



ENGLISH FOR SPECIFIC PURPOSES NEEDS ANALYSIS IN HIGHER EDUCATION: A CRITICAL REVIEW

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Abstract:

The present paper explores English for Specific Purposes (ESP) needs analysis in higher education. It examines the theoretical development of ESP, from early approaches such as register and rhetorical analysis to skill-centered and learning-centered perspectives. The paper highlights the distinction between ESP and General English and focuses on differences in objectives, content, and learner needs. It also reviews major frameworks of needs analysis, such as Target Situation Analysis, Present Situation Analysis, and Learning Situation Analysis, as well as influential models proposed by Munby, Hutchinson and Waters, and Dudley-Evans and St-John. Furthermore, the present review discusses empirical studies on ESP needs analysis and identifies gaps in existing research. It also informs ESP curriculum design in higher education contexts.

Keywords: English for Specific Purposes, needs analysis, higher education, ESP course design

1. Introduction

English for Specific Purposes (ESP) has become an essential branch of English Language Teaching (ELT), particularly in higher education contexts where learners are expected to use English for academic or professional purposes. Unlike General English (EGP), ESP is fundamentally driven by the specific needs of learners, which determine both course content and teaching approaches. Over the past decades, ESP has been defined and redefined by several scholars, reflecting its evolving nature. While early definitions emphasized the idea of ESP as a needs-based approach to language teaching (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998), later interpretations highlighted its strong connection to learners' disciplinary or professional contexts. However, despite this consensus around "needs", the concept of ESP remains complex due to differing views on what "specific" and "purpose" entail.

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A central element in ESP research is needs analysis, which is widely considered the cornerstone of ESP course design. Needs analysis involves identifying learners' present abilities, target requirements, and learning preferences in order to design effective language instruction. Various models have been developed to conceptualize needs analysis, ranging from Munby's early communicative model to more recent frameworks such as those of Hutchinson and Waters (1987) and Dudley-Evans and St John (1998). These models reflect a gradual shift from purely linguistic and target-situation-focused approaches to more comprehensive frameworks that include learning processes and contextual factors.

In higher education contexts, ESP plays an important role due to the increasing need for English in academic study, research, and future professional communication. However, the effectiveness of ESP courses is often influenced by how learners' needs are identified and interpreted, making needs analysis a crucial stage in ESP course development. This paper provides a critical review of English for Specific Purposes needs analysis in higher education. It synthesizes key theoretical perspectives, traces the evolution of needs analysis models, and examines their relevance to ESP course design as presented in the literature.

2. ESP Overview and Development

English for Specific Purposes (ESP) is widely regarded as an approach to language teaching that is fundamentally characterized by the prioritization of learner needs. As highlighted in the literature (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998), ESP places emphasis on identifying and responding to the specific linguistic and communicative requirements of learners in academic or professional contexts. However, despite general agreement on the centrality of needs, ESP remains a concept that is not uniformly defined, as scholars have offered different interpretations of its scope and characteristics. A major issue in ESP literature concerns the ambiguity of the term "need". As indicated by Richterich (1972), the concept of language needs is not easily defined and may refer to the requirements that arise from the use of language in different situations. Similarly, West (1994) emphasizes the difficulty in distinguishing between necessities, wants, and demands. In the same line, Alfehaid (2011) broadens the concept of needs to include learners' goals, preferences, interests, motivations, expectations, and lacks. This diversity of meanings shows that "needs" in ESP is a complex and multidimensional concept.

In ESP course design, needs have been classified in different ways. One common distinction is between objective and subjective needs (Richterich, 1972; Brindley, 1989; Belcher, 2006). Objective needs refer to observable data such as learners' language proficiency, current use of language, and difficulties encountered in real-life communication. Subjective needs, on the other hand, relate to learners' perceptions, attitudes, and expectations regarding language learning. Both types of needs are considered important in ESP, and an imbalance between them may affect the effectiveness of course design. Another important classification proposed in the literature

is Hutchinson and Waters' (1987) distinction between target needs and learning needs. Target needs include necessities, lacks, and wants. Necessities refer to what learners are required to know in the target situation, while lacks represent the gap between the learners' present knowledge and the required competence. Learning needs, on the other hand, focus on how learners learn and include factors such as learning strategies, motivation, and learning conditions.

The importance of needs analysis in ESP has led to the development of several models. Munby's Communicative Syllabus Design (1978) is one of the earliest and most influential models, focusing on a detailed analysis of communicative needs through categories such as participant, purposive domain, setting, interaction, and communicative event. Although widely recognized, this model has been criticized for being complex and for neglecting learners' subjective needs. In response to these limitations, McDonough (1984) proposed a more integrated model of needs analysis that takes into account both target situation requirements and contextual factors. Later, Hutchinson and Waters (1987) developed a model that emphasizes target needs (necessities, lacks, wants) and learning needs, providing a more balanced perspective. More recently, Dudley-Evans and St John (1998) expanded the scope of needs analysis by incorporating target situation analysis (TSA), present situation analysis (PSA), learning situation analysis (LSA), means analysis, and discourse-related aspects, offering a more comprehensive framework for ESP course design.

Overall, the literature shows that needs analysis is a central component of ESP, and its development reflects a shift from a narrow focus on linguistic description towards a more comprehensive understanding of learners' needs. These theoretical perspectives provide the foundation for examining ESP needs analysis in higher education contexts.

3. Needs analysis in ESP

Needs analysis is widely regarded as a defining feature of English for Specific Purposes (ESP) and a central step in course design (Flowerdew & Peacock, 2001; Hutchinson & Waters, 1987). It aims to identify what learners need to know in order to function effectively in target communicative situations. As the literature shows, ESP has progressively shifted from a focus on language forms to a broader concern with learners' communicative needs and learning processes.

Early models of needs analysis were strongly influenced by communicative approaches to syllabus design. One of the most influential frameworks is Munby's Communicative Syllabus Design (1978), which attempted to systematize learners' communicative requirements through a detailed analysis of various parameters such as participants, purposive domain, setting, interaction, instrumentality, and communicative events. This model primarily emphasizes the target situation and the linguistic demands associated with it (see Figure 1).

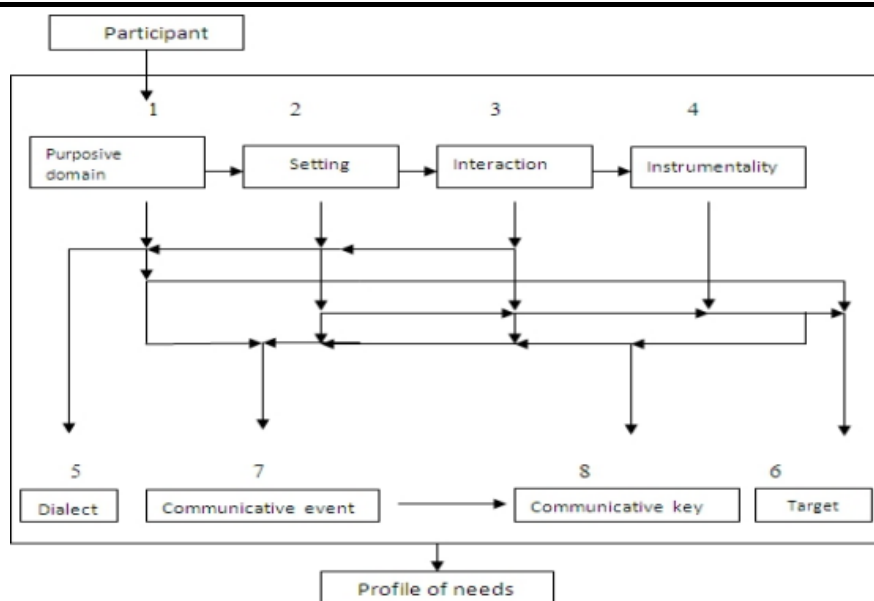


Figure 1: Munby's (1978) Communicative Syllabus Design (source: Rahman, 2015)

However, Munby's model has been criticized for being overly complex, mechanistic, and largely neglecting learners' subjective needs such as their preferences, motivations, and learning strategies. In response to these limitations, McDonough (1984) proposed a more flexible model of needs analysis, which integrates both target situation demands and contextual factors influencing course design. Unlike Munby's model, McDonough's framework acknowledges that needs are dynamic and shaped by external constraints as well as situational variables (see Figure 2).



Figure 2: McDonough's (1984) Needs Analysis Model (source: Rahman, 2015)

Although McDonough's model represents a step forward, it still does not fully account for learning processes or learners' strategies. A more comprehensive perspective is offered by Hutchinson and Waters (1987), who distinguish between target needs and learning needs. Target needs are further divided into necessities, lacks, and wants, while learning needs focus on how learners learn and what influences the learning process. This model marks a shift from purely product-oriented views of language to a more process-oriented understanding of learning.

Finally, Dudley-Evans and St John (1998) propose one of the most comprehensive frameworks for needs analysis in ESP. Their model integrates Target Situation Analysis

(TSA), Present Situation Analysis (PSA), and Learning Situation Analysis (LSA), alongside means analysis and discourse-related components such as genre and linguistic analysis. This multi-dimensional model reflects the complexity of ESP course design and the need to consider multiple sources of data. Overall, the evolution of needs analysis models demonstrates a gradual shift from a narrow focus on target language use towards a more holistic understanding that includes learners, learning processes, and contextual factors.

4. Empirical Studies and Critical Discussion

Empirical research on English for Specific Purposes (ESP) needs analysis has developed significantly over the past decades, particularly in higher education contexts where English is increasingly required for academic and professional purposes. Most studies in the field share a common objective: identifying learners' linguistic needs in relation to their academic disciplines and future professional requirements. However, despite this shared focus, the methodological approaches adopted across studies vary considerably, which has important implications for the validity and scope of their findings.

A number of studies have concentrated primarily on learners' perceptions of their English language needs. For example, Altamimi and Shuib (2010), in their study of petroleum engineering students, found that learners considered English essential for their academic studies and future careers. Their results also indicated that students felt particularly weak in productive skills, especially speaking and listening, and therefore required more instructional time dedicated to English language development. In a similar vein, Alastal and Shuib (2012) investigated undergraduate students in Applied Science and reported that learners perceived speaking as the most important skill for improvement, while reading, listening, and writing were also considered highly relevant for academic success.

Although these studies provide useful insights into learners' perceptions, they share a common methodological limitation: an over-reliance on questionnaire data. This narrow approach tends to restrict the depth of analysis, as it captures only one perspective, namely that of the learners. As emphasized in the literature, needs analysis is more reliable when multiple sources of data are used, including teachers, institutional stakeholders, and sometimes workplace representatives (Hutchinson & Waters, 1987; Long, 2005). The absence of triangulation in these studies therefore limits the extent to which their conclusions can be generalized or fully validated.

Similarly, Dafa-Allah (2012), in his study of medical students in Sudanese universities, focused primarily on Target Situation Analysis. His findings highlighted the importance of English for academic comprehension and professional communication, particularly in understanding lectures, reading medical materials, and engaging with media sources such as films and television. However, the study did not sufficiently consider other dimensions of needs analysis, such as present learning difficulties, learning strategies, or institutional constraints. This results in a rather partial view of learners' needs, centered mainly on future use rather than current learning realities.

Dakhmouche (2008) attempted to adopt a more balanced approach by including both students and teachers in his investigation of ESP in a computer science department. His findings revealed a lack of consistency in teaching objectives and highlighted a mismatch between learners' expectations and instructional practices. Nevertheless, the study still relied mainly on questionnaires as its primary research instrument. The absence of additional tools such as interviews or classroom observation limited the depth of interpretation and reduced the richness of the data obtained.

In contrast, Ibrahim (2016) represents a more methodologically comprehensive approach. His study combined questionnaires, proficiency testing, and interviews in order to examine English language needs among students in a Faculty of Public and Environmental Health. The findings revealed a discrepancy between students' self-perceived proficiency and their actual performance levels. More importantly, the study showed that learners required a wide range of skills, including vocabulary, grammar, and pronunciation, as well as collaborative learning strategies such as pair and group work. This study demonstrates the value of integrating multiple instruments and perspectives in order to achieve a more accurate and nuanced understanding of learners' needs.

Among the most comprehensive studies reviewed is that of Alfehaid (2011), which employed a mixed-methods approach and incorporated data from students, teachers, administrators, workplace professionals, and course documentation. This triangulated design enabled a more holistic understanding of both academic and professional English needs. The study also highlighted limitations in existing ESP courses, particularly in terms of curriculum design, teaching materials, and assessment practices. Its findings strongly supported the need for curriculum reform and teacher training in order to better align ESP instruction with actual learner needs.

Overall, the empirical literature on ESP needs analysis reveals both progress and persistent limitations. On the one hand, there is a clear recognition of the importance of needs analysis in informing ESP course design. On the other hand, many studies remain limited by methodological constraints, particularly the overuse of questionnaires and the under-representation of multiple stakeholder perspectives. In addition, insufficient attention is often given to learning needs, focusing instead on target situation demands. This imbalance suggests the need for more integrative approaches that consider not only what learners need to achieve, but also how they learn and under what conditions learning takes place.

5. Conclusion

This article has critically reviewed the development of English for Specific Purposes (ESP) needs analysis within higher education contexts. The discussion has shown that ESP has undergone significant theoretical and methodological shifts, moving from form-focused and structurally oriented approaches towards more communicative, learner-centered, and context-sensitive models. Early approaches, such as register analysis and rhetorical/discourse analysis, primarily emphasized language forms and textual features.

While these approaches contributed to the identification of linguistic patterns in specialized texts, they were limited by their neglect of learners and learning processes. Subsequent developments, particularly skill-centered approaches, introduced a stronger focus on language use and cognitive skills, yet still tended to treat language skills as isolated components rather than integrated communicative practices.

A major advancement in the field emerged with needs analysis frameworks, particularly Target Situation Analysis, which systematized the identification of learners' future communicative requirements. However, this approach was later criticized for its narrow focus on outcomes and its limited consideration of learner variability. In response, more comprehensive models such as those proposed by Hutchinson and Waters (1987) and Dudley-Evans and St John (1998) expanded the scope of needs analysis to include present situation analysis, learning needs, and contextual factors. The review of empirical studies further demonstrates that while needs analysis has become a central component of ESP research, its implementation often remains partial. Many studies continue to rely heavily on single data sources and fail to incorporate a sufficient range of perspectives or methodological tools. As a result, there is often a gap between theoretical models of needs analysis and their practical application in research and course design.

In conclusion, ESP needs analysis should be understood as a dynamic and multi-dimensional process that requires careful consideration of target demands, learner characteristics, and learning contexts. A more balanced and integrated approach is necessary to ensure that ESP courses are both relevant and effective in meeting the complex needs of learners in higher education.

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Conflict of Interest Statement

The author declares no conflicts of interest.

About the Author

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