Needs-Analysis: The First Step in Content Development for Mobile Learning

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Abstract

Learner-oriented diagnosis of language learning needs has been in the limelight for at least three decades in curriculum design or language programme development schemes (Munby, 1978; Brown, 2009). Following a similar route, in the present study 81 tourism vocational high school students' perceptions of English language learning needs are scrutinized. These students' 'real' wants and lacks are also given consideration under the theoretical foundations laid by Dudley-Evans and St. John (1998). Through a multi-layered needs analysis, an appropriate and stimulating mobile language learning platform is aimed to be constructed whereby learners' positive attitudes, language proficiency and technological literacy will be boosted in lieu of the traditional time-and place-constrained learning practices. To this end, students' internal subjective needs were determined through questionnaires while hotel managers/academics/teachers' views on students' objective needs were explored through semi-structured interviews. The findings have revealed that the students' vocational language needs remarkably outweigh the other types of needs per se. Under these circumstances, the results underline the inevitability of 'needs-analysis' in the construction of mobile language learning modules and platforms.

Keywords: Needs-analysis, Mobile learning, Vocational language learning needs.

Introduction

Needs-analysis in second language education was pioneered in the 1960s as English for Specific Purposes instruction (ESP) gained momentum (Munby, 1978; Richards, 2001). It is worth noting at the outset that in the present study we adhere to the common term 'needs analysis', which can be confused with its interchangeable partner 'needs assessment' by some authors (Graves, 1996), because we believe that 'analysis' assigns value to the data obtained through 'assessment'. The study thus relies on the argument that needs-analysis should be the backbone of any ESP course, as strongly argued by Hutchinson & Waters (1987) and Hamp-Lyons (2001).

Recent research into the language learning needs of diverse groups (e.g. Brown, 2009; Van Avermaet & Gysen, 2006; Long, 2005; Purpura & Graziano-King, 2004) illustrates that needs are learner- or group-specific, encompassing idiosyncratic dynamics. The current study examines the English language learning needs, wants, and

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lacks of tourism vocational high school 9th graders, based on the theoretical framework postulated by Dudley-Evans and St. John (1998).

Relating the inquiry area to both 'Target Situation Analysis' (TSA) introduced by Chambers (1980) and 'Present Situation Analysis' (PSA) posited by Robinson (1991), the study aims to suit the to-be-developed content of mobile learning platforms to a spectrum of learners' needs. This mobile learning environment is the target product of a Leonardo da Vinci (LdV) Transfer of Innovation project entitled Mobile Learning in At-Risk Group, or MLARG in short. MLARG set out to incorporate Information and Communication Technologies (ICT) and Mobile Learning Technologies (MLT) into language teaching materials and methodology for young people (aged 14-17) with limited exposure to English, which puts the students' future occupational status at stake. Within the landscape of self-directed, unobtrusive, pervasive, ubiquitous and ambient learning merged into the umbrella term, 'mobile learning' (Kukulska-Hulme & Traxler, 2005), MLARG helped the disadvantaged group of students to be armed with the assistive technology in the sense that they were able to make up for the incomplete process of language education, whilst engaging in 'edutainment'. Accordingly, the breadth of this extremely fast-moving field was expanded and enriched by transmission of an existing innovation into a new systemic, linguistic, socio-cultural and geographic environment in collaboration with three European partners, Slovakia (Society for Lifelong Learning), Czech Republic (Czech Technical University), Italy (Il Collegio Universitario). In particular, MLARG transferred the working mechanism of ICoTeL and ELefANTS by Slovakia, which created an "Integrated Virtual Training/Consultancy System" based on the application of up-to-date Information and Communication Technologies (ICT). In this fluid context, it initially specified the essence of such a research endeavor, responding well to learners' impulses. In order to achieve the pre-set objectives such as the design of modules on mobile phones, access to innovative lifelong learning opportunities, and enhancement of transparency of competencies for vocational language development, resulting in 'anywhere', 'anytime', and 'personalized' language learning (Atwell, 2005; Kukulska-Hulme & Traxler, 2007; Kukulska-Hulme & Pettit, 2009; Valk, Rashid & Elder, 2010), this inclusive project urged for a needs-analysis to determine the target group's peculiarities.

Methodology

A thorough needs analysis was conducted to identify the English language learning needs of tourism 9th graders as perceived from two poles, by adult professionals and by the students themselves. The initial semi-structured interviews were conducted with loosely pre-packaged sets of questions appropriate for the first group, and follow-up questionnaires were prepared to probe the intricately-framed topic of students' needs for English language learning and for technology (Bayyurt & Tıkaç, forthcoming). The foremost reason for this two-stage needs-analysis was the fact that, distinct from the needs of regular English language learners, vocational high school students' needs arise from pressing professional needs, particularly the ability to transfer language knowledge to novel situations and to use acquired language skills in real life communication. (Kavalieuskiene & Uzpaliene, 2003).

Participants

The 9th graders were determined to participate in this research study as they were assumed to be essentially deprived of the multidirectional access to foreign language learning materials. Indeed those youngsters suffer from the insufficient pedagogical and technological infrastructure though they are surrounded by the wide deployment of intellectual and technological tools in Etiler. Unable to exploit this rich array of opportunities, the school is also left with no option but to shrink the process of English language education within 6 hours a week, due to the mainstream vocational education regulations. It seems that the inefficient language education is hard to be compensated for by the gradual increase in the following grades, hence jeopardizing students' careers in the long run. Closely allied with the above-mentioned situation, the current study attributed the overarching term "at risk" to those 81 students (40 girls and 41 boys aged between 14–16). Consequently it evoked an awareness of the magnitude and seriousness of the case through the multi-purpose needs analysis, in that it constituted the baseline for the content development of mobile learning via MLARG project. Alongside this evolving issue, the present study also envisaged to foster English teaching/learning practices cognizant with students' real needs by embedding and institutionalizing mobile learning at Etiler Tourism Vocational High School.

Instruments

Semi-structured Interviews

In qualitative research, semi-structured interviews are frequently preferred, presuming that they yield reliable data through an 'interview guide', which offers the informants freedom to express their views in their own terms. This type of interview was used here because no more than one chance to interview the respondents would be obtained, as advised by Bernard (1988). The researcher was able to tailor her questions to encourage meaningful two-way communication augmented by empathy, rapport, and trust, as highlighted by Glesne & Peshkin (1992). Interviews with the professionals—two hotel representatives, four English teachers at the pilot school, and two academics in the tourism department of a state university—were conducted in Turkish, their native language. The researcher went to their places of work, where they were comfortable exchanging ideas about the desired profile of vocational students in the tourism sector. In addition to questions intended to fill out their demographic profile, the four English teachers were asked programmatic questions such as the following:

- Do you think the time given to English language instruction is adequate?
- What feedback do you get from hotel managers and employers?
- What do you think about your course book, basic equipment, and technological resources? Do you have an opportunity to use communicative activities or tasks?
- Do you integrate technology into your teaching?
- Have you had any experience with 'mobile learning' or 'e-learning'?

Questionnaires

In the second phase of the needs-analysis, the students' perceived needs were pinpointed by questionnaires devised to highlight any consistency among the students' remarks. It should be stressed that the findings of the interviews with adult professionals helped to develop a comprehensive questionnaire to explore students' English language needs. The questionnaire seeks information based on some commonly-known theoretical frameworks such as TSA (Target Situation Analysis), PSA (Present Situation Analysis), and LSA (Learning Situation Analysis), as well as other aspects pertaining to the model proposed by Dudley-Evans and St. John (1998).

The questionnaire, which was written in Turkish, the students' native language, consisted of three sections: personal information, a five-point Likert scale, and one open-ended question: *"As prospective employees in the tourism sector, please give your suggestions for improving the quality of English language education at your school so that it best fulfils your needs?"* Given to 81 students, the questionnaire first elicited personal information such as gender, age, schooling, English language education, estimated proficiency levels rated by language skills. Then the students were asked to rate 20 items related to their language needs, using a scale of 1 (least important) to 5 (extremely important).

Results

The two primary data collection instruments in qualitative research according to the needs analysis model developed by Dudley-Evans & St John (1998), namely questionnaires and interviews, offered some insight into the students' profile and language needs.

Interviews

First, the interviews with teachers suggested that six hours of English language education in Grade 9 is not enough for fully-developed competence in all four skills. One teacher said, *"There is no solution to this. There is not enough time to have it more than 6 hours. It's a pity."* The teachers found it hard to accept the fact that students could barely speak English once they entered professional life, but *"this is the best they can do with this limited range of facilities; we cannot blame them."* They were well aware of the employers' concern about their employee's need to communicate with people from various linguistic backgrounds: *"The little chance of practising the language results in this inability to speak English fluently, effectively, and appropriately. That's why they are mostly weak communicators, and that's what the hotel managers perpetually complain about".*

All the teachers pointed out that the current trend to leave grammar out of instruction cannot be the remedy for the deficiencies. *"We should give them the chance of using the language in 'real world', and grammar is definitely in this. How can you speak without it?"* a teacher commented. Another teacher proposed integrating grammar

into skills instruction; *"Things would be better"* if we could relate grammar to their prospective occupations by using field-appropriate texts.

The most commonly used technological device is the cassette player. It was acknowledged, however, that some *"well-off"* schools had started to use *"technology-rooms"*, with data-projectors, television, and so on. *"It would make a lot of difference, if we could use videos or something all the time. But although we try to make up for it with what we have, there is not much we can do,"* a teacher sighed.

Questionnaire

Only five of the 81 students had attended a private primary school. All were exposed to English in primary school, for an average of six years. A majority (52 students) self-evaluated their English proficiency as intermediate, and only nine considered themselves to be of advanced level. Of the language skills, speaking was rated the least developed (m=2,88), whereas reading was rated the most developed skill. Even though their speaking skills needed to be improved, they perceived that it was the second most addressed skill by the teachers, which signals a discrepancy between the emphasis and the efficacy of instruction. The paramount set of data were gleaned from the five-point scale by boiling down 20 items into three broad categories, linguistic, vocational, and "other" (academic, cultural, etc.). There is likely to be some overlapping among the categories; however, these categories help to give a comprehensive picture of the analysis (see Table 1).

As indicated by the table, the average of every single item was first calculated and then the mean of each category was enumerated. Afterwards, the most important three needs in each category were tabulated in the table along with their individual means, standard deviations, and corresponding responses of importance. The table clearly demonstrates that vocational language needs are highest in hierarchical order (m= 4.25). It accounts for the early awareness of the comparable importance of vocational language demands and implies that those demands should be seriously addressed in English lessons. The parameters of importance formulated in line with the mean scores also establish the greater influence of vocational language competence. It can be assumed that the limited time for vocational language instruction in the 9th grade does not thwart its perceived importance.

The open-ended question evinced supplementary responses that are similar to the interview findings. Fifty-two per cent of the students suggested that the number of hours of English be increased; 23% proposed that speaking could be taught more effectively; and 12% recommended that lab sessions be added to the curriculum (meaning lessons in which students put what they learn into practice through small group communicative activities and Computer-Assisted Language Learning (CALL) materials). Together, when the questionnaires and interviews are taken in complement, it is noteworthy that they yield salient results in common. Thus these results can guide some worthy modifications to the curriculum of vocational high schools in Turkey, where the use of mobile phones claims to become a facilitating tool in support of English language learning.

Table 1. Categorization of language needs by vocational high school students

Categories	Items	Mean	Std. Deviation	Students' responses of importance
General language needs	To understand native speakers of English easily.	4.44	.94	Very important
	To use the four basic skills of English (listening/ speaking/reading/ writing) effectively on a daily basis.	4.43	.94	Very important
	To be able to use English grammatical rules and sentence patterns fluently.	4.06	1.11	Very important
Vocational language needs	To use English in the specific contexts such as restaurant, front desk, etc.	4.54	.79	Extremely important
	To have a high position in tourism sector in future.	4.53	.72	Extremely important
	To improve vocational vocabulary knowledge.	4.39	.78	Very important
Other: academic, cultural…	To prepare for English proficiency tests and entrance exams in Turkey or abroad	4.01	1.14	Very important
	To participate in the exchange programs funded by the school or international organizations.	3.93	1.25	Very important
	To be able to express the Turkish way of life and culture in English.	3.74	1.00	Very important

Conclusion

This paper has shown that needs-analysis ought to be the starting point for curriculum and materials development in particular. A needs-analysis can provide an accurate profile of a target group, thereby guiding the process of content development.

There are plenty of studies emphasizing the description and analysis of students' future needs in ESP settings (e.g. Hutchinson &Waters, 1987; Brown, 2009). They all agree that needs-analysis is to be regarded as an on-going procedure, reviewing students' needs, wants, and lacks on a regular basis. The present study took the first step in exploring a disadvantaged group's internal needs (by students themselves via questionnaires) and some external demands (by institutions, employers, and teachers via interviews) that can inform the development of a suitable mobile language learning platform supplementary to the students' in-class vocational English education. The main goals of m-learning are positive attitudes towards English, technological literacy, motivation to study 'anywhere' and 'anytime', and increased self-esteem that comes from feeling valued (Atwell, 2005; Kukulska-Hulme, 2006, 2011; Wishart, 2011). If guided by knowledge of the true language learning needs of the students, MLARG materials will undoubtedly give rise to a revolution in vocational English language education in Turkey.

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