1 Needs analysis and the CEF Professional Profiles in ESP

Chapter overview

In this chapter, we describe the methodology we have used to conduct needs analysis within the CEF Professional Profiles approach and how this relates to other approaches open to needs analysis in **English for Specific Purposes** (**ESP**). We will:

- explain why needs analysis is integral to course design in ESP
- consider different ways in which needs analysis has been designed up to the present day
- provide an overview of how needs analysis in ESP has developed up to the present day
- explain the importance of **thick description** to the methodology used in our approach to needs analysis in the CEF Professional Profiles.

1.1 The need for needs analysis in ESP course design

Teaching ESP has always been characterised by a hands-on, **communicative approach** to language teaching. Learners are taught to accomplish tasks that they are familiar with from their professional environment in the foreign language. This kind of language teaching and learning brings the task to the forefront of the foreign language classroom (see e.g. Nunan 1989, 2004; Willis 1996; Ellis 2003).

However, the importance of tasks in language learning is not the exclusive preserve of ESP: it has also been highlighted by the **Council of Europe** in its groundbreaking and extremely successful document the *Common European Framework of Reference for Languages: Learning, Teaching, Assessment* (**CEFR**). The **action-oriented approach** adopted by the CEFR makes tasks central to language learning:

> A comprehensive, transparent and coherent frame of reference for language learning, teaching and assessment ... The approach adopted ... is an action-oriented one in so far as it views users and learners of a language primarily as 'social agents', i.e. members of society who have tasks ... to accomplish in a given set of circumstances, in a specific environment and within a particular field of action ... [L]anguage activities ... form part of a wider social context, which alone is able to give [these activities] their full meaning.

> We speak of 'tasks' in so far as the actions are performed by one or more individuals strategically using their own specific competences to achieve a given result. The action-based approach therefore also takes into account the *cognitive, emotional* and *volitional resources* and the full range of abilities specific to and applied by the individual as a social agent ...
>
> Language use, embracing language learning, comprises the actions performed by persons who as individuals and as social agents develop a range of *competences*, both *general* and in particular *communicative language competences*. They draw on the *competences* ... in various contexts under various *conditions* and under various constraints to engage in *language activities* involving *language processes* to produce and/or receive *texts* in relation to *themes* in specific *domains*, activating those *strategies* which seem most appropriate for carrying out the tasks to be accomplished.
>
> (Council of Europe 2001: 9, emphasis added)

The main concern of an action-oriented approach to course design is therefore to enable our learners to use the foreign language to accomplish just those tasks that are of most relevance to them in their professional lives. Hence, the effectiveness of this approach to course design hinges on knowing which tasks are relevant to which professional situations. This leads us to a problem that course designers often face, namely, how to identify the tasks and situations (and the corresponding **functions** and **notions**; see e.g. Munby 1978; Wilkins 1976) that the learner typically has to face in the real world.

This is the point at which a **needs analysis** is called for, but this is a far less straightforward process than it might initially seem because first it is essential to establish *whose* needs we are interested in. This also involves consideration of not just one perspective or one context but multiple perspectives and multiple contexts. Needs may be investigated from the perspective of teachers, that of the learners or that of the employers who are funding the language course. Then within the learner group itself, perspectives on what can be learned, what should be learned and why will differ from learner to learner (Robinson 1991).

No learner group is ever homogeneous of course, but this is particularly true of the ESP[1] group. ESP learners vary, but more often than not they will be adults or mature adolescent learners, and they will have diverse learner biographies. Thus we often find ourselves dealing with heterogeneous groups regarding the age, proficiency in the foreign language and professional experience of the learners. The needs of the working professional with extensive experience are likely to be very different from those of the inexperienced trainee, who must come to terms not only with the workplace context but also with the institutional context of whichever educational facility he or she is attending. The demands placed on the trainee by both the educational and the professional contexts may contribute to the perception that the

[1] What is true of ESP here may also refer to learner groups in English for Academic Purposes (EAP), **Vocationally Oriented Language Learning** (**VOLL**) and **Language and Communication for Professional Purposes** (**LCPP**)

trainee has either additional needs or else a completely different set of needs from those of the experienced professional in the same field.

The number of potential **stakeholders** of which the analysis can take account, together with the variety of perspectives from which the context can be considered have, not surprisingly, produced in the literature a wide range of definitions of what actually constitutes a 'need'. Hutchinson and Waters (1987: 54) define needs as 'the ability to comprehend and/or produce the linguistic features of the target situation'. They make a distinction between *target needs* and *learning needs*, subdividing target needs further according to the perspective taken. Figure 1.1 illustrates this classification of needs.

Hutchinson and Waters's scheme demonstrates clearly how the different roles and positions each group of stakeholders occupies result in needs which may vary considerably. It goes without saying that this variety in needs could lead to different views as to what kind of course should be designed or even to a conflict of interests between one or more of the groups. Conflicts of interest can arise when a learner group of employees perceive their needs to be different from those of the company that employs them and is thus funding the course. The learner-employees might lack confidence in their oral communication and so be mainly interested in developing their fluency in spoken discourse, whereas the company's focus might be on developing written skills because there has been a massive increase in the use of email and other kinds of electronic communication.

In their attempts to classify needs, both Berwick (1989) and Brindley (1989) have gone further than Hutchinson and Waters in exploring different kinds of perspectives on the professional context for learning. Berwick (1989) discusses *felt needs* and *perceived needs*, the distinction here being made between a personal, inside perspective and a more objective, outside view of the professional learner and his or her professional context for learning. Brindley's description (1989: 65) also starts out with an inside/outside perspective, which he

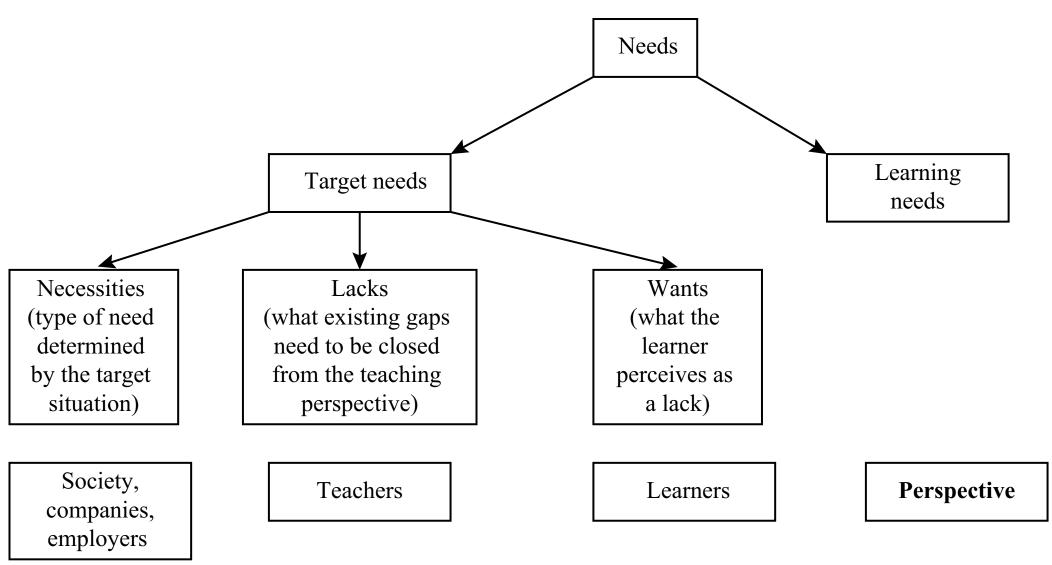

Figure 1.1: Classification of needs based on Hutchinson and Waters (1987)

refers to as *subjective* and *objective needs*. Here, objective needs tend to be based on facts and may be introduced from outside views, while subjective needs are those that involve the personal perspective of the learner as an individual. For instance, an objective need for a middle manager in the medical equipment industry might be *to be able to show visitors around*, but something like *to be more confident when dealing with visitors from abroad* would be representative of a subjective need.

However, Brindley then goes on to make a further distinction, between needs which are *process-oriented* and those which are *product-oriented*, where the former are concerned with how the learning is carried out, while the priority for the latter is the final outcome of the course. Taking the earlier example of the middle manager, a process-oriented view would consider how confidence in dealing with visitors can be gradually increased, and a product-oriented need would be defined as an ability to conduct a conversation with a visitor.

What these examples show is that needs analysis demands more than a straightforward process of one-to-one matching of means with objectives. Multiple stakeholders can have multiple perspectives resulting in a multitude of objectives and desired outcomes for the ESP course, some of which, as we have seen, may even be contradictory.

Consequently, the number of definitions for what can be considered 'needs' has led to a correspondingly wide range of definitions of needs analysis. Ellis gives us the rather straightforward definition of needs analysis as 'a procedure for establishing the specific needs of language learners' (2003: 345–6). While this is certainly true, it is far too general to be of much use to the course designer. A more complete view is given in Brown (2006), which takes into account the range of sources from which information can be gathered as well as the number of stakeholders for whom that analysis will be relevant:

> Needs analysis … is … the process of identifying the language forms that students ultimately will need to use in the target language. However, since the needs of the teachers, administrators, employers, institutions etc. also have some bearing on the language learning situation, many other types of quantitative and qualitative information of both objective and subjective types must be considered in order to understand both the situation and the language involved as well as information on the linguistic content and the learning processes. Needs analysis is the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of the particular institutions that influence the learning and teaching situation.
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> (Brown 2006: 102)

Brown shows us just how essential a systematic and thorough-going approach to needs analysis is to ESP course design. While needs analysis can also make valuable contributions to the design of any language course, it is especially important to ESP because here the needs analyst has to consider the involvement of teachers, employees, the commercial interests of the employers, the standards of professional associations, the syllabi of regional/national vocational qualifications and so on. At any one time, each of these perspectives may either complement or contradict another.

As a starting point for needs analysis for the ESP course, Robinson (1991) views needs in ESP on three different levels: the *micro-*, the *meso-* and the *macro-levels* of need. Figure 1.2 illustrates these three levels with examples taken from the ESP context of the middle manager in the medical equipment industry discussed earlier.

As shown in Figure 1.2, micro-level needs are those that arise from the individual learner. In our example of the middle manager, at the micro-level is the perceived need to be more confident with visitors from abroad, which could include advanced small talk but also the necessity to 'talk shop'. Let us imagine that our middle manager now has to deal on a regular basis with new business partners based in Japan. Her encounters with the Japanese company have so far left her feeling clumsy in certain situations and so she now wants to improve her fluency.

The wider context of the workplace (or the institution providing the vocational training – in this case, a supplier of medical equipment) is considered at the meso-level. This level deals with those needs that are related to outcomes deemed desirable or necessary to an organisation, such as a private company or a government department. In our example, the key concern of the medical equipment suppliers will be to build and maintain a good business relationship with their Japanese partners. To that end, they will also need the middle

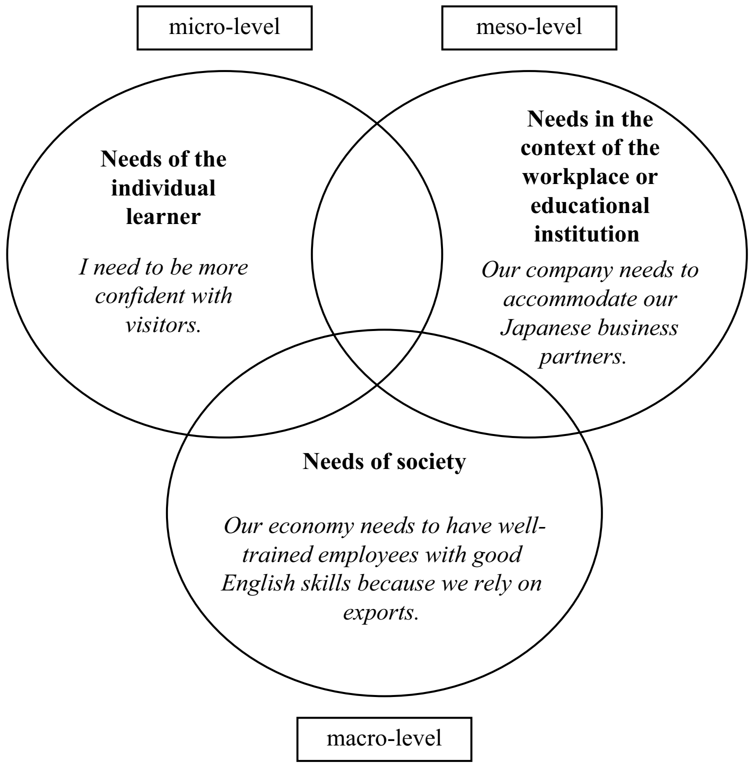

Figure 1.2: Needs in ESP on three different levels based on Robinson (1991)

manager to be confident in dealing with these important visitors, as she will need to attend to the Japanese delegation during visits. However, in order to accommodate the Japanese, it may also be necessary for her to be able to take part in business negotiations. We can see here how needs on the micro- and meso-levels overlap, but it is important to note that this will not necessarily be the case in other contexts or with other companies.

Finally, the needs of society as a whole are considered at the macro-level, making the concerns of this level the most abstract of the three. Needs at this level are related to questions of general importance to **language-in-education planning,** such as 'What languages should be known, learned and taught at all?', 'What is the objective in language teaching or learning?' or 'What methodology and what materials are employed over what duration?' (Baldauf & Kaplan 2005; van Els 2005). In the case of the example we have been considering here, a macro-level need might therefore concern vocational training on a national level, such as *We need a workforce which is proficient in English, as our national economy relies heavily on exports to North America.*

We have taken Robinson's (1991) description of needs, which can accommodate varied perspectives and sources of information, as our starting point for the main subject of this book: the CEF Professional Profiles Project. The approach in this project pays particular attention to meso- and macro-level needs, for it is from our investigation into these two levels of needs that the end product of our needs analysis, the *CEF Professional*[2] *Profiles*, derives. The basic aim of a CEF Professional Profile is to describe the language and communication needs of professionals at a level of detail sufficient to create an effective ESP workplace training programme or vocationally oriented language course. The profiles show how the CEFR, which focuses on general language use, relates to professional language needs.

Needs analysis for the creation of a profile begins with an investigation into what experienced professionals view as typical contexts, texts, communication situations, etc. in a particular professional field. We have particularly highlighted the meso-level because of the crucial role that the reality of workplace communication plays in the profiles. Each profile includes a focus on the typical contexts that professionals encounter in their working lives on a regular basis – in other words, routine situations. We refer to these 'slice-of-life' presentations of the particular professional fields as *snapshots*. However, we felt it was important not simply to stop at these snapshots but to include in the profiles those contexts which experienced professionals regard as a challenge. These were situations that were potentially more complex or that occurred less typically.

What the CEF Professional Profiles provide us with is a new approach to needs analysis in ESP, one which we refer to as **second generation needs analysis**. In contrast to the language-centred approaches of the first generation, which focus exclusively on functions and notions and on the four skills of speaking, listening, writing and reading (see Wilkins 1976; Munby 1978; Robinson 1991; Dudley-Evans & St John 1998), a second generation needs analysis requires a comprehensive task-based approach. We are not suggesting that there is a definite divide between the two generations of analyses, yet following Long (2005), we see

[2] 'Professional' is used here in its broadest sense and should be taken to include occupations other than law or medicine, such as hospitality, retail, facilities management, etc.

the task as the primary unit of needs analysis. However, we would like to go further than this, setting the task in the framework of one of the most important documents in language learning and teaching: the CEFR.

As we pointed out at the beginning of this chapter, the CEFR is an action-oriented approach which stresses the importance of tasks in all communication (Council of Europe 2001: 9, 43–56). One of the key features that interests us in the ESP context is the **professional discourse activity**. By this we mean a communicative task that is integral to the professional workplace context, but which is primarily fulfilled through the application of language and discourse skills (as opposed to, for example, workplace tasks that require specific technical expertise).

Professional discourse activities are tasks that engage the whole person of the learner. As a person, every learner is interwoven socially into diverse networks, each of which can be characterised by a different strand of social relationship. Not only is the learner a contributor to the learning experience of a group, he or she is also a family member, a stakeholder in local and national elections and, of course, a colleague in the workplace. The learner's participation in these various networks forms his or her identity as a person. This phenomenon is what the CEFR calls **social agency** (Council of Europe 2001: 1).

We can now see why a needs analysis which will take account of the goals, values and priorities of each of the stakeholders is clearly a necessity. This kind of needs analysis requires a **holistic** approach which will consider the person of the whole learner as that person appears in the context of his or her social group(s) (see Jaatinen 2001 on holism in foreign language education). In a holistic approach, dichotomies such as subjective and objective needs are no longer adequate because from the outset, the design and implementation of the ESP course need to accommodate the interplay of social, cognitive, emotional and volitional dimensions of learning. Again, what is of interest to us here is discussed by the Council of Europe in the CEFR as well as in the **European Language Portfolio (ELP)** (Kohonen 2001, 2005).

A holistic needs analysis, then, is one which takes account not just of the individual, but also of how that individual interacts in the contexts and situations of his or her field of action. The question to which we must now turn is: what types of data collection will be most appropriate to research in second generation needs analysis? The answer to this question is explored more fully in Section 1.3 below, but it should already be apparent from the foregoing that a second generation needs analysis will necessarily favour **qualitative research** methods over **quantitative** ones. Quantitative methods apply fixed categories to the research context and typically involve testing for gaps, looking for discrepancies or taking measurements of specific elements within the situation. We feel that to use only quantitative methods in needs analysis would be too blunt a tool to do real justice to the subtle complexities of stakeholder needs.

Second generation needs analysis is evaluative and therefore is fundamentally a qualitative approach. Personal narratives and/or biographical accounts are considered to be valid sources of data here, and the snapshot of routine tasks produced in the CEF Professional Profiles is an example of just such a method in action. In fact, in our view, qualitative inquiry (of the sort described in, e.g., Patton 1990) should be more widely accepted as a research method in needs analysis, and not only in the context of language education in workplace or vocational training contexts, but also more widely in the development of human resources in general (see Johnson 2006 and Luoma 2000 for a more general account of development in the area of human resources).

In Section 1.2, we present a typology of nine different research methods which are at the disposal of the needs analyst of ESP courses. After discussing the relative merits of each method, we finally look at how some of these methods have been applied in practice when carrying out needs analysis in three different areas of **LSP** (**Language for Specific Purposes**): business management, electronics and electrical engineering, and the military.

1.2 Needs analysis: a typology of research methods in needs analysis

Long (2005: 24) notes that there is a 'paucity of information and of research on methodological options in [needs analysis]'. And indeed, needs analyses in professional contexts are quite often conducted somewhat casually, involving little more than the teacher setting a placement test for the learners and/or asking the professional client or vocational course administrator to provide a list of desired outcomes for the course. While it is true that these types of informal inquiries are quick and cost-effective, such investigations may reflect only a single perspective of only one group of stakeholders, for example that of the employers or learners. For that reason, they may lead to no more than a partial sketch of the professional context.

The first step to creating a more complete picture through needs analysis requires a more informed consideration of the research methods available to the teacher or course designer. This section presents a brief overview of nine of the most common methods used in needs analysis research, and then discusses the advantages and disadvantages of each. A summary of the main points is given in Table 1.1, below. We then go on to look at three case studies, each of which has used a so-called **mixed methodology** approach. This is an approach to needs analysis, which may also be referred to as a **triangulation** of data, in which the researcher has used a combination of qualitative and quantitative methods to identify the learning needs of the stakeholders. Finally, we consider the value of using mixed research methods in needs analysis for ESP, as this provides a useful background for presenting the methodology adopted in our own project, the CEF Professional Profiles. We argue that needs analysis for ESP should be evidence-based where the evidence is supported by a thick description of the professional workplace or training institute. A thick description is one which attempts to unpack the multiple factors that collectively determine a more accurate understanding of the context for each of the activities contributing to the professional discourse. As thick description acknowledges the importance of social agency, it is therefore an ideal complement to the view of language and action taken by the Council of Europe in its CEFR (2001).

Table 1.1: Overview of research methods in needs analysis (adapted from Long 2005: 23–45)

Method	Advantages	Disadvantages	Examples from the literature
Non-expert intuitions	• low-cost • low-effort	• unreliable • not evidence-based	*Not used in systematic approaches to research*
Expert practitioner intuitions	• low-cost • low-effort • access to domain-specific language	• unreliable • not evidence-based (informed by a single professional's intuitions)	*Not used in systematic approaches to research*
Unstructured interviews	• exploratory character means that interviews may include aspects the interviewer had not previously considered	• time-consuming • (usually) only a few interview subjects possible • risk of researcher influencing informant's views (interviewer bias) • narrative data can be difficult to analyse and it may be difficult to draw comparisons between informants • limited generalisability	Holme & Chalauisaeng (2006) Jasso-Aguilar (1999)
Structured interviews	• relatively low-cost • relatively low-effort • potential for a large number of informants to be approached • yield standardised data • low risk of interviewer bias • comparisons can be drawn between informants • results may be generalisable	• important aspects may be neglected as a result of standardisation • do not allow informants room to express own ideas and own answers	Matthes & Wordelmann (1995) Hecker (2000) Hall (2007)

Method	Advantages	Disadvantages	Examples from the literature
Surveys and questionnaires	• relatively low-cost • relatively low-effort • potential for a large number of informants to be approached • yield standardised data • low risk of interviewer bias • sizeable amounts of data can increase the reliability and validity of findings • comparisons can be drawn between informants • results may be generalisable • option of informant anonymity	• standardised • may neglect important aspects • response rates tend to be low, ESP especially with questionnaires mailed to subjects • range of responses limited	Weiß (1992) Schöpper-Grabe & Weiß (1998)
Language audits	• can produce deeper insights into the situation • institution is the unit of analysis, so potential to yield a complete picture (see Koster 2004c) • results are tailor-made to institution under review – provides a good overview of an institution's language needs	• potential difficulty to access data (confidentiality policy of institution) • publication of results may be restricted (confidential to the participating institution) • results specific to a single institution limit generalisability • time-consuming and requires effort • potentially expensive to conduct	Glowacz (2004)

Method	Advantages	Disadvantages	Examples from the literature
Observation	• allows direct, in-depth, contextualised study of participants' actions: valuable source of data	• time-consuming • only case studies possible • potentially difficult to access data	Schröder (1984) Louhiala-Salminen (2002)
Text-based analysis	• might yield important insights into potential materials for the classroom, i.e. relevant text-types, discourse-types	• is restricted to text, does not take into account the contextual and situational factors • neglects the task to be accomplished • tends to result in decontextualised structural items	Basturkmen (1999) Mauranen (2003)
Diaries, journals and logs	• personalised insights into learner and teacher needs • provide access to insider knowledge	• may be restricted to only one type of informant • time-consuming to write and analyse • potentially yield impressionistic and idiosyncratic data	Sešek (2007)