Study and Linguistic Skills Needs of Engineering Students

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Abstract

In the teaching of every subject, in every country, there has been an increasing shift of the center of gravity in education towards the learner, his needs, his modes of learning process; and to some extent away from a teacher-centered outlook. The trend towards learner-centered education has led to the concept of needs analysis – the idea that the teacher can better help the learner by knowing in advance who the learner is, why he seeks to learn English, what he hopes to be able to do in the language at the end of his course of instruction. In order to help Engineering students improve and develop their language abilities related to academic purposes, English for Specific Purposes principles are being applied. The purpose of English for Specific Purposes is to increase and develop, in a short period of time, the linguistic potentials of college students who need the specific language to acquire or update knowledge in their field of specialization. Hence, this paper presents the study and linguistic skills needs of Engineering students of which the results were used as basis in developing Teaching Modules on study and linguistic skills for Engineering students to help them process information from texts in their courses most especially in their major subjects so that they may find their English classes more meaningful and purposeful.

Keywords: English academic purposes, English specific purposes, study linguistic skills, teaching modules

Introduction

Students are the most valuable resources of teachers. As their molders, it is the teachers’ responsibility to handle their students with utmost care by providing them with well-planned, well designed, and meaningful instruction. With the

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The growing popularity of computer systems today, students are captivated and tempted to spend their time with the computers for information and recreation purposes rather than read books or textbooks for that matter. The general observation is students generally do not give much time to acquire language skills relevant to their academic goals. Thus, they are unable to use and maximize the four language modes namely: listening, speaking, reading, and writing for academic purposes. This is the premise that prompted the writer who is also a teacher-researcher to exercise her responsibility as a teacher to give the students the appropriate activities that would develop the needed skills necessary to support their goals in getting a college education.

Students find learning meaningful only when authentic activities are used in the classroom (Earp: 1996). The use of workbooks in English classes will only be appealing to students if they find familiar terms and they can use these terms in their field of specialization. In some cases, workbooks cannot support the needs of the learner because situations used are structured, unnatural, and limited. If English teachers merely concentrate on giving grammar lessons which rely so much on structured sentence construction and analysis, they can never help their students comprehend authentic longer and more complicated texts. While students are in school studying different theories from their major subjects and working for their course work, they need study and linguistic skills to sustain them in their academic pursuits.

Many college students find difficulty in processing information from their textbooks, in solving problems, and in answering essay questions of their examination primarily because they lack orientation to needed study skills and linguistic skills. In order to help the student-learners improve and develop their language abilities related to academic purposes, English for Specific Purposes principles are being applied. The purpose of English for Specific Purposes is to increase and develop, in a short period of time, the linguistic potentialities of college students who need the specific language to acquire or update knowledge in their field of specialization. This fact implies, first, that the satisfaction theses learners expect from a language course is essentially practical and operational, and second,
that if the language to be taught is to fulfill the real needs, the content of the course will have to be determined through an analysis of the activities these learners will be performing in a second or foreign language which is English.

According to Fiorito (2005), the term "specific" in ESP refers to the specific purpose for learning English. Students approach the study of English through a field that is already known and relevant to them. This means that they are able to use what they learn in the ESP classroom right away in their work and studies. The ESP approach enhances the relevance of what the students are learning and enables them to use the English they know to learn even more English, since their interest in their field will motivate them to interact with speakers and texts. ESP assesses needs and integrates motivation, subject matter and content for the teaching of relevant skills.

The two main dimensions of English for Specific Purposes (ESP) are for study, and for occupation. The learners for whom ESP is appropriate are either engaged in studying or are in the world of work. This paper is focused on the needs of the former, for academic purpose. Since any course taken should be based on an analysis of the learner’s needs, then it is but important that these needs should be met. These needs were then carefully determined in order to find ways and means to identify and respond to these needs among Engineering students.

Review of Literature

If language varies from one situation of use to another, it should be possible to determine the features of specific situations and then make these features the bases of the learner’s course. This view gained ground from the specialists’ slogan that says: “Tell me what you need English for and I will tell you the English that you need.” This became the guiding principle of English for Specific Purposes (ESP) (Hutchinson and Waters, 1997:8). English for Specific Purposes is not a matter of teaching “specialized varieties” of English. The fact that language is used for specific purposes does not imply that it is a special form of the language, different in kind from other forms. Certainly there are some features which can be identified as “typical” of a particular context of use and which, therefore, the learner is more
likely to meet in the target situation. But these differences should not be allowed to obscure the far larger area of common ground that underlies all English use, and indeed, all language use (Hutchinson and Waters, 1997: 18).

The maintenance of English as an international language for the Philippines and as a non-exclusive language for Science and technology is one of the goals of the Bilingual Education Policy. “Filipino and English shall be used as media of instruction, the use allocated to specific subjects in the curriculum as indicated in the Department Order No. 25, s. 1974.” is one of the goals of the Bilingual Education Policy. According to this policy, English is used to learn science and technology, and to participate in affairs of the international community so that the English program must reflect these realities (Sinka & Sadorra, 1991:30).

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Dudley-Evans (1997) as cited in Anthony enumerated absolute characteristics of English for Specific Purposes as such: that it is defined to meet specific needs of the learners; makes use of underlying methodology and activities of the discipline it serves; and that it is centered on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre. http://www.laurenceanthony.net/abstracts/ESParticle.html

Traditionally, the teacher has been considered the most important element and the sole source of instruction. However, since learning takes place in the minds of the students, the teacher cannot learn for the students. What the teacher can do is just to provide instructional conditions that would facilitate learning and the rest of the processing will be done by the students. So that learning will occur,
students must use appropriate skills for learning which are popularly known as reading and study skills. A lot of students are not aware that they use such skills to help themselves learn and meet the school’s expectations (Gall, 1990:2).

Given a learner or a group of learners with a specific purpose in learning English, it would be seem logical in a learner-centered approach to base a course on that purpose and on the needs of the learner in his situation. Once learners’ needs have been defined, in terms of why he wishes to learn English and the kind of English he will have to use, this information can be used as a guideline for the content of a course suited to his particular interests and need. In short, English for Specific Purposes (ESP) has its basis in an investigation of the learner and the set of communicative needs arising from those purposes. These needs will then act as a guide to the design of the course materials. The kind of English to be taught and the topics and themes through which it will be taught will be based on the interests and requirements of the learner (Kennedy & Bolitho, 1985: 1-3).

Research Methodology

This study was descriptive in nature that looked into the study and linguistic skills needs among Engineering students. The main data were obtained from the researcher-made questionnaires administered to the two hundred sixty (260) fourth year Engineering students from the University of San Carlos, Technological Center. The campus is located in Nasipit, Talamban, Cebu, Philippines. It is six kilometers away from the city of Cebu. Among the Engineering courses offered are: Civil, Chemical, computer, Electrical, Electronics and Communications, Industrial and Mechanical Engineering. The data collected were tabulated, analyzed, and interpreted. The results were made as bases for the study and linguistic skills modules developed.
Findings

Engineering students identified the study and linguistic skills found most helpful and useful. The study skills were classified into three categories: reading, test-taking, and self-management of learning tasks. Identifying key points was found “totally useful” as a reading skill followed in descending order by note-taking, outlining, and answering guide questions. Test readiness and test-wiseness were found “most helpful” test-taking skills and managing time to accomplish learning tasks was identified “very much needed” in self-management. On the other hand, there were five areas under linguistic skills. Of those five enumerated, grammar was identified as “most needed”. General vocabulary, comprehension, Engineering vocabulary, and precise spelling were the linguistic skills also found “very much needed” and “needed” respectively. The teaching modules were designed based on the study and linguistic skills the Engineering students perceived most needed by them.

Teaching Modules on Study and Linguistic Skills for Engineering Students

There are two modules namely: Module 1 – Study Skills Instruction and Module 2- Linguistic Skills Instruction that were developed based on the needed skills identified. In each of these modules the rationale part explains the need to use these modules in order to respond to the expressed needs of the Engineering students. After which, the mechanics of implementation describes how the
modules can be used either as a separate course or could be taught in an infusion scheme. Then it is backed up learning theories that explain the framework used in the making of the modules followed by the specific objectives that the module wants to achieve. Then each skill is explained together with the practical exercises where students get to work on specific tasks that will lead to the development of the needed skills.

Conclusions and Recommendations

The conclusion drawn was the realization that study skills need to be explicitly taught as Engineering students have found them “most” useful”. Similarly, linguistic skills especially grammar skills were identified as “totally needed”. These skills then have to be included in the curriculum.

The teacher-researcher strongly recommends that the Teaching Modules on Study and Linguistic Skills for Engineering Student need to be implemented either as a separate course or through infusion approach. The delivery system of these skills has to be innovative and functional to address these needs. On the other hand, teachers should provide opportunities for students to use the language in all the four language modes namely: listening, speaking, reading, and writing in authentic situations. Also, departmental policies need to be flexible in regulating contents, instructional materials, and techniques to be used in English classes. As supplementary materials, loose worksheets instead of bound workbooks are advantageous to use so that teachers can easily change them regularly. English is a “communication arts” course which means that the course aims at enabling takers to communicate artfully. Definitely, this aim is not achieved if students spend instructional time answering workbook exercises like what elementary kids do. Teachers should provide opportunities for students to use the language in all the four language modes: listening, speaking, reading, and writing in authentic contexts. Moreover, Engineering students need a closer monitoring assistance in these study skills identified. The Guidance Office can design a work plan of implementation so that these skills can be thoroughly taught and supervised across the curriculum. At
the same time, the Administration has to support morally and financially projects or programs that envision development of lifelong skills of students.

References
Laurence Anthony. *English for Specific Purposes: What does it mean? Why is it different*