

RESEARCH ARTICLE

**RELATIONSHIP AMONG MEDICAL, LITERATURE AND ENGINEERING STUDENTS' NEEDS: ANALYSIS OF ESP COURSES APPROACH****MOJTABA REZAEI SANI¹, PARISA KOGANI BAHARVAND²**¹Ph.D. Scholar, Department of English, Kakatiya University, Warangal, A.P., India² M.A Scholar in TEFL (Under the Supervision of Dr. Yunes Azizian). Lorestan University, Iran**MOJTABA REZAEI SANI****PARISA KOGANI
BAHARVAND****ABSTRACT**

Pinpointing students' needs and planning academic courses based on their needs' assessment and also paying attention to the level of students' satisfaction, of courses are considered corner stone of ESP courses and programs. The present study was done in the realm of ESP so as to investigate whether there was any significant difference among Medical, Literature and Engineering students' needs with respect to their ESP courses. To address this issue, Literature, Medical and Engineering students of Lorestan University have taken part in this study. The questionnaires were distributed to each group. Further, individual semi-structured interview was also taken to obtain supportive data. In order to analyze the data, ANOVA and chi-square were employed. The results showed that ESP classes in Lorestan University lag behind students' requirement and international development regarding English learning and teaching with specific attention given to ESP courses. Students in these three different fields consider English language mostly as a tool to read scientific texts than to speak, listen and even to write.

Keywords: ESP, Needs analysis, English training trend.

Article Info:

Article Received:19/09/2014

Revised on: 29/09/2014

Accepted on: 30/09/2014

© Copyright KY Publications

INTRODUCTION

Different students studying in diverse fields have various and special needs. They try to participate in courses that fulfil their special needs the best way possible. ESP classes and courses are held specifically to respond to these various and special requirement. So when holding ESP classes, the utmost effort must be executed to offer such courses in which the students' needs are responded to the best way and all materials must be designed or selected so that students get the highest benefit by participating in these classes.

Review of literature

ESP was a phenomenon that grew out of converging trends after the Second World War. In spite of the fact that these trends have been operated in a variety of ways around the world, we can identify three main reasons common to the emergence of what we know as ESP today: (a) Worldwide Demands (b) Revolution in Linguistics and (c) Focus on the Learners. Salmani (2007). "One of the distinguishing characteristics which make ESP distinct from other approaches to language pedagogy is its emphasis on the learners' needs.(Robinson (1991)). Jahangard (2007) stated that: "The rationale for needs analysis is that by identifying elements of students' target English situations and using them as the basis of EAP/ESP instruction, teachers will be able to provide students with the specific language they need to succeed in their courses and future careers..." John (1991)." Benesch (1996)

The original flowering of the ESP movement springed from general developments in the world economy in the 1950s and 1960s: the growth of science and technology, the increased use of English as the international language of science, technology and business and the increased number of international students studying in the UK, US and Australia. Howatt (1984) argues that the need for commercial English for incoming Huguenot and other Protestant refugees to England in the 16th century led to a focus on Business English in early ELT and that actual textbooks on 'commercial English' and business letter writing were a feature of ELT from the 19th century." "ESP requires the careful research and design of pedagogical materials and activities for an identifiable group of

adults learners within a specific learning context." (Dudley-Evans and John 2005)

As the world grew and international relationship among nations grew and the need for a shared language as a lingua franca was felt, English language and consequently ESL and subsequently ESP became more and more important and prevalent in language education institutions around the world. Retrospectively, the concept of students needs play an important role in ESP courses "English for Specific Purposes (ESP) is a movement based on the proposition that all language teaching should be tailored to the specific learning and language use needs of identified groups of students." (Johns and Price-Machado as cited in Celce-Murcia, 2001)

In an effort to comply students' needs the best way we restore to is Needs analysis. "Needs analysis is neither unique to language teaching, nor, within language training it is unique to LSP and thus to ESP. However, needs analysis is the corner stone of ESP and to a much focused course." (Dudley-evans and John, 1998). In another view Nunan (2001 p.149) says: "needs analysis (is a) set of tools, techniques, and procedures for determining the language content and learning process for specified groups of learners." Richards (2009) in another perspective mentions that "one of the basic assumptions of curriculum development is that a sound educational program should be based on an analysis of learners needs. Procedures used to collect information about learners' needs are known as needs analysis." So the main perspective of ESP is language learners and their needs and utmost is done to identify the distinctive needs of specific learners and design courses in a way that suits these needs properly.

Needs analysis paves the way to design and offer an ESP course which is most responsive to students' needs. As Hutchinson and Waters (1993) put it as follows: "What distinguishes ESP from general English is not the existence of a need as such but rather the awareness of the need. If learners, sponsors and teachers know why the learners need English, that awareness will have an influence on what will be acceptable as reasonable content in the language course and, on the positive side, what potential can be exploited."

In the mid 1980s, Brindley elaborated on a distinction drawn by (Richterch1972, Richterich and Chancerel, 1978) between 'objective' needs and 'subjective' needs. The 'objective' needs are those that can be diagnosed by teachers based on analysis of personal data about learners along with information about their language proficiency and patterns of language use whereas the subjective needs which are often (wants, desires, expectations) can't be diagnosed easily or in many cases even stated by learners themselves."(Nunan, 2001)

By and large this discussion on students' needs confirm the fact that students' academic requirements are not fixed and written in stone; they need change in a progressive manner. Ostler E. (1980) defines this reality in this way "it is very easy to run an academic program on what seem to be reliable and useful criteria, however academic population change over a time, suggesting periodic assessment of the current students' requirements and abilities to see if changes in the population have also brought about a change in needs."

The question rises here is that, how can we get information about learners' needs? Nunan (2001) argues" a wide range of instruments and techniques is available for carrying out needs analysis. One family of techniques is used for collecting and analyzing information about the target language situation. These techniques are largely used for initial content analysis. The key question addressed here is: what are the skills and linguistic knowledge needed by students to comprehend and produce language for communicating successfully in target language situations? The second set of techniques is designed to obtain information about and from learners themselves. This information which can be related to both content and process is usually carried out through some form of questionnaire.

Significance of study

As it is always said, needs analysis is the most important part of ESP courses along with courses' evaluation which is conducted to see whether the course has reached its goals or not. As ESP courses are usually focused on specific objectives in definite time table, getting a clear picture of what must be

included in courses to achieve those pre-set targets is of utmost importance. There is no need to say that many of ESP classes and courses just become a wasted time in the end due to this reason that at the beginning of the course the needs analysis is not conducted very well; therefore, neither professor(s) nor students really know what they are doing in class or why they are doing so. To avoid this and secure the budget of organizations and dear the time of courses' participants, having a clear picture of students' needs and planning courses exactly in a way to meet students' needs is a must which those in charge should always bear in mind necessarily. Many methods have been developed in order to obtain information regarding students' needs. One of the most- referred methods is self-declaration in which students provide necessary information on their own needs; employing questionnaires to collect data is one the best and most-used methods of self-declaration. The advantage of using questionnaires is that those who want to take the course declare their needs. In this way, a clear picture of students' needs is provided which can be applied to plan a well-organized course that meets students' needs in a best possible way.

Method

Students of Lorestan University took part in this study; the number of participants was: Literature 48, Medical 31 and Engineering 33 students in total. In the first place questionnaires were distributed among students. Next, proper statistic measures were used to analyze the data and at the end the result was described in Discussion part. One-way ANOVA and chi-square was used to analyze the obtained data.

Result

Null hypothesis

There is no significant difference among Medical, literature and Engineering students' needs with regard to their ESP courses.

To accept or reject the above mentioned hypothesis, (ANOVA) will be used.

As the result shows there is a significant difference among Medical, Engineering and Literature students' needs with regard to their ESP courses. Hence the null hypothesis is rejected.

Sig.	Amount of probability	Fisher test	Average of squares	Sum of d.f	Sources of variances
0.05	0.000	2.944	1.204	39	46.964
			0.409	72	29.456
				111	76.420

maximum	minimum	Deviation of criterion	average	Number of subjects	
3	1	0.83	2.15	112	Literature, medical sciences and engineering fields

residual	N	Findings N	
-6.3	37.3	31	Medical sciences
-4.3	37.3	33	engineering
10.7	37.3	48	literature
		112	total

fields	Chi-square	d.f	Amount Of probability
4.625			
2			
0.009			

2-3-4 test are given in order to observe whether there is any significant difference between students' needs with regard to ESP courses

Null hypothesis

There is no significant difference among Medical, literature and Engineering students' needs with regard to their ESP courses. To accept or reject the above-mentioned hypothesis (chi-square) will be used.

DISCUSSION

Generally it seems that students in these three different fields (Literature, Engineering and Medical sciences) consider English language mostly as a tool to read scientific texts than to speak, listen and even to write and of course with their own differences.

It may be the case that the specific requirements of being involved in studying at higher education impose themselves upon students and push them further to consider English as an instrument which enables them to read various kinds of text in their specific field. In Iran's higher education system, the wrong belief of noticing reading-oriented aspect of English is held regarding English language and its

diverse kinds of functions as a communicative tool. Consequently, the first and sometimes the only function that crosses students and professors' mind is seeing English as a reading tool and giving the intensity and importance to it in all stages of learning and studying in Iran's educational system; it is of no surprise.

Furthermore, it is quite possible that students who have been studying English in a reading-dominated atmosphere for many years in Secondary School stage with much less attention to writing and speaking and almost none to listening, naturally have got used to considering English learning as something equivalent to being able to read in English which in current situation of Iran's educational system satisfies their needs. Taking this point into consideration that majority of students have chosen their level of satisfaction with both general English knowledge and ESP classes as Unpleasant, it may be understood that many of the students know that the way they are taught and their knowledge of English is problematic and perhaps defective.

It may be said that Iran's high education English training system has simply failed to prepare

students to face increasingly more integrated and competitive world in which communicating internationally is of the utmost importance. The second issue that crosses one's mind is the relatively subjects' high degree of dissatisfaction with such matters like; amount of students in classes, content of books, teaching methods, evaluation methods and other related issues. Although the level of dissatisfaction fluctuates from the highest, being observed in Literature and The Arts faculty and the least in Medical Sciences, but generally the level of displeasure is high which must be a great concern to those who are in charge of programming courses, professors and others involved.

Majority of students prefer to work in groups of two or more- specially, in Literature and Engineering faculties- which is in opposite to normal Iranian academic attitude that is in favor of working alone and individualism. It is a welcome phenomenon which must be emphasized on since English is a language and the main function of language is to work as a tool for people to communicate and of course communication mostly occurs among humans not in individuals' isolation. Apart from Engineering field which majority of subjects prefer to take ESP courses in their third and fourth years of studying, in Literature and Medical Sciences fields majority of subjects prefer to take ESP classes in their first and second years of studying: the second year is getting an absolute majority. The primary reason for the difference in engineering field subjects' preference is not known to researcher.

Majority of subjects in Literature and Medical Sciences fields prefer to be taught by an English teacher which is considered interesting. The reason specially, in the case of Literature subjects could be that as their field is not mere analytical but mostly dealing with human feelings, emotions and thoughts in different perspectives beside the restrictions which have been put upon Humanities generally in Iran, hence the literature students like to know and experience different ideas and thoughts further from what has been presented in their limited with bounds books subsequently English teachers are more capable of transferring these different opinions than their own professors.

Most of students prefer to take ESP classes before taking their special courses. It may show they are hopeful that studying ESP will help them to cope with understanding their special courses better although their wish may not come true. Another very interesting phenomenon that is observable is the high degree of attention that majority of subjects in all three fields pay to reading through internet which may be a sign of establishment of new communication technology apparatus among students. Such technology could potentially open new ways in teaching and learning in ESP classes in near future. Interestingly enough, majority of students see reading as the most important skill which they have to/ prefer to learn, a tendency which was discussed earlier and it is not necessary to discuss anymore.

ESP in Medical Sciences:

It is interesting to point out that although listening skill does not usually get much significance when it comes to choose among four language skills, majority of subjects are in favor of items two and five. This reality could be a sign of specific opportunities and also needs that this group of subjects has when listening skill is considered. The focus is on those needs that usually are neglected in current methods of teaching and learning ESP at universities specially. Another feature of this group is that majority of subjects who have chosen English books and sources as their reference which possibly could be because of their specific requirements, need to read and understand English texts more than two other groups.

ESP in Literature:

When it comes to listening skill, we witness that a considerable minority have chosen items 1 and 4 which show subjects' interest to listen to general and public issues that are related to all humans. In other word those who are studying Literature and The Arts and related sub-fields are more interested in listening to those general news and ideas because their field of study is less mere analytical and rigid and also is more related to humans and humans' thoughts, opinions and emotions. Therefore, naturally subjects who study Literature and other related fields are keener on listening to non-academic topics. Furthermore, opposite to majority of Medical Sciences and Engineering

subjects who have chosen items 13, 14 to 17 in reading part, majority of Literature subjects are not in favor of reading generally and the only exception is item 17 which covers online reading and majority of Literature subjects are in favor of this item. The other point that must be noticed in this group is the high degree of dissatisfaction that Literature subjects declare considering items 23, 24 upto 29. It may be the case that these students are really bored with uninteresting and monotonous texts which are taught in overcrowded classes. Even being less competent in English that is usually the case among Literature students may play a role in this unusually high degree of dissatisfaction.

ESP in Engineering;

In this group no really distinctive feature is observable and in most cases their choices go in line with what majority believe.

CONCLUSION

After reading the result and discussion part of this study, one may come to this conclusion that ESP classes in Iran's higher education system lag badly behind students' needs and international development regarding English learning and teaching with specific attention given to ESP courses. The ESP classes usually one-sidedly focus on reading skill and even in this skill it is not known whether the needs of students are fulfilled properly or not. Given the degree of dissatisfaction with ESP classes, one could conclude that even in reading skill the needs of many students are met. On the other hand there is a virtual inattention to other skills; especially, to speaking and listening. The important issue is students' weak ability in General English which severely affects their ESP capability too. Finally it is worth mentioning that the advent and introduction of Internet and online education and communication which students and youth are enthusiastic about, has created vast and unbelievable opportunity for learning and teaching English including ESP education. As Lieske (2007, p. 208) argues: "Howitz (1987) has asserted that a great deal of second language learning takes place outside of the classroom and research has demonstrated the positive relationship between out of class exposure to the L2 and success in language learning." It could be said that as Iranian universities' English education system disappoints

students and does not provide them with what they really need, the fast developing and changing world serves them better as it pushes them to get prepared to work and live in a world in which being able to communicate internationally plays an important role in their future career.

To put it in a nutshell, students generally are aware of inadequacies in their English training trend; they are attentive through getting information or first-hand experience that the level of their English knowledge is not enough to cope with the amount of their desires and challenges they face in progressively competitive and tough job market atmosphere. Accordingly it may be the case that many of them feel that their needs are not responded well with this kind of English learning and training trend.

Implications of the Study

It may be clear that ESP courses in Iran's high education institutions are far from being satisfactory and introduction of reforms in order to meet students' needs is a must that should be considered seriously by academic authorities; otherwise, the gap between what students and professors consider satisfactory and what is offered to them at universities continues to widen.

REFERENCES

- Benesch S. (1996). Needs Analysis and Curriculum Development in EAP: An Example of a Critical Approach. *Tesol Quarterly*. 30 (4). 723-738.
- Celce-Murcia M. (2001). Language teaching approaches: An overview. *Teaching English as a Second or Foreign Language*. Boston: Heinle & Heinle. 3 (1). 3-11.
- Dudley-Evans T. & Johns M.A. (1991). English for Specific Purposes: International in Scope, Specific in Purpose. *Tesol Quarterly*. (25) 2. 297-314.
- Dudley-Evans T. & ST John J.M. (2005). Developments in English for Specific Purposes, A Multi Disciplinary Approach. Cambridge: Cambridge University Press. (7) 1.
- Farhady H. (1995). On the Specificity of Purpose in ESP, the Proceedings of the Second International Conference in Linguistics and Applied Linguistics. *Twenty-five Years of*

- Living with Applied Linguistics, Collection of Articles.* Rahnama press, 575-586.
- Hutchins T. & Waters A. (1993). *English for Specific Purposes, A Learning-centered Approach.* Cambridge: Cambridge University Press. (3) 2.
- Jahangard A. (2007). Which Word Types (Technical or General) are More Difficult to Retain b the Iranian High School Learner? *The Asian ESP Journal.* (3) 2. 6-23.
- Jiajing G. (2007). Designing an ESP Course for Chinese University Students of Business. *The Asian ESP Journal.* (4) 3.
- Lieske C. (2007). Japanese Nursing College Students: Use of English Outside of the Classroom. *Asian ESP Journal.* (3) 2. 83-97.
- Nunan D. (2001). *Second Language Teaching and Learning.* Boston, MA: Heinle & Heinle Publishers.
- Ostler E.S. (1980). A Survey of Academic Needs for Advanced ESL. *TESOL Quarterly.* (14) 4.
- Richards C.J. (2009). *Curriculum Development in Language Teaching.* Cambridge: Cambridge University Press.
- Salmani M.A. (2007). Are Task Type and Ask Familiarity Predicators of Performance on Test of Language for Specific Purposes? *The Asian ESP Journal.* (3) 1. 67-96.
- 11 Talking to Professionals or Experts in Real Situations
- 12 Talking to the Lecturers, Students and Others
As a Student, I Need Reading Skill For...
- 13 Reading Specialized Books
- 14 Reading Articles in Professional Journals
- 15 Reading Reports
- 16 Reading Newspapers and Magazines in English
- 17 Reading Online Texts
As A Student, I Need Writing Skills For...
- 18 Taking Notes from Lectures
- 19 Taking Notes from Books
- 20 Writing an Article for Giving Conference
- 21 Writing Class Project
- 22 I Am Satisfied With the Number of Students in Class
- 23 I Am Satisfied With the Items Included In the Book
- 24 I Am Satisfied with the Applied Teaching Method in Class
- 25 I Am Satisfied with the Teacher's Assessment Test
- 26 I'm Pleased with the Present Book
- 27 I Am Satisfied With the Extent of Teaching Foreign Culture in Class

APPENDIX

Set of Common Questions Used For All the Three Faculties;

As a Student, I Need English for the Following Purposes ...

- 1 Listening to Conversations about Public Issues
 - 2 Listening to Lectures
 - 3 Listening to Series of Lectures
 - 4 Listening to Mass Media
 - 5 Listening to Instructions (Training in Real Situations, Such As a Hospital)
 - 6 Listening to Students and Colleagues
- ##### **As a Student, I Need English For...**
- 7 Participating in Academic Discussions
 - 8 Speaking At Seminars, Meetings and Presentations
 - 9 Questions and Answers in Class
 - 10 Questions and Answers at Seminars