
Challenges in Designing ESP Course for First Year Students of Engineering Faculty at Malikussaleh University

Designing ESP
Course for
Engineering
Students

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Abstract

Purpose – This study aims at finding out the implementation of English for specific purposes (ESP) course and identifying the challenges faced by English lecturers in designing an ESP course for first-year students in the Engineering Faculty of Malikussaleh University.

Methodology – This study implements qualitative research through interviews as a means of data collection.

Findings – This study addresses the application of an ESP course and identifies the challenges appeared during the stages of designing. The study reveals that an ESP course is not completely implemented. In fact, the course provided little ESP contents. The paper also reveals that, in terms of challenges, each stage of design presents its own challenge. To design an ESP course involves five crucial stages, that is, needs analysis, syllabus, material, teaching, and evaluation. Teachers encounter challenges as the design process takes place.

Research Limitations/Implications – The present study provides an account of how English teachers view challenges in implementing a complete ESP course. However, further research should be conducted to discover the possibility of application of ESP course in national universities in Indonesia.

Practical Implications – This paper offers solutions in order to make the implementation of ESP course feasible in the university.

Originality/Value – There have not been any research in ESP application for engineering students in Malikussaleh University.

Keywords ESP course, challenges, course design

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1. Introduction

The implementation of Asian Economic Community for almost two years has brought higher needs of competency in English. The need for mastery of English in the era of ASEAN Economic Community is a challenge for the university as a manufacturer of skilled labor. In order for the graduates to win the competition in the world of work, it becomes the responsibility of universities to equip graduates with sufficient English language skills. The immediate urgency of English is increasingly felt especially relating to the rapid development in science and technology as well as competition in the job market. Improving the competency can be done with emphasis on the needs of learners as a fundamental problem in the design of learning. This is in line with the application of the English for specific purposes (ESP) approach where the learners' needs are the main considerations in determining the learning process and direction so that the achievement of teaching objectives can work effectively and efficiently (Hutchinson and Waters, 1987; Robinson, 1991). This approach particularly focus to assist learners to master English in allotted time and applicable to their field of study, interest, or profession. It can be taught for any fields of science and professions, such as English for law, medicine, engineering, economics, or mathematical sciences, etc.

ESP has continued to develop to become one approach of teaching a language that is spoken by half of the world population since 1960s. The reason for the development has been brought forward to manage various needs and teaching situations. ESP as "...the teaching of English used in academic studies or the teaching of English for vocational or professional purposes" (Anthony, 1997, pp. 9-10). This explains that the objective of this approach of teaching is for academic or work needs.

Interest in a target language culture can cultivate need to learn its language. However, this may not apply to students who study a language for different reasons. This type of students study English either to continue their study or to apply for jobs. ESP as "...generally used to refer to the teaching and learning of a foreign language for a clearly utilitarian purpose of which there is no doubt" (Robinson, 1991, p. 2). This means that in this approach, English is taught to achieve special language skills by using real life situations, and using methods almost identical to those in their profession or for understanding English in discourse related areas of expertise which they are involved in.

English is compulsory in every department in Malikussaleh University. English course is offered for first year students in Engineering Faculty at Malikussaleh University in their first semester. The subject contains two credit hours and taught once a week. In Indonesia, English is taught as foreign language. The focus of teaching English in lower education level is more on general English (GE). However, for the development of English language teaching at higher education level, the English learning model should not only be conducted with the GE learning approach but also using the ESP approach. The English learning model should be done in accordance with the needs of the learner in their respective fields. The importance of designing ESP course aims to make the language specifically taught fulfill the language needed in the field to be studied by the learners. Therefore, implementation of ESP is crucial in order to equip students with appropriate language skill. Nevertheless, the implementation may present challenges for the teachers as designing ESP courses require profound research and significant amount of time.

2. Methodology

The purpose of the study is two folds. First, it will discover if English lecturers at Engineering Faculty at Malikussaleh University apply ESP in designing their course for first year students at the faculty. Secondly, it aims to identify the challenges they face

during the design of the ESP course. To answer the research questions, interviews were conducted with two English lecturers from this faculty. The materials taught for students are also analyzed. Therefore, qualitative methods were implemented to emphasize contexts, meanings, and individuals' interpretations.

This paper implemented purposeful sampling (Merriam, 1998 as quoted in Chang, 2014). The participants of this study are one female and one male English teachers teaching English courses for first year students of Engineering Faculty at Malikussaleh University in Indonesia. These two teachers teach English for all eight departments in the Engineering Faculty at Malikussaleh University. They have been teaching English in this university for a few years. None of the interviewees have received ESP pre-service training. Both graduated from English teaching major as their undergraduate. The female teacher has a Master in TESOL for her graduate while the male teacher has Master in Curriculum Design. Interviews were applied as foundation for data collection.

3. Results and discussion

A course is as "an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge" (Hutchinson and Waters, 1987, p. 65) Thus, this is a process of planning and setting up courses for the sake of learning a language. In the context of ESP, course design is a process of data collection in preparing effective tasks, activities, and creating the collecting data to prepare effective tasks, activities, and to create the most suitable setting for ESP learners to achieve their goals (Richards, 2001). Thus, ESP learner' needs and expectations should be given more attention. Learners' need, undoubtedly, play an essential role. This means that course design for ESP setting is not a teacher-centered approach. Therefore, in designing an ESP course ESP teacher's work involves much more than teaching. Dudley-Evans and St. John (1998) propose the term "ESP practitioner" because this definition is more detailed and complete. Key roles of ESP practitioner are distinguished as follows: as teacher, course designer and materials provider, collaborator, researcher, and evaluator. All these roles are somewhat present as the designing process begin to take place.

Language courses, whether ESP or GE, are well established through a number of stages. There are five different stages in preparing an ESP course (Dudley-Evans and Johns, 1998, p. 121). They suggest that the stages are cyclical rather than linear and interconnected. The stages are as follows: needs identification and analysis, syllabus design, materials production, teaching, and assessment and evaluation.

In the context of first year students in the Engineering Faculty at Malikussaleh University, English is a mandatory subject to be taken during their initial semester of study. It consists of two credit hours and is taught once a week for 16 weeks. Therefore, the English course in the first semester should provide language skills that is applicable not only for their study, for instance to read books or journals written in english, but also for their future after they graduate.

From the interview, it is revealed that the English course given is not a complete ESP course. Teachers implement a course combined mostly with GE and few ESP contents. ESP contents are usually given in forms of texts and vocabulary enrichment. Several challenges inevitably emerged when each stages of the process of designing the course takes place. The teachers identified the challenges related with the stages of course designing.

(1) *The Needs Analysis Stage*

The needs analysis as the first stage determines where the course will be directed to. If it is intended for engineering students, then the lecturer is required to identify what the needs are for the future engineers in their study. However, as the

Engineering Faculty itself consists of several departments, such as Chemical Engineering, Industrial Engineering, Mechanical Engineering, etc., the lecturers identified the specific needs of each department. This present challenge since the lecturer then should provide several plans for ESP courses in this faculty. The task will be overwhelming because the lecturers have to take into account the needs of several fields of study.

(2) *Syllabus Design Stage*

As the syllabus designer, the lecturer must determine what competencies should be taught and determine which order should be taught first. Since the English lecturers of the Engineering Faculty are graduated from the English department, they take reference to the teaching of English in general, which emphasizes on making of sentences in English properly and social functions. This actually still can be associated with the teaching of ESP, but because ESP is more concerned with teaching English for special needs then the syllabus approach is more emphasis on application. This syllabus also determines what activities will be implemented throughout the course. The lecturer can select activities that resemble specific contexts similar to actual practice according to the discipline of the students. The English lecturers need to conduct more in-depth research for the selection of these activities so as to produce the right syllabus. A fundamental issue in designing an ESP syllabus is that the teachers as the syllabus designer is not a specialist in the specific area (e.g., engineering) (Gupta, 2013). Thus, consequently he/she is not capable of deciding by himself/herself which topics to include in the syllabus to provide the required terminology.

One of the characteristics or even a critical feature of teaching Technical English is that the course involves specialist language (especially terminology) and content. In the majority of cases, teachers are not specialists in the students' professional fields. That is why the primary issue in teaching English for engineering students is the struggle to master language and subject matter. Teachers find themselves having to teach with texts whose content they know little or nothing about.

(3) *Materials Production Stage*

Materials production in ESP setting highly require use of authentic materials. Wallace (as quoted in Berardo (2006) defines authentic texts as "...real-life texts, not written for pedagogic purposes." Thus, any texts written, read, and used by native English speakers can be classified as authentic materials. They can be available from journals, magazines, user-manuals, etc. However, the preparation of materials using authentic forms present challenges not only for lecturers as materials provider but also for the learners as recipients. As the materials provider, the lecturer's decision on selecting texts or materials are based on his/her own level of knowledge in that specific area and also the students (Gupta, 2013). However, most first year students in the Engineering Faculty at Malikussaleh University are still in the beginner level. They are in lack of language skills, needed to read, for example, journals written in English. This requires adaptation at some levels. Nevertheless, since English lecturers are not specialist in the engineering, the adaptation process raises concern as the teacher may leave out the essential importation in termes of subject matter (Gupta, 2013). This is also the case of English class in the Engineering Faculty. The English lecturers are not able to completely use the scientific journals in engineering as the materials because language level and subject matter knowledge inadequacy.

(4) *Teaching Stages*

Traditionally, teaching language has been focused on teaching the four skills, namely: reading, listening, speaking, and writing. This may not apply to ESP setting since the objectives are set for the learners to obtain a comprehensive mastering of English required by their field of study. For language teaching, in general, several teaching models are frequently applied (Liu Yumei and Xiao Bang, 2007 as quoted in Wenzhong Zhu and Fang Liao). They outlined three models: PPP (Presentation–Practice–Production) Model, ESA (Engage–Study–Activate) Model, and PPT (Presentation–Practice–Testing) Model.

In the Engineering Faculty, from the interview it was revealed that the lecturer practice the three approaches alternately since they have become familiar with the approaches during their previous study. However, the teachers show concern in applying these approaches since they are lacking on subject content. ESP teachers in Taiwan universities “. . . were puzzled about the extent to which they should restrain the design of the ESP activities by the subject content” (Chang, 2014). This is similar as what are experienced by the two English teachers interviewed. To approach teaching of the language and the subject content without sacrificing one of them is something that teachers should pay attention to as a facilitator in the ESP settings. The choice of the appropriate method is another challenge for these two English lecturers.

(5) *Evaluation*

In the final stage of designing, the ESP course for first year students in Engineering Faculty, teachers play the role of evaluator. This role is no less valuable than the previous stages. One type of evaluation is testing the students that are conducted to evaluate the students’ progress and effectiveness of teaching methodology. However, in ESP classes an additional kind of testing should take place, which is the evaluation of course and teaching materials. As ESP courses are needs-adjusted, their evaluation is crucial. Since ESP courses are exceptional, to create one ESP course that would satisfy all ESP students is impossible. The system of evaluation in Engineering Faculty has been standardized by the university. Elements of grading consists of quiz, assignments, mid-test, and final test. English lecturers in the university are required to comply to the standard grading system. To prepare the students’ evaluation that meets not only the needs of their subject but also the needs of the grading system is problematic for lecturers. For example, if they plan to have project-based evaluation, then they need to break down each progress into the grading components. This requires more effort and consume more time than allotted time.

4. Conclusions

This study has revealed that English teachers has not completely applied ESP course in teaching English for first year students of Engineering Faculty at Malikussaleh University. A complete ESP course seems appalling to be designed as teachers have to play several roles simultaneously in order to make the course comes into realization. The teachers are required not only to teach or organize the class to run well, but also prepare syllabus, provide materials, collaborates with subject/content experts, conduct research, and evaluate the students and the course. The result of this study also shows that challenges are inevitable as the teachers proceed to design an ESP course. To state which challenge is the most burdensome is seemingly impossible as each stage presents equal difficulties. Nonetheless, breaking down each challenge into feasible task gives a sense of success that leads to

probability of completion of an ESP course to be applied. Dealing confidently with the challenges helps providing expedient step-to-step experience to prepare for any course in the future. However, since this study is limited to ESP for engineering students, more thorough and wider research that examines the implementation of ESP through out the university are suggested. Further study should involve students as the users of the course in order to discover other relevant factors that influence the implementation of ESP course.

References

- Anthony, L. (1997). "Defining English for Specific Purposes and the Role of the ESP Practitioner". Available: <http://www.antlab.sci.waseda.ac.jp/abstracts/Aizukiyo97.pdf> [accessed 1 November 2017].
- Berardo, S. A. (2006). "The Use Of Authentic Materials In The Teaching Of Reading". *The Reading Matrix*, Vol. 6, No. 2, p. 61.
- Chang, C.-W. (2014). "A Qualitative Inquiry into the Dilemmas and Challenges Perceived by Teachers in ESP Instruction". *LSP Journal*, Vol. 5, No. 1, p. 105.
- Dudley, E. and St. Johns, A. M. (1998). *Developments in ESP a Multi-Disciplinary Approach*. Cambridge University Press, Cambridge.
- Gupta, D. (2013). "Teaching English to Engineering Students in India. English for Specific Purposes World". Vol. 14, No. 39. Available: http://www.esp-world.info/Articles_39/39_Gupta.pdf [Accessed 1 November 2017].
- Hutchinson, T. and Waters, A. (1987). *English for Specific Purposes: A Learner-Centred Approach*. Cambridge University Press, Cambridge.
- Richards, J.C. (2001). *Curriculum Development in Language Teaching*. Cambridge University Press, Cambridge.
- Robinson, P. (1991). *ESP Today: A Practioner's Guide*. Prentice Hall, New York, NY.
- Wenzhong, Z. and Fang, L. (2008). "On Differences between General English Teaching and Business English Teaching". *English Language Teaching*, Vol. 1, No. 2. Available: <http://files.eric.ed.gov/fulltext/EJ1082806.pdf> [accessed 2 November 2017].

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