NEW CHALLENGES IN DESIGNING SECOND/FOREIGN LANGUAGE PROGRAMS IN A NETWORKED WORLD

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Abstract

In the past 50 years since the emergence of computer-aided language learning, also the roles and needs of second/foreign language learners and teachers have changed significantly, as educational technology has been integrated into the language classroom. Educational goals have broadened to include lifelong learning, global interaction, and the acquisition of computer-mediated communication skills. Such extended changes call for a renewed examination of the second/foreign language pedagogy and curriculum design in order to provide the necessary integration that may fit the new technology-enhanced setting, especially in the first and most fundamental step, i.e. needs analysis. Several scholars have acknowledged the centrality of needs analysis in course design. However, while Second Language Acquisition authors have extensively written on needs analysis applied to primary and secondary education, very few studies are available as to how needs analysis can be applied to tertiary education. Different approaches to needs analysis exist, yet, to the best of my knowledge, none of them alone attempts to investigate the needs of learners in second/foreign language programs based on computer-mediated communication in a networked learning setting. This paper aims at filling this gap. After going through current literature on needs analysis, we identified Dudley-Evans and St. John's concept of needs analysis as the starting point of our investigation as it encompasses previous approaches and is open to extension, especially in those areas in which it falls short. This study, therefore, contributes to complementing Dudley-Evans and St. John's essential building blocks of needs analysis with three additional ones – which address specific CMC skills, epistemic and information fluency – identified when designing EFL/ESL courses for BA and MA programs in Translation and Communication Studies in the course of the past ten years. Although the study is inherently qualitative, it is grounded on the quantitative data collected in each of the courses – thirty altogether – which substantiate the results of the investigation. The newly defined building blocks can be used to integrate the information gathered from a traditional needs analysis, and will help teachers to further clarify the purposes of their language programs so that they address the needs of today's connected learners.

Keywords: ESL, EFL, language learning, technology, needs analysis.

1 INTRODUCTION

In the past five decades of computer-aided language learning [1], the integration of educational technology [2] into the language classroom [3] and the extension of educational goals to include lifelong learning and global interaction [4] [5] have determined a significant change in the roles and needs of language learners and teachers.

Recently, researchers have been focusing on the shift from e-Learning to we-Learning, investigating how to incorporate the new Web trends into the learning process and how to harness and apply Web 2.0 concepts to create new learning experiences and learn across communities [6].

Such extended changes call for a renewed examination of the second/foreign language pedagogy and curriculum design in order to provide the necessary integration that may fit the new technology-enhanced setting [7], especially in the first and most fundamental step in EFL/ESL program design, i.e. needs analysis.

This paper offers a conceptual focus and theoretical ideas that may contribute to the development of a better understanding of these questions.

2 THEORETICAL FRAMEWORK

2.1 Needs Analysis at the interface of technology and language learning

Needs analysis is the very first step we go through when designing our syllabuses, as it helps us set our goals before developing our units, delivering our courses and evaluating their effectiveness. The feedback received will help us redefine and readjust our NA for the next course. Then a new cycle begins in a spiral-wise development. Past experiences will not simply add up; they will rather inform the next course so that it will never be the same each time it is delivered, but improved by subsequent cycles of analysis through evaluation. It is the longitudinal development across time which contributes to continuous improvement in the light of Action Research. Feedback is not only received from the final evaluation step, but also from each of the former steps in the cycle, through formative evaluation.

Several scholars have acknowledged the centrality of needs analysis in course design (Fig. 1): among them are Munby (1978) with his CNP (Communicative Needs Processing) [8]; Hutchinson and Waters (1987) with their Framework for analyzing learning needs [9]; West (1994) [10]; Seedhouse (1995) [11]; Jordan (1997) [12]; Dudley-Evans and St.John (1998), who illustrated how stages in the ESP process are interconnected [13]; and Long (2005), who called for more effective needs analysis methodology than simply identifying needs [14].
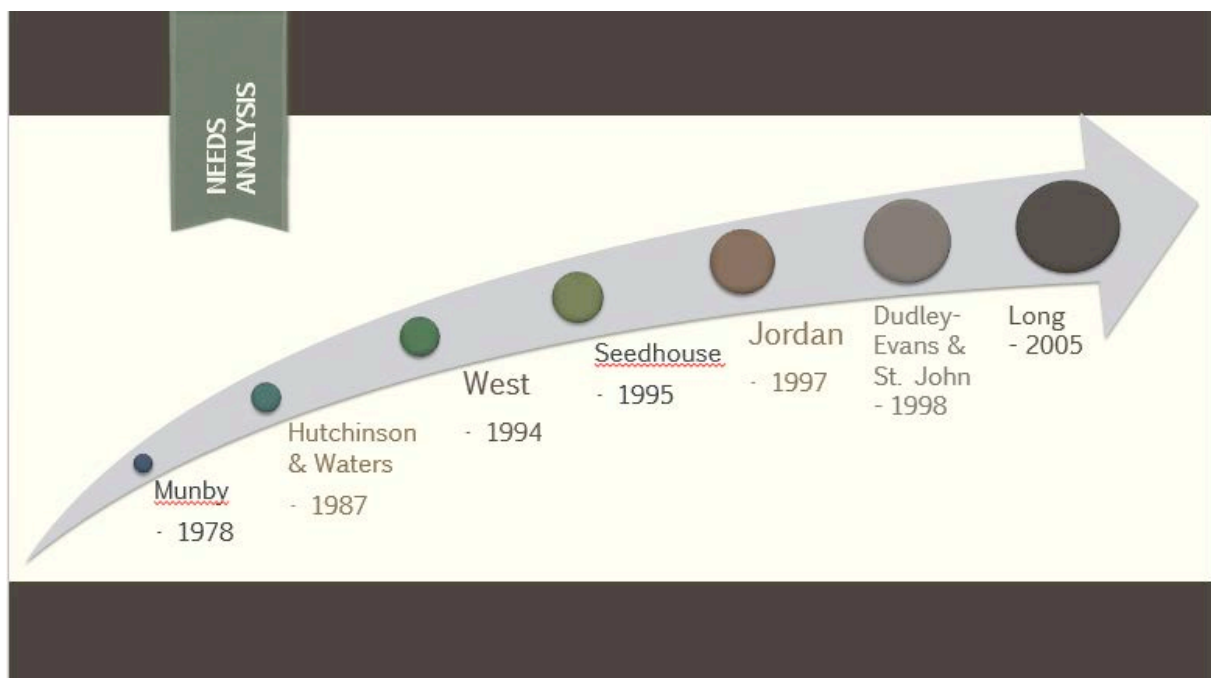

Fig.1: Needs Analysis in the past three decades

After going through current literature on needs analysis, I identified Dudley-Evans and St. John's concept of needs analysis as the starting point of my investigation as it encompasses previous approaches and is open to extension. I also acknowledge Long's work which emphasises methodological options; that is, selection of data collection methods and analysis of data, rather than making use of the results of needs analysis to inform curriculum development, but for the sake of this study, the main reference point will be the work of Dudley-Evans & St. John.

While Second Language Acquisition authors have extensively written on needs analysis applied to primary and secondary education, very few studies are available as to how needs analysis can be applied to tertiary education. In addition, there are different approaches to needs analysis, yet, to the best of our knowledge, none of them alone attempts to investigate the needs of learners in second/foreign language programs based on computer-mediated communication in a networked learning setting. This paper aims at filling this gap.

2.2 Technology-enhanced language learning

With the massive explosion of the Internet and related tools, the focus has gradually shifted from merely technological aspects or communicative aspects of information processing – especially those

involving information transfers between different locations [15] – to the processing of linguistic and other symbolic systems through the internet and allied technologies by interaction between sender(s) and receiver(s) [16].
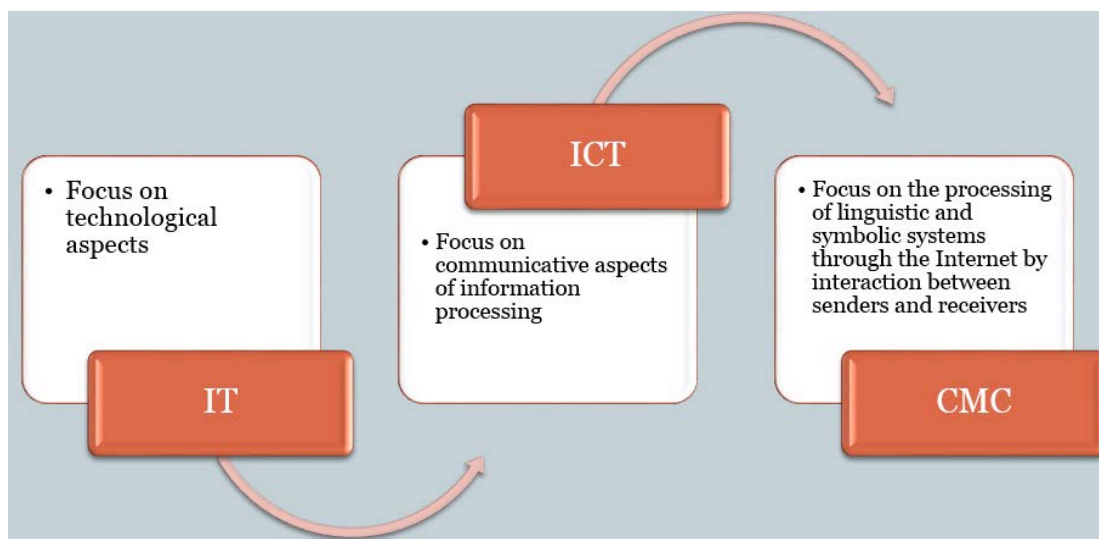

Fig. 2: Shifts in the focus on technology in CALL/CALT

In line with the shift in focus illustrated in Fig. 2, CMC can be defined in different ways according to a more technological, information-processing or sociological perspective.

In the technological perspective, the term computer-mediated communication signifies the ways in which telecommunication technologies have merged with computers and computer networks to give us new tools to support teaching and learning [17].

In the information-processing perspective, CMC is the process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting and decoding messages [18].

In the sociological perspective, CMC refers to the social interaction through transactional, multifunctional and multimodal processes by which meaning is negotiated between people via a network of computers [19].

This study is related to the latest perspective, and relies on the theoretical framework that underpins the design of the courses that have undergone scrutiny. The framework is based on the synergy among the pedagogical, methodological and technological aspects of learning, and offers a formula for achieving a successful integration of CLIL, CMC and NL. It incorporates the theoretical tenets of constructivism [20] and opens up to new knowledge-building approaches such as connectivism [21].

The guiding principles of this triangulation of CLIL, CMC and Networked Learning have been applied to an *English for Communication* course offered between 2006 and 2010 in the Master's Degree program in *Multimedia Communication*, whose design is outlined below, with a focus on Needs Analysis.

3   DESIGNING ESL/EFL PROGRAMS IN NETWORKED LEARNING

The starting point, as mentioned before, is the concept of NA as proposed by Dudley-Evans and St. John [13] because it encompasses previous approaches and can be extended to meet the needs of the mentioned triangulation of methods.

Their current concept of NA includes an all-encompassing rubric of indicators (illustrated by the basic building blocks in Fig. 3), which may cater well for a NA applied to the CLIL node of the triangulation, but would still fall short as to the remaining nodes.

Fig. 3: Needs Analysis basic building blocks [13]

I suggest they should be integrated with more specific indicators (Fig. 4) aiming to address the needs of today's connected learners, namely:

- learners' "information fluency", i.e. the learners' level of digital literacy, critical thinking, presentation skills and domain-specific knowledge;

- learners' "CMC skills", i.e. the learners' ability to initiate and maintain dialogue online; to construct an argument, compare opposing arguments, make judgments online; to share ideas, opinions, etc. and co-construct knowledge online;

- learners' "epistemic fluency" [22], i.e. the abilities, predispositions and practices involved in combining multiple ways of knowing, where epistemological beliefs are not fixed traits but reconfigurable mental resources.

Fig. 4: Additional NA building blocks covering networked learners' needs

Information fluency integrates the abilities to:
- collect the information necessary to consider a problem or issue,
- employ critical thinking skills in the evaluation and analysis of the information and its sources,
- formulate logical conclusions and present those conclusions in an appropriate and effective way.

CMC Skills integrate the ability to contextualize Information Fluency (but not only) in a computer-mediated, interactive, communicative exchange, therefore projecting the individual dimension onto a virtual, social dimension of communication. In addition, besides emphasizing the authenticity of performance, CMC Skills prioritize argumentation and discussion skills – as they are fundamental to online interaction – and to some extent foster sharing skills and ideas leading to projects and artifacts which are the result of collaboration.

Epistemic fluency is the ability to recognize and practice a culture's epistemic forms – i.e. the target structures that humans use to construct knowledge – to understand the different forms of expression and evaluation, and to take the perspective of interlocutors who are operating within epistemic frameworks. Collins's idea of epistemic forms [23], coupled with Bereiter's notion of conceptual artifacts [24], can be used to help students understand how they should be representing new knowledge within a professional culture [25]. A considerable contribution towards students' development of epistemic fluency, which deserves a central place in 21st Century learning, is given by networked learning, and connectivism.

4 APPLYING NEEDS ANALSYS TO ESL/EFL PROGRAMS IN NETWORKED LEARNING

In simple terms, a needs analysis includes all the activities used to collect information about the students' learning needs, wants, wishes, desires, etc. The information gathered from a NA can be used to define program goals. These goals can be identified as specific teaching objectives, which in turn will function as the foundation on which to develop lesson plans, materials, assignments and activities, mid-term or final tests. Basically, a NA will help teachers to clarify the purposes of their language programs.

In the *English for Communication* course underlying this study, CMC permeates the entire course and is employed in three different ways: a) as a subject; b) as a regular medium of communication; c) as a test/self-test tool, as summarized in Fig. 5.
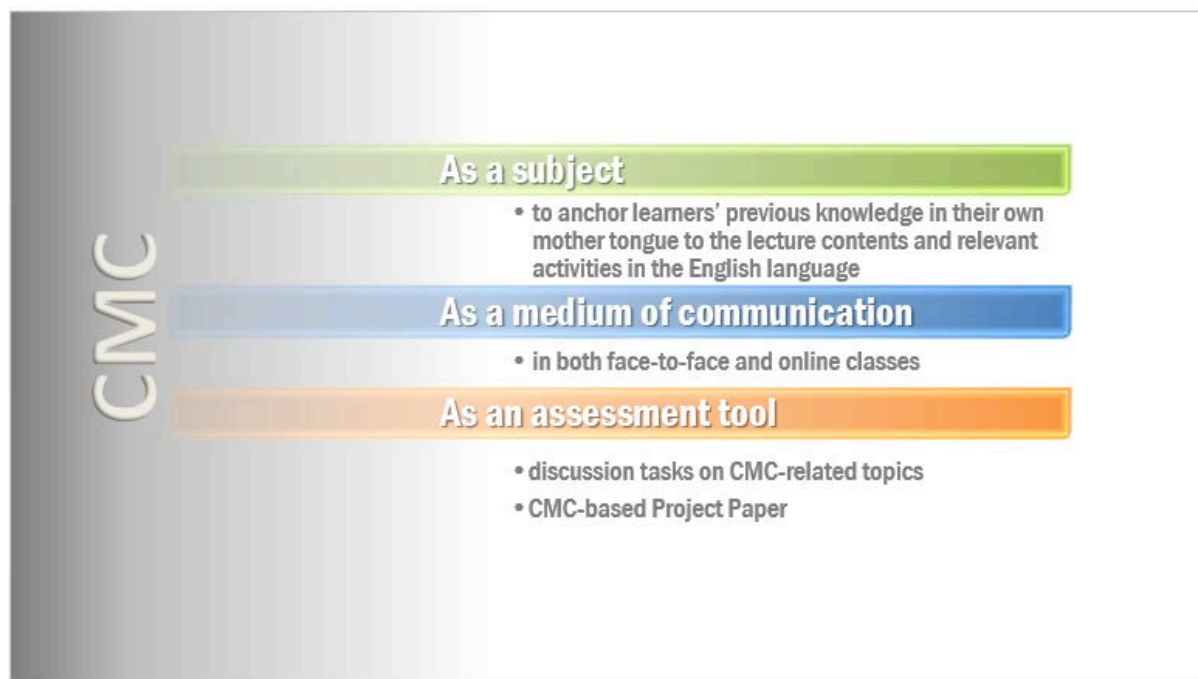

Fig. 5: The three-fold role of CMC in the *English for Communication* course underlying this study

Learners are assigned discussion tasks on CMC-related topics with English native speakers (or learners of English as a second or foreign language), and they have to complete a Project Paper in which they analyze their own interaction with the foreign interlocutors and the relevant communicative flow so as to reflect on the CMC-related topics discussed and the modes in which CMC has taken place in their Discussion Tasks.

The analysis of learning assessment is based on the qualitative and quantitative data collected in each of the courses – thirty altogether – which substantiate the results of the investigation.

Stahl [26] notes that studies with collaborative groups mainly focus on "quantitative correlations among variables – such as the effect of group size on measures of participation – rather than trying to observe groups' knowledge building processes". However, participation statistics, if considered alone, may be a poor indicator of student learning. In the constructivist paradigm, assessing learning does not mean to judge whether a learner has reached a pre-established learning goal after following a predefined learning path. It rather means involving the learner in a process of observation (self-observation) and monitoring (self-monitoring) of his own knowledge construction processes. Attention is therefore paid not really to the results achieved but rather to the processes started to achieve them.

The data collected to assess learning in the course at issue are drawn:

1) from the Formative Assessment at the end of each unit, consisting of a unit self-test which provides learners with information about the content and language skills acquired, and from learners' posts to the discussion tasks assigned which provide insight into the Information fluency skills, CMC skills and epistemic fluency developed;

2) from the Summative Assessment at the end of the course, from the final test and the Project Paper, i.e. the final report on the multicultural CMC experience developed, for an overall assessment of the skills built upon during the whole course;

3) from the Self-Assessment at the end of the course, via a Learning Self-Assessment form, and a Course Evaluation form.

In order to observe groups' knowledge building processes and analyze learning and tutoring processes, the data collected is entered into a table, which has been structured according to different categories and indicators aiming at targeting cognitive, affective and metacognitive learning activities [27].

Fig. 6: Exacts from the Cognitive Learning Activities Schema [27]

The table also provides a useful means to assess if and to what extent the learning goals have been achieved, and the relevant needs met.

5 CONCLUSIONS

The aim of this study was to attempt at complementing existing approaches to needs analysis in order to address also the needs of learners in second/foreign language programs based on computer-mediated communication in a networked learning setting. After going through current literature on needs analysis, I identified Dudley-Evans and St. John's concept of needs analysis as the starting point of my investigation as it encompasses previous approaches and is open to extension. This study thus contributes to complementing Dudley-Evans and St. John's essential building blocks of needs analysis with three additional ones – which address specific CMC skills, epistemic and information fluency – identified when designing EFL/ESL courses for BA and MA programs in Translation and Communication Studies during the past ten years. Although the study is inherently qualitative, it is grounded on the quantitative data collected in each of the courses – thirty altogether – which substantiate the results of the investigation. The newly defined building blocks can be used to integrate the information gathered from a traditional needs analysis, and will help teachers to further clarify the purposes of their language programs so that they address the needs of today's connected learners.

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