A case study of incorporating ESP instruction into the university English course

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Abstract

This paper aims to investigate whether or not participants of the ESP course have shown a greater improvement in English proficiency based on test scores and whether or not there is any difference in their attitude toward the percentage of the university ‘freshman English’ course materials devoted to a specific area of study between participants and non-participants. The most interesting result is that the suggested percentage of course material correlates with how much the students have improved in English proficiency by the end of the course.

Keywords: ESP program, English as a foreign language, collaborative teaching, freshman English

1. Introduction

English for Specific Purposes (ESP) is an exciting movement in language education. It widens the opportunities for English teachers and researchers to explore the curriculum, course planning and implementation of ESP education and its impact on learners. The world we live in has increasingly become more globalized. More and more people are using English in a growing number of occupational contexts. For example, eighty-five percent of all information in science and engineering in worldwide informational storage and retrieval networks is in English (Grabe & Kaplan, 1986; Zengin, Erdogan & Akalin, 2007). Facing a higher demand and a greater expectation for English proficiency of college graduates, some universities in Taiwan, are encouraging that more professional courses be taught in English in addition to using textbooks written in English. In November 2005, a new organization (ETA-ESP) was established within English Teachers’ Association (ETA) in Taiwan. It suggests that ESP has been gaining attention in Taiwan.

ESP is well known for its learner-centered and content-based approach. This aims to meet learner-specific needs in the utilization of English for their specific field of study. Thus, the ideal ESP teachers must not only be skillful in English language, but also acquire the knowledge of a specific profession in order to provide an effective ESP course for the learners. Practically, such an English teacher is seldom found in a regular university setting. One way to solve this problem is by using a collaborative teaching approach. This paper aims to investigate whether or not participants of the ESP course has shown a significant improvement in English skills based on test scores and
whether or not there is any difference in attitude toward the percentage of the university freshman English course materials devoted to a specific area of study between participants and non-participants.

2. Literature Review

The ESP initiative began in the 1950s and 1960s when there was an expansion of scientific, technical and economic activities on an international scale (Dudley-Evans & St. John, 1998). The demands and the needs of communication in English have also increased accordingly. As a result, English instructors are pressured to adapt their teaching to meet the needs of learners in their specific environment.

For the last 15 years, there have been numerous studies on ESP courses in Taiwan including courses for nursing or medical students (Lee, 1998; Chia et al. 1999), for business students (Chen 1998; 2000), and for students in travel and leisure management (Tsai 2005; Liang 2007). The goal of these studies is to provide the effective instruction of the English language education that meets the academic or professional needs of students. However, most English teachers in Taiwan who have been trained and prepared in the areas related to linguistic competence, literature and cultural knowledge but do not know enough about other professional fields such as science, engineering, or computer technology to effectively teach ESP courses alone. Study by Shao (1992) suggests that the best way for an ESP program to succeed is for English teachers to collaborate with science/engineering/computer teachers or teachers from any other professional fields. Fortunately, Chung Yuan Christian University (CYCU) has a unique environment in which such a collaborative teaching is possible.

3. Method

Two groups of first-year undergraduates from the College of Science and the College of Engineering at CYCU in the academic year of 2006 were selected for the study. Specifically, forty science students were assigned to the experimental group (ESP class) and the same number of engineering students to the control group (general English for freshman or EGP class). All of them registered in a required yearly course of freshman English. They were administered the Michigan English Placement Test (MEPT-1) at the beginning of the first semester and the same proficiency test at the end of the second semester (MEPT-2). The students were also given a questionnaire survey measuring the perceived English needs for university freshman students at the end of the second semester. Not all students took both tests or filled out the survey. As a result, we only collected a complete set of data from 28 students in the experimental group and 31 students in the control group at the end of the project. These students were graduating seniors in June of 2010. In an attempt to determine if they had changed their opinions about ESP education, a brief telephone interview was conducted in the beginning of June before their graduation.

Concerning the teaching approach, we elected to collaborate in the ESP teaching between an experienced English teacher trained in language teaching and a physics professor specializing in physics. Both instructors chose the teaching materials together and collaboratively taught the experimental group (ESP class). The language teacher taught two hours and the physics professor taught one hour a week. The same English teacher alone instructed the control group (EGP class) three hours a week for the whole academic year. The role of the ESP teaching is to activate the learners’ science background knowledge in English. Special attention was given to science content, paragraph organization, sentence structure and lexical analysis; while the role of general English teaching is to enhance the foundation of general English skills. Building up vocabulary was an important component for both classes.

This study aims to measure the progress of the participants’ English proficiency of the ESP program and to compare their achievement with nonparticipants’ achievement. It also investigates whether or not there are differences in the opinions between the two groups concerning the percentages of course materials in freshman English relevant to a specific area of study. In addition, this study examines if the changes in opinions have occurred over the four year period of study (opinion of freshman vs. opinion of senior).

4. Results

There are several interesting results which have surfaced. First of all, it is encouraging to find that both groups of learners have a significant improvement in overall English language skills. Several paired t-test were conducted to explore the specific areas of improvement. It was found that for the learners in the experimental group (participants
of the ESP program) showed significant improvement in vocabulary only in MEPT-2, while the learners in the control group (participants of the traditional general English program) showed a significant improvement in listening and grammar in MEPT-2. Figure 1 shows that most learners in the control group show an improvement of between 0 and 10 points, but the experimental group has a higher percentage of learners improving more than 15 points.

Figure 1. A comparison of improved test scores between experimental group and control group

When examining learners’ opinions regarding the percentage of English course materials devoted to a specific area of academic or professional study, it has been found that at the beginning of the freshman year the majority of learners in the control group preferred a less than 50% of the ESP teaching emphasis in a English course, regardless of their improved test scores. For the freshman students in the experimental group, it has been found that many of them would prefer a more than 50% of the ESP approach. The same question was asked in June 2010 when these students were seniors, the results were somewhat different. Figure 2 shows that for the experimental group, learners with a higher improved test scores in MEPT-2 when they were freshman indicated that they preferred a higher percentage of the ESP material incorporated into freshman English course by the time they became seniors.

Figure 2. Improved test scores in freshman year and the % ESP suggested in senior year by experimental group

Figure 3 shows a different outcome for the control group. It shows that for the learners in this group, whose improved test scores in MEPT-2 when they were freshman was 5 points or higher, suggested that less attention be given to the ESP approach when they became seniors.
5. Conclusion

Because all Taiwanese children have had access to English language education from the third grade of primary school in Taiwan since 2001, we hope that most stipulated objectives of general English teaching can be achieved for all students when they graduate from their high school in the near future. We also hope that the students can obtain competent English abilities in their professional fields with the support of English courses at the university level. Based on the results of this study, a majority of students who participated in the ESP program in the context of freshman English course support such a curriculum. There is still work needed to be done to improve basic English skills such as listening, speaking, reading and writing skills of the students who are in an ESP program. Understanding of the nature of students’ field of study, working out the English language needs in relation to each subject area, choosing appropriate teaching materials and creating practice situations relevant to specific fields of study are all important components of a successful ESP program.

As the ESP program gains momentum in Taiwan, more attention will be given to its curricular planning and material selection. Consequently, the implementation of the ESP program will be further refined and will hopefully motivate the students with variety, relevance and an enjoyable learning experience. English teachers will then be able to develop an ESP curriculum that takes the classroom into the real world and brings the real world into the classroom.

References