of each domain referred to them, reprocessed them in their team-directed way, and could produce their own speaking outcome. More than I expected sometimes, they performed their tasks 'beautifully' and I could discover they were “enjoying” (Pathology St. Sung, Learning log) the content such as Ebola symptoms, Snoezelen room, PET CT, bruxism, arthritis and so on.

CHAPTER 7

SUGGESTIONS AND CONCLUSION

GHEC was developed under systematic planning, implemented as an action model, evaluated with profound observation, and reflected from several perspectives. These processes were carried out within an initial cycle of this action research of a natural setting. What would be the next stage? Now begins another cycle of ongoing research. It is the time to move on to the re-planning phase with suggestions. Following it, this present study concludes with signs of changes it induced.

7.1 Re-plan: Future Course Action Plan

Before this chapter begins, it is necessary to reconsider the needs of an ESP course for healthcare field students in Korea. Without the necessity for ESP, suggestions for re-planning would be ‘a good-for-nothing’. As shown in the previous NA results and students’/teacher’s reflection, an ESP course for the students can be deemed as significant and indispensable. Nonetheless, it is not recommended as a compulsory uniform college English course like TOEIC courses here. If so, the course could lose its ESP identity. Although the specific context matters, I suggest GHEC as a selective course in accordance with departmental and individual needs. Further suggestions are posited.

Firstly, the course can be more effective and efficient for more than intermediate high level of English learners, though less than intermediate level of

learners may deal with their ESP content in a more guided way rather than self- or team- directed way.

Secondly, one of the general goals of the course can be to get the students able to deal with a foreign patient, an allied health professional, a doctor or a nurse – in a Korean hospital or other healthcare situations in Korea. This implies that the course is more likely EOP-oriented than EAP to prepare for their future target situations.

Thirdly, NA results in our context suggest a course focusing on speaking. To elicit a more vigorous speaking outcome, the discipline-related content can be used as effective input through listening and reading. Writing also can be primary output practice for the final speaking outcome. Many students were observed to write first and then speak during GHEC. Thus, the beneficial effects of focus on speaking can be multiplied along with the whole-language approach.

Fourthly, the content specificity of the course could depend on the discipline combination and students' academic years for the class. The class covering all healthcare college discipline departments like our GHEC may also deal with wide-angled content considering the level of students' domain-specialized knowledge and other students' discipline-domains. A few students in GHEC expressed difficulty in OET speaking sample themes since they were in the second year of their studies when they had just studied a few of their major-related subjects.

Fifthly, aside from the whole-content specificity, smaller-content specificity within a general course theme could be better to allow some degree of learner autonomy, which leads to self-/team- directed learning in an accelerative fashion. For example, students can decide their role-play themes and scenario in a pair- or

team- directed way. Likewise, they can investigate their focus area in depth according to their disciplines within a big theme picture. In an Ebola poster presentation task of our GHEC, if I had had the same discipline students' team rather than a mixed one, they could have had more specific content based on their team expertise. However, in the case of GHEC, I chose to build up a harmonious teamwork of variety and it was intended to work as the beginning warm-up for more specific and autonomous task that were coming up as the unit was the first of GHEC.

Sixthly, in terms of methods, TBLT or PBL is strongly suggested for speaking focused, wide-angled ESP course. In particular, the healthcare sector is even more vital in that it is engaged in a variety of specialized tasks and problem-solving situations. Simulated tasks can be helpful for target-situation application. In a more narrowly angled course or with more specific tasks in a course, students can develop their tasks into a long-term project or a teacher can arrange project-based learning (PBL) for a specific theme from the course beginning.

Seventhly, for efficient time management for each class unit, it might be better to use a kind of blended learning with a learning management system or e-learning over the internet, which the observer colleague also suggested. In GHEC, I intended to allow the students to perform their tasks almost only during the class since it is necessary to observe the process of their task-performing dynamics as well as their outcome. As the units passed by, I could see many of the students preparing by looking up some words and their task-related content autonomously. Having students do some of the works in advance of a given unit through an on-line system could allow for more time to focus on more outcomes and have the students ask more prepared questions.

Lastly, an ESP practitioner, if not a team-teaching with a content instructor, may as well carry out more thorough NA and reflect the results through ongoing NA before, during and after the course. Admitting the roles as both facilitator and learner, one can try one's best to elicit and incorporate students' prior knowledge and English-speaking potentials, rather than to teach something extra. It seems to be working that an ESP practitioner demonstrates his/her flexibility in selecting the specificity of topic/themes, individual/pair/group work, task/problem/project, and single discipline team/mixed team, etc. Also, for a successful ESP course, it is crucial to prepare a variety of relevant authentic materials so that students can extend their various needs, focus and interest. This is not an easy job for a healthcare layman, but it is worthwhile researching and communicating with relevant people. During the class in reality, it is particularly important to answer students' questions about making English sentences right. Don't panic. They already know a lot of technical words from their majors. They just need help to connect the words in correct English sentences or texts. Looking back to my class, it was a good way to use the 'Socratic dialogue method' for our students to gradually build up their sentences themselves.

Such suggestions can be applied to an undergraduate EMP-oriented ESP course including nursing English and medical English. In re-planning an upgraded GHEC next time in our local context, the following is suggested plus the above suggestions:

- The mixed GHEC course can have four modular formats like the first GHEC version. The content specificity can be gradually increased from general healthcare to more specific healthcare discipline and task level.

- Module 1. ‘Healthcare news and my study’ can involve suicide, diabetes, pneumonia reporting increasing death tolls³⁷ as well as Ebola or MERS³⁸. Hot issues are recommended in keeping with modern needs and students’ interest. Poster presentation and conference presentation simulations can be useful activities. Students can connect the given topic with their study area and they can have reading practice with typically frequented texts from their textbooks or key articles such as ‘reading comprehension with medical statistics’.
- Module 2. Human body and medical terminology can cover from general anatomy and organs to specific focus body parts using several types of information gap activity and a micro-teaching task. A human-body exhibit can be held with students’ English explanations. A medical-terminology lesson can be included here along with English pronunciation practice of such terminology. A quiz show can make it fun.
- Module 3. Health and hospital can expand from visiting the hospital to consulting with patients in the hospital division related to their major. Guided lessons about symptoms and each situational dialogue sample can

³⁷ <http://www.g-health.kr/portal/bbs/selectBoardArticle.do?bbsId=U00186&nttId=315669&menuNo=200509&language=&searchCndSj=&searchCndCt=&searchWrd=&pageIndex=1&vType=>

³⁸ MERS-CoV (Middle East Respiratory Syndrome Coronavirus) is the hottest news topic in Korea these days (June, 2015).

be necessary for the next module. The tour-guide task and practice through quizzes can consolidate the students' knowledge. Students' intensive interest area in a hospital can be explored through making an English video clip with some interviews with target field workers. Their dream hospital can be introduced as well.

- In Module 4. In Medical Korea and my job, students can be more autonomous in a pair/team directed way. Simulated or creative role-plays can be great activities for pairs and teams. In this final module, learner autonomy can bear fruit at its peak. A teacher can offer some related materials and situations recommended by domain instructors: e.g., students from the emergency medical service department are asked to do CPR in English as a representative model. As for medical Korea concept, students can refer to Korea Health Industry Development Industries (KHIDI)³⁹, choose their research topic from there, and give their presentation. In this module, teacher's assistance is considered as important as students' active and thorough preparation.
- Next GHEC can use the school e-learning system and/or an instructor's internet blog to upload materials and students' speaking outcome.

³⁹ <http://www.khidi.or.kr/eps>

7.2 Spread of ESP: ‘Signs of Changes’

This action research project has blown a wind of change. The study fulfilled its duty of action research as change agent and professional development as expected. In fact, this is the start of changes happened while conducting the present research. I have been in the middle of changes for English education although it is a long way to go further and only one cannot change the whole. This study has also been in the middle of changes to take on new significance.

In the incubation period of this study, I started with the hope for the ‘proof of what I can’t see but I expect’ as a seed. From the seed have come forth the fruit as signs of change through and after the study. The first big fruit was the next cycle of our action research after the first cycle of course development and implementation, which could not be prophesied at all in that I was not empowered in curriculum decision making. And so my hope was realized in a different way.

I hoped the college would offer GHEC as a selective, but I didn’t take any official actions on it. I just delayed my actions until I finished my dissertation. However, unexpectedly, GHEC was suggested and supported as an extra-curricular intensive course during winter vacation by an enterprising professor from Emergency Medical Service Department. With the grant the professor was awarded, I could perform the full course of 60 hours collaboratively with a foreign instructor of English who welcomed my ESP idea and research. I have a lot to talk about it with joy and excitement but the story about the vacation course may need to be continued elsewhere.

Another sign of changes came from the students. Influenced by me, a student from Emergency Medical Service department gave an official presentation of CPR (cardiopulmonary resuscitation) in English in their academic conference. She was part of a TOEIC Speaking prep course of college English, in which I gave an assignment of free topic presentation with some examples relating to disciplines. Also, some nursing students wanted to join the GHEC course when I introduced my idea of GHEC and they participated in the vacation course.

More recently, furthermore, the head professor of the nursing college faculty called me to discuss vacation English conversation programs and ‘Nursing English Conversation Course’ next 2016 school year. It was a sudden surprise. I had many questions to ask of her such as “why did you call me?”, but without enough time to say, she mentioned that her nursing college needed to change the college English curriculum in keeping with the changed educational direction of the school management. We just talked briefly about the possibility of the course. Amazed at the news, I didn’t know how to respond to her offer properly. I am still curious about the source of the call. It is also surprising that the Nursing College rather than Healthcare College contacted me.

What are important at this point in time are signs of changes for my professional development, for my students, and for my school. What I couldn’t see during incubation approached with the sprouting the seeds of the proof of hope. More changes are coming from many voices engaged in this study.

7.3 Conclusion

This study has sought to demonstrate the need for an ESP course and its systematic inquiry when developing it in a healthcare college in Korea of an EFL setting starting from critical response to existing college English education. Not merely its development but also implementation was conducted using the action-research paradigm adopted concurrently with a conceptual framework of ESP course development. Consequently, such an approach engendered signs of changes toward the spread of ESP courses in one genuine situation which can meet the needs of the students, the professors, the school, the target employment workplace and the nation concerned.

However, this new attempt of my context-dependent action-research project for my doctoral dissertation has its limitations. First, accompanied by the nature of action research happening in one single place, the results of the current study could not be generalized widely to other contexts of ESP. It is recommended with caution that any application of this study's findings be considered within given contexts. Second, although there was the wealth of both quantitative and qualitative data collected in a mixed method, it was far beyond my control to synthesize all the data, inevitably resulting in my sometimes being biased in selecting representative cases. Additionally, the researcher's multi-roles tended to make the identity rather complex somewhere between teacher insider's subjectivity and researcher outsider's objectivity. It seemed that too much mixing of data and the researcher's identity can create a complicated study. Lastly, students who took the GHEC were informed of the nature of the course unexpectedly just before the course began and some of them

must have had burdens. As a result, although ethical considerations were satisfied on the surface, there can be a minority who might have sacrificed their opinions under the shadows of the majority.

Despite these limitations, this study seemed to achieve the goals established at the beginning: First, the study put the need for change into action in a bottom-up way with the emancipatory potential of an inside instructor/researcher; Second, through the study, I could listen to the various voices, to communicate openly and to understand them better; Third, the study enabled my students and me to have our course containing our voices; Fourth, this study also seemed to verify to some degree that ESP can work not just as an approach but as a solutional clue; Finally, the study gave me chances to learn more and develop professionally.

In addition, the present study has sought to answer the questions about (1) how the ESP course for EFL healthcare students can be tailored through what kinds of NA, what types of syllabus design, and what characteristics of material preparation, (2) after the course implementation, how the students taking the course reacted to the tailored GHEC, and (3) suggestions for further course. Through multidimensional NA of students, domain instructors, and graduates, the tailored course comes to feature a wide-angled EOP-oriented pre-experience course under a competency-based curriculum of the educational context of the school. The syllabus had a modular format of four modules – (1) Healthcare news and my study, (2) Human body and medical terminology, (3) Health and hospital, and (4) Medical Korea and my job – narrowing down from broad and general themes to more specific and specialized themes. Also, it contained the eclecticism of several syllabus types such as content-based, task-based, and speaking-focused with variable

elements of active learning, self/team-directed learning, and critical pedagogy. Students' course objectives were described as 'can-do' statements in terms of confidence/self-efficacy in using English, familiarity with general medical English contexts and medical vocabulary repertoire, self/team-directed task completion, target field role-plays, and the improvement of English speaking proficiency from beginner to intermediate level. In accordance with the syllabus, four representative lesson plans were constructed to implement four grounding units among four modules including a series of tailored tasks of Ebola poster presentation, anatomy micro-teaching, hospital tour guide, and my job field role-play.

In preparing the materials for GHEC, a variety of materials were prepared in line with each unit since existing ready-made materials could not be sufficient to meet our tailored content and tasks. Based on various research on relevant materials with the principle of authenticity, audio/visual aids, and realia, I provided the students with CNN Student News with authentic article photos about Ebola, different anatomy parts handouts for the micro-teaching task of different discipline-domains, genuine hospital brochures, and OET speaking sample tasks for role-plays for both the whole healthcare class and each different domain.

Set firmly upon such development, GHEC was put into action for twenty-four second-year students assigned randomly, and as a result, it was discovered that the students had a positive reaction as seen in their active participation through course evaluation survey, learning logs, and class observation. Our course objectives could be achieved smoothly with an average satisfaction level of 3.9 out of 5, showing students' high valuing especially of the GHEC materials and tasks. However, class time management was pointed out as an issue to be settled.

Subsequently, another cycle began from future course re-planning suggestions after the initial action-research cycle with ESP course development and implementation. Some pedagogical implications through students' and teacher's reflections were presented: (1) ESP can perplex general learners or a teacher, but also freshly challenge, (2) A facilitative teacher and team-directed tasks can make ESP learners more active, and (3) Tailored ESP content enabled learners to productively elicit their background domain knowledge and interest. Further, constructive suggestions for upcoming upgraded GHEC and similar courses were made, including considerations of students' entry level of English proficiency, content specificity issue, class combination of discipline departments, hospital situational goals, speaking boost with the whole-language approach, flexible adoption of TBLT/PBL/PBL with tasks, problems and projects, e-learning system for efficient time management, and ESP practitioner's roles as facilitator and learner. More detailed suggestions were made for the next GHEC in our context.

My final words on this last page of the current study are that this action research with an alternative ESP course could not be fulfilled only with my efforts but also with a number of voices from students, professors, graduates, target-situation workers, which are echoing even now in my heart. As an ESP practitioner/researcher, I hope that the changes toward ESP invoked here will evolve continuously for sustainable ESP development and additionally, effective and efficient tailored ESP courses can be come true purposely in the EFL setting along with other general college English courses.

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Appendix A

Needs Analysis Questionnaire for Students

(Translated from Korean into English)

IRB No. 1312/001-001

Valid until November 21, 2014

Questionnaire on English Course of Healthcare College (For Students)

Hello.

This questionnaire is part of needs analysis devised to develop General Healthcare English Course, which is a tailored English for Specific Purposes (ESP) course for healthcare fields. It consists of questions about healthcare related discipline-majors and needs for English learning. The responses will be used only for research purpose to develop a course and improve English education. Personal information collected through this survey is guaranteed to stay strictly confidential according to ‘Personal Information Protection Act’. Those who agree to participate in this survey may click ‘start’ to proceed to the next step. You may withdraw the survey halfway and there is no disadvantage even if you do not participate in it. The participants who respond to this questionnaire will be given a small gift voucher. Thank you.

Soo-Jin Shim

The researcher & College English Course instructor

“This research has obtained the approval by IRB of Seoul National University
(IRB No.1312/001-001, Approval date: November 22, 2013)”

Section B. Students' English Learning & College English

10. I think English learning has focused most on _____ skill so far (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
11. I think I have felt lack of _____ skill in English learning so far (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
12. I think the most difficulties in English learning are _____ (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
13. I don't think I have any problem in my future career, even if I don't study English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
14. I think English learning is currently important to me.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
15. I think my English proficiency level is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
16. I think my anxiety level about English is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
17. I will study English until I achieve my goals necessary about English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree

18. I think my motivation level about English leaning is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
19. I think I have been mostly affected by _____ in my English learning.
- ① Teachers ② Friends ③ Upperclassmen
 ④ Learning contents ⑤ Teaching methods ⑥ Other
20. I am currently studying English for _____ (including English classes).
- ① 0 hour ② less than 2 hours ③ less than 4 hours ④ less than 6 hours
 ⑤ less than 8 hours ⑥ less than 10 hours ⑦ Other (specify): _____
21. I think the goal of my English learning is _____.
- ① To get a job abroad
 ② To get a domestic job
 ③ To go to the graduate school
 ④ To get credits of mandatory English courses
 ⑤ Because of my favorite subject
 ⑥ To increase my English scores of TOEIC, etc.
 ⑦ Other (specify): _____
22. I think the objective of an English course at Healthcare College should be _____.
- ① To enhance general basic English conversation ability
 ② To enhance the ability to read and understand domain-related books and vocabulary
 ③ To prepare for English tests such as TOEIC or OPIc for employment prep
 ④ To improve practical English ability needed on the job (e.g., my field related- English conversation, reading, or writing, etc.)
 ⑤ To cultivate the understanding of Anglo-American culture and liberal arts as a general education subject

⑥ To enhance current affairs-oriented English ability including news, magazines, and newspaper articles, etc.

⑦ Other (specify): _____

23. I have been satisfied with College English (TOEIC-centered) Courses until now.

- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree

24. I think College English (TOEIC-centered) Courses have been helpful until now.

- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree

25. I desire to take College English (TOEIC prep) Courses during _____. (Check all that apply)

- ① 1st grade ② 2nd grade ③ 3rd grade
④ 1st grade vacation ⑤ 2nd grade vacation ⑥ 3rd grade vacation

26. I desire to study a College English Course (TOEIC prep) for _____ per week.

- ① 0 hour ② 2 hours ③ 3 hours ④ 4 hours ⑤ 5 hours

27. As to English conversation other than TOEIC, I want to take _____.

- ① TOEIC Speaking Preparation ② OPIC Preparation
③ Basic English Conversation ④ English Presentation ⑤ Nothing

28. Please make any suggestions about English course subjects to Healthcare College.

Section C. ESP Course: General Healthcare English Course (GHEC)

Unlike the existing general English courses, a healthcare related English course will be developed by incorporating your majors and English. This subject can include more specific English area reflecting your discipline content and situation. Your answers to the questions will be highly appreciated.

29. I think I need an English course subject associated with my major.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
30. I think I have no time to study English because of the burden on subjects relating to my major.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
31. Please write any English contents or activities which should be included in GHEC.
- _____
32. I have ever experienced difficulties in studying my domain subjects due to English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
33. I think the most important skill necessary in GHEC is _____ (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
34. With regard to my discipline domain, I wish I could be good at _____ in English.
- ① Reading original English textbook editions
② Reading news articles or reports
③ Presentation or PR
④ Technical vocabulary
⑤ English interview about my major
⑥ Situational conversation on my job field (e.g., hospital, laboratory situations)
⑦ Writing e-mails, reports, etc.

35. I think the most necessary English skill is _____ for my field employment (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
 ⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
36. I think the most effective teaching method is _____ for GHEC (Check all that apply).
- ① Teacher's lecture
 ② Team-based cooperative learning
 ③ Individual activity
 ④ Role-play (e.g., a foreign patient - a physiotherapist, a medical tour guide, etc.)
 ⑤ Work-field tasks
 (e.g., collecting a blood sample of a foreigner, discharge of a foreign patient, etc.)
 ⑥ Presentations
 ⑦ Translation from English into Korean
 ⑧ Vocabulary practice (e.g., quiz)
 ⑨ Other (Specify): _____
37. I desire to study GHEC (Check all that apply) during _____ (Check all that apply).
- ① 1st grade ② 2nd grade ③ 3rd grade
 ④ 1st grade vacation ⑤ 2nd grade vacation ⑥ 3rd grade vacation
38. I desire to study GHEC for _____ per week.
- ① 0 hour ② 2 hours ③ 3 hours ④ 4 hours ⑤ 5 hours
39. I think the proper number of students per class of GHEC is (up to) _____.
- ① 20 ② 30 ③ 40 ④ 50 ⑤ 60 ⑥ no matter
40. I expect GHEC to be taught by _____ instructor.
- ① Korean ② Native English-speaking instructor
 ③ Korean : Native (50:50) ④ no matter

Appendix B
Needs Analysis Questionnaire for Domain Instructors

(Translated from Korean into English)

IRB No. 1312/001-001

Valid until November 21, 2014

Questionnaire on English Course of Healthcare College
(For Instructors)

This questionnaire is part of needs analysis devised to develop General Healthcare English Course, which is a tailored English for Specific Purposes (ESP) course for healthcare fields. It consists of questions about healthcare related discipline-majors and needs for English learning. The responses will be used only for research purpose to develop a course and improve English education. Personal information collected through this survey is guaranteed to stay strictly confidential according to ‘Personal Information Protection Act’. Those who agree to participate in this survey may click ‘start’ to proceed to the next step. You may withdraw the survey halfway and there is no disadvantage even if you do not participate in it. Thank you.

Soo-Jin Shim

The researcher & College English instructor

“This research has obtained the approval by IRB of Seoul National University
(IRB No.1312/001-001, Approval date: November 22, 2013)”

Section A. Personal Background Information

1. My major is _____.
- ① Occupational therapy ② Hospital management ③ Optometry ④ Biomedical laboratory science
⑤ Radiology ⑥ Dental hygiene ⑦ Physiotherapy ⑧ Emergency Medical Service
2. My gender is _____. ① Male ② Female
3. Experience(s) of staying abroad, including studying abroad.
Period: _____ Country: _____
4. When I studied English language, I felt difficult in _____. (Check all that apply)
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation

Section B. Students' English Learning & College English

5. I think English learning is necessary to students.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
6. What do you think of the purpose students study English?
_____.
7. I think there has been a lack of _____ skill in students' English learning so far (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
8. I do not think that my students will be hindered from building their career, even if they do not study English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
9. I think English learning is actually important for my students.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree

10. I think my students' English level is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
11. I think the level that my students are feeling anxious about English is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
12. I think my students should learn English until they achieve their goals necessary about English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
13. I think my students' motivation level about English learning is high.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
14. I am interested in my students' English learning and give them advices.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
15. I think it will be proper for students to learn English for _____ (including the English course) per week.
- ① 0 hour ② less than 2 hours ③ less than 4 hours ④ less than 6 hours
 ⑤ less than 8 hours ⑥ less than 10 hours ⑦ _____
16. I think the goal of students' English learning is _____.
- ① To get a job abroad
 ② To get a local job
 ③ To go to the graduate school
 ④ To get credits of mandatory course
 ⑤ Because of their own favorite subject
 ⑥ To increase their English score of TOEIC, TOEFL, etc.
 ⑦ Other

17. I think the objective of an English course at Healthcare College should be _____.
- ① To enhance general basic English conversation ability
 - ② To enhance the ability to read and understand major-related books and vocabulary
 - ③ To prepare for English tests such as TOEIC or OPIc for employment
 - ④ To improve practical English ability needed on the job (e.g. their field related-English conversation, reading, or writing, etc.)
 - ⑤ To cultivate the understanding of Anglo-American culture and liberal arts as a general education subject
 - ⑥ To enhance current affairs-oriented English ability including news, magazines, and newspaper articles, etc.
 - ⑦ Other (specify): _____
18. I think College English (TOEIC prep) Courses have been satisfactory until now.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
19. I think College English (TOEIC prep) Courses have been helpful to students until now.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
20. I think the most suitable timing when students have to intensively study College English (TOEIC prep) Courses is _____.
- ① 1st grade ② 2nd grade ③ 3rd grade
 - ④ 1st grade vacation ⑤ 2nd grade vacation ⑥ 3rd grade vacation
21. I think it will be proper if College English (TOEIC prep) Courses are open for _____ per week.
- ① 0 hour ② 2 hours ③ 3 hours ④ 4 hours ⑤ 5 hours
22. As to English conversation other than TOEIC, I desire the course of _____ to be opened.
- ① TOEIC Speaking Preparation ② OPIC Preparation
 - ③ Basic English Conversation ④ English Presentation ⑤ Nothing
23. Please make any suggestions about English course subjects to Healthcare College.
- _____

Section C. ESP Course: General Healthcare English Course (GHEC)

Unlike the existing general English courses, a healthcare related English course will be developed by incorporating your majors and English. This subject can include more specific English area reflecting your discipline content and situation. Your answers to the questions will be highly appreciated.

24. Students have ever experienced difficulties in studying the subjects associated with their majors.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
25. In the subjects associated with their majors, what is the most difficult part for students to experience in English? _____
26. My students need an English course subject associated with their majors.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
27. Please write any English contents or activities which should be included in GHEC.

28. Please recommend to your students any English edition about their majors.

29. It will be helpful to students if the list of technical vocabulary from discipline-domain textbooks of English versions is applied in GHEC.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
30. I think the most important skill necessary in GHEC is _____ (Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
31. With regard to the discipline domain, I wish students could be good at _____ in English.
- ① Reading original English textbook editions
② Reading news articles or reports

- ③ Presentation or PR
 ④ Technical vocabulary
 ⑤ English interview about my major
 ⑥ Situational conversation on their job field (e.g., hospital, laboratory situations)
 ⑦ Writing e-mails, reports, etc.
32. I think the most necessary English skill is _____ for their field employment (Check all that apply).
 ① Listening ② Speaking ③ Reading ④ Writing
 ⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
33. I think the most effective teaching method is _____ for GHEC (Check all that apply).
 ① Teacher's lecture
 ② Team-based cooperative learning
 ③ Individual activity
 ④ Role-play (e.g., a foreign patient - a physiotherapist, a medical tour guide, etc.)
 ⑤ Work-field tasks
 (e.g., collecting a blood sample of a foreigner, discharge of a foreign patient, etc.)
 ⑥ Presentations
 ⑦ Translation from English into Korean
 ⑧ Vocabulary practice (e.g., quiz)
 ⑨ Other (Specify): _____
34. I think the most suitable time for students to study GHEC (Check all that apply) is _____. (Check all that apply)
 ① 1st grade ② 2nd grade ③ 3rd grade
 ④ 1st grade vacation ⑤ 2nd grade vacation ⑥ 3rd grade vacation
35. I think GHEC will be proper for _____ per week.
 ① 0 hour ② 2 hours ③ 3 hours ④ 4 hours ⑤ 5 hours
36. I think the proper number of students per class of GHEC is _____.
 ① 20 ② 30 ③ 40 ④ 50 ⑤ 60 ⑥ no matter

Appendix C
Needs analysis Questionnaire for Graduates
(Translated from Korean into English)

IRB No. 1312/001-001

Valid until November 21, 2014

Questionnaire on English Course of Healthcare College
(For Graduates)

Hello.

This questionnaire is part of needs analysis devised to develop General Healthcare English Course, which is a tailored English for Specific Purposes (ESP) course for healthcare fields. It consists of questions about healthcare related discipline-majors and needs for English learning. The responses will be used only for research purpose to develop a course and improve English education. Also, a follow-up telephone interview associated with this survey may be arranged under the cooperation and references of the university you graduated from. Please feel free to give your valuable opinions for the department and the healthcare field you were involved in. The participants who respond to both the questionnaire and the telephone interview will be given a small gift voucher. Personal information collected through this survey is guaranteed to stay strictly confidential according to ‘Personal Information Protection Act’. Those who agree to participate in this survey may click ‘start’ to proceed to the next step. You may withdraw the survey halfway and there is no disadvantage even if you do not participate in it.

Thank you.

Soo-Jin Shim

The researcher & College English instructor

“This research has obtained the approval by IRB of Seoul National University
(IRB No.1312/001-001, Approval date: November 22, 2013)”

Section A. Graduates' Background Information

1. My major is _____.
① Occupational therapy ② Hospital management ③ Optometry ④ Biomedical laboratory science
⑤ Radiology ⑥ Dental hygiene ⑦ Physiotherapy ⑧ Emergency Medical Service
2. My gender is _____. ① Male ② Female
3. I graduated from my university in _____.
① 2013 ② 2012 ③ 2011 ④ 2010 ⑤ other
4. I am currently working for _____.
(e.g. General hospital, Research institute, Graduate school, etc.)
5. My job duty at work is specifically _____.
6. I have stayed in an English-speaking country abroad for _____.
① none ② less than 6 moths ③ 6 months ~ 1 year ④ 1 year ~ 2 years ⑤ more than 2 years
7. My TOEIC score before graduation was _____.
8. My TOEIC Speaking level before graduation was _____.
① TOEIC Speaking level _____ ② Not applicable
9. My OPIc level before graduation was _____.
① OPIc level _____ ② Not applicable
10. When getting your current job, _____ was a requirement.
① TOEIC only ② Speaking only ③ Both ④ Neither ⑤ Other (Specify): _____

Section B. English Learning & College English

11. I think the most important skill necessary in English learning is _____
(Check all that apply).
- ① Listening ② Speaking ③ Reading ④ Writing
⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
12. How much do you use English in your workplace?
- ① Never ② Little ③ Somewhat ④ Much ⑤ A great deal
13. Please write down specifically when you felt the necessity of English at work.

14. With regard to career, please indicate what made you in trouble with English.

15. I do not think that the students of my school will be hindered from building their careers, even if they do not study English.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
16. I think English learning is important to the juniors of my school.
- ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
17. I think the objective of an English course at Healthcare College of A University should be _____.
- ① To enhance general basic English conversation ability
② To enhance the ability to read and understand domain-related books and vocabulary
③ To prepare for English tests such as TOEIC or OPIc for employment prep
④ To improve practical English ability needed on the job (e.g., my field related-English conversation, reading, or writing, etc.)
⑤ To cultivate the understanding of Anglo-American culture and liberal arts as a general education subject
⑥ To enhance current affairs-oriented English ability including news, magazines, and newspaper articles, etc.
⑦ Other (specify): _____

18. Please advise the juniors at school on English study.

19. Please make any suggestions about English course subjects to school for juniors' sake. _____

Section C. ESP Course: General Healthcare English Course (GHEC)

Unlike the existing general English courses, a healthcare related English course will be developed by incorporating your majors and English. This subject can include more specific English area reflecting your discipline content and situation. Your answers to the questions will be highly appreciated.

20. Our juniors need an English course subject relating to their discipline-domain.
 ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
21. Please write any English contents or activities which should be included in GHEC.

22. I have ever experienced difficulties in my workplace due to English.
 ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
23. I think the most important skill necessary in GHEC is _____ (Check all that apply).
 ① Listening ② Speaking ③ Reading ④ Writing
 ⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation
24. It would be useful to apply the vocabulary list to the course by extracting technical vocabulary from discipline-domain textbooks of English versions.
 ① Strongly agree ② Agree ③ Neutral ④ Disagree ⑤ Strongly disagree
25. With regard to my major, I wish I could have been good at _____ in English while at my college.

- ① Reading original English textbook editions
- ② Reading news articles or reports
- ③ Presentation or PR
- ④ Technical vocabulary
- ⑤ English interview about my major
- ⑥ Situational conversation on my job field (e.g. hospital, lab situations)
- ⑦ Writing e-mails, reports, etc.

26. I think the most necessary English skill is _____ for my field employment (Check all that apply).

- ① Listening ② Speaking ③ Reading ④ Writing
- ⑤ Grammar ⑥ Vocabulary ⑦ Pronunciation

27. I think the most effective teaching method is _____ for GHEC (Check all that apply).

- ① Teacher's lecture
- ② Team-based cooperative learning
- ③ Individual activity
- ④ Role-play (e.g. a foreign patient - a physiotherapist, a medical tour guide, etc.)
- ⑤ Work-field tasks
(e.g. collecting a blood sample, discharge of a foreign patient, etc.)
- ⑥ Presentations
- ⑦ Translation from English to Korean
- ⑧ Vocabulary practice (e.g. quiz)
- ⑨ Other (Specify): _____

28. Please feel free to give any comments or suggestions about GHEC.

※ Thank you for your cooperation and your opinions. Please leave your contact number so that I can send you a gift voucher by lot. Besides, we may contact you for an interview regarding the questionnaire. If you accept our interview request, you will be given an additional gift voucher. Your contact number will be used for the foresaid purpose only, being kept confidential and it will be discarded after interviews. *Contact information (phone number): _____

Appendix D

Course Evaluation Questionnaire for GHEC Students

General Healthcare English Course Evaluation Questionnaire

*Major: _____ *Gender: male/ female *Grade: _____

*Recent TOEIC Score: _____ (Official/ Mock/ Special version)

*TOEIC Speaking level: _____

►Please indicate your feelings about the following aspects of this course.	Very satisfied	Some-what satisfied	Neu-tral	Not very satis-fied	Not at all satis-fied
1 Achievement of the course objectives	<input type="checkbox"/>				
2 Content relevance to healthcare field	<input type="checkbox"/>				
3 English input (e.g., listening, reading)	<input type="checkbox"/>				
4 English output (e.g., speaking, writing)	<input type="checkbox"/>				
5 Effectiveness of teaching strategies/methods (Learner-centered, Task-based, Communicative approach)	<input type="checkbox"/>				
6 Materials (e.g., handouts, CNN, video clips, etc.)	<input type="checkbox"/>				
7 Tasks and activities (e.g., poster presentation, tour, role play, etc.)	<input type="checkbox"/>				
8 Overall evaluation of the course	<input type="checkbox"/>				

►Please indicate whether you agree or not on the following statements.	Strong-ly agree	Agree	Neu-tral	Dis-agree	Strong-ly dis-agree
9 I, as a student of the course, participated actively in the course.	<input type="checkbox"/>				
10 The course stimulated my interest in English and my major.	<input type="checkbox"/>				

11	The tasks and activities contributed to an increase of knowledge/skills in my major.	<input type="checkbox"/>				
12	I think I made progress in English while performing given tasks	<input type="checkbox"/>				
13	I was prompted to speak English more through the course.	<input type="checkbox"/>				
14	The materials were relevant and useful for me.	<input type="checkbox"/>				
15	The assessment methods such as role-play and presentation were reasonable.	<input type="checkbox"/>				
16	This course is a necessary course for the healthcare college students here.	<input type="checkbox"/>				

17 I became more _____ in this course compared to other English courses.

18 I became less _____ in this course compared to other English courses.

19 Why? _____

►Please answer the following questions.

20 What were the major English learning experiences in this course? (Check all that apply.)
 Listening, Speaking, Reading, Writing, Vocabulary, Grammar, Pronunciation, Other _____

21 Which task/activity was most interesting and conducive to you? (Check all that apply.)
 Poster presentation, Expert's micro teaching (anatomy information gap), Hospital tour, My field role play (OET, tour guide, job fair, etc.)
 Other _____

- 22 Which materials were most interesting and conducive to you? (Check all that apply.)
Ebola, Anatomy, Hospital tour materials (brochure, PR and Medical Korea video clip), Role-plays materials (OET sample, Healthcare jobs in U.S., etc.) Other _____
- 23 What improvements did the course make in terms of English learning?

- 24 What were the best aspects of the course?

- 25 What were the least satisfactory aspects?

- 26 Are there any differences/changes from other English courses?

- 27 Are there any differences/changes of myself from other English courses?

- 28 Are there any suggestions for the course?

Appendix E

Interview Protocol for Domain Instructors

Interview Schedule	
Interviewee ID: _____	Intended duration: _____ mins
Date: _____	Interview began: _____
Location: _____	Interview finished: _____
 Topic: English Course Design – ESP (This interview is conducted in a semi-structured way about the following themes based on the questionnaire which you responded to.) Regarding	
<ol style="list-style-type: none">1. Current English learning of students2. Correlation between domain related career and English learning3. Importance and needs of English4. College English Course5. ESP course: General Healthcare English Course (GHEC)6. Other opinions	

Appendix F

Informed Consent Form

(Translated from Korean into English)

Informed Consent Form for Research Participants

Subject: ESP Course Development and Implementation: Action Research for Healthcare College Students in Korea

Researcher: Soo-Jin Shim (College English Course instructor of A University and Ph. D candidate of Seoul National University)

This study is about the development of an ESP course for the students of a healthcare college. You are invited to take part in this study because you are a professor/student of the healthcare field. The researcher of Seoul National University, Soo-Jin Shim (Contact No. 010-4200-XXXX) will explain the study to you. The study will be performed to those who agreed to voluntarily participate in the study. It is important for you to understand the purpose and the background of the study before making your decision to take part in the study. You are kindly asked to read the following carefully. If necessary, you may discuss this matter with your family or friends. If you have any questions, please feel free to ask the researcher and she would be happy to answer them.

1. What is the purpose of the study?

The purpose of the study is to develop and implement a tailored ESP (English for Specific Purposes) course which can meet their special goals and needs associated with their majors and job-fields for the students of a healthcare college in Korea.

2. How many people are expected to take part in this study?

Around 1,000 students of the healthcare college and 30 domain instructors will participate in the questionnaire survey. Among them, 20 to 30 students and about 10 professors will be interviewed for the study. Furthermore, some graduates and staff working in the target healthcare field will take part in this study.

3. If I take part in the study, what process should I be in?

If you agree to take part in the study, the process will be as follows:

- a. You will be interviewed in relation to the questionnaire survey in which you already participated. You may freely reply to the questions.
- b. The interview will be recorded and it will take around 30 minutes.

4. If I want to stop participating in the study, what should I do?

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. If you want to leave the study, please tell the researcher immediately.

5. How long will it take for me to take part in this study?

It will take around thirty (30) minutes.

6. Are there any side effects or risks if I take part in the study?

There are no foreseeable side effects or risks by participation.

7. Are there any benefits to the participants?

There are no personal and direct benefits expected from the study. However, the information you provide will make a great contribution to developing the ESP course, which will in turn make you beneficial with the course in the school.

8. If I do not participate in the study, is there any disadvantage?

You are free not to take part in the study. If you do not participate in the study, there will be no penalty to you.

9. How will the researcher protect my privacy?

Your information will be strictly treated as confidential. When the information collected from you is published in any academic journal/society, your name and other personal information will not be used, but if requested by laws, your personal information may be provided. Also, any monitoring staff, inspectors and/or IRB of Seoul National University can access the study results without infringing the confidentiality of participants' personal information, in order to inspect the reliability of information/data and process of the study under the relevant law coverage. Your signature on this informed consent form will be regarded as your acknowledgement and approval.

10. Will I be rewarded for the participation of this study?

As a token of our gratitude, a small amount of gift certificate will be given (by lot).

11. How can I inquire about this study?

If you have any question about the study or any problem during the study participation, please contact the researcher listed below:

Name: Soo-Jin Shim Contact No. 010-4200-XXXX

If you have any question about your right as a participant in the study, please feel free to contact the SNUIRB (Contract No. 02-880-5153) at any time.

Consent to Participate in the Study

1. I have read and understood the information on the study, and I have discussed this with the researcher.
2. I have heard about its risks and benefits, and I have got the satisfactory answers to my questions.
3. I agree to voluntarily take part in the study.
4. I agree that the researcher collect and treat my information collected for the study under the coverage of the laws and IRB regulations.
5. I agree that the researcher treat my information for the study and also, I agree that the healthcare authority, college and/or SNUIRB access my information being treated as confidential, for the purpose of their inspection.
6. I understand that I may freely withdraw my participation in the study at any time and that I have no penalty or disadvantage from my decision of such withdrawal.
7. I agree that my responses are recorded by voice recorder and/or in writing.
8. I agree that my signature means I have received a copy of this consent and I will keep the copy until the end of the study.

Participant

Name : _____ Signature : _____ Date (mm/dd/yy) : _____

Researcher who received the consent

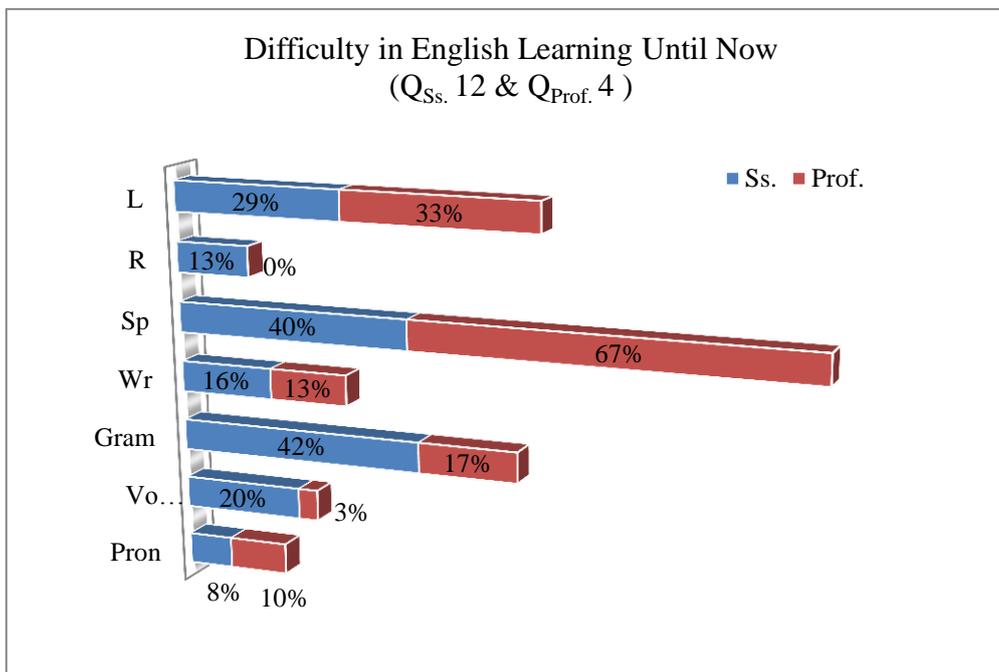
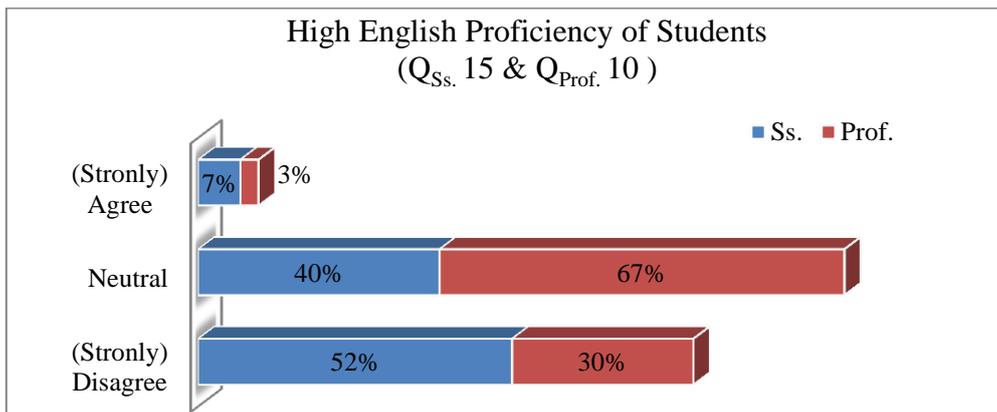
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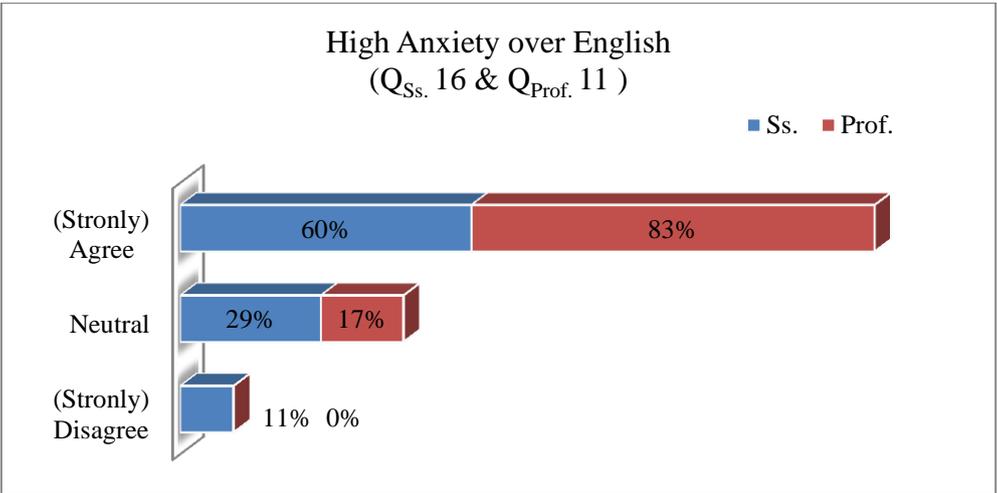
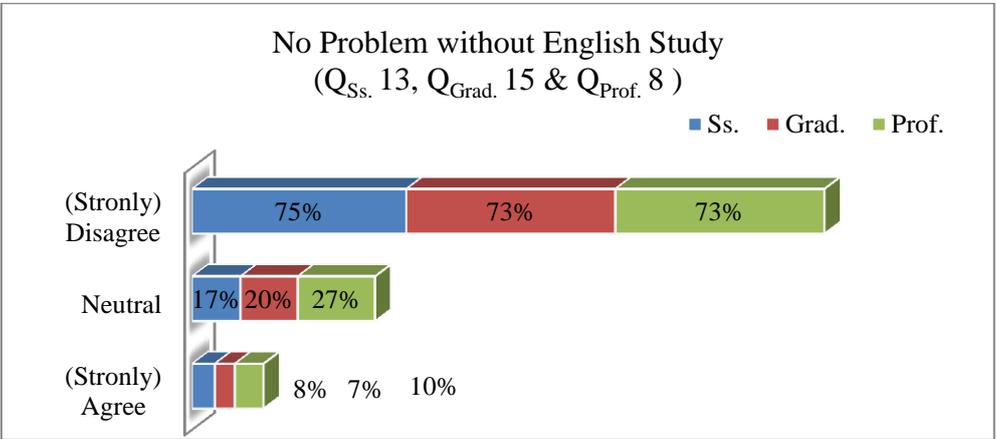
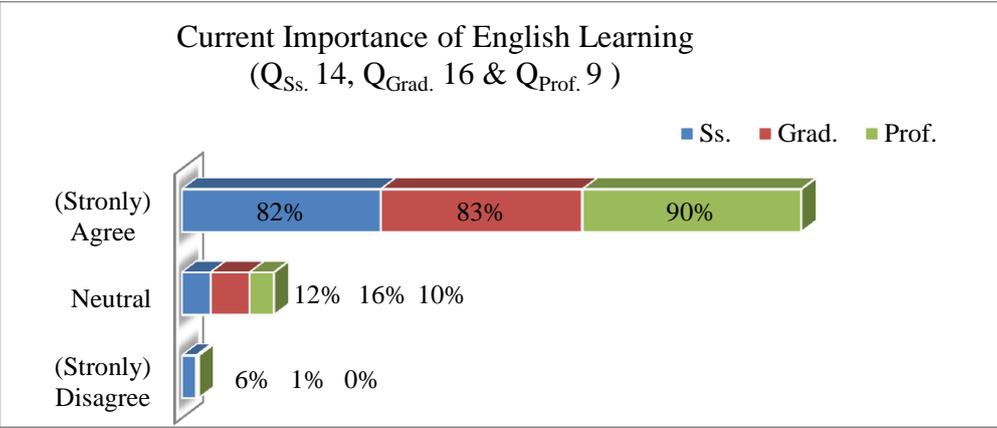
Researcher in charge

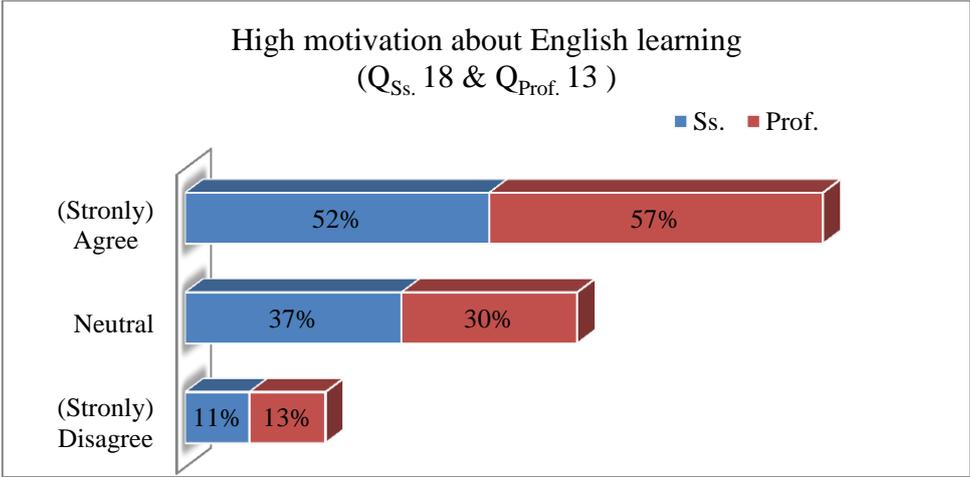
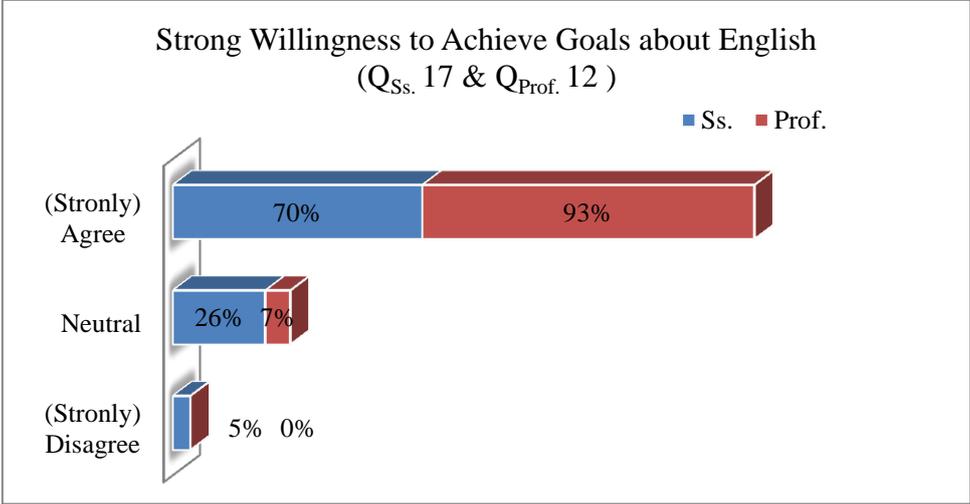
Name : _____ Signature : _____ Date (mm/dd/yy) : _____

Appendix G

Results Graphs of Needs Analyses Surveys







Appendix H

Students' Worksheets about Ebola

Useful Vocabulary about Ebola

※ Fill in the gap using given vocabulary.

mortality rate, replicated, quarantine, treatment, disease, bodily fluid/ body fluid, measles, nausea, transmitted, hemorrhage, contaminate, rule something out (or in), infectious disease, outbreak

- _____ : liquids produced by the human body, such as blood or saliva
- _____ : Blood leaking out of blood vessels may be obvious, as from a wound penetrating the skin. Internal bleeding (such as into the intestines, or after a car accident) may not be immediately apparent. adj. _____
- _____ : sick feeling, like you are about to vomit
- _____ : illness that are passed on easily from person to person
- _____ : An infectious viral disease causing fever and a red rash, typically occurring in childhood
- _____ : A sudden occurrence of something unwelcome, such as war or disease
- _____ : passed from one person to another n. _____
- _____ : number of deaths caused by the disease
- _____ : Make (something) impure by exposure to or addition of a poisonous or polluting substance
- _____ (n. v.) : A state, period, or place of isolation in which people or animals that have arrived from elsewhere or been exposed to infectious or contagious disease are placed
- _____ : remedy or cure
- _____ : repeated in exactly the same way
- _____ : exclude (or include) something as a possibility

Collocations <verb + noun>

have, suffer from | catch, contract, develop, get | die from, die of | cause | carry, pass on, spread, transmit | inherit | detect, diagnose | treat | combat, fight | control, manage | cure | prevent | eradicate, stamp out, wipe out + _____

※ Make your own sentences using the vocabulary above.

Ebola Virus Infection

(<http://www.webmd.com/a-to-z-guides/ebola-fever-virus-infection>)

Ebola is a rare but deadly _____ that causes _____ inside and outside the body. As the virus spreads through the body, it damages the immune system and organs. Ultimately, it causes levels of blood-clotting cells to drop. This leads to severe, uncontrollable bleeding. The disease, also known as Ebola **h** _____ fever or Ebola virus, kills up to 90% of people who are **i** _____.

_____ ?

Although movies and books describe major **o** _____ of Ebola-like disease in the U.S., they're just fiction. So far serious Ebola cases have only shown up in Central and West Africa. The CDC says there's no significant risk of Ebola in the United States. It has strong safety measures in place for people who have Ebola and are brought to the U.S. for treatment.

Ebola can **s** _____ from country to country when people travel. So it is possible for it to reach the U.S. if an infected person travels here. But there are ways to prevent people from coming to U.S. airports with the disease. Airline crews are trained to spot the **s** _____ of Ebola in passengers flying from places where the virus is found. Crews are told to **q** _____ anyone who looks infected.

_____ ?

Ebola isn't as contagious as more common viruses like colds, influenza, or measles. It spreads to people by **c** _____ with the **s** _____ or **b** _____ of an infected animal, like a monkey, chimp, or fruit bat. Then it moves from person to person

the same way. Those who care for a sick person or bury someone who has died from the disease often get it.

Other ways to get Ebola include touching **c**_____ needles or surfaces.

You can't get Ebola from air, water, or food. A person who has Ebola but has no symptoms can't spread the disease, either.

_____?

Early on, Ebola can feel like the flu or other illnesses. Symptoms show up 2 to 21 days after infection and usually include: **H**igh _____, **H** _____, **J** _____ and **m** _____ aches, **S**ore **t** _____, **W**eakness, **S**t _____ pain, **L**ack of **a** _____.

As the disease gets worse, it causes bleeding inside the body, as well as from the eyes, ears, and nose. Some people will vomit or cough up blood, have bloody diarrhea, and get a rash.

_____?

Sometimes it's hard to tell if a person has Ebola from the symptoms alone. Doctors may test to _____ other diseases like cholera or malaria. Tests of blood and _____ also can diagnose Ebola. If you have Ebola, you'll be isolated from the public immediately to prevent the spread.

※Summarize this information and comment on it.

Watch TV & Speak

CNN Student News

Ebola Outbreak Devastates African Villages

<http://edition.cnn.com/2014/09/03/studentnews/sn-content-thurs/index.html?iref=allsearch>

Aired September 4, 2014 - 04:00:00

1. Pick up key vocabulary

2. Note taking

3. Questions & Answer

①

②

③

④

⑤

※ Phrase Match

1. First up, an American doctor in Liberia has tested	
2. Quantities are extremely limited,	
3. Some who've gotten it have survived,	
4. Three, there`s	
5. It`s killed	
6. Dr. Rick Sacra, a Christian missionary wasn`t treating people with Ebola,	
7. And that`s one of five things	
8. Five, this outbreak, the worst so far	
9. Second point,	
10. It`s spread through direct contact	
11. Other symptoms	
12. Quick treatment with fluids, vitamins and medicines	
13. Four, there`s an experimental drug	
14. About half of those	

※ Put the sentences in the right order.

1-

✳️ Phrase Match

	a. seems to help in some cases.
	b. to know about this virus.
	c. no cure.
	d. being used on some victims.
	e. positive for the Ebola virus.
	f. are muscle pain, vomiting, bleeding.
	g. thousands in West Africa.
	m. and its effectiveness isn't proven.
	i. with blood and body fluids.
	j. who've gotten it have died.
	k. it's a fever.
	l. has been largely limited to West Africa.
	h. but he's in the country that's been hardest hit by the latest Ebola outbreak.
	n. some have died.

✳️ Put the sentences in the right order.

1-

Teacher's material: CNN Student News Script

<http://transcripts.cnn.com/TRANSCRIPTS/1409/04/sn.01.html>

Ebola Outbreak Devastates African Villages

CARL AZUZ, CNN ANCHOR: This is commercial free CNN STUDENT NEWS. I'm Carl Azuz. It's good to see you this Thursday. First up, an American doctor in Liberia has tested positive for the Ebola virus. Dr. Rick Sacra, a Christian missionary wasn't treating people with Ebola, but he's in the country that's been hardest hit by the latest Ebola outbreak. And that's one of five things to know about this virus. It's killed thousands in West Africa. Second point, it's a fever. Other symptoms are muscle pain, vomiting, bleeding. It's spread through direct contact with blood and body fluids. Three, there's no cure. About half of those who've gotten it have died. Quick treatment with fluids, vitamins and medicines seems to help in some cases. Four, there's an experimental drug being used on some victims. Quantities are extremely limited, and its effectiveness isn't proven. Some who've gotten it have survived, some have died. Five, this outbreak, the worst so far has been largely limited to West Africa. And you're about to see how Ebola has turned parts of Liberia in the ghost towns.

(BEGIN VIDEOTAPE)

NIMA ELBAGIR, CNN CORRESPONDENT: Half the population here have either died or fled. Many not even stopping to carry their belongings.

(on camera): Why are these houses abandoned?

(voice over): Gazali Johnson told us he lost his eight months pregnant sister, his brother, niece and many others. Too many to name.

From Zango (ph) we go further into the jungle. Through a quarantine gate into nearby Bakuda (ph). Some 8,000 people live here, no one has been allowed to leave.

This community has been completely isolated. Of the over 1,000 death from Ebola in Liberia, 20 percent have died right here, in this town. The town chief tells us, they worried if the virus doesn't kill them, hunger and disease will.

This is what it's like across Lofa, locked in, afraid and alone.

Sometimes the county health workers are called in to investigate a case and when they get that, they discover it's actually one of their own. This clinic had to be locked up after all the health workers in it contracted Ebola, only one of them survived.

(END VIDEOTAPE)

Questions & Answers

- ① What is the name of CNN anchor?
- ② What happened to the American doctor Rick Sacra in Liberia?
- ③ What are five things to know about Ebola virus?
- ④ What happened to Gazali Johnson, his family, and his house?
- ⑤ Please give me the reason why the clinic had to be locked up?

Appendix I

Ebola-related Photos for Poster Presentation



Healthcare workers are among those most at risk of catching Ebola

<http://www.bbc.com/news/world-africa-26835233>



Hemorrhagic rashes all over the body

<http://www.md-health.com/Ebola-Virus-Disease-Pictures.htm>



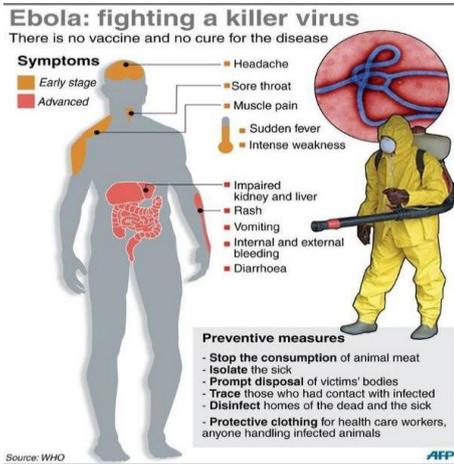
Fruit bat is one of the major culprits for hosting and transmitting Ebola virus

<http://www.md-health.com/Ebola-Virus-Disease-Pictures.html>



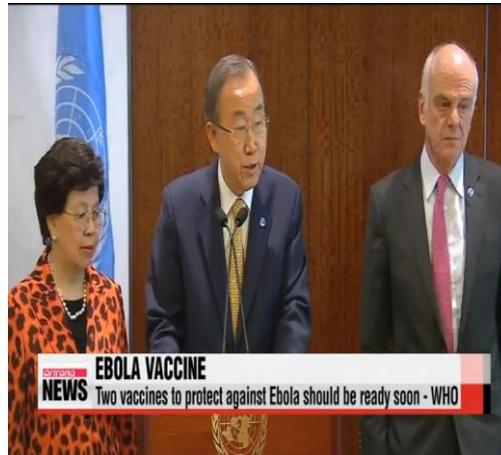
Bushmeat is one possible source of Ebola(Photo: CBS News)

<http://www.wtsp.com/story/news/health/2014/04/06/ebola-virus-breakout-guinea-liberia/7379153/>



Ebola: fighting a killer virus

<http://www.businessinsider.com/what-does-ebola-feel-like-2014-10>



Two vaccines to protect against Ebola should be ready soon - WHO

http://www.arirang.co.kr/News/News_View.asp?nSeq=167893



Ebola Emergency

http://www.koreatimes.co.kr/www/news/opinion/2014/09/195_164442.html

Ebola deaths in West Africa
Up to 24/25 November

6,928

Deaths - probable, confirmed and suspected
(Includes one death in US and six in Mali)

- 4,181** Liberia
- 1,463** Sierra Leone
- 1,284** Guinea
- 8** Nigeria

Source: WHO



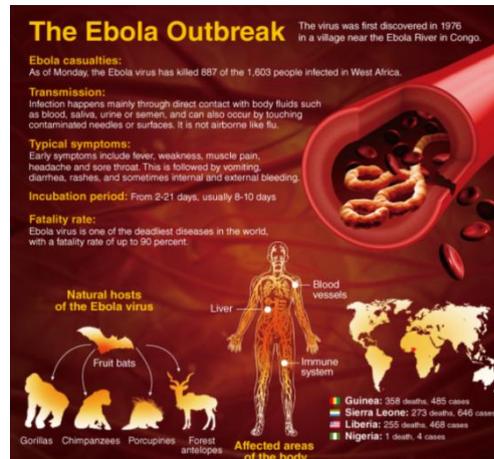
Ebola Deaths in West Africa

<http://www.bbc.com/news/world-africa-26835233>



Protective Ebola suit

<http://www.bbc.com/news/world-africa-26835233>



Ebola Outbreak

<http://www.koreaherald.com/view.php?ud=20140805000933>



Signs and Symptoms of Ebola

http://en.wikipedia.org/wiki/Ebola_virus_disease



Strict precautions must be observed when burying those who have died of Ebola

<http://www.bbc.com/news/world-africa-26835233>

Appendix J

Students' Materials about Human Anatomy

<http://www.englishforeveryone.org/PDFs/Advanced%20Matching%20-%20Human%20Body%20Organ%20Systems.pdf>

Advanced Matching – The Organ Systems

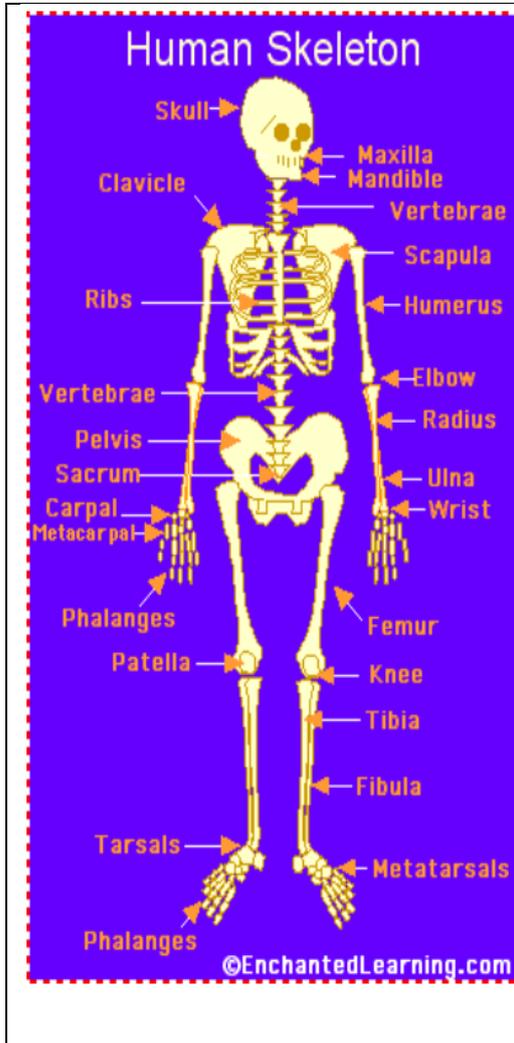


Directions: Draw a line from words to their definitions.

- | | |
|-------------------------|--|
| A) Circulatory System | 1) The System that regulates the body's responses to internal and external stimuli |
| B) Digestive System | 2) The System that differentiates self from non-self and neutralizes potentially pathogenic organisms or substances |
| C) Endocrine System | 3) The System consisting of the skin and its associated structures, such as the hair, nails, sweat glands, and sebaceous glands |
| D) Immune System | 4) The System involved in reproduction |
| E) Integumentary System | 5) The System of organs that produce, collect, and eliminate urine |
| F) Lymphatic System | 6) The framework of the body, consisting of bones and other connective tissues, which protects and supports the body tissues and internal organs |
| G) Muscular System | 7) The System of endocrine glands that chemically controls the various functions of cells, tissues, and organs through the secretion of hormones |
| H) Nervous System | 8) The System of organs and glands responsible for the ingestion, digestion, and absorption of food |
| I) Reproductive System | 9) The System that circulates blood and lymph through the body |
| J) Respiratory System | 10) The System of organs involved in the intake and exchange of oxygen and carbon dioxide between the body and the environment |
| K) Skeletal System | 11) The System that is composed of skeletal, smooth, and cardiac muscle tissue and functions in movement of the body or of materials through the body, maintenance of posture, and heat production |
| L) Urinary System | 12) Part of the immune System; the System which circulates lymph |

Human Skeleton

<http://www.enchantedlearning.com/subjects/anatomy/skeleton/index.shtml>



The human skeleton consists of 206 bones. We are actually born with more bones (about 300), but many fuse together as a child grows up. These bones support your body and allow you to move. Bones contain a lot of **calcium** (an element found in milk, broccoli, and other foods). Bones manufacture blood cells and store important minerals.

The longest bone in our bodies is the **femur** (thigh bone). The smallest bone is the stirrup bone inside the ear. Each hand has 26 bones in it. Your nose and ears are not made of bone; they are made of cartilage, a flexible substance that is not as hard as bone.

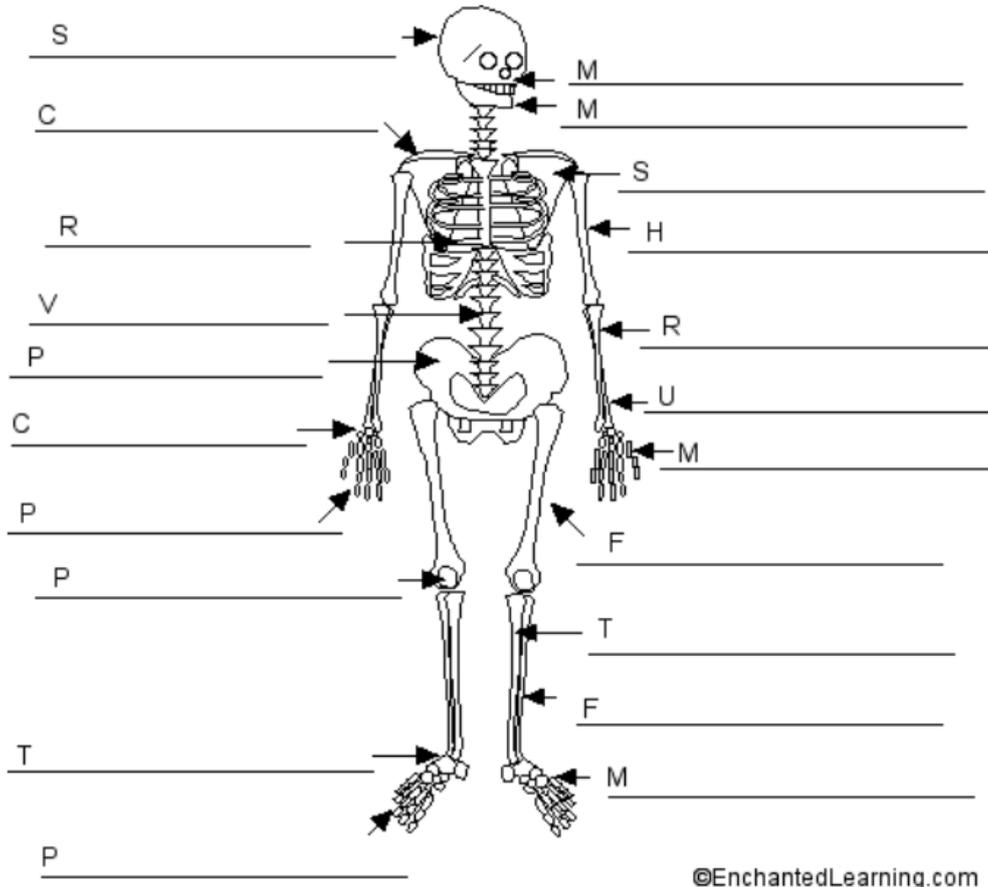
Joints: Bones are connected to other bones at joints. There are many different types of joints, including: fixed joints (such as in the skull, which consists of many bones), hinged joints (such as in the fingers and toes), and ball-and-socket joints (such as the shoulders and hips).

Differences between males and females: Males and females have slightly different skeletons, including a different elbow angle. Males have slightly thicker and longer legs and arms; females have a wider pelvis and a larger space within the pelvis, through which babies travel when they are born.

The **musculoskeletal system** consists of the human skeleton (which includes bones, ligaments, tendons, and cartilage) and attached muscles. It gives the body basic structure and the ability for movement. In addition to their structural role, the larger bones in the body contain bone marrow, the site of production of blood cells. Also, all bones are major storage sites for calcium and phosphate. This system can be split up into the muscular system and the skeletal system.

Label the Bones

<http://members.enchantedlearning.com/subjects/anatomy/skeleton/Labelskeleton.shtml>



The major bones:

tibia
vertebrae
scapula
carpals
tarsals

phalanges
femur
ulna
humerus
fibula

maxilla
metatarsals
clavicle
metacarpals
pelvis
phalanges

ribs
skull
radius
patella
mandible

Teacher's signature

Appendix K

Information on Healthcare Jobs

Best Health Care Jobs

Physical Therapist

<http://money.usnews.com/careers/best-jobs/physical-therapist>



Thanks in part to an aging population, the medical professionals who plan and execute rehabilitative programs designed to improve patient mobility and lessen pain are in high demand. Physical therapists might work in a clinic, hospital or private office, and your patients could include an injured soldier, an aging athlete or a recent accident victim. It's your job to test and measure their coordination, muscle strength, range of motion and motor function. You may consult with other medical-care providers, including physicians, occupational therapists and social workers. Job opportunities look good in the field, and employment is expected to grow much faster than average thanks to rising demand for such services among older baby boomers.

By 2022, the Bureau of Labor Statistics projects physical therapist employment growth of 36 percent, with the field adding 73,500 more jobs. Driving this demand for physical therapists are older people who experience heart attacks, strokes and other injuries that require rehabilitation. Physical therapists are also increasingly being called upon to help manage chronic conditions, including diabetes and obesity.

Salary:

The median annual wage for physical therapists was \$79,860 in 2012, according to the BLS. The best-paid 10 percent of workers in the category made \$112,020, while the bottom 10 percent made \$55,620. The highest wages are for home health care and consulting positions. The best-paid physical therapists live in Las Vegas, Fairbanks, Alaska, and Jacksonville, Fla.

Training:

At a minimum, you'll need a master's degree and a state license to become a practicing therapist. Many students also pursue a doctor of physical therapy degree, and new graduates taking the national licensure examination in the field after 2017 will be required to hold such a degree. Most doctoral programs take three years, compared with two or two and a half for a master's. Many licenses also require continuing education in order to stay certified.

Best Health Care Jobs

Dental Hygienist

<http://money.usnews.com/careers/best-jobs/dental-hygienist>



A dentist's responsibilities could include diagnosing and treating a patient's dental problems, but a dental hygienist is concerned primarily with preventative care. He or she educates patients on the proper ways to brush and floss teeth and offers guidance on the best over-the-counter products to use when doing so. Usually, hygienists also remove the harder-to-clean gunk from our teeth and gums – such as tartar, stains and plaque – when we go for a routine dentist visit. As dreaded as a trip to a dentist's office can be, many of us may avoid the more invasive and painful dental procedures by following a hygienist's advice and coaching. "When we see a patient's health improve, we know we've done our job, and hopefully encouraged a lifetime of good health habits," says Pam Quinones, a registered dental hygienist with more than 30 years of experience and the past president of the American Dental Hygienists' Association.

Job responsibilities can vary slightly by state – for example, there are parts of the country where dental hygienists may place fillings – and not all in this profession work in private practices. Some choose to use their skills in research-focused occupations, or to go into clinical practice in a school or public health program. Employment for all types of dental hygienists will swell 33.3 percent by 2022, which is much faster than the average growth rate for most professions as determined by the Bureau of Labor Statistics.

Salary: Hygienists make comfortable salaries, especially considering that many in this profession work part time. In 2012, their median salary was \$70,210. The best-paid earned about \$96,280 and the bottom 10 percent earned \$46,540. Many of the top-paid hygienists work in dentists' offices, but outpatient care centers and ambulatory health care services also pay well. The profession's best-paying metropolitan areas include San Francisco, Vallejo, Calif., and Santa Rosa, Calif.

Training: Most in this profession have earned an associate's degree in dental hygiene. And increasingly, students are pursuing bachelor's and master's degrees to further their career. "There's even a movement to create a doctoral program for dental hygiene," Quinones says. Following your formal education, it's preferable to receive practical experience, like an internship, in a dental office. This way you'll be better-versed on the job's day-to-day responsibilities and challenges. Finally, you must receive licensure from the state in which you'd like to work.

Appendix L

OET Speaking-Task Samples

<http://www.occupationalenglishtest.org/Display.aspx?tabid=2425>

OET SAMPLE TEST	
ROLEPLAYER CARD NO. 1	OPTOMETRY
SETTING	Optometrist's Consulting Room
PATIENT	You are 50 years old and must wear spectacles for reading but not for distance tasks. You would like to know what you can do to throw away your glasses, which you think make you look old. You have heard that it is possible to do exercises to improve your vision so that you will not need glasses. You think that the optometrist should be able to help you.
TASK	<ul style="list-style-type: none">• Explain your current condition and ask for alternatives to glasses.• Ask the optometrist for advice on what eye exercises you can do to be able to read without spectacles. A friend of yours (aged 30) was successful with this method.• Be hard to persuade when the optometrist explains that exercises will not eliminate the problem. Refuse alternative suggestions – you do not want contact lenses.• Reluctantly accept the advice given by the optometrist.
© Cambridge Boxhill Language Assessment	
SAMPLE TEST	

OET SAMPLE TEST	
CANDIDATE CARD NO. 1	OPTOMETRY
SETTING	Optometrist's Consulting Room
OPTOMETRIST	This 50-year-old client has reading glasses but hates wearing them. He/she does not wear a distance prescription. The client has heard that there are eye exercises that will make spectacles unnecessary. The client wants a course of eye exercises to achieve this.
TASK	<ul style="list-style-type: none">• Discuss the problem with the client and explain the nature of presbyopia. Suggest contact lenses as a possible alternative to spectacles.• Convince the client that eye exercises do not eliminate presbyopia and he/she will not enable reading without glasses.• Persuade the client to accept the fact that almost everybody over about 45 needs optical support to read.• Insist on the client using either glasses or contact lenses when reading.
© Cambridge Boxhill Language Assessment	
SAMPLE TEST	

OET SAMPLE

ROLEPLAYER CARD NO. 1

PHYSIOTHERAPY

SETTING Hospital

PATIENT Your elderly mother has been an inpatient at the local hospital for the past three weeks. She was admitted with vomiting and diarrhoea; her gastro-intestinal problems have now resolved, and she will be discharged as soon as she is stronger. This illness has left her very weak and you are concerned that she is not able to walk without help.

- TASK**
- Find out how your mother can strengthen the muscles in her legs.
 - Ask if she should use any special equipment or shoes.
 - Express your concern that she may not be able to cope with a lot of activity because of her age and her weakness.

© OET CENTRE

SAMPLE

OET SAMPLE

CANDIDATE CARD NO. 1

PHYSIOTHERAPY

SETTING Hospital

PHYSIO You are speaking to the adult son/daughter of an elderly woman who was referred to you. The patient has general muscle weakness and debilitation following three weeks of bed rest for gastro-intestinal problems. Her medical problems have resolved and the son/daughter is anxious to help her regain her strength prior to discharge.

- TASK**
- Explain your management to the son/daughter (e.g., gentle exercises, getting the patient to move around more and more each day).
 - Describe some specific leg strengthening exercises that would be suitable for this patient (stretches, flexion).
 - Ask that appropriate shoes for her to wear for ambulation are brought in to the hospital.
 - Advise on other appropriate activities (e.g., aqua aerobics, walking, swimming).
 - Reassure the son/daughter.

© OET CENTRE

SAMPLE

Appendix M

Students' Learning Logs Examples

LEARNING LOG

Student number: 138 XXX

- What did I do?
I learned about Ebola virus.
We studied outbreak, symptoms of Ebola virus.
We also saw CNN news which is about Ebola virus.
- How do I think/feel about this?
I'm very interested about this.
Because ^{nowadays} Ebola virus is hot issue all over the world.
So, I'm so curious about this, and I'm happy to learn this.
- What did I think about but not say (or what did I want to say but did not)
I saw a news that in Korea, there was some infected people who escaped and disappeared. So many people worried about that
I want to say this, but I have no chance to say.
- How well (or badly) did it go?
It went well. Because I can learn lots of Ebola Virus.
And I can see CNN News. It was nice. I took a note and gave answers to Questions... It was great Experience.
- What did I learn?
I learned about outbreak Ebola virus.
I learned that there are many symptoms of Ebola virus disease.
I noticed that there ~~were~~ many people ~~who~~ isolated because their village is contaminated.
- What will I do differently next time?
Next time, I'll give a presentation more confidently.
This time, I was little bit nervous.
I'll speak more next time.

- How will I do it differently next time?
I will make more chance to say or give a presentation.
And I will act more confidently and actively next time.
I think this time, I was little bit nervous.
- What have I achieved?
I became more interested in this theme (Ebola virus)
And I became more confident than before.
I think I'm overcoming anxiety of presentation.
- What have I learned about myself?
I found more details about Ebola virus myself after class.
(Any vaccine or the way to cure the disease)
And I saw CNN news for several times after class.
- How can I use this to plan for the future?
I'm interested in (developing medicine or vaccine) and immunology.
So, I can have more and more interest in this field.
And then, I can come close to my dream.
(Go)
- (How) can I use this to plan new learning experiences?
I make a decision to listen or see CNN news almost everyday.
Actually I saw it sometimes, But ~~to~~ from this class,
I want to see news everyday. And I also try new
* Others media to improve my English skills.
↳ I'm very satisfied with this class. I'll keep studying
~~like this.~~

2. Human body anatomy

임상병리학과

LEARNING LOG

Student number:

13808

XXX

- What did I do?

I learned about Human body anatomy.

Each Major studied for their own subject and then, We taught each other.

- How do I think/feel about this?

It was great chance to know Human body.

Actually I learned Human Anatomy, but this was different and exciting because we taught each other by using only English.

- What did I think about but not say (or what did I want to say but did not)

I want to say about details in Digestive System.

I want to teach my class mate about how we digest food.

But we don't have enough time for details. So we just talked about each organs and functions.

- How well (or badly) did it go?

Actually, "Use Only English", this part is little bit difficult because terminology is difficult. But we try to use only English. Finally we can understand all parts of Human body.

- What did I learn? (General systems)

I learned ^{Organ} Systems of body, Eye diagram, digestive system, human skeleton and Tooth.

I learned details in each part. (terminology & function)

- What will I do differently next time?

Next time, I will talk more class mates.

This time, time was limited so, I can't talk everyone enough.

I will talk more than before.

- How will I do it differently next time?

I will take class more actively.

And I will try to not to be shy.

- What have I achieved?

I achieved that I know all parts of ^{Human} Body in English.

I can learn other part (major), even though not too much,

I can know ^{at least} basic of every part of Human body Anatomy.

- What have I learned about myself?

I learned more about my major, digestive system. Because I have to teach classmates. So I find terminology in Korean and study basic function in English - So I learned more about digestive system.

- How can I use this to plan for the future?

I will have job in this field.

Even though other parts are not my major, I have to know basic of them. So this is nice chance to learn basic of them.

- (How) can I use this to plan new learning experiences?

If I need any information about other parts of human body,

I can use this experience. And I can plan to learn

details for each part, if I have any interested thing,

3. Hospital Tour

임상병리학과

13808 XXX

LEARNING LOG

Student number:

- What did I do?

We looked around (toured) University Hospital.

- How do I think/feel about this?

I can see some department of hospital. And some surgery or diagnostic machine like PET-CT, Cyber knife.

I feel good because it's difficult for us to see that machine because we are student.

- What did I think about but not say (or what did I want to say but did not)

I want to see department of our major. But there was no enough time to tour all departments. So that made me sad.

And, I want to ask radiologist about how to cure if they are exposed excessive radiation during work. But I have no chance to say.

- How well (or badly) did it go?

It was really nice because we can experience other major and we can know more about hospital than before.

We can also experience our future work area, so it was good.

- What did I learn?

I learned that radiologist take care of their own exposure to radiation because it's dangerous.

And also, I can know that medical machines are so expensive. But, Development of medical skills are very advanced nowadays.

- What will I do differently next time?

I will do more actively because this time I missed chance to ask question. Next time, I will not hesitate to ask question or say something.

- How will I do it differently next time?

I will speak directly next time. This time I thought many time to ask question - I had lots of preparation time but then I missed the chance to say. So I will speak immediately.

- What have I achieved?

I have achieved that I have interest in hospital work. So I think again about my future.

- What have I learned about myself?

I found about departments about my major. Because of lack of time, we can't go there. So I found that and get information about it myself.

- How can I use this to plan for the future?

I can't decide ^{exactly} what to do in the future.

I have many things to do but I can't decide.

However by this chance to tour hospital, I thought about hospital again.

- (How) can I use this to plan new learning experiences?

If I have any questions, I will go hospital and find that department and ask them to solve the problem.

And then I can learn and experience more.

4. Role Play

영상병리학과

138080 XXX

LEARNING LOG

Student number:

- What did I do?

I did role play with my class mate.

We introduce our major and guide others to know about hospital departments of our major.

- How do I think/feel about this?

I feel good this class, because I have to speak in English to show our major, so I prepared for that and then we can know better about our major. And also we can know other major, too.

- What did I think about but not say (or what did I want to say but did not)

I want to say about other jobs about my major for example laboratory, blood bank, company of medicine and so on. But we don't have enough time so I did not say about others, just I said about departments of Hospital and information about only general pathologist.

- How well (or badly) did it go?

We gave a presentation well. We prepared it together with making ppt and script. And then we were satisfied with it. And also

I had a good time because I can learn about other major.

One point was bad because there was no enough time, so we can't listen all.

- What did I learn?

I learned about other majors. There were many majors which are related to hospitals. And there are many situations which other majors have to deal with in hospital. It was fun to know situations I haven't ever seen before.

- What will I do differently next time?

Next time, I will speak more clearly and confidently.

This time, I was nervous when I was giving a presentation, so I made some mistakes in pronunciation. So I'll try perfectly next time.

- How will I do it differently next time?

I have to be act confidently and speak clearly. I have to be careful about pronunciation.

I'll practice some pronunciation to speak clearly.

- What have I achieved?

I gave a presentation about my major. It was nice experience and I knew better about my major because we prepared for the presentation. And also I can know lots of other majors.

- What have I learned about myself?

I learned about my major in details, for example, work place, what they do, what kinds of departments related to us, each function of department, and other kinds of jobs related to us and so on.

- How can I use this to plan for the future? I found myself to prepare presentation.

I thought again about my future job, I haven't decided it yet but I think again and I found more information. So I can use this experience to decide my future and make a plan for me.

- (How) can I use this to plan new learning experiences?

I will use this experience to make my future's plan. I have to find more information and then I will think again about jobs related to my major. And I will decide and plan my future.

Appendix N

Multiple-Response Results Tables of Course Evaluation Survey

Helpful Tasks

Tasks/Activities	Responses		Percent of Cases
	N	Percent	
Poster Presentation	9	18%	38%
Anatomy micro teaching (Info gap)	10	20%	42%
Hospital tour	12	24%	50%
My field role-play (OET, tour guide, job fair, etc.)	18	37%	75%
Total	49	100%	204%

Best Materials

Materials	Responses		Percent of Cases
	N	Percent	
Ebola (CNN Student News, Photos, etc.)	13	26%	54%
Human Anatomy (Micro teaching experts' materials, etc.)	7	14%	29%
Hospital tour materials (brochure, PR and medical Korea video clip)	15	30%	63%
Role-play materials (OET sample, healthcare jobs in U.S., etc.)	15	30%	63%
Total	50	100%	209%

ABSTRACT IN KOREAN

국 문 초 록

본 연구는 특수목적영어(ESP)에 대해 소개하고 그러한 ESP 강좌, 즉 여기서는 한국의 한 보건의료 단과대학 학생을 대상으로 하는 General Healthcare English Course (GHEC, 일반 보건의료영어 강좌)를 개발하고 실행하고 평가까지 함으로써, ESP의 실행가능성을 타진해 보았다. 본 연구의 단초는 지식기반사회에 외국어로서 영어(EFL)를 배우는 한국 배경하에, 학생들의 필요·요구에 초점을 맞춰 더 흥미롭고 효과적인 대학영어교육을 위해 하나의 대안을 찾고자 한 것이다. 또한, 현재 연구자가 처한 확실적인 대학영어 교육과정의 문제점에서 탈피하여 ESP 강좌를 개발하고 실행해 볼 필요성을 인식함에 따라, 본 연구에는 교육혁신의 변화를 모색해보려는 실행연구(action research)의 해방적(emancipatory) 잠재력이 내재해 있다.

본 연구는 다섯 가지 목표로, (1) 결정권 없는 내부의 교수자로부터 상향식의 변화요구를 실행하는 것, (2) 연구자 주변의 목소리를 경청하여 소통하는 것, (3) 학생과 교수자 즉 ‘우리’의 목소리를 담은 강좌를 여는 것, (4) 문제에 대한 접근법이 아닌 해결의 실마리로서 ESP를 알리는 것, (5) 더 전문적으로 배우고 계발하는 것이다. 이러한 목표에 부합하는 세 가지 연구질문은 첫째, EFL 환경의 보건의료계열 학생들을 위한 맞춤형 ESP 강좌는 실행연구의 틀에서 요구조사, 강의계획서 설계 및 교수학습자료 개발과 의사결정과정을 통해 어떻게 개발되는가?, 둘째, 맞춤형 강좌를 수강한 학생들은 어떤 반응을 보이는가?, 셋째, 향후 한층 더 개선된 강좌 설계를 위해 무엇을 성찰하고 제안할 수 있는가?이다.

한국의 ESP 관련 문헌은 그 동안 요구분석 위주로 초점을 맞춰 왔으며

의학목적영어(EMP)는 주로 의사와 간호사를 대상으로 진행되었다. 이에 본 연구는 의사와 간호사 이외 다른 보건의료계열을 대상으로 강좌를 개발하고 실행까지 하여, 국내외 소원했던 기존 연구의 간극을 메우고자 ESP-AR (특수목적영어-실행연구) 강좌개발 연구설계 모형을 제안한다. 이 모형을 통해 실행연구 패러다임 속에서 양적·질적 통합연구 방식으로, 다차원적 요구분석을 포함하여 ESP 강좌 개발과 실행을 실행연구 나선형 순환단계(Action research spiral)에 따라 체계적으로 연계할 수 있었다. 본 연구의 요구분석 설문조사 대상은 작업치료학과, 병원경영학과, 안경광학과, 임상병리학과, 방사선학과, 치위생학과, 물리치료학과, 응급구조학과 총 8개 학과로 구성된 한 보건의료 단과대학으로, 1244명의 학생들과, 123명의 졸업생들과 30명의 보건의료계열 교수자들이 참여했다. 또한, 그 중에 35명의 학생들, 12명의 졸업생들과 10명의 교수자들이 인터뷰에 응했다.

다차원적 요구분석과 의사결정과정을 기반으로 일반 보건의료계열 직업목적영어(English for general healthcare occupational purposes)의 성격을 띤 GHEC가 탄생하였으며 말하기 기능 중심에 과업중심 방법을 접목한 내용중심 강의계획서를 탑재하였다. 이러한 넓은 각도(wide-angled)의 ESP로 직업중심(English for Occupational Purposes, EOP) 지향적인 선경험(pre-experience) 대학생 영어강좌는 (1) ‘보건의료 뉴스와 나의 전공공부’, (2) ‘인체와 의학 용어’, (3) ‘건강과 병원’, 그리고 (4) ‘보건의료 한국(Medical Korea)과 나의 직업’과 같이 네 개의 모듈(module)로 구성하였다. 이는 넓고 일반적인 주제에서 시작해 구체적이고 전문화된 주제로 발전하여 학습자의 향후 직업에 필요한 영어를 심화하는 구성이다. 강좌 목적은 ‘할 수 있다’라는 방식으로 서술되었고 각 모듈에서 네 개의 시범 수업에 대해 대표 교안을 작성하여 실행하였으며, 여기에는 ‘에볼라(Ebola) 포스터 프레젠테이션’, ‘해부 마이크로 티칭(anatomy micro-teaching)’, ‘병원 투어 가이드’와 ‘내 분야 일에 대한 역할극(my job field role-play)’ 과업을 기획하여 포함하였다. 교수·학습 자료는

실제진본성(authenticity), 시청각 보조자료와 실물교재(realia) 원칙을 바탕으로 준비하였고 에볼라 관련 CNN 학생뉴스와 사진, 각각 다른 여러 전공학부를 위해 맞춤형 해부관련 자료, 실제 병원 홍보물과 병원 투어, 그리고 보건의료계열 국제 영어 시험인 OET 말하기 과업 견본을 제공하였다. 24명의 학생들이 GHEC를 수강하였으며 그 결과 강좌평가조사와 교수·학습 로그, 동료 관찰을 통해 학생들의 적극적 참여와 긍정적인 반응이 나타났다. 강좌평가는 5점 척도로 진행해 평균 3.9의 만족도를 보였으며 특히 GHEC 자료에 4.21, 과업에 4.08의 높은 값을 기록했다. 학생들은 강좌를 통해 덜 지루하게 되었으며 영어에 대해 낮아진 정의적(방어) 여과기제(affective filter)와 더불어, 좀더 ‘적극적’이고 ‘자신감 있어지고’ 전공에 대해선 더 ‘전문적’이 되었다고 스스로 평가했다. 그러나, 수업 중 시간 운용이 쟁점이 되어 해결해야 할 과제로 남았다.

강좌 실행과 평가 후 실행연구 나선순환의 제 2막 1단계로써 향후 강좌 재 계획에 관해, 본 연구의 교육적 함의는 다음과 같다: (1) ESP는 일반 영어 학습자들과 교사를 처음엔 당황케 하지만 신선한 도전을 준다, (2) 조력적인 교사 역할과 팀 주도적 과업중심교수법으로 ESP 학습자들은 더욱 적극적이고 활동적이 되며, (3) 맞춤형 ESP 내용으로 학습자들은 생산적으로 그들의 분야에 대한 사전 지식과 흥미유발을 끌어내어 더욱 생산적으로 영어를 발화할 수 있다. 또한, 연구의 주요결과를 망라하여 향후 GHEC 재 계획을 위해 건설적인 제안을 한다. 즉, 학생들의 강좌 초입 영어 숙달도 수준과 전공내용 특수성, 전공별 학생들의 반 편성 조합, 목표 병원 상황, 총체적 언어 접근법(Whole Language Approach)으로 말하기 신장, 과업중심언어교육(TBLT)/문제중심학습(PBL)/프로젝트중심학습(PBL)에 대한 융통성 있는 채택, 효율적인 시간 운용을 위한 이러닝 시스템 그리고 조력자와 학습자로서 역할을 하는 ESP 전문가에 관해 교수·학습 맥락에 맞춰 고려할 것을 제안한다.

한편, 실제 한 지역을 배경으로 본 실행연구를 진행 중, ESP의 개념이 연구자와 연구 참여자들에 의해 퍼져나가게 되었고 그 결과 응급구조학과 심폐소생술(CPR)을 영어로 하고 방학 보건의료영어캠프 제안을 받는 등 ESP를 향한 좋은 변화의 조짐이 나타났다. 이는 ESP가 일반적인 대학영어교육에 대한 대안 혹은 첨가제로서 가능성이 충분하다는 반증이며, 특히 본 ESP 강좌 연구는 그 효과와 효율성 측면에서 전공을 배우는 대학교육과 맞물려 한국의 EFL 환경에서 ESP 적용의 구체적 실현을 긍정적으로 보여줄 수 있었다.

주요어: 특수목적영어(ESP), ESP 강좌 개발, 요구분석, 실행(현장)연구, 강좌 개발, 대학영어교육, 강좌 실행, 강좌 평가, 커리큘럼 변화, 보건의료영어, 의학영어, 의학목적영어(EMP), 직업목적영어(EOP)

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