

Needs Analysis From different Perspective: Period, Focus and Scope of Analysis

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Abstract.

Term "needs", or needs analysis (NA) itself, is a general term with several interpretations. The present study is an attempt to shed lights on the concept of needs analysis from theoretical and practical aspect. This paper delves into the issue of needs and the corresponding classifications. To undertake the study, this paper provides the origins of needs analysis by focusing on different scopes in various perspectives. It considers needs from different aspect and the tentative methodology and steps one needs to conduct a study in this field. The paper finally ends with the major arguments regarding the needs analysis in the ERFL/ESL context.

Keywords: Needs analysis, Situations analysis, Deficiency, Target situation, means analysis

1. Introduction.

Origins of the term "analysis of needs" go back to India where it first appeared in the 1920s (Howatt, 1984, p. 245; White, 1988, p. 12). Michael West introduced the concept of NA to refer to the "need" which covers what learners will be required to do with the foreign language in the target situation, and how they might best learn the target language during training. In West's approach, "needs" also refers to those which are determinable in broad terms only but could not be defined precisely (Howatt, 1984). Since West, the concept of need did not reappear for almost 50 years.

With the advent of English for Special Purposes (ESP), NA returned to central prominence and has become a key tool in course design. The Makerere Conference held in 1960 was where the term ESP was first introduced (Howatt, 1984). During its fledgling days, NA was done intuitively or informally by language teachers who frequently based their teaching on some kind of informal analysis of students' needs (Tarone & Yule, 1989). However, it was during the early 1970s that formal NA came into existence as a result of the work of the Council of Europe and ESP practitioners (Richterich, 1973 as cited in Tarone & Yule, 1989). The heydays of ESP started with

John Munby's Communicative syllabus design (Munby, 1978). The size and scope of Munby's work showed that NA is crucial to any ESP course design step (Hutchinson & Waters, 1987). NA has implicit and explicit theoretical bases and principles mainly established by both the Council of Europe (Richterich, 1973 as stated in Tarone & Yule, 1989) and Munby (1978).

One of the main underlying theoretical bases of NA is curriculum development which includes three main tendencies, i.e., improving teaching methods, adapting the teaching to the type of learning, and training the learner how to learn. NA has been rooted in adapting the teaching to the type of learning part and training the learner how to learn. For Munby, the theoretical bases of his NA were related to the communicative competence whose principles were derived from Hymes (1971). It is also possible to build a model of needs analysis on the basis of linguistic competence by considering both target needs and present levels of competence (Tarone & Yule, 1989). Chronological evolution of NA is summarized in Table 1 below.

Table1. History of NA (West, 1994, p.1)

| Stage | Period | Focus | | Scope of analysis | Examples |
|-------|-------------|-------|-----|---------------------------|---|
| 1 | Early 1970s | ESP | EOP | Target situation analysis | Richterich, 1971/1980 ELTDU, 1970 Stuart & Lee, 1972/85 |
| 2 | Later 1970s | | EAP | Target situation analysis | Jordan & Mackay, 1973 Mackay, |

| | | | | | |
|---|-------------|---------------------------------|---|--|------|
| | | | | | 1978 |
| 3 | 1980s | ESP & General Language Teaching | Target situation analysis, Deficiency analysis, strategy analysis, means analysis, language audit | Tarone & Yule, 1989 Allwright & Allwright, 1977 Allwright, 1982 Holliday & Cooke, 1982 Pilbeam, 1979 | |
| 4 | Early 1990s | ESP | Integrated/computer-based analysis, materials selection | Jones, 1991 Nelson, 1993 | |

2. Different Types of Needs.

There is no agreement on the definition of needs: "The very concept of language needs has never been clearly defined and remains at best ambiguous" (Richerich, 1983, p. 2 as cited in West, 1994). According to West (1994), the main source of this ambiguity is the distinction or even contradiction between different concepts of need, e.g., need as necessities (also called objective, product-oriented or perceived needs), or as demands (also known as want, subjective, or felt needs).

Brindley (1989) categorizes needs as subjective and objective. While objective needs can be determined through observation of a situation, the learners, and their use of language, subjective needs are more complex and difficult to observe as they involve the wishes and expectations of learners. According to Brindley, objective needs refer to the needs which can be collected from different kinds of information about learners, how they need to use language in real life communication situations, along with their current level of language proficiency and everything they need to learn. The second term refers to the needs of learners in the learning situation and can be understood from affective and cognitive factors points of view, such as learners' personality, confidence, attitudes, wants, expectations regarding learning English, cognitive styles, and learning strategies.

Brown (1995) made a further classification on the types of needs as situation needs and language needs. By situation needs he refers to the type of information focusing on a language program's human aspect, referring to the physical, social, and psychological context in which learning occurs. The language teaching materials available, and the differences and similarities in the students' social backgrounds can be given as examples of the language programs' features which might affect the learning process. By language needs he refers to information including the target linguistic behaviors that the learners should gain. Language needs include details about the situations in which language will be used, required competency, learners' reasons for learning a language, and so on.

Hutchinson and Waters (1987), on the other hand, make a distinction between target needs (including necessities, lacks and wants), and learning needs. Target needs involve what learners require to act in the target situation effectively and learning needs involve what learners are required to do in order to learn effectively. Brindley (1989)'s subjective needs and Hutchinson and Water (1987)'s learning needs are similar in terms of their role throughout the learning process.

Brindley's objective needs, Hutchinson and Water's necessities, and Brown's language needs refer to the same category of learner language requirements (West, 1994). The term "needs", or NA itself, is a general term with several interpretations. Hutchinson and Waters (1987) propose a useful classification of needs which is going to be explained in details in the following.

3. Necessities.

Necessities refer to the type of need being defined by the demands of the target situation, i.e., what the learner has to know in order to act effectively in the target situation (Hutchinson & Waters, 1987). These needs are also known as the objective needs which may consist an analysis of typical everyday situations. This type of NA approach to identify these necessities is called the Target-Situation Analysis (TSA) (Hutchinson & Waters, 1987; West, 1994). Necessities are the course objectives to show the short- or medium term goals or aims being used throughout courses rather than target necessities or goals which are defined by language audits. TSA identifies which languages are needed in a course, prioritizes language skills, defines needs in situational or

functional terms, and specifies what grammatical or lexical language components are necessary for a particular function (West, 1994).

4. Lacks.

Knowing necessities and the target goals to study English in a course alone is not enough. We also need to know what the learner knows already; so that we can decide which of the necessities the learner lacks. The target proficiency is where our course is heading toward, while we need to know the existing proficiency level of the learners to know where to start the course. The gap between the ending target proficiency and the current level of learners' proficiency can be referred to as the learner's "lacks" (Hutchinson & Waters, 1987, p. 55). Hence, lacks are what learners do not know and Present Situation Analysis (PSA) can help identify them (West, 1994).

5. Wants.

Wants are what the learners want or feel they need (Hutchinson & Waters, 1987). These needs are personal and are sometimes referred to as subjective needs which are not predictable and differ from learner to learner and therefore indefinable. It is often pointed out that these may differ, even conflict, with necessities as perceived by a sponsor or employer, and lacks as identified by the teacher. This, however, does not mean that wants are any less real and ways will have to be found to determine them. Although wants are idiosyncratic or even opposed to the aims of the intended course

(Hutchinson & Waters, 1987), there may be wants which are perceived by the majority of the potential participants which can then be used in designing syllabus, especially if this is negotiated between instructor and learner. Deficiency analysis, which asks learners to identify their own learning priorities, is the NA approach used to identify wants (West, 1994).

6. Learning Strategies.

Hutchinson and Waters (1987, p. 60-62) distinguish between two types of learning needs: "the learner's preferred learning strategies for progressing from where they are (present situation/ lacks/deficiencies) to where they want to go (target situation/necessities)". Strategy Analysis will help identify preferred learning strategies (West, 1994). The second type is the teacher's interpretation of suitable strategies which may differ from learner's expectations about these learning strategies.

7. Constraints.

These include the potential constraints of the learning situation (Hutchinson & Waters, 1987). These are the external factors which may include the resources (staff, accommodation, time) available, the prevailing attitudes or culture, and the materials, aids and methods available. Constraints are often ignored in early approaches to needs analysis such as Munby (1978)'s as cited in West (1994); however, they are now seen as central to the process of course design and Means Analysis is the NA approach to define constraints.

8. The Language Audit.

The sixth and the last type of NA as proposed by Hutchinson and Waters (1987) is the language audit which is a large-scale survey undertaken by a company, an organization or even a country to determine what languages need to be learnt, for what reasons, by how many people, to what level, in what type of institution, by what methods, at what cost, and so on. These are big and often political questions. In general, a language audit differs from a NA in its scale, i.e., "the NA is used to determine the various needs of an individual or group; a language audit defines the longer-term language-training requirements of a company, country or professional sector, and can thus be seen as a strategy or policy document" (West, 1994, p. 3). The language audit may include all the levels or layers of a NA.

9. Methodology of NA.

Before conducting a NA, we need to decide on who will be involved, what type of data will be collected, how they will be collected and how they will be analyzed and interpreted (West, 1994). According to Brown (1995), there are four different philosophies related to NA: the democratic, the analytic, the diagnostic and the discrepancy philosophies or methodologies. "The importance of such philosophies lies in the fact that they will affect the types of information that will be gathered"(West, 1994, p.6).

In the democratic philosophy, a need is defined as any change that is desired by a majority of the group involved. Whether this group consists of the students themselves, their teachers, program administrators, or the owners of a private school, the democratic philosophy would lead to a needs analysis that would gather information about the learning most desired by the chosen groups (Brown, 1995).

In the analytic philosophy a need is whatever the students will naturally learn next based on what is known about them and the learning processes involved, that is, "the students are at stage X in their language development, and they next need to learn X+1 or whatever is next in the hierarchy of language development" (Brown, 1995, p. 25). A diagnostic philosophy proposes that a need is something whose missing is harmful (Brown, 1995).

Finally, the discrepancy philosophy is one in which needs are viewed as differences or discrepancies, between a desired performance from the students and what they are actually doing. For the data collection instruments various methods and types of instruments can be used to analyze the needs of the students. The most

frequently used instruments are existing information, tests, observations, interviews, meetings and questionnaires (Brown, 1995). Existing information refers to any preexisting information that may be available including data sources within a program or external data sources. According to Brown, tests are a good source of information in terms of identifying the general ability levels of students. Also, observing a group of people while they are meeting and engaged in a task may provide useful information about the people and the program. Questionnaires are a useful and time efficient way of collecting data that can be applied to a large group of people (Brown, 1995).

10. When to Conduct NA.

The right time to conduct NA is not easy to anticipate. There seem to be three or four possible answers to this question, for example, before, at the start, during the training course, and/or end of a course (West, 1994). According to Robinson (1991), the standard is to conduct NA before the start of the course as much as possible, however, it is now generally accepted that NA should be repeated during the course in a way that it becomes an on-going process. Taking a process view towards any aspect of ELT seems acceptable (West, 1994).

Based on different timings for NA, we have another categorization of NA: The “off-line” NA analysis (Chambers, 1980, p. 28) is the one which involves analysis before the start of the course. In this type of NA the course designer has enough time to prepare a syllabus and select appropriate training materials. Off-line approaches are based on the target situation and involve questions from sponsors, managers, employers, or those currently working in the target situation who may or may not have an accurate view of learners' language requirements. Also, off-line NA may require learners to complete questionnaires to identify their needs and wants. But since learners' perceptions of their own needs may be inaccurate and incomplete, courses designed based on off-line analyses have to be reviewed and revised (Chambers, 1980). Munby (1978) also took off-line procedure to NA.

On the other hand, the “on-line” or “first-day” (West, 1994, p. 5) NA is the one which takes place on the first day and at the start of a course. As opposed to the off-line approach, in the online NA, the trainer or course designer has little time to prepare a detailed course outline, but it is possible to ensure that the information obtained is complete, relevant and accurate even for a short time. Learners' perceptions of their needs change as the course passes (Chambers,

1980). So TSA and the analysis of lacks based on the present situation analysis (PSA) are not sufficient. In addition, teachers' perceptions of the learners' needs also evolve as the course goes on. “A process of on-going needs re-analysis is therefore required in response to these changing perceptions, so that both learner and teacher can identify new or short-term priorities” (West, 1994, p. 6). It is also motivating for the learners to reformulate their objectives every now and then. Therefore, on-going re-analysis is necessary; frequent but small-scale surveys can provide a more accurate picture than elaborate, large-scale procedures, “since each new attempt can draw on and refine the last” (Gardner & Winslow, 1983, as cited in West, 1994).

11. Who Does the NA?

There are three main categories of needs based on people who are involved in NA (Johns & Dudley-Evans, 1980):

- teacher-perceived needs
- student-perceived needs
- company-perceived needs (p.8)

Teachers, students and sponsors cooperate with each other in an ideal NA situation (Johns & Dudley-Evans, 1980); however, it's important to have the maximum number of sources of information. Although some may assume that learners are not accurate and complete sources of information in NA as their knowledge of their own needs is not impeccable, the involvement of the learners in the process of NA has several advantages (Nunan, 1988, p. 5):

1. “Learners come to have a more realistic idea of what can be achieved in a given course.
2. Learning comes to be seen as the gradual accretion of achievable goals.
3. Students develop greater sensitivity to their role as language learners and their rather vague notions of what it is to be a learner become much sharper.
4. Self-evaluation becomes much sharper.
5. Classroom activities can be seen to relate to learners' real-life needs.
6. Skills development can be seen as a gradual, rather than an all-or-nothing, process”.

According to Brown (1995), four categories of people are and should be involved in the NA process: The target group, the audience, the needs analyst, the resource groups. The target group refers to people or learners about whom we gather information. They can be learners or teachers whose needs are being analyzed.

Audience refers to the people who will directly make use of the outcomes of the assessment process. This group usually involves teachers, administrators and governmental institutions. Needs analysts are those who are responsible for conducting the needs analysis in a reliable and valid way. A resource group includes any group of people who may serve as sources of information about the target group.

This group may consist of parents, language instructors, content-area instructors, and employers. Brown points out that special attention should be given to identifying these groups of people in order not to exclude important individuals or groups in the process.

12. Methods to Conduct NA.

In NA, there are several instruments to gather information such as scientific surveys or informal tools used by a teacher in a class (West, 1994). It is also possible to employ more than one method in a single NA project depending on the objectives of the course. The kind of data to be gathered by the needs analysis varies according to the instrument used and the purpose of the survey.

Berwick (1989 as cited in West, 1994) makes a distinction between inductive, e.g., observations and case studies, and, more common, deductive methods, e.g., questionnaires, surveys or other data-gathering instruments.

Richterich (1983 as cited in West, 1994) lists various methods for gathering data in NA which cover both inductive and deductive approaches. Examples of such methods are as follows (Jordan, 1977):

1. Pre-course placement/diagnostic tests which measure the approximate language level of the student, but the main application of such tests is selection rather than diagnosing.

2. Entry tests on arrival which potentially have greater diagnostic value and are more precise in identifying learners' language weaknesses and lacks.

3. Self-placement/diagnostic tests to enable learners to identify their own level of language proficiency and areas of special priority.

4. Observation of classes Yalden (1967 as cited in Jordan, 1977) suggests classroom observation as an approach which includes a checklist or a set of notes. This approach is specifically valuable for deficiency analysis.

5. Surveys based on questionnaires

6. Structured interviews which are information-gathering techniques for NA.

Mackay (1973 as cited in Jordan, 1977) points out the advantages of the interview over the questionnaire which is its completeness of coverage and the opportunity to clarify and extend, economy, familiarity, and lower levels of specialist training.

It is possible to combine interviews with questionnaires.

7. Learner diaries which tended to focus on four areas: course input, tutor performance, learner performance and external factors affecting study.

8. Case studies which are the in-depth investigations of the learning needs and difficulties of individual students or groups (West, 1994).

9. Final evaluation/feedback which takes place at the end of the course and provides information for the student on the effectiveness of learning which can be used as the basis for future self-improvement. It also indicates the soundness of the initial NA and can suggest ways in which future courses could be improved.

10. Previous research about the needs and deficiencies of certain categories of learners. Examples of the previous research can be case studies of individuals or small groups and surveys of large groups.

13. Target Situation Analysis (TSA)

The most common form of needs analysis is the TSA which determines the learners' language requirements in the occupational or academic situation they are being prepared for (Chambers, 1980 as cited in West, 1994). The earliest TSA procedures were designed to determine how much English was used via a questionnaire. The most well-known approach to TSA was the one devised by Munby (1978) for the British Council. Munby's work has attracted a lot of attention as the most comprehensive approach to NA (Dickinson, 1995). Dickinson believes that the subsequent developments in NA have either been derived from Munby or in many ways been a reaction to the shortcomings of Munby's model.

14. Deficiency Analysis.

Deficiency analysis is an approach to NA that has been developed to find learners' present needs/wants as well as the requirements of the target situation which may be called analyses of learners' deficiencies or lacks. Other aspects of deficiency analysis may include discovering whether students are required to do something in the target language which they cannot do in their mother tongue (West, 1994).

15. Strategy Analysis.

During the 1980s, NA extended from what to include in a syllabus as content into how to do so. Language teachers need to know the preferred learning styles and expectations of their students when they learn a language (West, 1994). In this type of NA, students' preferences in terms of grouping size, extent of homework, learning in/out of class, learning styles, correction preferences, use of audio/visual sources, and methods of assessment are analyzed. Strategy analysis shows the methodology

Tarone and Yule (1989 as cited in West, 1994) discuss the conflict that may arise between teachers' and learners' expectations. The problem gets worse when learners

have inefficient learning strategies. Strategy analysis helps with the student-learner difference and the development of learner autonomy.

16. Means Analysis.

Means analysis is also called the ecological approach to NA (Holliday & Cooke, 1982). According to this view, the course designer or teacher first identifies the relevant features of the situation, i.e., the ecosystem and then sees how the positive features can be used to advantage to accommodate what would conventionally be seen as constraints. Holliday (1984) identifies four principal steps in such a means analysis (p. 45):

1. Observe lessons, taking random notes on all significant features
2. Use the notes to construct a report on the lesson to form the basis of discussion with the teacher.
3. Review all the original notes and draw out significant features common to all observations.
4. Construct a communicative device (chart, diagram, etc.) which expresses the findings.

This approach is directly opposite to the way in which NA is usually done, where the categories are defined before the observation and are based on linguistic descriptions and the situation is not being observed (Holliday & Cooke, 1982). The Means Analysis approach allows sensitivity to the situation.

17. Steps in NA.

There are certain kinds of models with different steps suggested for NA.

McKillip (1987), for example, proposes the following steps:

1. Identify users and the uses of the needs assessment
2. Describe the target population and the service environment
3. Identify needs (describe problems and solutions)
4. Assess the importance of the needs
5. Communicate results

Gravatt, Richards, and Lewis (1997, as cited in Richards, 2001) state the following procedures which have been used in NA:

1. Literature survey
2. Analysis of wide range of survey questionnaires
3. Contact with others who had conducted similar surveys
4. Interviews with teachers to determine goals
5. Identification of participating departments
6. Presentation of project proposal to participating departments and identification of liaison person in each department
7. Development of a pilot student and staff questionnaire
8. Review of the questionnaires by colleagues
9. Piloting of the questionnaires
10. Selection of staff and student subjects
11. Developing a schedule for collecting data
12. Administration of questionnaires
13. Follow-up interviews with selected participants
14. Tabulation of responses
15. Analysis of responses
16. Writing up of report and recommendations

18. Criticisms of NA.

Richards (2001, p.52) states that NA in language teaching can be used for a number of different purposes, for example:

- "To find out what language skills a learner needs in order to perform a particular role, such as sales manager, tour guide or university student;
- To help determine if an existing course adequately addresses the needs of potential students;
- To determine which students from a group are most in need of training in particular language skills;
- To identify a change of direction that people in a reference group feel is important;
- To identify a gap between what students are able to do and what they need to be able to do;
- To collect information about a particular problem learners are experiencing".

By all these, Nunan (1988) points out the criticisms and limitations of the NA. In general, several criticisms of NA and its applicability to language teaching have emerged since the mid-1970s (Nunan, 1988), some of which are as follows:

- The lack of awareness of the existence of NA as a tool in course design;
- Problems of familiarity and expertise;
- There is also little information on the validity or reliability of the instruments used and the results obtained.

19. NA in EAP.

English for Academic Purposes is needed not only for educational studies in countries where English is the native language, but also in the countries where English is the official language and medium of instruction in

the higher learning institutions (Jordan, 1997). The concept of EAP is interpreted and implemented differently based on the needs and situation of countries' educational policy.

The expansion of the demand of EAP to suit the particular needs of students and the development of higher education varies according to the particular country's situation. The future development of EAP in higher education has been widely discussed by ESP practitioners. For instance, Mo (2005 as cited in Jordan, 1977) predicts that more attention will be paid to EAP at pre-tertiary levels in the future as there are already many researches on EAP needs that concern students at undergraduate and postgraduate level.

The design and implementation of any curriculum for EAP courses should take into consideration the different language needs of the target learners. Undoubtedly, by determining learners' language needs, a strong foundation pertaining to the whole idea of conducting the particular language courses could be formed. With that preliminary knowledge, the whole process of designing curriculum, from the construction of course objectives to the selection of course contents and learning activities can be made easier. This could provide assurance in the quality of the courses especially in making the learners to achieve the expected learning outcomes. To start collecting information on the learners' language needs, a needs analysis has to be carried out (Jordan, 1977). On the other hand, needs analysis is referred as "the activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of a particular group of students" (Brown, 1995, p. 35).

As a result, using NA as a short-cut approach of determining course syllabus will pose risks to both the instructors and students because the quality of learning might be questioned. Therefore, in developing curriculum for any language courses, a little effort must be put in to conduct needs analysis so that any doubts pertaining to the quality of the curriculum could be avoided (Brown, 1995).

According to Brown (1995), NA is able to identify how learners will use English in their technical fields; it gives the instructor initial insights about the prospective students' current level of performance in English and fourthly, needs analysis provides an opportunity to collect samples of authentic texts, spoken and written, which will be used by them in the target environment. Hence, NA can be certainly viewed as an integral part in language curriculum development especially in EAP.

Brown (1995) proposed a model related to the use of NA in EAP context. In this model, it is noted that NA is placed as the first phase in the whole system. This is then followed by the other five phases: objectives, testing, materials, teaching and evaluation. It is in this initial phase that administrators collect and analyze all the necessary information about students' language needs in order to develop the course objectives, testing methods, instructional material and teaching methodologies. It is also noted in the model, after the fifth phase or a course has been implemented, a needs analysis has to be re-conducted. This shows that curriculum development, therefore, is actually a cyclical system and needs analysis is also an on-going activity.

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