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Analyzing Needs Analysis in ESP: A (re) modeling

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ABSTRACT: English for Specific Purposes (ESP) as a subdivision of English Language Teaching (ELT) is claimed to be relevant to the needs of an identifiable group of learners. This relevance is virtually achieved through needs analysis by which one can come up with what the learners already know, what they need to know, and, finally, what they want to know. The range of activities can be captured by a set of what, why, when, who, and how questions. The answers to these questions will feed into the process of course design so as to assure that the course is on the right track. In this article, first, some clarifications of terminology are made; then, a slightly modified version of a model for doing needs analysis is given. After that, some prevalent trends in needs analysis are discussed. And finally, some thorny issues are proposed which need to be solved or at least resolved or compromised.

Keywords: ESP, needs analysis, course design, negotiated syllabus

INTRODUCTION

English for Specific Purposes (ESP) defined as “a language course or program of instruction in which the content and aims of the course are fixed by the specific needs of a particular group of learners” (Richards and Schmidt, 2010, 198) is an efficacious enterprise. Practically speaking, ESP deals with preparing the learners to be able to use English in academic (students of different fields), professional (people of different professions such as doctors, engineers, and nurses), or workplace (technicians for example) settings. As it is about specific students, therefore, it must be tailored to the needs of these students. This coordination is accomplished through what is called Needs Analysis (NA). Looking through the literature, one can find different definitions of NA by some scholars with varying degrees of overlap and/or deviation. For instance, Brown (1995, p. 36) defines NA as “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 particular institutions that influence the learning and teaching situation”. In this definition, the idea of defensible curriculum deals with the accountability of the course meeting the requirements of a particular group of students and their instructor(s) or other stakeholders. NA is defined by Dudley-Evans and St. John, (1998) as a means of establishing the “what and how of a course” (p. 122). This way, the syllabus is likely to be motivating for learners, who see the obvious relevance of what they are studying. Moreover, most ESP courses are subject to time constraints and time must be effectively utilized (West, 1994). As students in ESP classes often have restricted time to learn English, it is reasonable to teach them just the pre-specified segments of English based on their needs. Therefore, in terms of syllabus design and course development, the task of the ESP course developer is to identify the needs of the learner(s) and design the specific course in mind around them (Basturkmen, 2010).

Clearing Terminological Territory

Before delving into the discussion of NA, some clarifications are needed in terms of terminological territories which are largely about the type of information that can be collected in any NA activity. Hutchinson and Waters (1987) divide needs into target needs (i.e. what the learner needs to do in the target situation) and learning needs (i.e. what the learner needs to do in order to learn). The analysis of target needs can look at necessities, lacks, and wants. Roughly, necessities are about what the learners need in the course of language use, for example, the mode in which the students are required to answer the questions of the instructor; lacks deal with the deficiency side of the coin on the part of the learners e.g., on what aspect the learners have not received any previous practice; and wants which are the individual desires in the course of language learning. Another way to look at needs is to make a major division between present knowledge/required knowledge, objective/subjective needs, and perceived/felt needs Dudley-Evans and St. John (1998). The difference between present and required knowledge goes back to the gap between present know-how and the exigencies of the target situation. The latter difference between objective/subjective and perceived/felt needs lies in the nature of data based on the nature of sources used to collect the data required for NA, using outsiders and/or insiders views Dudley-Evans and St. John (1998). For example, tests are used to elicit objective needs and interviews to subjective ones. Very roughly, lacks fit into present knowledge, necessities fit into required knowledge, and wants fit into subjective needs. We will come back to the instruments used to collect different sorts of information in NA.

In order to put forward a balanced argument on NA and the steps taken to conduct NAs, we will adopt a framework by Brown (2009) and explain the stages of a comprehensive NA. This framework consists of three general stages with ten steps.

His framework goes in this way:

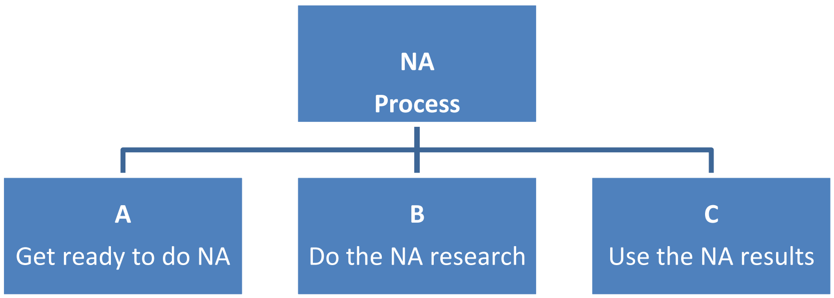

Figure 1. A framework for doing NA (adopted and adapted from Brown, 2009)

In fact Brown presents his framework in a linear fashion, but I have tried to give it a cyclical shape. The logic behind this modification goes back to the time of NA and the interaction among its different stages. A needs analysis might be done before a course starts, at the beginning of a course, be ongoing during the course or at the end of a course if it going to be repeated with a different group of learners (Nation and Macalister, 2010). It is especially at this point that NA tends to be circular, shaping and reshaping the future courses and adding to their efficacy. The framework goes as follows:

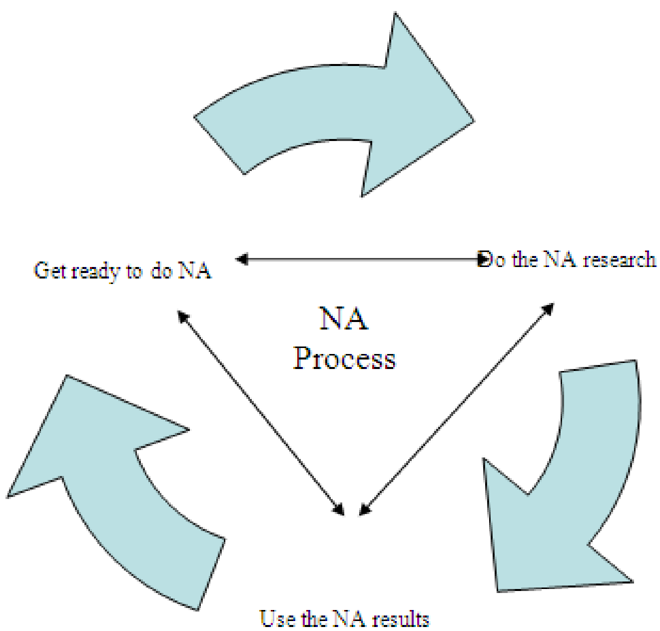

Figure 2. A framework for doing NA

In Fig. 2, we can see the major and general stages of doing a needs analysis. These stages come along with ten steps:

A Get ready to do NA
1. Define the purpose of the NA
2. Delimit the student population
3. Decide upon approach(es) and syllabus(es)
4. Recognize constraints
5. Select data collection procedures

B Do the NA research
6. Collect data
7. Analyze data
8. Interpret results

C Use the NA results
9. Determine objectives
10. Evaluate the report on the NA project

What follows is a brief description and explanation of the ten steps in the process of doing NA (Brown, 2009):

1. Defining the purpose of the NA

From the time of its inception, a few perspectives have been suggested as the purposes of doing NAs. Brown (2001) cites Stufflebeam et al. (1985) to identify four philosophies behind the aim of conducting NAs in education. They are:

1. Discrepancy philosophy – the distance between students future language requirements and what they are able to do with language now.
2. Democratic philosophy – the needs that are preferred by the majority of the stakeholders involved in the process of language instruction.
3. Analytic philosophy – given learner characteristics and the learning processes, needs are the next things to acquire.
4. Diagnostic philosophy – like drugs for a prescription, needs are the required elements of language performance; harmful if not developed.

Of course there are some other taxonomy in terms of different types of needs and accordingly purposes. For instance, Brindley (1984), Hutchinson and Waters (1987), Jordan (1997), and West (1994). But, it should be borne in mind that there are always possibilities of discrepancies and conflicts between different kinds of needs, especially between necessities identified by a teacher or sponsor and wants demanded by learners or between learners' preferred strategies and styles and teachers' preferences for strategies. All the views need to be taken into consideration although there is no easy way to do so. In this regard, Jordan (1997) suggests a negotiated syllabus and McDonough (1984, cited in Jordan, 1997) proposes a goal-oriented needs analysis that enables teachers to be flexible and to tailor the course to the learners' needs. In addition, West (1994) suggests that learners and teacher(s) should negotiate the syllabus and methodology to involve wants perceived by the majority of the participants because wants are important and should be considered in teaching. Long (2005) places the solution of this problem in the data collection stage as he believes that by triangulating sources and methods, we can validate the information obtained about needs.

2. Delimiting the student population

When it comes to the practice of NA, we should be careful to delimit the students of our study both in terms of scale and focus. Generally speaking, the scale deals with how broad the NA should be. It can range from very small scale local NA to international programs. However, due to unique nature of the needs of particular groups of students, it needs to be local. So, NA has to be situation-specific.

Regarding focus, NA can be done in any sectors of LSP and even in General English programs (Seedhouse, 1995). It can be done with having other languages apart from English as well.

3. Deciding upon approach(es) and syllabus(es)

Speaking about approaches and syllabuses, one can argue about the how and what the students need to learn in the course of a particular program of language instruction (Brown, 1995). Approaches can range from purely form-based procedures to completely communication-based ones. The content or the syllabus of the program can be everything from structural to functional to task-based and so on (Long and Crooks, 1992; White, 1988; Wilkins, 1976).

4. Recognizing constraints

Constraints in doing NAs are not related to the language itself but the environment in which the language program is being run or is going to be run. Properly named “situation analysis” by Richards (2001), this phase of analysis deals with the situational factors affecting the course. For the most part, we are working within a framework imposed by learners, teachers, and the situation. However, we are dealing with a host of factors such as social, cultural, political, and economical limitations. Especially, “in an era of shrinking recourses” (Long, 2005, p. 1) we need to be more accountable in our education.

5. Selecting data collection procedures

Due to the pragmatic and systematic nature of needs analysis, the procedures used to collect data must be appropriate for the specific situation in mind. Brown (2009, p. 277) cites the following five factors that affect choices of data-gathering procedures:

1. Characteristics of the information source
2. Situational characteristics
3. Type of information needed
4. Technical measurement criteria
5. Level of accuracy desired

Based on what we have argued so far, the procedures of data collection must be in line with purpose, scale, focus, approaches, syllabuses and constraints of the situation based on the analysis of the situational factors and constraints.

6. Collecting data

Dudley-Evans and St. John (1998) argue that in NA, asking the right questions are far more important than the corresponding answers because such questions might lead the analyst to astray. This way, there might be a large pile of data entangling the analyst in the viscous circle of data analysis phase. At the initial stages of NA, it is often the case that the mind of the needs analyst goes blank on the questions to ask. But, the point is to ask relevant questions in order to have effective and efficient answers. The ground-breaking work was done in 1978 by Munby through proposing Communicative Syllabus Design and Communicative Needs Processor (CNP). There are other types of procedures in Brown (1995), Long (2005), and Nation and Macalister (2010). These procedures range from the very quantitative approaches such as tests to the qualitative methods of the research continuum such as interviews.

7. Analyzing data

Naturally, the way that we analyze our data depends on the type of data that we have gathered. Therefore, based on the two ends of quantitative–qualitative research methodology continuum, Brown (2004) suggests corresponding standards to judge the quality of the two camps. These are reliability, validity, replicability, and generalizability for the former and dependability, credibility, confirmability, and tansferability for the latter. For the most part, “NA procedures lend themselves to qualitative rather than quantitative research methods” (Brown, 2009, p. 282). Therefore, the quality of the needs analyst is as equal as the quality of the data if not more than that.

There is a more effective strategy, if used properly, which leads to more credibility i.e., triangulation borrowed from sea navigation. Broadly speaking, triangulation is using more than one procedure for data collection then cross-checking the results to have an extended perspective. In an expanded perspective, Brown (2001) proposes seven types of triangulation: data triangulation, investigator triangulation, theory triangulation, methodological triangulation, interdisciplinary triangulation, time triangulation, location triangulation. However, one might be careful not to triangulate when in doubt (Dörnyei, 2007).

8. Interpreting results

In this stage of NA, the needs analyst interprets the results. But again, the needs analyst has to do his/her best not to misinterpret the findings. Using outsider’s help such as experts in the fields would be beneficial. However, traps exist everywhere, especially biases in terms of interpretation. Nonetheless, while cross-validating, the results must be checked, rechecked, and weighed against the other sources and criteria.

9. Determining objectives

After the interpretation stage, it is turn to specify the objectives in order to have more relevant content. This way, the course content is going to be motivating, effective, relevant, and efficient as far as it is tailored to the specific needs of specific students (For lists of objectives, see Brown, 1995; Nation and Macalister, 2010).

10. Evaluating the report on the NA project

The final stage of a needs analysis is evaluation of the NA based the report drawn from that. By and large, the report must include descriptions of the situation, the learners, the underlying theory, data collection procedures, and the analysis side of equation. Moreover, a discussion of the findings is put forward based on the benefits of different participants and stakeholders.

Nation and Macalister (2010) maintain that as far as needs analysis is a type of assessment, so, it can be evaluated by "considering its reliability, validity, and practicality" (p. 30). For them, "reliable needs analysis involves using well-thought-out, standardized tools that are applied systematically" (ibid, p. 30). Therefore, the more pieces of observation and the more people who are studied, the more reliable the results. From their perspective, "valid needs analysis involves looking at what is relevant and important" (ibid, p. 30). If the number of important needs is high, it would pay the price to do a ranking activity to decide what type of need should get priority in the needs analysis investigation. They argue that the worst decision would be to let practicality dominate by deciding to investigate what is easiest to investigate! Practical needs analysis is feasible in all aspects, is not expensive, does not occupy too much of the learners' and teacher's time, provides clear, easy-to-understand results and can easily be incorporated into the language teaching program. "There will always be a tension between reliable and valid needs analysis and practical needs analysis; a compromise is necessary but validity should always be given priority." (ibid, p. 31).

Trends in Needs Analysis

In the 1970, the dominant approach in needs analysis was target situation analysis (TSA) which initially focused on 'how much' English was used and then on 'what' of language use. TSA was mainly used for investigating necessities. The peak and landmark of needs analysis studies drawing on TSA was Munby's (1978) approach which established needs analysis (West, 1998). To have a syllabus specification, Munby used a Communicative Needs Processor (CNP) that consisted of a range of questions about key communication variables in order to gain a profile of the learners' language needs which, in turn, was developed into a communicative competence specification. While Munby's model paved the way for further developments and advances in needs analysis, it has been criticized on several grounds including being complex and time-consuming, excluding learners' perceptions, neglecting socio-political, logistical and administrative constraints and drawing skills specification from social English (Jordan, 1997; West, 1994).

Realizing the shortcomings of Munby's approach, several analysts broadened the scope of needs analysis to include some issues beyond syllabus specification. In fact, needs analysis was extended to include the 'how' of language learning in addition to the 'what' of language, and several pedagogic needs analysis approaches such as deficiency analysis, strategy analysis and means analysis were developed as complements to TSA (Jordan, 1997; West, 1994, 1998).

Present situation analysis (PSA) which is provided by Richterich and Chancerel (1980, cited in Jordan, 1997) determines what the learners are like at the beginning of their language courses, and investigates their strengths and weaknesses. In Brindley's (1989) terms, present situation analysis refers to 'means needs' and 'ends needs'. 'Means needs' help students to learn their language purposes as the course proceeds, but 'ends needs' are related to target needs. It seems that the approach called 'deficiency analysis' is the same as the PSA described by West (1994) along with some others (e.g. Allwright, 1982; Robinson, 1991, cited in West, 1994) which regards deficiency analysis as a combination of TSA and PSA; as an approach to needs analysis that considers both the learners' present situation and the demands of the target situation.

In the 1980s, the focus of needs analysis turned towards the learners' preferred learning styles and strategies to mark a big shift from what to how of language learning. Preferences in group size, correction procedures and methods of assessment relate to strategy analysis (Jordan, 1997). Making distinctions among needs, wants, and lacks, Allwright (1982, cited in Jordan, 1997) who opened up the area of strategy analysis was concerned with enabling learners to identify skills and preferred strategies of achieving them. Similarly, Hutchinson and Waters (1987) advocate a learning-centered approach, and show a concern with language learning and its processes. It should be pointed out that some writers like Jordan (1997) categorize the learning-centered approach by Hutchinson and Waters (1987) separately from strategy analysis. This may be reasonable as learning-centered approach encompasses some elements like the place and time of EAP course which are not included explicitly in strategy analysis.

To adjust language courses to local situations in order to make them workable, another approach to needs analysis called means analysis is suggested mainly by Holliday and Cooke (1982, cited in West, 1994). Means analysis, which can be done as an adjunct to needs analysis, studies the local situation and its givens such as resources, teachers, and cultural attitudes. It is based on this idea that what works well in one context may not work in another and language courses should be adapted to situations in different educational, professional, and workplace environments rather than being imposed without understanding of local constraints and exigencies (Jordan, 1997; Dudley-Evans & St. John, 1998).

Another approach to needs analysis is called language audit. It makes needs analysis a matter of language planning as it takes into consideration some broad issues of language policy that were initially considered outside the scope of needs analysis. Language audits are large-scale surveys done in a company, an organization or a country (Jordan, 1997; West, 1994). Perhaps due to their large scale nature, language audits are not deemed so relevant to EAP teachers by some writers (e.g. Jordan, 1997), and there is also a belief that they need to be followed up by further needs analyses of individual learners (van der Handt, 1983, cited in West, 1994).

CONCLUSION

The comprehensive review of needs analysis by West clearly presents different aspects of this inevitable step in language teaching enterprise, especially ESP. It shows how different procedures and approaches in needs analysis have gone through several steps since the 1970s to be established and trusted today. The broad scope of needs analysis discussed in the paper gives an idea about its significance for educational systems as West (1994) states that needs analysis is a key stage in the entire educational process from the determination of aims and objectives to the development of materials. Therefore, one can argue that the efficiency of any ESP course depends, for the most part, on the quality of the needs analysis done as the infrastructural foundation on which the whole course is constructed. Admittedly, any course proposal which does not accommodate the immediate needs and expectations of a particular audience may just gather dust on a shelf .

In spite of its importance in education particularly language teaching, and especially ESP, there are some thorny issues needing analysis though. These issues need to be resolved or at least compromised. They go as:

- Institutions tend to project their own tastes onto the results of NA .
- NA in ESP would imply marginality for the minority as they learn a restricted portion of English (or other languages).
- When learners are asked on their needs, they might not have the required knowledge and familiarity with their future needs and requirements (Long, 1996).
- The discrepancy between objective and subjective needs might lead to demotivation on the part of the learners .
- Language needs do not necessarily lead to learning, hence, language analysis is needed along with learning and naturally teaching analysis (Hutchison and Waters, 1987).
- Most learners do not have the required awareness or metalanguage to talk about their needs (Chambers, 1980).
- In most cases, resorting to portioning out a sample of any language based on NA would be reductionist because language use is for the most part unpredictable .
- Different perspectives come into play during NA. The analyst is placed in a conundrum on which perspectives to count or give priority (Jasso-Aguilar, 2005).
- Basing a course on the findings of NA results in language training rather than language education. This way, the learners are going to have restricted linguistic and communicative repertoire (Widdowson, 1983).
- Doing NA brings with it the issue of ideology of those who are in control of the analysis. Therefore, it is not a neutral enterprise (Benesch, 1996, 2001).
- Theoretically speaking, it can be argued that no NA is free of the theory of the nature of language (West, 1994).
- There are not established criteria how the content selection of the course should follow (Nation and Macalister, 2010).
- Regarding triangulation, there is always the risk of data contamination.
- NA is not necessarily synonymous with rights analysis (Benesch, 2001) dealing with power relations.

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