Evaluating (Eng 201 Applied) in light of Applied Medical Sciences Students’ Needs at MUST

Dr. Hanan Abdel-Baqi Mohammad Khalil
Lecturer of Applied Linguistics (Methods of TEFL)
Misr University for Science & Technology (MUST)
Abstract

The purpose of this study was to evaluate the ESP course (Eng 201) which is taught as an advanced level to 2nd and 3rd years to Applied Medical Sciences College at Misr University for Science and Technology (MUST) in Fall 2015 semester. The text book is called "English for Nursing". But in addition to Nursing, there are three other departments; Radiology, Laboratory, Respiratory. So, the text book seems to be irrelevant to most of the students' specialization. Three instruments including: a questionnaire, an interview, and a needs checklist were used. The results of the questionnaire and the interview showed that most of the students of both 3rd & 4th years who registered in the course (Eng 201) Applied were not satisfied with the text book. The analysis of the needs checklist showed that the most prominent needs most of the students agreed on were: acquiring some of the terminology that can help them in their study, some expressions and some language functions to help them communicate effectively with their lecturers, and their colleagues solving listening and speaking problems in English.

Keywords: ESP course, Evaluation, Students’ needs
Evaluating (Eng 201 Applied) in light of Applied Medical …. 

Introduction

With the increasing number of students who join private universities for having a high quality of learning in new specializations which have an urgent demand in the job market, the College of Applied Medical Sciences was founded at Misr University for Science and Technology (MUST). At MUST, there are about six medical colleges Medicine, Dentistry, Pharmacy, Physical Therapy, Biotechnology, and Applied Medical College (AMS) with its four basic branches: Laboratory, Radiology, Respiratory, and Nursing. There are only three of this College (AMS) in Egypt, one at MUST, another college at 6th of Oct., University, and the third college at Pharos University at Alexandria.

Many students from all over the world, especially the Arab world come to MUST to join the AMS college because once they graduate from this college, they can find easily a job opportunity at Pathology Laboratories or Scan centres, or at hospitals. Some of these students can get a job easily during their study. Many international students have preferred to study at MUST. They come to study at MUST from Palestine, Jordan, Somalia, Sudan, Saudi Arabia, Yemen, Canada, Nigeria and other different countries. All the Medical Colleges at MUST are certified from the Ministry of Higher Education in Egypt.

However, facing a higher demand and a greater expectation for satisfying the students’ learning needs in English became a problem because all the professional courses are taught in English and the students have to be skilful in the English language so as to deal with foreigners or even native
speakers of English during the clinical training period in Souad Kafafi teaching hospital at MUST. So, an ideal ESP course has to satisfy such needs and should be considered by language instructors, course coordinators and course designers. English for specific purposes (ESP) has grown to become one of the most prominent approaches to the teaching of English language today. This is reflected in the increasing number of Medical colleges in English medium language in Egypt offering ESP medical courses, aiming at introducing international students to the content and content-based approaches for their future profession. ESP is designed to meet the learner-specific needs in English and enable them to succeed in their future work.

So, the current study aimed at evaluating the ESP course (Eng 201 Applied) and it aimed to increase our understanding of the learning and teaching context sufficiently to provide suggestions for better programming to overcome these problems.

Problem of the Study

The results of the semi-structured interview with a sample of 3rd & 4th year students (100) who registered in the course (Eng 201) Applied during the Fall 2015 semester revealed that the textbook entitled 'English for Nursing' does not satisfy students' needs in English. So, the current study attempts to evaluate that course.

Research Questions

This study tried to answer the following questions:
1. What are the factors to be considered in designing an effective course for (Eng 201 Applied)?
2. Can the current course satisfy the AMS students’ learning needs in English?
3. What are the features of content, methodology, and class activities used in teaching the textbook?
4. How can course designers, co-ordinators, and instructors provide support to develop teaching an AMS ESP course?
Assumptions

1. The textbook “English for Nursing” does not satisfy most of the AMS students' needs in the departments of Laboratory, Radiology, and Respiratory.
2. The course content, methodology, and activities need to be modified to satisfy the students' needs in English.
3. The current course (Eng 201 Applied) needs to be modified to fulfil the AMS students' needs to fulfil the students' needs mostly in communicating in English.

Research Delimitations

They are delimited to:

1. A group of AMS students (100) who registered in the course (Eng 201) Applied during Fall 2015 semester.
2. Three departments of the AMS college at MUST; Laboratory, Radiology, and Respiratory who find the content and activities included in the text book insufficient for their study purposes and needs in English.

Review of Literature

The development of world financial system and the growth of mass media, the digital world, and international communication, and therefore the importance of English as the language of international communication, the exchange of ideas, knowledge, and culture are acknowledged by many experts. (Jiajing, 2007; Ghalandari & Talebinejad, 2012). In the past few decades, the need for using English for the exchange of information within specific professional fields through specific journals, meetings, and conferences has increased recently (Gatehouse, 2001). So, English for specific purposes (ESP) as a part of the English language teaching, has developed its own procedures, materials, and methodology (Dudley; St John, 1998)

English for specific purposes (ESP) and English for specific academic purposes (ESAP) have developed in different countries to meet the needs for different specializations and the different study needs of the students in the English language. It is important to design different
programs based on different methodologies, approaches, contents and class activities to fulfil the needs of those students. ESP and ESAP are taught in many universities around the world because the fields of English for medical profession, technical English, business English, educational English, and other specially used English - related subjects are more required. (Yu; Yuan, Wei; Yan, 2010)

The necessity for having special programs for different professions and different groups was emphasized. Several researchers e.g. Ahmad, Barati, Ketabi (2015) suggested including specific English into the curriculum of university students. Bahatia, Noguchi (2011), Sayfouri(2010), Flowerdew( 2000), Dudley( 2000) emphasized the need for having a more systematic approach to ESP, considering language in society. Today’s concern is to equip learners with language they have to use effectively in their work.

Many academies, universities and professional associations of teachers of English have ESP and ESAP sections. There have been great changes over the past 30 years. Much attention was elaborated on the changes and situation of English teaching and learning in some medical colleges. In the past 30 years, there have been great changes in English teaching approaches, methodologies, and contents in Medical colleges in many universities in Egypt. Medical English was taught using textbooks prepared by a considerable number of publishers (e.g. Pearson, Garnet, and mainly Cambridge).

Hutchinson, Waters (2002) explained that some Medical colleges have their own specialized textbooks; English for Pharmacy, Good Practice for Medical Practitioners, and English for Nursing. Medical English is a branch of ESP influenced by systematic functional linguistics. ESP has experienced five phases of development: register analysis, discourse analysis, target situation analysis, skills and strategies and a learning -centred approach that involves moving from the criteria of analyzing rules of the language usage to the deep form of learner-centred approach. They added that "The language we speak and write varies significantly, and in a number of different ways, from an open situation to another. If language varies from one situation of use to another, it should be possible to decide
the features of a specific situation, and then make these features the basis of the learner's course”.

Features of ESP and ESAP

Zhang (2008) stated that there are about 5 features of ESP:
1. ESP courses are based on need analysis; (2) ESP learners have a distinctive aim; (3) ESP teaching activities have a clear purpose closely related to the training in a specific field; (4) ESP teaching methodology is determined by learners' need for a specific content in an elastic way; (5) ESP covers a far wider range than general English does, including specialist knowledge as well as that of general English. So before conducting an ESP course, it is important to know what learners have already known so as to decide what they lack because the major concern of ESP is need analysis.

ESP started out by trying to address very specific student needs for English language learning and use. It has ended up covering a wide range of instructional field (Yogman and Kaylani, 1996). They also identified that the most essential thing is that students experience the satisfaction of productive language use, and through their learning experience, they gain learning experiences relevant to their future job-related needs.

Many studies found that there are several differences between ESP courses and General English in sentence structure, sentence length, tenses, and voice of verbs. Conducting register analysis not only has academic significance, but also contributes to language teaching. Chi (2008) designed an oral business English course for mixed level students, which included business grammar and vocabulary. Chi also emphasized that grammar in business English needs to emphasize verb frequency and the usage of tenses. In the first stage of ESP development, grammatical and lexical syllabi are the main standards in a mixed syllabus.

Needs Analysis

The "Needs- Based Philosophy" appeared in language teaching in the 1980s in relation to ESP and vocationally oriented program design. A needs analysis includes all the activities used to collect information about students' learning needs and interests.
The process also involves looking at the potential and requirements of other interested parties such as the teacher. The information collected from the needs analysis can be used to help define program goals. These goals can be stated as specific teaching objectives, which in turn will function as the foundation on which to develop lesson plans, materials, tests, assignments, and activities. A needs analysis can help to clarify the purposes of a language program.

Needs analysis is applicable in situations where students have very specific language needs or when learners' needs are not so specific, as in the case of EFL students in a school setting. Malu and Figlear (1998) studied the problem that impeded success for nursing students with an ESL background, and observations in the classroom and clinical settings. Discourse and text analysis was conducted and four problems were identified: second language development, differing expectations of nursing education, a fear of failure, and unfamiliarity with a participatory learning model. Guhde (2003) argued that nursing requires a higher level of cognitive academic language proficiency. The needs analysis combined target situation analysis with present – situation analysis (Dudley, St John 1998; West, 1994). The situational or functional demands of the target setting were determined and a curriculum designed around "learner lacks' or the gaps between the current skills of ESL nursing students and the target skills of nursing students. The tasks and activities that students need to perform as nursing students were identified at the global and rhetorical levels.

Language needs have been seen from different perspectives by different researchers. Some have focused on the learners’ language needs in terms of the target situation, in which the learners will need the language to perform
effectively naming them’’ target needs’’ or ‘’communication needs’’. Some have introduced the needs of the learners as ‘’learning needs’’ or ‘’situation needs’’, others have focused on the students’ own perceptions of their own needs called them ‘’felt needs’’, and the final type is the pedagogic needs analysis’’ (Cleik, 2003). Some other researchers use the term ‘’Rights Analysis instead of the Needs Analysis i.e. Ahmad, Barati, Ketabi (2015) in their own study.

**Student Needs**

Many educators acknowledge that any course should be based on the analysis of learners’ needs. By this end, ESP procedures can have a useful effect on general English. It also indicates the urgent need for a common approach. By being aware of the target situation, the ESP learners’ needs are distinguished from those of the General English learners' needs.

Huang(1997) carried out a survey including (17) universities and examined participants’ opinions in English programs for Non English majors (EPNMs) to offer ESP to university freshmen and graduates. Two thirds of the students believed that ESP was important because many of them had to use English on their jobs or they would benefit from ESP in the future. Science students felt that they needed and wanted an ESP course. In this case, students' needs become one of the most important considerations to set an ESP course at a university.

Also, Mazdayasna and Tahririan (2008) conducted a case study to investigate the foreign language learning needs of undergraduate medical science students studying in faculties of nursing and midwifery in Iran. They found students need to increase their general proficiency in English
students expected to be offered specialized English courses throughout their undergraduate studies in order to fulfil their short-term needs. The learners' needs finally revealed the problem in their program and reminded the course designer to focus attention on realistic situations. Also, Ellis and Johnson (1994) emphasized that success in learning can only come about if the learner is motivated. Additionally, making the course relevant to job or study needs is usually a good way to motivate the learner. Dudley and St. John (1998) believed that the learners' needs are more subjective and correspond to cognitive and affective factors.

**Learner/ Student- centred Learning**

Student- centred learning also known as learner- centred education, broadly compasses methods of teaching that shift the focus of instruction from the teacher to the student. In original usage, student- centred learning aims to develop learner autonomy and independence. (Jones, 2007)

Pederson (2003); Hannaafin(2010) agreed that student-centred instruction focuses on skills and practices that enable lifelong learning and independent problem-solving. Student- centred learning theory and practice are based on the constructivist learning theory that emphasizes the learner’s critical role in constructing meaning from new information and prior experience. (Young; Paterson, 2007)

Student- centred learning emphasized the students’ interests first, acknowledging student voice as central to the learning experience. In a student- centred learning situation, students select what they learn, how they will learn, and how they will assess their own learning. (Hannaafin, 2010)
Contrary to student-centred education, teacher-centred learning considers the teacher as the primarily active role and the students take a more passive receptive role. In a teacher-centred classroom, teachers choose what the students will learn, how the students will learn, and how the students will be assessed on their learning. Student-centred learning requires students to be active, responsible participants in their own learning and with their own rate of learning. (Johnson, 2013)

In the education reform glossary (2014) using the term ‘’ student-centred learning’’ refers to the educational mindsets or instructional methods that identify individual differences in learners. In this sense, student-centred learning focuses on each student’s interests, abilities, and learning styles, placing the teacher as a facilitator of learning for individuals rather than for the class as a whole. One of the most critical differences between student-centred learning and teacher-centred learning is in the assessment. Student-centred learning typically involves more formative assessment and less summative assessment than teacher-centred learning. (Crumly, 2014)

Moslemi, Moinzaden and Dabanghi (2011) investigated the needs of 80 Iranian MA students of Biology, psychology, and philosophy studying in the university of Isfahan. Twenty five content teachers and seven English language teachers also attended the study. They used interviews, questionnaires, and text analysis to collect data. The results showed major dissatisfaction of the participants with the course demanding courses which provide more exposure with the language and an increase in the weight of English in national MA entrance exams and joint teaching of both content and language teachers.

Hernandez and Paredes (2002) examined the design and implementation stages of a course of English given at the faculty of psychology of the University of Murcia, Spain.
At the beginning of the academic year, a questionnaire was given to the students to evaluate their needs and motivation. Also, a test was given to measure their general communicative competence. With respect to their motivation, the students manifested two orientation: Labour and integrative reasons. Taking into account their "labour reasons", some units closely related to their speciality were included and the final evaluation was modified giving some weight to the specific English component (75% GE, 25% ESAP). The analysis revealed that students with a better communicative competence at the beginning of the course received higher marks in the final exam. Based on the results, they asked for an integration of ESP and EAP into mainstream English course.

**Student-centred Learning in Higher Education**

Student-centred learning environments have been shown to be effective in higher education (Wright, 2011). They have been defined exclusively within higher education as both a mindset and a culture within a given educational institution and as a learning approach broadly related to, and supported by constructivist theories of learning. They are characterized by innovative methods of teaching which aim to promote learning in communication with teachers and other learners and which take students seriously as
active participants in their own learning and foster some active skills such as problem solving, critical thinking, and reflective thinking. (Attard; Geven; Santa, 2014)

In Hong Kong University, a study was conducted by Geven, Attard (2012)

The success of this initiative was evaluated by surveying the students. After two years, the mean ratings indicated the students’ perception of the quality of the teaching and learning environment at the university all rose significantly. This study was implemented examining student- centred methodology in large institutions of higher education. The main aim was to support student- centred learning aiming at ensuring the active use of different skills in student learning by employing the following methods:

- Developing a model of a broadly based teaching and learning environment influencing the students’ common capabilities to provide evidence of the need for interactive learning environment.
- Analysis of good practice by award- winning teachers, in all faculties, to show how they made use of active forms of student learning.
- Subsequent use of the analysis to promote a wide use of good practice.
- A compulsory teacher training course for new junior teachers, which encouraged student- centred learning.
- Projects funded through teaching development grants, of which 16 were concerned with the introduction of active learning experiences.
- A program-level quality enhancement initiative which utilized a student survey to identify strengths and potential areas for improvement.

- The introduction of program reviews as a quality assurance measure.

In the USA, the integrated model of teaching to improve student-centred learning was employed and created significant learning experiences. (Fink, 2017; Ginsberg, 2017)

Some related studies investigated the efficiency of ESP text-books. They examined medical ESP textbooks and found that they are well-matched to students and physicians' needs and achievement. Based on Hutchinson and Waters'(1987) framework, they examined and evaluated ESP textbooks of medical students in Shiraz Medical School and investigated the compatibility of the content of these textbooks with the students' needs.

Ghalandari and Talebinejad (2012) found ESP textbooks in medicine as appropriate books for the purpose of medical English for Iranian physicians. Other studies regarded the role and characteristics of ESP teachers and found them controversial. They investigated two ESP teachers from Petroleum University of Technology (PUT) in Ahvaz. Based on the data derived from the semi-structured interview with them in Farsi and observational evidence investigating the route limited content knowledge was compensated for by their command of language, the teachers' attempt for survival especially on the first days of the term which leads to low teacher creditability, and their need for different teaching strategies as main problems these teachers faced. They concluded that "tradition" dominates ESP classes and they need various skills and knowledge to equip themselves with.

**Method**

**Participants of the Study**

The participants included (100) 3rd and 4th year Applied Medical Sciences (AMS) students who registered in the ESP course (Eng 201) Fall 2016/2016 semester, at
MUST. The researcher used an evaluating study where it took place during the academic semester Fall, 2015/2016.

**Instruments of the Study**

The current study used three main instruments, 1. a questionnaire, 2. an interview, and 3. a needs analysis.

1. **The Questionnaire**

The first instrument used was a questionnaire that included close-ended questions to collect qualitative data to obtain the general idea about the course and the text book (English for Nursing). The questionnaire was designed and validated by juniors. It was administered by the end of the term. The students studied the regular course (Eng 201 Applied) and they used the text book in their study entitled (English for Nursing). They have studied for 12 weeks and had their quizzes, mid and final exams. Before having the final exam, the questionnaire was administered. It included 12 items with four responses from which the participants had to choose only one. The participants responses were analysed and data were statistically treated.

2. **The Semi- Structured Interview**

The semi-structured interview was designed and used by the researcher to collect the qualitative data related to whether the regular course could satisfy the students’ needs. The interview was conducted by the researcher and another colleague by the end of the study. It included some questions about the contents of the course. Its main dimensions included some information needed to collect data related to whether the regular course could satisfy their study needs in the English language or not, what activities and content they need to be included in the course and whether they really benefited from the activities included in the course.

3. **The Needs Analysis Questionnaire**

Needs analysis is an in-depth research conducted in order to determine the needs of a specific population or group of students. It is very useful in determining different
elements that shouldn’t be included in an educational program. (Richards, 2001). Needs analysis is a tool used to get familiar with the needs of students, and is conducted and its results are used by experts for preparing the materials and in syllabus design. (Ahmad; Barati; Ketabi, 2015). The qualitative data collected from the questionnaire and the interview were analyzed to obtain the information about the AMS students’ needs.

**Session (1) Applied Medical Sciences College (AMS)**

**An Example Session (1)**

**Objectives of the Session**

- By the end of the session, AMS students will be able to:
  - Explain the importance of the AMS college in the health care field in English.
  - Mention the main four departments of the AMS college
  - Explain the type of course they study in the AMS college and its relation to their specialization.
  - Identify the activities they need to be included in the (Eng 201 Applied)

**Warm Up**

- The researcher asks the students some general questions about the AMS college to familiarize them with their college and its role in the health care field, e.g. What role does the AMS college play in the health care field?

**Briefing**

The researcher discusses some main points with the students about the college of AMS, its importance in the medical field, its specializations/departments, what jobs they are expected to have when they graduate from the AMS college.

**Practice**

In pairs the AMS students ask and answer questions about their AMS college. Four groups speak about each department’s importance, the technical terms, abbreviations used in their specializations, and some of the instruments they use during their study.

**Evaluation**

The researcher gives the students a reading text about the college of
Evaluating (Eng 201 Applied) in light of Applied Medical Sciences its importance, its specializations, and the services it offers to the job market. Then, the students answer questions on the given text, e.g. Complete the following sentences with words from the text:

1. The main four departments in the college of Applied Medical Sciences are

                            ................................................................., ................................................................. and ..................................................................

2. In the college of AMS, students study both ........................................... courses and ...........................................

                                    ................................................................. courses.

**Results and Discussion**

**1. Results of the Questionnaire**

As a response to the questions included in the questionnaire, the percentages of the positive and negative responses within the survey questions were calculated. The following figure illustrates the percentages of students were asked if the regular course and textbook could satisfy their studying needs in the English language according to each department. The students were asked to answer the questions using “yes”, “No”, or other fairly simple options.

![Bar chart showing percentages](chart.png)
Needs Analysis of Data Showed by Pillars

Fig. 1. Needs Analysis shown by pillars

From the above figure, it was clear that about 70% of the students who studied the course were not satisfied with the textbook (English for Nursing) and the contents of the course (Eng 201 Applied). It was also clear that about 70% of the student did not find the course (Eng 201 Applied) satisfy their study needs in the skill of writing medical reports. About 70% of the students did not find the course and the textbook satisfy their needs in medical writing. While about 94% of the participants agreed that both the textbook and the course were dissatisfactory for their listening and speaking skills.

2. Results of the Interviews

The data collected from the interviews were analyzed to show the students’ needs in the English language; the content, the methodology, the needed activities and if the regular course could satisfy these needs or not. The data were coded to recognize both the general problems, needs of the regular course, and the weaknesses that the course could have.

Fig. 1 shows the basic skills in which participants believed they needed and those that were not satisfied with the current course. Each number represents the number of times the particular need was mentioned throughout the different questions within the interview with all the participants.

Discussion of the Results

According to the results obtained from both the questionnaire, the interviews and the students’ needs analysis, about 85% of the participants surveyed that they are unable to use English efficiently in their own filed even if they have passed the Eng 201 midterm and final exam. About 90% of the students agreed that they still need to learn English after they have passed the exam, especially the students in the departments of Laboratory, Radiology, and Respiratory. So it is irrelevant to their socializations. According to the skills the students need mostly, about 94% of the students reported that they need to learn listening and speaking, which is neglected in the regular course because they really need to speak English fluently with
their professors, colleagues, and even with some foreign patients who come to the hospitals where they are trained in or where they usually work later on. About 70% of them reported that they want to learn medical reading because they need to read pathology reports, radiology reports, and reports needed to diagnose the patients at the ICU who might be at risk and the trainee students need to read their reports quickly to treat them. 70% of the participants reported that they know very well the grammatical rules, but they could not write medical reports efficiently. About 75% of the students felt dissatisfied with what they have learnt in the Eng 201 class because they think it has nothing to do with their real speciality. What can be said is that AMS students who study Eng 201 Applied are in a dire need to a course that should be designed specially for them with all their specializations to satisfy their study needs in English, not only nursing.

**Conclusion**
The current study aimed primarily at evaluating the ESP course Eng 201 Applied at MUST. The main result was that the current course and textbook could not satisfy the AMS students’ needs. The needs analysis showed that there must be stress on the productive skills that the students could really benefit from during their training period or future job, such as listening and speaking, reading, and writing. The materials used in teaching Eng 201 Applied should be diverse, interesting, and motivating. Teachers should be trained on teaching this course, and learn some medical terms, issues, and skills.

**Suggestions and Recommendations**
Further research could be conducted on:
1. Designing an ESP course for Eng 201 Applied to satisfy the students’ needs in all the Specializations.
2. Evaluating the ESP courses taught in all the colleges at MUST.
3. Establishing a unit for ESP courses only at MUST, separate from the Requirements unit.
4. Designing an ESP course for technical secondary schools to satisfy secondary school students’ needs.
5. Preparing mini-dictionaries to be accompanied with each ESP designed course to provide the students with the keywords and the specialized terminology needed in their studies.

7. Preparing training programs for teaching medical English especially for demonstrators and instructors of English language to be qualified for teaching medical courses.

References
Evaluating (Eng 201 Applied) in light of Applied Medical ....


- Johnson, E. (2013). The Student- Centred Classroom: Social Studies and History,1, 19
Immigrant ESL Nursing Students: A Case Study with recommendations for Action. Nurse Educator, 23(2).