

Tracing the Development of Approaches of Needs Analysis in English for Specific Purposes (ESP)

CJ Kothalawala[#], TD Kothalawala and WAAK Amaratunga

Department of Languages, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

[#]kothalawala.chamila@yahoo.com

Abstract- *Since the beginning of the concept of English for Specific Purposes (ESP) there have been multiple perspectives of the term 'needs' and its classification, and as a result models of needs analysis have evolved tremendously through the last three decades. This study reviews the literature on needs in ESP by tracing the evolution of the term needs and models and approaches in needs analysis. In this study, eight models and approaches of needs analysis were qualitatively analysed in order to identify their appropriateness and limitations in identifying learner needs. The selected eight models include: 1) register analysis, 2) Munby's Communicative Needs Processor, 3) deficiency analysis, 4) learner-centered needs analysis, 5) target situation analysis, 6) critically aware needs analysis, 7) right analysis and 8) stakeholder needs analysis. These eight models were selected for the study as they have been the most widely used ones in curriculum development throughout ESP practice. As the outcome of this study, the researchers have identified that needs have been distinguished as learning and target needs, lacks, wants, gaps, deficiencies and rights. Each approach of needs analysis has been criticized in ESP literature due to its limitations in defining the term needs and in the method used for collecting learner needs. The study has identified that 'needs' has not been viewed as a single entity and the models and approaches of needs analysis have evolved from the most influential early models to complex and modern models which are used to identify learner needs in ESP in the modern context. The understanding developed about the broader perspective of the evolutionary process of needs.*

Keywords: Needs, Needs Analysis, Learners

I. INTRODUCTION

Needs analysis has been a central device in curriculum development in ESP literature (Benesch, 2001, p.42). It consists 'samples of learners' language performance in the productive and receptive skills to make placement decisions and set course goals' (Brindley, 1989, p.66). Many researchers define needs analysis as a systematic approach to designing and maintaining language curriculum and as the starting point in the process of curriculum design. The ultimate result of conducting a needs analysis is to design a focused language

programme (Dudley-Evans & St. John, 1998, p.122). Hence, needs assessment is the foundation of a syllabus on which all the other decisions are incorporated.

Since the beginning of the English for Specific Purposes (ESP) approach, "needs" have been an integral part to produce "tailored-to fit instruction" (Belcher, 2006, p.135). The concept of 'needs' and the models of needs analysis have evolved in recent years. Richterich (1983) claims "The very concept of language needs has never been clearly defined and remains at best ambiguous" (p.2). Also, different models and approaches of needs analysis have been used by researchers of English language teaching throughout the past decades. Needs analysis has evolved from simple models to most complex ones. Some of them such as Munby's communicative Needs Processor have been most influential models in curriculum design.

The rapid evolution of needs analysis in the field of English for Specific Purposes (ESP) has brought newest models which analyze a wide range of social issues that affect a language programme. Characteristics of the environment in which the courses are conducted and views of stakeholders (i.e. instructors, course coordinators, heads of departments, directors, past students, professionals, employers) are considered as important factors in current models of needs analysis. Stakeholder needs cannot be described in terms of necessary language skills only because some of their needs are non-linguistic, and those needs should be described in terms of attitudes, beliefs, motivation, interest, the level of corporation and isolation from others. Therefore, a needs analysis should also focus on financial, physical, political and other non-linguistic needs (Brown, 2001, p.14).

The aim of this study is to analyse 1) different interpretations of the term 'needs' and 2) models and approaches of needs analysis in order to trace the evolution of needs analysis in ESP. The results of this study will be beneficial to identify the best way to analyse learner needs in the present and future learning situations which are more complex in terms of diverse learner and stakeholder identities.

II. METHODOLOGY

The methodology of this study include analysing 1) five interpretations of the term 'needs' and 2) eight models of needs analysis qualitatively. The nine interpretations include 1) subjective and objective needs, 2) instrumental needs, 3) needs as gaps, 4) learning and target needs and 5) needs as rights. The selected models and approaches for analysis include 1) Register Analysis, 2) Communicative Needs Processor, 3) Deficiency Analysis, 4) Learner-Centred Needs Analysis, 5) Target Situation Analysis, 6) Critically Aware Needs Analysis, 7) Right Analysis and 8) Stakeholder Needs Analysis. These eight approaches have been the most widely used ones in curriculum development throughout ESP practice.

III. RESULTS AND DISCUSSION

A. The concept of 'needs' in curriculum development has evolved with different classifications. The section below presents various interpretations of the term 'needs'.

1) *Subjective and Objective Needs:*

Brindley (1984) has identified two types of needs: 1) objective needs and 2) subjective needs. The objective needs are derivable from different factual information about learners, their use of language in real life, their current language proficiency and language difficulties. On the other hand, subjective needs are derivable from cognitive and affective needs of learners in the learning situation, derivable from cognitive factors such as personality, confidence, attitude, learners' wants and expectations with regard to learning English (Brindley, 1984, p.70).

2) *Instrumental Needs:*

According to Brindley (1989), 'instrumental' needs arise from purposes for learning. These needs highlight the necessity to focus on a specific target context. It is similar to 'goal-oriented' definition proposed by Widdowson - "What the learner needs to do with the language once he has learnt it (1981, p.2). Brindley (1989) suggests a continuous cyclic approach in which ongoing reflective instruments and strategies would match the programme principles by encouraging students to become aware of and reflect on their learning needs. Learners' responses often focused on the necessity to align course content with the learners' occupational or academic goals.

3) *Needs as Gaps:*

In 1980s needs analysis evolved with deficiency analysis or identifying gaps in learner knowledge (West, 1997, p.71). Brindley (1989) presents that needs are conventionally defined as the "gap" between "what is" and "what should be" (p.65). According to Lawson

(1979), the agentship to decide the "gap" lies with the educator who identifies such "deficiencies" (p.37). However, these "gap[s]" lack objectivity as they are decided by someone else, not by learners.

4) *Learning and Target Needs:*

Hutchinson and Waters (1987) distinguish between target needs (i.e. what the learners need to do in the target situation) and learning needs (i.e. what the learners need to do in order to learn). Next, they classify target needs into necessities, lacks and wants, which are based on learners' perception, which may conflict with the perception of other stakeholders (p.55). Necessities are the skills learners think that they want to improve. Lacks are the gap between the target proficiency and the existing proficiency of English. Identifying what learners already know will depict which language skills they lack. For example, Karl Genson, a German engineer working in a multi-national company needs to improve his reading skills in engineering, which he considers as a necessity as well as a lack. On the other hand, he desperately wants to improve his oral skills (Hutchinson & Waters, 1987). Thus, "wants" are decided by a learner in the way in which he/she identifies him/herself with the target language (p.55).

5) *Needs as Rights:*

Benesch (2001) identifies the term 'needs' in ESP as an unsuitable term since it has psychological and biological connotations - needs as basic human needs such as food, water and shelter (p.61). Therefore, she redefines the term needs as 'rights', and presents a new model of needs analysis called Critical Needs Analysis. Later Benesch (2001) changes the title 'Critical Needs Analysis' into 'Rights Analysis', which is a more democratic approach to needs analysis. She describes how target needs are not a unified set of goals. They are contradictory since teachers are concerned with pedagogy and students merely want to get through an exam. Students tend to find a critical alternative that does not originate from the target situation. According to Benesch (2001) students challenge the syllabus as "unreasonable ...arrangements" of teachers (p.43).

A. *Different Models and Approaches of Needs Analysis.*

In analysing the selected models and approaches of needs analysis used by researchers of language teaching throughout the past decades, it is identified that needs analysis has evolved from simple models to most complex ones. Some of them have been most influential models in ESP. *Table 1* presents a list of canonized approaches and models of needs analysis.

Table 1: Different Models and Approaches of Needs Analysis

Type of Need Analysis	Key Figures/ Researchers
1.Register Analysis	Peter Strevens, Jack Ewer and John Swales -1960s and 1970s
2.Communicative Needs Processor	Munby (1978)
3.Deficiency Analysis	West (1997);Brindley (1989)
4.Learner-Centered Needs Analysis	Nunan (1988)
5.Target Situation Analysis	Hutchinson and Waters (1987)
6.Critically Aware Needs Analysis	Holliday and Cooke (1982); Selinker (1979) and Swales (1990); Tudor (1997); Douglas (2000); Murray and McPherson (2004); Jasso-Aguilar (1995,1998); Carter-Thomas, (2012); Huhta, Vogt &Ulkki (2013)
7.Right Analysis	Benson (1989); Goer (1992); Smoke (1994); Leki (1995); Prior (1995); Spack (1997); Benesch (1999, 2001); Dudley Evans and St. Johns(2001).
8.Stakeholder Needs Analysis	Jass-Aguilar (1999); Long (2005); Cheng (2011); Belcher &Lukkarila (2011);Paltridge&Starfield (2013); Huhta, Vogt &Ulkki (2013)

Source: Literature Survey Data

1) *Register Analysis:*

According to *Table 1*, needs were first identified on the basis of register analysis and linguistic analysis. For example, in 1960s and 1970s, Peter Strevens, Jack Ewer and John Swales analyzed English grammar and vocabulary in order to make teaching more relevant to learner needs. Nevertheless, register analysis has been criticized due to the fact that it is limited to its analysis to the word and sentence level.

2) *Munby's Communicative Needs Processor:*

The most influential early model of needs analysis was Munby's Communicative Needs Processor (1978). Needs analysis conducted at the early stages of ESP were similar to Munby's needs analysis Communicative Needs Processor (CNP). It includes questions to elicit information on biographical data, setting, interaction, domain, parameters for categorizing learners' needs and the methods to apply them in course design. The critics on CNP define it as a machinery of discovering

target situation needs (i.e. Hutchinson and Waters, 1987). It is also considered as the most sophisticated instrument for conducting a needs analysis (Nunan, 1988) and a more systematic and very influential model (Flowerdew and Peacock, 2001). CNP describes the participants' identity, language proficiency, a profile of communication needs and specific language skills (Munby, 1978, p.42).

CNP has been criticized by many researchers on several grounds. First, CNP is only based on identifying learners' target needs. In that sense, teacher's perception of learner needs was merely based on the prior assumption of linguistic elements needed in the target situation. Such a perception on learner needs in lexicogramatical features was insufficient, and there is a need to understand the specific use of language in different contexts (Belcher, 2006, p.136).

Flowerdew and Peacock (2001) claim that the early models of needs analysis (i.e. CNP) were simple models that were intended to elicit a 'rough' idea' of learner needs. Those models did not represent needs of all stakeholders, and were limited to identifying some of learners' biographical information (i.e. age and first language and target needs such as reasons for learning English). However, learners have their own set of needs rather than target needs. According to Brown (2001) such needs are financial, physical, political and other non-linguistic needs (p.14). Also, West (1994) criticizes CNP due to its complexity, learner- centeredness, constraints, and time consuming nature (pp.9-10). Flowerdew and Peacock (2001) presented that Munby's CNP is a narrow model as it focuses only on target needs. Recently, Huhta, Vogt &Ulkki (2013) claim that a needs analysis in ESP should be evidence-based where the evidence is supported by a 'thick description' of the professional workplace or training institution. A thick description is one which attempts to reveal multiple factors that provide a more accurate understanding of the context.

3) *Hutchinson & Waters' Target Situation Analysis:*

Following Munby's CNP, Hutchinson and Waters (1987) provided the framework of needs analysis called Target Situation Analysis (TSA).According to Hutchinson and Waters, target situation needs are "in essence a matter of asking questions about the target situation and the attitudes towards the situation of various participants in the learning process (p.59). The questions are as follows.

1. Why language is used?
2. How will the language be used?
3. What will the content areas be?
4. Where will the language be used?

5. When will the language be used? (Hutchinson & Waters, 1987, p.59).

Both Munbian model and Hutchinson and Water's Target Situation Analysis include similar questions to elicit learner needs. Hutchinson & Waters (1987) also considered about "learning" needs i.e. skills and abilities required by learners to achieve target competence. Target situation alone is not the decisive factor, the fact that "learners are people" with their own needs should be taken into account and it is where "learning" needs come into play. Motivation, strategies, skills as well as learning situation (time, place where the course is conducted) should be taken into account under learning needs.

Flowerdew & Peacock (2001) state that there is a mismatch between target situation needs and learner needs because learners might have their own perception of target needs (p.178). For instance, teachers have a subjective view of learner needs whereas learners themselves have their own objective view on needs (Hutchinson and Waters, 1987, p.59). Similarly, Lawson (1979) argues that an educator's diagnosis and prescription of learner needs are not always accurate. He identifies a need as a matter of agreement and judgement not discovery (p.37).

Benesh (2001) claims that target needs can be rejected by learners or they are subjected to criticism or change (p.43). Further, Murray and McPherson (2004) found that instructors are not always good judges of what will interest and motivate students (cited in Belcher, 2006, p.139). Researchers have considered subjective needs of learners such as self-awareness, awareness of target situations, life goals (Tudor, 1997 cited in Belcher, 2006, p.136). Hence, they should allow learners to select contents of their own preference. The practitioners should give priority to helping learners use appropriate English for their own purposes asserting ownership of English as it is useful in user's way.

4) *Deficiency Analysis:*

In deficiency analysis needs are seen as gaps between present language performance and required competence in a particular communicative situation. "If instructions are to be centred on the learners and relevant to their purposes, then the information about their current and desired interaction patterns and their perceived difficulties is clearly helpful in establishing programme goals which in turn can be translated into learning objectives" (Brindley, 1989, p.64). Deficiency analysis helped to identify gaps in learner knowledge. Mostly deficiencies or gaps in learner knowledge were identified

by teachers. Teachers' approach to needs are influenced by their experience, philosophy and conception of their role (Brindley, 1989, p.65).

5) *Learner-Centred Needs Analysis:*

In 1980s needs analysis in ESP was influenced by Communicative Language Teaching (CLT) which was popular at that time. As a result of that, identifying communicative needs was felt rather than listing grammatical, phonological and lexical items. David Nunan introduced a different perspective on curriculum: "education reality is not what educational planners say ought to happen, but what teachers and learners actually do". He introduced the concept "learner-centered curriculum" placing learner needs in a central position than the needs of other stakeholders. The content of the materials used in such a curriculum should be relevant to learners' needs (Nunan, 1988, p.42). The learner-centred system makes demands on teachers to counsel learners, to negotiate the curriculum, to assess learning processes and outcomes and to prepare their own materials (Brindley, 1989, p.78). The relevance of language content to learners' personal goals and social roles is valued in Learner-centred needs analysis.

6) *Ethnographic Approach in Needs Analysis:*

At the beginning of 1990s, much attention was paid to understand the nature of the language and its context with a more social perspective (Robinson, 1991 cited in Belcher, 2001, p.136). Researchers paid attention on considering a wide range of affective and cognitive variables which affect learning such as learners' attitudes, motivation, awareness, personality, wants, expectations and learning styles (Brindley, 1989, p.63). The context of language use is viewed as a continuously changing situation, which is constructed by its participants (Douglas, 2000, p.89 cited in Belcher, 2006, p.13).

Holliday and Cooke (1982); Selinker (1979) and Swales (1990) used an extended ecology metaphor to denote that ESP syllabus designers are not working independently, but within a wider social milieu as in an ecosystem interacting with other parties such as students, teachers, course planners, etc. According to Holliday and Cooke (1982) ethnographic approach is based on the fact that course designers should explore the wider social structure first and language used as the second, as a part of the social structure (p.137). Other researchers of ethnographic approach include Boswood (1992); Courtney (1988); Crocker (1984); Johns, (1988) (cited in Flowerdew, 1995, p.21).

7) *Critically Aware Needs Analysis*

Recent studies on needs analysis have focused their attention on critically-aware quantitative research or ethnographic description that encourages awareness of a need for a critically pragmatic ESP which discuss contradictory stakeholder needs. Cheng (2011) discussed learner, teacher and institutional factors that impact on ESP teaching and learning and how learner needs and expectations are translated into learning objectives in ESP classes (Paltridge & Starfield, 2013, p.3).

Similarly, Huhta, Vogt & Ulkki (2013) argue that a needs analysis for ESP should be evidence-based where the evidence is supported by 'a thick description' of the professional workplace or training institution or one which attempts to unpack the multiple factors that collectively determine a more accurate understanding of the context (p.26).

8) *Right Analysis*

Another popular model of needs analysis is right analysis which is a 'framework for understanding and responding to power relations that imply learners' rights to challenge materials- "unreasonable, poorly conceptualize, unclear" (Benesch, 2001, p.61). It is based on examining how power is exercised and resisted in an academic institution including the pedagogy and the curriculum (Benesch, 1999, p.313). Right analysis considers learners' rights in determining what they should learn. It conceptualizes a more democratic participation for all stakeholders with a greater equality in an academic community (Benesch, 2001, p.62).

According to Dudley-Evans (2001) Benesch's right analysis is a radical departure from conventional needs analysis (cited in Bensch, 2001, p.xii). Requirements and resistance are key determinants of it. It is based on the fact that each academic situation offers its own opportunities for negotiation, depending on local conditions and on the current political climate. The reconciliation of different stakeholder needs is of vital importance for a better language programme. In conserving those power struggles, course designers should use a critical needs analysis (Benesch, 2001, p.45).

9) *Stakeholder Needs Analysis*

Brown (2001) claims that in a needs analysis one would survey stakeholders such as professors, lecturers, teachers, employers and others who can provide insights into learners' language requirements (p.20). Similarly, John & Price- Macando (2002) claims that an ESP programme should be formed in considering the sources of demands such as teachers, supervisors, government

agencies, professionals and others who need a specific language programme (p.45). Consulting various stakeholders is important to fulfil both learners' and other stakeholders' needs. The questions in a stakeholder needs analysis often includes facts on strengths and weaknesses of learners, language needs required in the job and managers' expectations etc.

Byleen and Altman consider stakeholder needs analysis as "the collective experience and wisdom" (cited in Rice, 2007, p.214). Similarly, Rawley and Roemer consider the importance of the collaboration of different perspectives of stakeholders (Rice, *ibid*). Stakeholder needs analysis reflects a sense of responsibility and team work to achieve desired goals of programmes more easily. Collaboration, communication and cooperation among stakeholders are key aspects that help implementation of changes. The bottom-up participation in the change process of stakeholders, especially faculty and students, is of vital importance" (Rice, 2007, p.6).

Among the Sri Lankan studies on stakeholder needs analysis that utilize multiple sources of data collection Cumaranatunge's study (1988) was based on designing a learner-centered course that caters to Sri Lankan domestic aids in West Asia. She collected data from multiple stakeholders including returning domestic aids, women currently working, agencies, employers, and government officials, travel agents using various methods such as questionnaires, semi-structured interviews, field study, informal interviews and participant observation. The results presented the language used in the job, problems and pressures faced by domestic aids in their job (cited in Jasso-Aguilar, 1999, p.32).

Beuster and Graupensperger (2007) also used questionnaires, e-mail surveys and focus-group discussions to identify needs of international students, academic instructors, the marketing Department, alumni, and teachers of the Intensive English as a Second Language (IESL) Department of Green River Community College in Auburn, Washington. The questions were based on topics such as instructional techniques, course content, placement and assessment, and personal learning goals. They found the learners' need of academic English to be used in the academic college classes. The results changed the Department's mission statement with "a greater focus on academic preparation for students and promised to hold them to higher standards" (cited in Rice, 2007, p.20) On the contrary, Bonfanti and Watkins consider satisfying instructor needs in order to renew the curriculum (in Rice, 2007, p.214).

Frank's study (1998) was based on identifying language and communication problems that existed between the staff of the Student Health Programme and their international student patients in Southern Illinois University-Carbondale. The results showed that both stakeholders agree on several problems in communication areas including medical vocabulary and pragmatic problems due to different procedural and cultural expectations. He suggests the collaborative efforts of stakeholders to understand the communicative problems in the healthcare setting (1998, pp.31-54). Similarly, Cowlings (2007) explored needs of HR managers, managers, other employees using three data collection methods: interviews, surveys and observations for a business English programme (cited in Spence and Liu, 2013, p.99).

Altman (2007) used a triangulation approach to obtain data from students, instructors and content-area faculty and staff. Similarly, Petro's study on the University of Rhode Island's writing requirements consulted the Writing Department before developing an ESL programme (cited in Rice, 2007, p.9). Further, Kirkgoz elicited the perception of 1000 current and former students in Cukurova University and she also encouraged the faculty participation in the needs assessment (in Rice, 2007, p.9).

IV. CONCLUSION

This study has identified that 'needs' have not been viewed as a single element and the models and approaches of needs analysis have evolved from the most influential early models to complex and modern models. Different models and approaches have been used to identify learner needs and they provide a piece to complete the jigsaw of needs analysis (Songhori, 2008).

As the outcome of this study, the researchers have identified that needs have been distinguished as learning and target needs, lacks, wants, gaps, deficiencies and rights. Each approach of needs analysis has been criticized in ESP literature due to its limitations in defining the term needs and in the method used for collecting learner needs. The results of this study include the broader perspective of the evolutionary process of needs analysis which will enable curriculum designers to select a suitable model of needs analysis that matches with multiplicity of learner needs. It will enhance the professionalism in the field of curriculum development in ESP.

REFERENCES

Belcher, D. (2006). English for Specific Purposes: Teaching to Perceived Needs and Imagined Futures in Worlds of

Work, Study and Everyday Life. *TESOL Quarterly*, 40, 133-153.

Benesch, S. (2001). *Critical English for Academic Purposes: Theory, Politics and Practice*. Mahwah, NJ: Lawrence Erlbaum.

Brindley, G. (1989). *Assessing Achievement in the Learner-Centered Curriculum*, Sydney: National Centre for English Teaching.

Brown, J.D. (2001). *Using Surveys in Language Teaching*. Cambridge, England: Cambridge University Press.

Dudley-Evans, T., & St. John, M.J. (1998). *Developments in ESP: A Multidisciplinary Approach*. Cambridge, England: Cambridge University Press.

Flowerder, L. (1995). Designing CALL Courseware for an ESP Situation: A Report on a Case Study. *English for Specific Purposes*, 14 (1), 19-35.

Flowerdew, J., & Peacock, M. (2001). *Issues in EAP: A Preliminary Perspective*.

Hutchinson, T & Waters, A. (1987). *Needs Analysis. English for Specific Purposes: A Learning Centred Approach*, Cambridge, England : Cambridge University Press.

Johns, M. A & Price-Machado, D. (2001). English for Specific Purposes: Tailoring Courses to Student Needs- and to the Outside World in M. Celce-Muraria (Ed.), *Teaching English as a Second or Foreign Language*. Boston: Heinle & Heinle.

Lawson, K.H. (1979). *Philosophical Concepts and Values in Adult Education*. Revised edition. Milton Keynes: The Open University Press.

Munby, J. (1978). *Communicative Syllabus Design*. Cambridge, England: Cambridge University Press.

Nunan, D. (1988). *The Learner-Centred Curriculum*. Cambridge, England: Cambridge University Press.

Paltridge, B & Starfield, S. (2013). *The Handbook for English for Specific Purposes*: Wiley Blackwell Publishers.

Rice, A. (Ed). (2007). Revitalizing an Established Programme for Adult Learners. In K. Graves (Ed.), *TESOL Language Curriculum Series*. Maryland: Capital Communication Systems Inc.

Songhori, H. M. (2008). Introduction to Needs Analysis. *English for Specific World*, 4. Retrieved June 5, 2013 from <https://docs.google.com/viewer?a=v&q=cache:R-PBhv-ytXEJ:www.esp->

Spence, P & Liu, G, Z. (2013). Engineering English and the high-Tech Industry: A Case Study of an English Needs of Process Integration Engineers at a Semiconductor Manufacturing Company in Taiwan. In *English for Specific Purposes*, 32, 97-100.

Widdowson, H.G. (1987). English for Specific Purposes: Criteria for Course Design. In M. H Long & J. C Richards (Eds.), *Methodology in TESOL-A Book of Readings*. New York: Newbury House Publishes.

West, R. (1994). Needs Analysis in Language Teaching. *Language Teaching*, 27 (1-19). Retrieved May 3, 2012 from <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=2766356>.

BIOGRAPHY OF AUTHORS



CJ Kothalawala is a Lecturer at the Department of English, Faculty of Management, General Sir John Kotelawala defence University.



TD Kothalawala is a Lecturer at the Department of English, Faculty of Management, General Sir John Kotelawala defence University.



WAAK Amaratunga is a Senior Lecturer and the Head of the Department of English, Faculty of Management, General Sir John Kotelawala defence University.