

THE EIT E-LEARNING MODULE

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Abstract: This paper presents the initial stages of a Leonardo Da Vinci project. The project aims at developing the EIT (English Language for Information Technology Specialists) E-Learning module, which will include relevant and innovative e-learning material for English learning/teaching in the field of IT. This material will be designed for IT professionals, students and English language tutors in order to bridge the current gap in the English for Specific Purposes (ESP) IT-related materials and to facilitate the work of tutors, enhance self-study and encourage life-long learning. The paper presents also the analysis of the results of a survey aiming at identifying the requirements, special needs and innovation drivers of the potential users of the proposed module. The survey was conducted through a questionnaire given to IT students and interviews with IT professionals. Based on the analysis of the results we proceed herein with suggestions for the design of the module.

1 INTRODUCTION

The work presented in this paper builds on our applied research work in the area of e-learning in general (Pouyioutas et al. 2004, 2005, 2006) and specifically in e-learning with focus on the English Language. More specifically it focuses on e-learning and English for Information Technology (IT) people.

Our research, which was carried out into ESP (English for Specific Purposes) in the field of IT, targeting several sectors at once (universities and colleges, websites of the main publishing houses and their outlets, IT specialists) showed that choice of

materials in this particular area was limited. Several printed materials have been found available and they either are outdated or target learners with intermediate and higher language level. More specifically, the following books have been found in the market: Oxford English for Computing (intermediate level) (Boeckner and Brown 1993), Oxford English for Information Technology (intermediate to upper-intermediate level) (Glendinning and McEwan 2002), Dave Sperling's Internet Guide (intermediate level) (Sperling 1998), Infotech English for Computer Users (intermediate level; the only one with weblink activities) (Esteras

2007) and Chambers Guide to English for IT and the Internet (Gourlay 2000). The only on-line resource found is English 4 IT (English 4 IT 2007).

We had long before carrying out the survey realized the paradox of the current state; although English is considered to be the language of IT, the majority of IT specialists in European countries are trained in their national languages, therefore do not have the appropriate level of proficiency in English and in IT terminology in English. This problem is becoming bigger due to the nature of the IT subject area. IT is a constantly developing field with new developments happening every day. New hardware, new software, new concepts are introduced at a speed that is too fast to cope with. Clearly this speed makes it impossible to allow hard-copy published translation material to be available. The only solution available is the offering of English for IT supported by on-line material that can be updated on a daily-basis as new terminology is created.

There is therefore an obvious need for online ELT/ESP materials in the field of IT designed for elementary and post-elementary learners aiming at developing elementary/post-elementary level learners' learning skills, general command of English, improving their IT vocabulary and promoting self-study. At this point it is worth mentioning another research we carried into the sector of computer-related activities (Gridasova 2006a). IT specialists reported the need for a self-study tool that would comprise relevant information, interactive learning materials with elements of fun and allow them to evaluate their progress. As a consequence, the idea has been developed for a product to bridge the current gap in ESP materials for vocational, in-company training and individual learning and promote the idea of independent and lifelong learning. We envisaged such an e-learning tool to be interactive, attractive for self-study and to provide feedback (answer key, pop-up hints, useful links). This led to the development of a Leonardo Da Vinci proposal, entitled "The E-Learning Module - English Language for IT Specialists" (Gridasova 2006b), which has been selected for funding by the European Union and started in October 2006.

The expected project product, namely the EIT (English Language for Information Technology) E-Learning module will be an ESP teaching/learning module. It will be designed as a 1-year learning, calendar-like programme (an Internet portal), comprising English lessons at the post-elementary level with a strong emphasis on learner training and autonomy, featuring: (a) 365 daily mini-lessons with 2-4 skills development and use of language

activities, links to related websites and study tips, divided into 3 major sections: Essential English for IT Professionals, Communication Skills and Learning Skills (b) 52 weekly progress checks, 12 end-of-month tests, an entry diagnostic test, and an exit test (c) online glossary of common words used in website materials translated into partners' languages (d) online glossary of common IT terminology including all partners' languages (e) a language reference section (f) a user guide (g) a message board (online forum) for online exchange of ideas (both learners and teachers) (h) printable materials for teachers.

The EIT material can be integrated into the language training programmes within the curricula and courses as a means for both formal and informal learning. Colleges, universities, training centers can use it either as integrated part of a larger language course or as a self-standing course. Furthermore, since the course will be designed in a diary-like way, teachers will be able to design a course themselves – employing the materials and themes they need, choosing its duration, selecting the course companions – printable handouts, tests - related to the chosen materials, etc. The course is perfectly applicable when working with part-time and distant students, setting the online materials for self-study and employing printable handouts for contact hours. Also, EIT can be easily employed in so-called language intensive courses, with duration of 1- 2 weeks – the tutor is exposed to a variety of ready-made and ready-to-print materials; they only have to select the relevant themes and duration.

2 SURVEY ANALYSIS

This section presents the first stage of the development of the EIT module, namely Needs Analysis. A questionnaire was distributed to IT students and interviews were conducted with IT professionals in all partner countries. Herein we present the results of the Needs Analysis in Cyprus.

The student questionnaire was designed to help identify the students': (a) perception regarding their English Language skills (b) perception regarding their need to improve their English Language skills (c) intended forums for using the English language (d) their preferred learning surroundings and learning methods (e) experience in using e-learning (f) perception regarding the usefulness of e-learning in general and in learning the English language specifically (g) perception regarding their need to improve their English Language skills using e-

learning (h) perception regarding limitations of e-learning materials and suggestions for improvement (i) interests in obtaining a certificate for an English self-study course offered on-line.

64 (42 male, 22 female) IT students of an average age 25 answered the questionnaire. They reported that they consider their English Language skills and abilities (speaking, understanding, reading and writing) as quite good. Indeed, their skills, as cross-checked with the level of the English Language courses they are currently register, are good. They also reported that they use English quite often (Figure 1) in many situations (e-mails, telephone, exams, presentations, seminars, reading manuals, writing, socializing). Only 4 out of 59 students (7%) reported extensive experience in using e-learning, 33 students (56%) reported some experience, 11 (19%) reported little experience and 10 (18%) reported no experience at all. In all cases the most common e-learning platform/forum used was reported to be the Internet and CD-ROMs. So, in general, the majority of the students had some but not extensive experience. The vast majority of the students (51 out of 58, 88%) regard e-learning material as a useful tool for learning and would use e-learning to learn English (45 out of 58, 78%). Figure 2 presents, in terms of importance, the skills and abilities that these students would like to improve and the skills and abilities that these students would like to improve using e-learning material. On average, the students consider that it is rather important that all the listed skills are improved. We can also see from Figure 2, that the corresponding averages for every skill are very similar. This shows that the students would use e-learning material to improve their English.

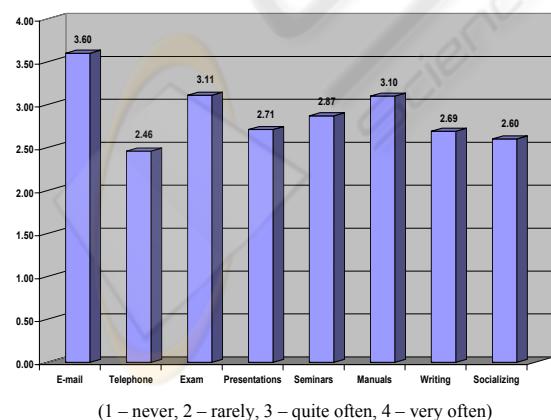


Figure 1: Situations where Students Expect to Use English.

Students also reported that they approve learning either within a group or on their own, in both cases either at home or at the University or at work. Although the students seem to stronger approve face-to-face learning (3.2 in the scale of 1-4), they also approve e-learning (2.7 in the scale of 1-4) and blended learning (2.98 in the scale 1-4). This preference is consistent with the little experience in e-learning reported by the students. The lack of extensive experience makes them a bit more skeptical in using such new learning methods. Furthermore, the students consider rather important all the suggestions for improving e-learning material (Figure 3). Finally, the majority of them (41 out of 59, 70%) expressed interest in obtaining a certificate for an English self-study course offered on-line.

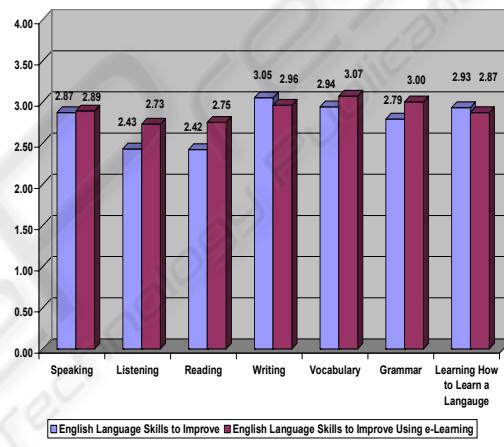


Figure 2: English Language Skills to Improve.

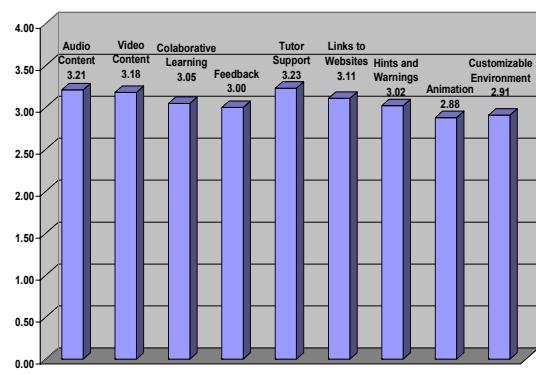


Figure 3: Suggestions for Improving E-Learning Material.

IT professionals (5 males and 3 females of an average age of 34) were interviewed based on some

given guidelines, which were designed to extract similar information as the one extracted from the questionnaire. All respondents reported that they use the English language at work for all job related aspects. They also reported that they have good English Language skills, however, they have some problems with IT specialized words and jargon. They would like to improve their vocabulary, speaking and grammar and they could spend an average of one hour a day for that. They all learn at the workplace and home, both on their own or as a member of a group, and 6 of them (out of 8) have used on-line learning material. They were very familiar with the concepts of e-learning. The type of e-learning material they have used was available on training CDs and videos as well as through on-line material available on platforms such as Moodle and Blackboard. However, nobody has used e-learning material to learn a language. They all believe in e-learning and they consider it as a flexible, autonomous, innovative, time-saving and very useful (when it provides feedback) tool for learning. They, therefore, would consider using e-learning for learning a language, although they expressed a concern regarding the reading and pronunciation aspects that need to be very well developed within such e-learning material. They would expect such a tool to be available through multimedia CDs or websites and collaborative software and support text-chat computer-aided assessment, educational animation and simulations learning environments. They expect it also to be efficient, effective and user-friendly and allow the support of a tutor. From their experience in using e-learning material, bad design and lack of technical support are factors that affect very negatively the acceptance of such material. Finally some of them would be interested in obtaining a certificate for an English course offered on-line.

Although the open-ended questions did not suggest particular answer options (as compared to the questionnaire), very similar recommendations were made by the IT professionals. This shows that our expected user requirements and functionality and features of the proposed tool, as these were indirectly expressed through the multiple-choice answers in the questionnaire, were confirmed by the non-directed answers of the IT professionals.

3 CONCLUSIONS

Based on the previous section, we herein propose the expected functionality and features of the EIT

module. The module should support the teaching and learning of the following English Language skills and abilities: (a) Understanding, (b) Speaking, (c) Reading, (d) Writing, (e) Vocabulary use, (f) Grammar use. Furthermore, the expected module should: (a) support both individual and group learning (b) be able to be used as a stand-alone module or integrated in other modules in a distance-learning mode or in a blended learning mode (c) support multimedia features, including animation, video and audio (d) provide feedback and a customizable learning environment (e) provide computer-aided assessment (f) allow facilitator/tutor support (g) support a simulation learning environment (h) have a well designed user-friendly interface (i) be efficient and effective (j) have technical support (k) lead to a certification.

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