Stances in Conducting ESP Needs Analysis:

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ABSTRACT: Needs analysis (NA) has proved to be a fundamental practice since the emergence of English for Specific Purposes (ESP) in the 1960s. Based on findings of NA, short time courses with a reasonable cost were catered to meet learners' needs on the job (Hutchinson and Waters; 1987). In the ESP course, researchers have sought to include register, discourse, language skills, content and tasks required in a specific domain. Eventually, NA has gone through multiple developmental stages which can be classified under each of these trends: analyzing the target situation, analyzing the present situation, or analyzing the two situations together. In each new approach, researchers and practitioners have tried to reveal the utility of considering new variables and look at NA from different perspectives. This work provides an overview of the main approaches that contributed to the advancement of NA. At the end of this review, we contend that all these approaches have proved to be complementary and have had a positive impact on ESP practices. Today researchers can stand at any point of the spectrum of needs analysis at their convenience and choose from a variety of NA approaches, or use a combination of different approaches which better serve their objectives and their customers' needs. **KEY WORDS:** Needs analysis- present situation analysis - target situation analysis- process approach- learning-

centered approach- NA task-based approach - educational engineering approach

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Needs analysis (NA) has been identified in the literature as a major practice and a continuous process in English for Specific Purposes (ESP). The views which influenced NA include the present situation analysis, the target situation analysis (Munby 1978), a combination of present situation and target situation analysis (McDonough 1984_ Robinson 1991), the learning-centered approach (Hutchinson and Waters 1987), the strategy approach (Allright 1992), task-based needs analysis (Long 2005) and more recently educational engineering analysis (Colpaert 2010).

An example of a target-oriented approach was offered by Munby's (1978) model, Communication Needs Processor (CNP). Hutchinson and Waters (1987; 54) reported that "the work marked a watershed in the development of ESP". They contended that this model was effective in identifying the learner's target situation communicative needs at a time when researchers were rather pre-occupied with the analysis of register and grammar needed in the target situation. They explained that, in this way, the model moved NA a step further. McDonough (1984: 31) also described this model as "a landmark in the development of ESP". Dudley-Evans and St John (1998) commented that when this model appeared, 'function' and 'situation' became fundamental concepts in NA.

Indeed the model succeeded in introducing new variables to needs analysis which were previously overlooked. In this view, the target situation was no longer restricted to language items found in the target domain. It now included the skills needed to use the target language and more importantly it took the learner into consideration. It allowed collecting detailed information about the learner: age, sex, and nationality, as well as his/her place of residence, language/s and purposive domain. Learner's purposive domain includes the identification of the type of ESP course needed whether educational or occupational. The model also orients the investigator to understand the setting in terms of time and place of learning and what Munby (*ibid*).called 'psychosocial setting'. This setting considers the psychological environment of the learner, such as learner's culture, agenda, religion, and ethics which are in relation with his/her learning environment. In the same way, the model focuses on the participant's interaction in the target language: role, relationship and instrumentality; "In this parameter [instrumentality], information is obtained on the medium, mode, and channel of communication that the particular participant requires (Munby *ibid*: 75)". This variable looks at the target language the participant needs in terms of medium/ macro-skills; mode/ modes of discourse or subdivisions of the macro-skills, for instance, speaking as a monologue or in a conversation; and channel/ type of communication, either unilateral, bilateral or live (Munby *ibid*).

Comprehensive as it may look, the model was criticized, though, for its implementation complexity (McDonough 1984_ Hutchinson & Waters 1987_ Jordan 1997). Similarly, West (1994, cited in Jordan 1997) contended that Munby's (1978) model can be used to collect information about the learner and not from the learner: "As a reaction, more recent needs analysis procedures have been developed which deliberately adopt a very different starting point, reasserting the value of the judgment of the teacher or involving the learner from the start (cited in Jordan *ibid*:24)".

In accordance with these views, McDonough (*ibid*) described the model as target-oriented and concerned with the 'end-product' idea only. He criticized it for representing an idealized point of view assuming the investigator has both time and access to the target situation. He also argued that it fails to encompass all the necessary factors for an effective NA and suggested extending this model to include: "goal specification-individual, goal specification-group, present and future needs, context, 'felt' needs, and external demands (40)".

In fact, learner's present needs emerged as a seminal component of NA to further develop practices in ESP. Robinson (1991) argued that goal-oriented needs analysis fails to identify learner's needs, as it only considers objectives and does not account for many factors like students' personal aims, wants, desires, and limitations. Robinson classified needs analysis as Target Situation Analysis (TSA) and Present Situation Analysis (PSA), suggesting that "needs analysis should be seen as a combination of both (9)."

In addition to consulting students on their needs, Robinson recommended consulting "the language-teaching institution (teachers and administrators) and those who are or will be concerned with the students' specific job or study situation (*ibid*: 11)". She argued that most of the time teachers are able to perceive learners' objective needs, while students perceive their subjective needs. However, it is possible that learners are not clear about their subjective needs like the need to develop confidence. This might suggest that a combination of students' needs, as they see them and the teachers' views can be more enriching in a NA. Brindley (1989 in Finney 2002) recommended that needs analysis should be both product-oriented and process-oriented in order to be effective. By product oriented, he means language-focused and by process-oriented, he means learner-focused; "One aimed at collecting factual information for the purposes of setting broad goals related to language content, the other aimed at gathering information about learners which can be used to guide the learning process once it is underway (in Finney 2002:75)".

In addition to the previous classifications of NA as TSA, PSA or a combination of both, Robinson stated other types of needs analysis, among which is the process-oriented approach of needs analysis. This approach is concerned with learning as a process; "Third we can consider what the learner needs to do to actually learn the language. This is a process-oriented definition of needs and relates to transitional behavior, the means of learning (*ibid*: 7-8)." This approach looks at learner strategies to learn the language and addresses their desires as well as their limitations. It can help the researcher identify problems that hinder language learning. Allright (1992 in Jordan *ibid*) referred to this approach as the strategy approach. He explained that it targets learning and teaching methods and allows the investigation of teaching methodologies when there is a belief that they are inappropriate to meet the learner's needs. Jordan *(ibid)* reported that Allright was a pioneer in this type of analysis. According to Jordan, the strategy approach accounts for students' problems with poor learning strategies such as rote learning, passive attitudes, and dependency on teachers.

Problems have arisen where students use learning strategies or styles that are perceived by teachers to be inappropriate or inefficient e.g. rote learning and a passive teacher dependent approach to language learning. In this case, it becomes important for teachers in EAP courses to raise awareness in learning strategies and methods of teaching. Consequently learner training and the development of learner autonomy becomes important (Jordan *ibid*: 27).

This approach is not pre-occupied with language items that the learner has to master in a course for a target situation, but rather aims to identify learners' poor learning strategies and inadequate teaching methodologies that hamper language learning. In this way, the analyst can propose alternative ways to mend the present situation and allow students to develop effective language learning strategies through more efficient teaching methods and methodologies.

At the end of the last millennium, Dudley-Evans and St John (*ibid*) suggested a combination of the target situation analysis (TSA), the learning situation analysis (LSA), and the present situation analysis (PSA) in order to complete the 'jigsaw' of needs analysis.

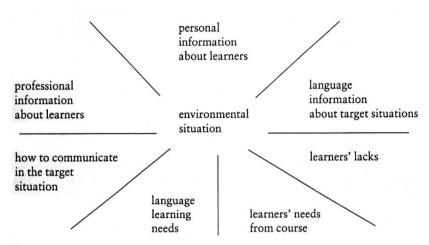


Figure 1. What needs analysis establishes (Dudley-Evans & St John; *ibid:125*)

They explained that for any NA, professional, personal, English language information about the learner should be collected and learners' lacks should be identified. Information about the skills needed in the target situation and effective ways to teach them should be well considered. They also stated that the course objectives and learning outcomes, for what the students or clients need the course, should become clear to the designer. Besides, they recommended that *the learning environment/ means analysis* should be taken into consideration in terms of its specificities to ensure good practices.

We concur with this view as it makes use of all the previous NA approaches in ESP in a harmonious way. Though, NA approaches continued to grow and more had to come to enlighten practices in ESP. In the beginning of the new century, a new concept in language learning emerged, action-based learning, and a new approach came grandly with the focus on enabling learners to use the language in real-life tasks, Task-Based Learning. This move no doubt has had a great impact on approaches in needs analysis. Long (2005) explained that NA is a necessary stage in the design of every language course, whether general or specific, so that it becomes oriented to the learner's current and future use of language. For Long (*ibid*), NA is about identifying the learners' needs and making the course more useful and purposeful for them. The language view behind this type of needs analysis is that language should be taught to enable learners to use it in different situations, just as in action-based learning. This view might be considered as a new move in the history of NA, as it represents an adaptation of needs analysis to action-oriented language learning and adjusts itself to Task-Based Learning requirements.

General (language for no purpose) courses at any proficiency level almost always teach too much, e.g., vocabulary, skills, registers or styles some learners do not need, and too little, e.g., omitting lexis and genres that they do. Instead of a one-size-fits-all approach, it is more defensible to view every course as involving specific purposes, the difference in each case being simply the precision with which it is possible to identify current or future uses of the L2 (Long *ibid*: 19).

Long also argued that a Task-Based NA is very useful, as it accounts for both language and skills in the target situation. It serves to identify the linguistic items needed to carry out a task as well as the skills related to the performance of this task. For Long, the most insightful and informative needs analysis is the one that can indicate whether the student is able to do a task in the target language after fulfilling the course that aims at preparing him/her to do so. This information, according to Long, can be gathered by having unstructured interviews with experts in the target situation or after the course when learners are on their real professional tasks. He illustrated his argument using the NA conducted by Auerbach and Burgess (1985) on tourist industry workers. In this work, Auerbach and Burgess reported great discrepancies between the language modelled for learners in textbooks and the language which is really used in the target situation of this industry.

This may not affect profits for textbook writers and publishers, but it can have serious consequences for learners. Thus, with considerable justification, Auerbach & Burgess (1985, pp. 478-90) strongly criticized authors of 'survival English' texts for producing materials which modeled oversimplified language, inauthentic communicative structure, and unrealistic situational content (Long *ibid*: 35).

This approach was followed by Bertin and Bertin $(1993)^{1}$ in a needs analysis they performed to identify English learners' needs in the field of international transport. As the date may indicate though, this was the time when language didactics was concerned with competences rather than tasks, but the procedure is very much the same. Bertin's study showed the importance of the authenticity of the task, just as in action-based learning. Eventually, for the purpose of the language needs identification in the target situation, the researchers involved stakeholders by sending a questionnare to different companies related to the learners' fields. This procedure was useful to identify learners' future needs in the workplace in terms of language and the tasks they have to perform. Long (*ibid*) further justified the necessity to follow such an approach, as pre-service learners can provide only 'partial input' for a NA, such as information about their learning preferences or learning styles and they are less likely to identify their future needs in the workplace. He elaborated that such learners "tend to make inadequate sources of information for a needs analysis (NA), since most in-service learners know about their work, but little about the language involved in functioning successfully in their target discourse domains, and most pre-experience or pre-service learners know little about either" (20).

While the usefulness of task-based approach in needs analysis is acknowledged, we suggest it can be combined with other approaches that focus, for instance, on the learners' needs in terms of learning strategies and wants. In Task-Based Approach NA, proposed by Long, learners' personal needs are seen only as learning styles or preferences. The work of Colpaert (2010) and his team's decades of research can be regarded as complimentary to Long's work for a more effective and comprehensive needs analysis. Colpaert worked on the design of pedagogical work to help students improve their language learning in different languages, fields, and places in the world. Colpaert's approach in needs analysis puts emphasis on the utility of considering learners' needs from the learners' perspective, which he called Educational Engineering. In his article Elicitation of Language Learners' Personal Goals as Design Concepts, Colpaert explained that learners' personal goals should be elicited and identified first, and then pedagogical goals will follow. He argued that integration of goals into the design will provide a compromise to the learners to invest themselves in what they have to do, "The integration of personal goals into the design construct leads to acceptance (face value and validity). In a second step, learners follow a commensurate effort pattern, making more and more effort to the extent to which they get more and more reward. Gradually in design, the focus is then shifted from personal to pedagogical goals" (Colpaert, *ibid*: 270). He also explained that this method ensures the efficiency of any work designed for learners, as it implements what helps them to overcome problems like motivation and to foster their learning. He identified them as psychological learner factors and classified personal goals as conscious and unconscious wants in a definite learning situation:

- They are not linked to concrete actions, but mostly to states of mind or feelings. Personal goals are not related to life-in-general (like be happy, rich, and healthy), but they mostly spring from attitudes toward the learning situation.
- Personal goals are certainly individual to a large extent, they differ within a group, but it has always been possible to group them or find some kind of common denominator. [...]
- They are not necessarily psychological realities, which would be hard to prove. They are assumptions about some aspects of the user which have appeared to be of decisive importance for the design process (269).

According to Colpaert, personal goals are the factors that can enhance or hamper a student's learning, and, for this reason, they should be included in the work design. Learner's involvement in course design is possible if we look at Chambers (2007). In a new trend in discourse and genre analysis Chambers argued that learners should be given the option to choose texts and discover the community discourse preferences in the target situation as a step towards their own 'discoursal expertise'. On the one hand, this might be regarded as a complementary process in task-based approach. On the other hand, it can enhance learners' intrinsic motivation as described in Colpaert (*ibid*) since their preferences are taken into consideration. It is important to note that discourse analysis approach to needs analysis has been revived and benefited from concordance software and it is now easier to conduct.

Similarly, Hutchinson and Waters (ibid) recommended that the learner's syllabus should be taken into account in needs analysis. They defined the learner's syllabus as what happens inside the learner brain. They also stated that at first pre-requisites should be defined for any course and because learners learn in different ways, the course designer should include a variety of procedures and techniques in a course. Hutchinson and Waters identified learners' necessities, lacks and wants. They differentiated between wants and lacks and explained that lacks can

¹Le deuxième problème qu'il nous a fallu aborder est celui de la définition de ce que nous avons qualifié d'« interface utilisateur », pour reprendre la terminologie de l'informatique, c'est à dire des situations dans lesquelles l'opérateur se trouve en contact avec la langue anglaise, dans le cadre de son activité professionnelle (Bertin & Bertin 1993 : 227-228).

be determined by teachers, but wants are psychological factors which can be determined only by the learner. This concept of wants corresponds to what Colpaert (*ibid*) called 'learners' personal goals'.

Although researchers have extended the meaning of NA and its types, NA still has potentials to grow. Needs analysis is a continuous process in ESP which is performed in order to enhance language learning in a specific domain. From this perspective, views in language didactics should be thought about as another source of information which can help reach better options. New teaching/ learning methods should replace old practices through the help of NA. Findings in SLA are to inform NA practices in ESP (Hutchinson and Waters ibid). Today the emergence of new teaching methodologies and the advancement of learning theories encourage ESP practitioners to keep up with this development. For instance the end of last millennium has witnessed the birth of new learning theories, such as Dynamic Systems Theories (DST) which combined a variety of teaching methodologies including cognitive and socio-constructivist approaches in Second Language Development (SLD), as described by DeBot, K, Lowie, W, Thorne, S. L., and M. Verspoor (2013). These theories initiated changes in the concept of learning and led to the emergence of action-based learning and eventually to project-based learning, problem-based learning and task-based learning.

NA as in the Strategy Approach, which was discussed earlier in this work, has to focus on new alternative teaching methodologies and what potentials they can bring to the ESP learner. In line with this trend, the new millennium especially Sarré & Whyte (2016) examined the construct of ESP didactics which is concerned with the 'How' variable in language teaching/ learning or methods and methodologies to meet learners' needs.

The emergence of Content and Integrated Language Learning (CLIL) as a new trend in teaching language for a specific discipline, has led researchers to seek approaches which can benefit the learners in terms of learning strategies, language and content as a new alternative in ESP teaching/ learning. Zarrouk (2017) debated that Problem-Based Learning methodology can be useful to mend problems in language learning in an ESP course. She contended that this teaching methodology is in line with modern learning theories bringing language knowledge and domain knowledge in addition to enhancing learner strategies together under one practice.

We can conclude that all these approaches can still fit under the two headings of PSA and TSA. However, each of these will encompass all the necessary variables required to ensure effective practices in ESP. These practices should include learner's needs in a current and in a target situation: learners' psychological factors and language wants and needs in terms of register, discourse and language skills in a specific domain of knowledge. It should also target skills and strategies which can help a learner easily function in a target situation.

Present Situation Analysis and Target Situation Analysis can now be extended to include every new practice suggested in NA.

In the new millennium, PSA will include all possible information existing in the present situation:

- personal information about the learner;

- information from the learner and the teachers about the learner's current needs in terms of linguistic abilities, current knowledge in the target subject, and learning techniques and strategies in order to identify lacks and wants;

- learning context: macro, meso and micro: potentials and limitations; facilities in terms of labs, computers, Internet, etc...;

- used course materials and underlying methodologies; and
- current pedagogical practices as in the process approach or strategy approach.

Similarly, TSA will include all possible information existing in the target situation; needs of the customer in the target situation whether students or employees:

- language needed: register, discourse, genre and skills;
- knowledge in the target domain;
- required skills to perform a task in the TS; and
- learners' personal goals.

However, as no needs analysis can encompass all these aspects together, priorities should be set for each context of an ESP learner. It is also important to note that the choice of a particular type of needs analysis depends on the objectives of the analyst. Each needs analysis, as Robinson (*ibid*) denoted, has to be catered to serve the researcher's goals. She argued that two analyses of the same group of learners' needs conducted by different analysts can end up showing different needs: "the needs established for a particular group of students will be the outcome of a needs analysis project and will be influenced by the ideological preoccupation of the analysts (7)".

After the approach in NA is selected, the researcher needs to cater his/her tools. This is another seminal step since NA success depends on the quality of the used instruments for data collection and the analysis of the findings; Dudley-Evans and St John contended that the information we gather from students or clients "will only be as good as (a) the questions asked and (b) the analysis of the answers (*ibid* :122)."

In case of the use of a multi-method approach, findings need to be triangulated. Triangulation of sources is a common practice in NA. Long (*ibid*) defined triangulation as a procedure that helps researchers to increase the

credibility of their data interpretation: "*Triangulation* is a procedure long used by researchers, e.g., ethnographers, working within a qualitative, or naturalistic, tradition to help validate their data and thereby, eventually, to increase the credibility of their interpretations of those data (*ibid*: 28)." Stake (2010:124) argued that it is a form of confirmation of findings, a 'win-win situation' that gives the researcher confidence to go ahead with firmer steps.

We saw that triangulation may be a form of differentiation (Flick, 2002). It may make us more confident that we need to examine differences to see important multiple meanings. You might call it win-win situation. If the additional checking confirms that we have seen it right, we win. If the additional checking does not confirm, it may mean that there are more meanings to unpack, another way of winning.

Once objectives are set and the sought information is gathered and analyzed, needs should become clear. Then, teaching methodologies which would enhance learning should be carefully selected and implemented in course designs in line with the learner language needs and psychological goals. Practitioners should be trained and made aware of the course intended learning outcomes to ensure that classroom practices meet the set objectives. Evaluation follows each course and satisfaction surveys can increase the quality of the outcomes.

References:

- [1]. Bertin Jean-Claude & Claire Bertin. 1993. « Mise en place d'une formation en anglais à l'Institut des transports internationaux et des ports (Le Havre) ». ASp.1. Actes du 13e colloque du GERAS et de l'atelier Langue de spécialité du 32e congrès de la SAES. (221-249). ASp [En ligne], 1 | 1993, mis en ligne le 29 avril 2014, consulté le 21 janvier 2015. URL : http://asp.revues.org/4372 ; DOI : 10.4000/asp.4372
- [2]. Chambers, Angela. 2007. "Language learning as discourse analysis: Implications for the LSP learning environment". La revue du GERAS ASP. No 51-52. (35-50).
- [3]. Colpaert, Jozef. 2010. "Elicitation of Language Learners' Personal Goals as Design concepts, Innovation in Language Learning and Teaching", 4:3. (259-274).
- [4]. http://dx.doi.org/10.1080/17501229.2010.513447 DeBot, K, Lowie, W, Thorne, S. L., & M. Verspoor. (2013). Dynamic systems theory as a theory of second language development. In M. Mayo, M. Gutierres Mangdao, & M. Adrián (Eds.), Contemporary approaches to second language acquisition (pp. 199-220). Amsterdam: John Benjamins.
- [5]. Dudley-Evans, Tony. & Maggie Jo St John. 1998. *Developments in English for Specific Purposes* a Multi-Disciplinary Approach. Cambridge. Cambridge University Press.
- [6]. Finney, D. 2002. "The ELT Curriculum: A Flexible Model for a Changing World". *Methodology in Language Teaching An Anthology of current practice*. Richard, J.C. & Renadya, W. A. (eds.). Cambridge University Press. (69-80).
- [7]. Hutchinson, Tom. & Alan Waters. 1987. English for Specific Purposes: a learning-centered approach. Cambridge. Cambridge University Press.
- [8]. Jordan, R.R. 1997. English for Academic Purposes: a guide and resources book for teachers. Cambridge. Cambridge University Press.
- [9]. McDonough, Jo. 1984. ESP in Perspective a Practical Guide. London. Collins ELT.
- [10]. Munby, John. 1978. Communicative Syllabus Design. Cambridge. Cambridge University Press.
- [11]. Robinson, Pauline. 1991. ESP Today: A Practioner's Guide. Hemel Hempstead. Prentice Hall International.
- [12]. Sarré, Cédric. & Shona Whyte. (2016). "Research in ESP teaching and learning in French higher education: developing the construct of ESP didactics/ La recherche sur l'enseignement-apprentissage de l'anglais de spécialité (ASP) en France : pour une didactique de l'ASP". ASp 69. (139–164).
- [13]. Stake, Robert. 2010. Qualitative Research: Studying How Things Work. New York- London. The Guilford Press.
- [14]. Zarrouk, Hajer. 2017. Problem Based Learning in Teaching ESP from Theory to Practice. Deutchland/ Germany. Verlag/ Publisher. Noor Publishing; OmniScriptum GmHm & Co. KG, Saarbrucken. ISBN: 978-3-330-85622-6