Needs Assessment in ESP: A Review

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Abstract

Needs assessment of the learners in English language is considered as an important domain that comes under the ambit of ESP "English for Specific Purposes". English cogitates as a lingua franca and a cornerstone for success in any field. However, in ESL/ELT it is imperative to design a course that caters for the needs of the learners. Thereby this study attempts to evaluate the existing needs assessment literature to corroborate its relevancy and adequacy in preparing the nursing professionals for their professional English language requirements. In this evaluative study, needs analysis and assessment literature have been reviewed. ESP is explored in various ways like its definitions, classification, development, different approaches to needs analysis.

Key words: ESP; Needs assessment; ELT; Professional English

INTRODUCTION

ESP English for Specific Purposes had been defined in many ways by ELT experts, ESP specialists and connoisseurs. The most quoted definitions were put forward by Mackay and Mountford (1978), Hutchinson and Waters (1987), Streves (1988), Robinson (1991), Dudley Evans and St. John (1998) and Flowerdew and Peacock (2001) and Nunan (2004).

Mackay and Mountford (1978, p.2) classified ESP as the teaching of English for a "clearly utilitarian purpose". The purpose they referred is to determine by the needs of the learners through investigation, which could be academic, occupational, or science. These needs in turn found out the content of the ESP curriculum to be taught and learned. Mackay and Mountford also defined ESP and the *special language* that took place in *specific settings* by *certain participants*. Thus these certain strands of special language, specific settings and certain participants process in such a way that cumulatively helped in determining the target language needs and requirements of learners in a context specific situation.

For Hutchinson and Waters (1987, p.19) ESP was "an approach to language teaching in which all decisions as to content and method were based on the learners' reason for learning". ESP was an approach to language teaching in which all decisions as to content and method were based on the learner's reasons for learning. They perceived ESP as a procedure and not as a product.

Strevens (1988) defined ESP via making a distinction between four *absolute characteristics* and two *variable characteristics*. The absolute characteristics were that ESP consists of English Language Teaching which is:

- Designed to meet specific needs of the learner;
- Related in content (that is in its themes and topics) to particular disciplines, occupations and activities;
- Centered on language appropriate to those activities in syntax, lexis, discourse, semantics and so on, and analysis of the discourse;
- In contrast with "General English".

The variable characteristics are that ESP

- May be restricted as to the learning skills to be learned (for example reading only);
- May not be taught according to any pre-ordained methodology.

Robinson's (1991) definition of ESP was "normally goal-directed', which constantly enlarged as a result of needs and situational analysis of the learners. Its key objective was to target the needs of the learners that facilitated them with their desired requirements and it followed English medium of instructions chiefly. She considered ESP course as a purposeful and purpose oriented that carried the objective of meeting learners' needs in achieving successful performance in education as well as professional roles. This was what made it different from that of a general English course was its specificity.

Dudley-Evans and St-John (1998, pp.4-5), tailored Strevens's definition of ESP to form their own definition of ESP. They contended that the emphasis on content in the absolute characteristics mentioned by Strevens might validate the wrong impression held by many teachers that ESP was always related to subject content. They construed that ESP did not necessarily have to be related to content but it should always reflect the underlying concepts and activities of the broad disciplines. For them, it was an approach to language teaching in which all decisions as to content and method were based on the learners' reason for learning.

Furthermore, Dudley-Evans and St-John (1998, p.5) included the following variable characteristics:

- ESP is likely to be designed for adult learners, either at tertiary level institution or in a professional work situation.
- ESP is generally designed for intermediate or advanced students. Most ESP courses assume some basic knowledge of the language systems, but it can be used with beginners.

John (1998) took away the absolute characteristic that ESP was in contrast with General English and had further added more variable characteristics. He vied that ESP was not necessarily related to specific discipline.

Flowerdew and Peacock (2001) included another set of factors to the variables anticipated by Strevens (1988) and Evans and St John (1998):

- Authentic texts
- Communicative task based approach
- Adult learners

- Purposeful course

Nunan (2004) expounded ESP as an important subcomponent of language teaching, with its own approaches to curriculum development, material design, pedagogy, testing and research.

Thus English for Specific Purposes 'ESP' was defined by different ESP experts, academia and instructors according to their own specific experience and specific demands and needs. All of them had agreed on the fact that it was a process of developing a course considering the requirements of the learners to meet their specific professional and academic requirements at large. ESP was the name of a systemic and systematic evolution of language teaching and learning in an explicit context.

1. EMERGENCE OF ESP

C.L. Barber published an article as early as 1962 on the nature of scientific English "EST" regarded as synonymous with 'ESP' English for Specific Purposes. His most quotable quote was:

"Tell me what you need English for and I'll tell you the English you need."

Emergence of ESP had marked by the multiple factors emanating from this global village and widespread role of language in multiple forms and functions. ESP field became popular in 1960s as a vital activity within ESL and EFL. Another important factor was revolution in linguistics. Many branches of linguistics had been introduced till then. Language had been enucleated by various linguists around the world. It also evolved the concept of contextualized use of the language in real-life situations and scenarios instead of teaching it in isolation. This trend made learners the focus of all the learning process and a shift from teacher-centeredness to learner-centeredness was a fait then.

2. BRANCHES OF ESP

Busturkmen (2010) categorized English for specific purposes into different sub branches according to its general and specific nature of the course in his book "Developing Courses in English for Specific Purposes".

Table 1
Branch Sub Branches Example Stated by Busturkmen (2010)

English for Academic Purposes (EAP)	English for General Academic Purposes (EGAP)	English for academic writing
	English for Specific Academic Purposes (ESAP)	English for law studies
English for Professional Purposes (EPP)	English for General Professional Purposes (EGPP)	English for the health care Sector
	English for Specific Professional Purposes (ESPP)	English for nursing
English for Occupational Purposes (EOP)	English for General Occupational Purposes (EGOP)	English for the hospitality industry
	English for Specific Occupational Purposes (ESOP)	English for hotel Receptionists

Hutchinson and Waters (1987) brainstormed English for Specific Purposes in the shape of a 'Tree of ELT' and broke down into different branches and sub-branches. The tree delineated into several branches:

a) English for Medical Studies
b) English for Technicians
c) English for Economics
d) English for Secretaries
e) English for Psychology
f) English for Teaching

Below these branches, it was suggested that these branches could be conveniently divided into two principled branches whether English was required for specific academic or profession/occupational purposes.
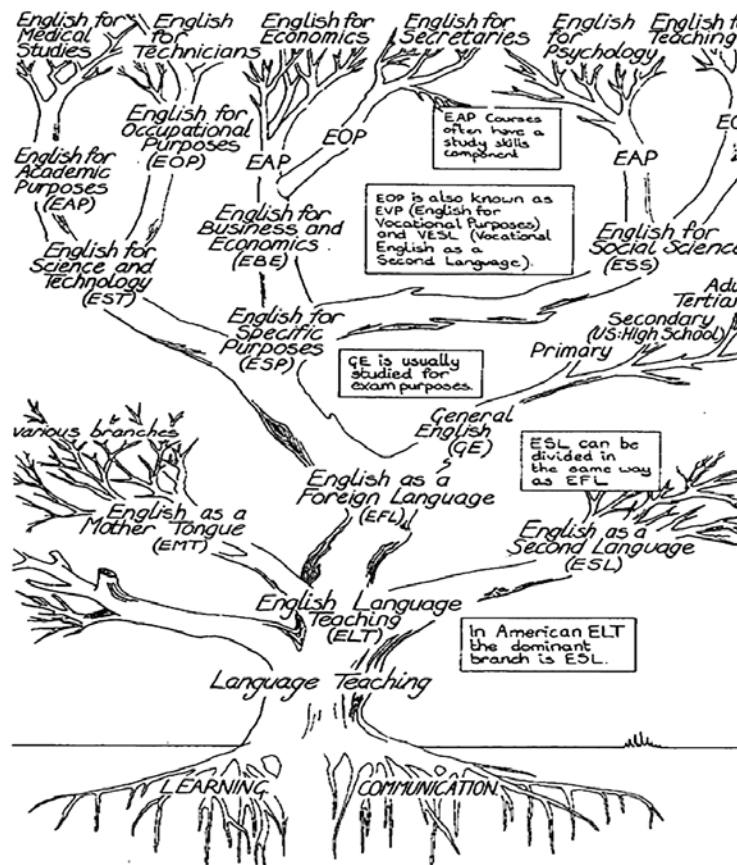
Figure 1
The Tree of ELT

3. ENGLISH VS. ENGLISH FOR SPECIFIC PURPOSES

In theory nothing, in practice a great deal
Hutchinson and Waters (1987, p.53)

English for specific purposes in simple terms could be defined as 'one teaches one's students or employees according to their specific English language needs'. Some of the specific components that made ESP distinguished category from that of general English described by Hutchinson and Waters (1987) were as follows.

a) ESP follows time constraints.
b) ESP is time specific.
c) ESP is task specific.
d) ESP develops students' communicative competence.
e) ESP has language based objectives.
f) In this course, learners want to achieve 'real world' objectives requiring specific linguistic competencies.
g) ESP focuses on one skill specifically rather than the teaching of all four skills in general English.
h) ESP uses insights from various disciplines.
i) ESP uses expertise from specific disciplines

4. NEEDS ANALYSIS IN ESP

A number of linguists, (e.g. Strevens (1977), Swales(1990), Hutchinson and Waters (1987), Jordan (1997), Flowerdew and Peacock (2001), and Basturkmen (2006)) laid emphasis on needs analysis as an insinuating point for devising syllabuses, courses, materials for specific audiences. It could be defined as:

The process of determining the needs for which the learner or group of learners required a language and arranging the needs accordingly to priorities …[It] made use of both subjective and objective information (Richards et al., 1992).

Munby (1978, p.43) stated that, needs analysis could also help in evaluating an existing programme and if found deficient might help in establishing the need for introducing a change and what kind of change might appropriately match the needs of the learners and simultaneously be acceptable to teachers.

The identification of language and skills was used in determining and refining the context for the ESP course. This process was termed as 'needs analyses' (Basturkmen, 2010). This kind of needs analysis brought about the attitudes of the learners, instructors, donor agencies or employees of an organization towards introducing a needs-based English language course. Therefore needs analysis had utilitarian purposes for altering, shaping, or reshaping the course according to the needs of the specific learners and demands of the specific situations in a systematic way. The first and foremost task of an ESP practitioner was to identify the needs of the learners and design a course around them.

5. NEEDS ANALYSIS PROCESS

Jordan (1997, p.38) pointed out that there was no single approach to needs analysis and circumstances varied from situation to situation. In practice, most choices would be determined by time, money and resources. However it was essential to plan in advance. After deciding what was strictly relevant and necessary sufficient time must have been allowed to carry out step by step procedures'. The steps suggested by Jordan (1997, p.23) were:

a)   Purpose of analysis
b)   Delimit student population
c)   Decide upon the approach(es)
d)   Acknowledge constraints/limitations
e)   Select methods of data collection
f)   Collect data
g)   Analyze and interpret results
h)   Determine objectives
i)   Implement decisions (i.e. decide upon syllabus, content, materials, methods, etc.)
j)   Evaluate procedure and results

6. APPROACHES TO NEEDS ANALYSIS

In order to design an "effective ESP course", it was important to consider the question that how the data of needs analysis could be used (Hutchinson and Waters, 1987). Various approaches to needs analysis had been discussed by different writers. Jordan (1997) reviewed needs analysis by considering five approaches to needs

analysis: target situation analysis, present situation analysis, learning centered approaches, strategy analysis and means analysis that would be explained one by one.

6.1 Target Situation Analysis (TSA)
Target situation analysis connoted, "What did students need to be able to do" in English as a result of the course?" (Robinson, 1991, p.196) In the 1970s, a framework for needs analysis was devised by Munby (1978). It focused on the pupils' needs at the end of the language course, and target level performance. The core of Munby's model was the communication needs processor (CNP). In CNP, account was taken of the variables that affected communication needs by organizing them as parameters in a dynamic relationship to each other. After operating Munby's model the end product was a profile of the language needs of the learners. Then the needs profile was converted into a 'communicative competence specification', from in which a sequenced syllabus could be drawn up. The route to arrive at the syllabus went either via a "language skills selector" or via a "meaning processor" and "linguistic encoder".

Munby's attempt was to be systematic and comprehensive inevitably made his instrument inflexible, complex and time-consuming (West, 1994). Due to complex inflexible nature of Munby's model, all the subsequent models of needs analysis aimed at simplicity (Jordan, 1997). Jordan criticized Munby's model because he considered practical constraints after the procedure had been worked through whereas, Jordan (1997) believed that practical constraints should have been considered at the start of the needs analysis procedure. Secondly, Jordan believed that language items chose for practice in ESP/ EAP should also have reflect on those used in the real world whereas, Munby's classifications of language were derived from social English.

6.2 Present Situation Analysis (PSA)
Richterich (1977) proposed the Present Situation Analysis (PSA) approach which was different from the target situation analysis. It established the learners' state of language development and the sources of information were the students themselves, the teaching establishment and the "user institution", for instance, place of work, sponsoring body, etc.. The data was collected through surveys, questionnaires, and interviews. The learner was at the center of the system which included the surrounding society and culture.

6.3 Learning Centered Approaches
Hutchinson and Waters (1987) supported a learning centered approach. They had differentiated between the learner-centered approach and the learning-centered approach. The learner-centered approach was based on the principle that learning was totally determined by the learner, while learning-centered approach involved learning as process of negotiation between

individual and society which included teaching syllabus, methods, materials, etc.. Hutchinson and Waters made a comparison between target needs, (what the learner needed to do in the target situation) with learning needs, (what the learner needed to do in order to learn). They pointed out that it was necessary for the course designer to obtain the following kind of information from an analysis of learning needs.

- Why were the learners taking the course?
- How did the learners learn?
- What resources were available?
- Who were the learners?
- Where would the ESP course have been taken place?
- When would the ESP course have been taken place?

Target needs were what the learners needed to do with the language in the target situations. These could be distinguished by Hutchinson and Waters (1987) into three facets:

√ Necessities: These were objective or perceived needs seen as derived by outsiders from facts.

√ Lacks: These were subjective or felt need seen as derived from inside. This referred to the existing gap between existing proficiency and target proficiency.

√ Wants: What the learners felt they need. This included learners, views about the situation their wishes, motivation, attitudes, interests, personal reasons for learning, learning styles etc..

6.4 Strategy Analysis

The approach was related to finding out about learners' language learning strategies. The focus of needs analysis turned more towards the methodology employed to implement language programmes (Nunan, 1988b). This involved not only methods of teaching, but also methods of learning. The pioneer work in this area was that of Allwright (1982). His starting point was the learners' perceptions of their needs in their own terms. He wanted to help students to identify the skill area and their preferred strategies of learning the skills. In a strategy analysis the related areas were preferences in group size, correction procedures and methods of assessment (Jordan, 1997).

6.5 Means Analysis Approach

An important approach to needs analysis suggested by Holliday and Cooke (1982) was means analysis. The focus of means analysis was to look at environment in which a course would be likely to take place. It also involved a study of the local situation, i.e. the teachers, teaching methods, students, facilities, etc.. It saw how a language course could be implemented within constraints. Dudley-Evans and St John (1998) stated that classroom culture and the management infrastructure and culture were the two important factors in means analysis approach.

7. CRITICISM

Though needs analysis as a fundamental element in designing an appropriate course for the target population; however it was also subject to criticism by many ESP experts due to its limitations. Brindley (2000) argued that conducting needs analysis was a time consuming and tedious process in a fast pace world. However it might be dreary process of administering needs analysis but it supplied a lucid picture of the learners' present situation that led to the carrying out the a successful ESP programme.

8. NEEDS ANALYSIS AROUND THE WORLD

ESP in Pakistan was gaining currency in the fields of agriculture, business, computers, technology, engineering, journalism, law and medical. The major focus of the researchers had been on determining the needs of the learners and designing a suitable course as a part of recommendation and evaluating the existing courses.

Iqbal (1998) conducted a study to justify the rationale of introducing a course of English language for the students of Computer Science (BCS). In his research he described the designing features of the syllabus of English for this group of learners, based primarily on their needs and problems at the university level.

Hassan (2005) analyzed the reading and writing skills for advanced students of business English in Pakistan. The recommendation made was to focus on learners' written abilities to meet with the field challenges and requirements. Nevertheless he considered communication as a vital aspect of ESP in his research.

Ahmed (2005) had carried out an extensive and useful research on legal English. His findings had presented a clear picture of the levels of inadequacy in several areas related to academic and professional situations. In the light of his findings, he also recommended a legal English course which could be implemented in various academic and professional institutes of legal education in Pakistan.

Khushi (2011) evaluated the English Teaching Programme taught at Pakistan Military Academy, Kakul based on needs analysis, situational analysis and textual analysis consecutively. She also recommended various interventions required to improve language teaching and learning at PMA.

Javid (2013) explored ESP and its variants like its definition, characteristics, scope and purpose of having such a course. In his research, he found out that the purpose of an ESP course was to enable learners to function adequately in the target situation. Thus an ESP program should have been aim-directed, learner-directed and situation-directed.

Niazi (2013) conducted a notable research recently in ESP with special concentration on medical purposes in which he investigated the academic and professional

English language communicative needs of medical learners. The study explored the frequency of use of English; its importance in various activities related to the medical field, the existing level of English proficiency of medical learners also identified opinions about learning English at medical colleges in Pakistan. The findings revealed that English was extensively used both in medical studies and profession. The study indicated the needs of specific methodology and trainings of English language teachers for teaching English in medical colleges.

It was evident from the research projects mentioned above that like other parts of the world, there has been a great development in ESP course-designing projects carried out in different disciplines in Pakistan that significant contributed into the regional domain of ESP context. However there was a need to continue with same tradition with well-equipped research to fill the existing gaps and explore ESP in Pakistani practices and perspectives. The present research was an attempt to fill this gap.

There were numerous examples of English for medical and health care purposes. This part would focus on some of the notable researches around the world during the recent century in chronological order that catered only to the medical industry.

Shomoossi, Rad, and Rakhshani (2003) looked into the efficacy of the nursing programs and the results indicated a wide gap between the judgment of nurses and students of nursing about the efficacy of the ELT programs in Iranian medical universities and institutes. It suggested a need for a change in the dynamics of nursing English to meet the expectations from nursing job.

Antic (2007) contended that the demand for English was very specific. In analyzing, the needs of German medical students' writing tasks, he suggested to have their demands in focus and should more specific than English for Medical Purposes (EMP). Tasçı (2007) in his graduate scholarship at The Graduate School of Education Bilkent University Turkey had analyzed medical students English language needs and the findings indicated a changing trend in the students' perceptions of their foreign language needs in comparison with the previous needs analyses of English language needs in medical contexts. The overall findings of this study revealed that there was a need to increase the class hours, provided technological equipment, and appointed trained instructors for the efficient teaching of medical English.

Gimenez (2008) in the United Kingdom researched the academic writing in nursing and analyzed the genres, marked criteria and designed a course based on the results of the survey, the interviews and the examination of the marking criteria. Her article presented taxonomy of the most common genres in pre-registration nursing, examined typical marking criteria, and suggested some guidelines for the design of writing courses for nursing students. It also presented a possible outline for one such course. Radu (2008) in his research titled: "English for Medical Purpose Teaching" described the steps to learn the medical terminologies for medical personnel. Since medical terminology was a specific terminology which was used to achieve the purpose of communication in the health care field efficiently and precisely he noted.

Donnelly, McKiel and Hwang (2009) delved into the ESP instructors' perspectives and data acquired from the instructors suggested that the challenges experienced by EAL students and instructors resided in a lack of awareness and supported at the institutional and structural levels rather than solely on capacities of individual EAL students or instructors. From this study, identification of supportive activities for nurse educators and education sector decision makers emerged in Canada.

Freihat (2012) elaborated on the role of needs analysis and designed the specific course for nursing students in Jordan. Hatam and Shafiei (2012) evaluated the effectiveness of ESP courses in enhancing technical translation proficiency among mechanical engineering students. The research found that the ESP course under investigation was approximately sixty percent effective in enhancing the learners' proficiency in technical translation. Moreover in medical and health care unit Dafa-Allah (2012) investigated on ESP learners' needs in a case study of medicine students at Sudanese Universities, Gass (2012) designed an ESP curriculum for Thai nurses after a thorough analysis of their needs and situations and Tayyebi (2012) looked into the usages of personal pronouns in English in Persian Medical research articles.

Sarudin, Mechraoui, Noor, ibrahim, Muhamad and Malek (2013) explored the stakeholders' perceptions of an English for occupational purposes course in their study in Malaysia. This study was undertaken to investigate the strengths and weaknesses of English for occupational purposes course for students of economics and management science based on internal stakeholders' perceptions. A multi-method approach had been adopted and triangulation of methods comprising survey questionnaires and semi-structured interviews were employed. Javid and Umer (2013) investigated English language needs of medical undergraduates in Saudi perspective. The findings of the study had reaffirmed the previous research that suitable and appropriate in-house teaching materials were inevitable to address ESP learners' specific academic needs. It was further revealed that speaking and reading skills were the most important for their medical studies.

Pavel (2014) suggested that teaching medical English should have adapted to meet the specific academic and professional needs of the Romanian students. This research focused on the key issues in course design and brought forth the insights gained from my professional experience developing the curriculum for medical English. Tachom (2014) in his work on Thai

nursing students examined innovations in task-based teaching and use of authentic professional English. His investigation was supportive in shaping the potential of task-based language teaching in this setting, to address a number of known problems with the development of spoken English within ESP in Thai higher education. This study was designed as a teaching intervention, conducted with a group of health science students. An action research design was followed, and both qualitative and quantitative data were obtained in the current study concerning the instructional process, ongoing student learning, and final learning outcomes.

Kabouha (2015) researched the vocabulary learning strategies of medical English terminologies in a case study of foundation year students at Ibn Sina Medical College Jeddah. The findings of the present study suggested that further research could be conducted concerning how to adapt these strategies in classroom teaching and learning and how to train learners to use vocabulary learning strategies more efficiently.

These studies indicated a growing interest among researchers in the medical and health-care unit English language learning, teaching, designing courses and setting instructions strategies and knowing the classroom discourse in ESL/EFL framework.

CONCLUSION

This paper covered the definitions of ESP, its emergence; branches and development in the modern world were discussed. Then the literature related to needs analysis and its different approaches had been reviewed to get a fair idea of the domain of needs analysis at a broader perspective. Then the seminal ESP works at global context and medical ESP at international context were appraised. By reviewing literature, it was discovered that despite the fact ESP had been researched in multiple ways by various researchers around the world but there was a dearth of noteworthy researches allied to nursing English with special focus on Pakistani nursing English perspective.

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