Abstract

Initiating change imposes on us voicing out what is perceived as possible obstacles for innovative practices to disseminate. In fact, exploring actual ICT uses and understanding why learners and teachers resist using ICT helps framing the necessary strategy to follow in order to better respond to learners' communicative needs and expectations. For that we should evaluate the potential that ICT brings to our educational context alongside the pedagogical culturally-rooted practices that embody the psychological specificities of both teachers and learners. The present research paper intends to explore the underlying factors influencing an effective ICT-based approach to the teaching of English for Specific Purposes, best exemplified at the Preparatory School of Economic Sciences, Commerce and Management of Oran in Algeria, henceforth EPSECG.

Keywords: ICT in education; TELL; Communicative Competence; ESP

1. Introduction

The need for designing a framework that accounts for psychological, pedagogical as well as technological/organizational considerations for successful ICT integration in a foreign language teaching/learning environment seems to us necessary if one is to expect pedagogy to be transformed and learning to be enhanced and...
local economy to be developed. Our idea is that an ICT-ESP based approach to learning/teaching ESP is necessary if one is to expect communicative competence to be developed and improved.

Reviewing the literature about the psychological and pedagogical aspects of ICT in the English Foreign language Teaching and Learning situations, more precisely in an ESP context of EPSECG will help us transcend the theoretical aspect of technology integration and attempt to match it to more contextual EFL/ESP teaching and learning everyday concerns. For that we will try to explore what seems to us represent the necessary constituents for a successful ICT use i.e. teachers’ and learners’ attitudes towards ICT in teaching and learning, and pedagogical and methodological concerns for framework design.

For the purpose of this study we ask the following questions: what are the pedagogical and psychological principles underlying the ICT- based approach needed to bridge the gap of the communicative competence in English language in the workplace? Put otherwise, how can our understanding of teachers’ and learners’ attitudes and perceptions helps us to design effective language learning experiences using technology?

The hypotheses which we put forward are as follows: the need for designing a framework that accounts for psychological, pedagogical as well as technological/organizational considerations for successful ICT integration in a foreign language teaching/learning environment seems to us necessary if one is to expect pedagogy to be transformed and learning to be enhanced, and local economy to be developed.

2. The background

2.1. ESP and communicative competence

English through its international standing has become the most obvious mark of globalization. Foreign language learning and teaching faculties strive in vain to provide an adequate training matching the constraints of both academic curriculum and actual business world requirements to the future English language communicating professionals. Teaching English in the Algerian university, however, faces some difficulties in guarantying the attainment of communicative competence in English for its students. This deficiency is the natural outcome of traditional non-native classroom environment that suffers an acute lack of interpersonal interactions in the target language and no exposure to authentic environments, which are two basic elements in the acquisition of a foreign language.

In the Algerian context, English language ability prevents many young Algerians from conducting their jobs effectively when working in multinational companies or when being in charge of international affairs. English language researchers for professional and specific purposes acting within foreign language university -based departments lack the actual side of English in the workplace and are short of providing the adequate resources and tools that would help their students to be communicatively competent.

ESP curriculums as they have been designed until now could not respond to the evolving communicative needs of the workplace because they are designed independently from the actual economic concerns of the country relying on no more than purely individual visions about what would be considered as the workplace’s linguistic/communicative demands.

The national plan to implement five preparatory schools of economics, commerce and management throughout the country with the necessary infrastructure, and human resources aims at improving a qualitative training for the future business and economic leaders of the country. ESP instruction in the context of EPSECG stands as a bridge between English for Occupational Purposes EOP, and English for International Communication. The curriculum is oriented along economic-general themes and introductory registers together with grammar and language structure basics; nonetheless, little is done towards communicative competencies to be built. At present, instructors introduce the ESP program for the English language courses simply by selecting materials from available economic texts in different areas of specialization along with materials designed for teaching English for general use.

Stephen Littlejohn and David Jabusch (1982) generally defined communication competence as the ability and willingness of an individual to participate responsibly in a transaction in such a way as to maximize the outcome of shared meaning. According to the author:
“it is important to draw a clear distinction between communication competence and proficiency. While a proficient communicator possesses critical communication skills and knowledge, by comparison, a competent communicator also is motivated to use those skills and knowledge to achieve desired outcomes in an appropriate manner for the situation. This distinction is especially important in terms of evaluating competence in communication.” (Littlejohn and Jabusch, 1982).

Competence is contextual, then developing an ICT–ESP based approach in view of bridging the gap of communicative competence, the researcher should take into consideration aspects of relevancy to the local context (norms and attitudes) so as to find a balance and design ESP curriculums which mirror the peculiarities of the economic sector and functionality of the international language so as to meet the demands of more global challenges.

Brian Spitzberg (1984) used these assumptions to develop a model of communication competence that is constituted of motivation (affect), knowledge (cognition), and skills (psychomotor abilities). According to the author, effective communication then is tightly related to people's perceptions of the outcomes of a communication interaction. Responding to the learners’ needs is therefore helping them to get a step forward to the main aim that preparatory schools expect to reach which is to prepare learners to be competitive in a fast-growing globalized world.

2.2. ICT in Language learning contexts: enablers and obstacles

ICT diffusion, integration and adoption in a society is culturally-bounded. As any innovation, it may be welcomed or resisted (Britain and Liber, 2004). Technology brings new opportunities for managing complexity, where there were previously none. The choices we make affect both the pedagogy and the flexibility available to learners. Innovation in one aspect of life necessarily influences another or other aspect (s) creating a number of changes that affect the way people live, react, evolve and perceive the future. In educational realms this may be viewed as challenging obstacles towards academic improvement, learners’ attainment (Cox and Abbott, 2004) or professional development. Exploring actual ICT uses and understanding why learners and teachers resist using ICT helps framing the necessary strategy to follow in order to better respond to learners' communicative needs and expectations. Diverse studies on assimilating innovative technologies in education systems report that the main factors for failure or success are linked mainly to the teachers’ attitudes (Hattie 2009; Fullan and Smith 1999). Attitudes towards computers influence teachers’ acceptance of the usefulness of technology, and also influence whether teachers integrate ICT into their classroom (Akbaba & Kurubacak, 1998; Clark, 2001; Huang and Liaw, 2005). According to Zhao and Cziko (2001) it is necessary for teachers to have the appropriate skills, knowledge and attitudes to integrate ICT into the curriculum and create real opportunities for effective learning to take place. It is clear that the use of technological resources in the language learning processes provides a good source of "authentic" (Richards & Renandya, 2002) situations to use the language and enhances collaborative learning. On the other hand, much learning occurs outside the realm of the classroom. It is then necessary not to focus our attention to the restricted realm of the classroom and the possible changes that occur or do not occur there. With the advent of technology in our daily life activities, language and social activities are prolonged and enriched outside the physical classroom context, before PC’s monitors and through other channels of communications, including computer mediated communication channels and social networks handheld technology devices or smart phones, to cite a few. The language teacher is then urged to take part of this newly-defined cultural microcosm and adapt pedagogically by extending learning beyond the traditional classroom setting bringing adequate content and activities to learners eager to consume media-based learning materials.

2.3. ICT integration in ESP through ICT in Algeria

Technology can bring a lot to education. In education, it has gone through many stages of development influencing teaching and learning. The challenge for teachers is to continually fine-tune to learners’ needs through adjusting their teaching approach to empower them through knowledge construction or skill-building in situations
beyond the ones in which they are acquainted. ICT offers unprecedented opportunities to enhance learning through the impressing possibilities it offers to educators to better meet learners’ styles of learning and help them to be prepared for the workplace challenges through the enhancement of their competences and the development of their skills.

Responding to the learners needs is therefore helping them to get a step forward to the main aim that preparatory schools expect to reach which is to prepare learners to be competitive in a fast-growing globalized world, and train them to be the future national economic leaders in their respective economic sub-sectors.

To facilitate the entry of Algeria into the information society the following national ICT initiatives have been introduced:

- The project of the ministry of education to equip all schools with computers by 2005,
- The connection of educational institutions under the ministry of culture to the internet project in 2012,
- The Ousra'TIC project (Computer for Every Home Initiative) in 2006,
- The Tempus ID@A project of e-learning (2005-2008),

On the other hand, by the end of 2013, the total number of internet users in Algeria in a population of over 38m was that of 6 million representing a penetration rate of 16.5%. The sector demonstrated an important expansion since it shifted from 4m in 2009 to over 6m by the end of 2014. Despite its considerable population size, internet usage in Algeria remains low since it represents only 2.7% of the whole African internet users, ranking it 8th out of 10 Africa top internet countries far from South Africa and Egypt with more than 63m and 43m internet users respectively according to the latest 2013 Internet World Stats Report.

New studies entitled WebDialn@ (meaning ‘our web’ in the Arab Algerian accent) by Med&Com and Ideatic were carried out for a duration of 6 weeks during 2012 and polled 13 600 internet users through an online survey, made available online on 33 popular Algerian sites. The questions turned on ADSL, mobile internet, Social networks, e-commerce, etc. The typical Algerian web user is described as male (68.3%), women represent just 31.7% of Algerian web users. The majority of users are aged between 26 and 35 representing by this way more 60% of the whole surveyed population. More than 63% of them hold a university degree and 18% are high school students.

In 2010 the total number of Facebook users in Algeria was estimated by Facebook over a 1m. According to recent stats (2013) the overall estimation is that of 4 million Facebook users which amounts 11% of the general penetration rate of the country and more than 65% of the whole Algerian users. Youtube readership on the other hand increased from just 300,000 visits a day in April 2011 to 700,000 in the beginning of 2012.

As far as education is concerned, ICT has been introduced into Algerian educational system from in the late 1990s. A wave of governmental decisions helped its dissemination across a large range of educational institutions under the provision of hardware, personal computers and ICT labs. The aim was to achieve the potential benefits of teaching and learning through ICT, and making by this way ICT as an integral part of the curriculum. However the enthusiasm underlying its widespread into schools did not last due to the obstacles encountered when attempting to integrate it into daily teaching and learning practices. Learners were asked to attend ICT overloaded theoretical courses, teachers were asked to teach using ICT without any former training or ineffective training that did not respond to their concerns or anxieties. It proved then to be a burden instead of being a supporting means to teaching.

‡http://www.internetworldstats.com/af/dz.htm#links
§ 4,111,320 Facebook subscribers on Dec 31/12, 11.0%, retrieved from http://www.internetworldstats.com/africa.htm#dz
or learning. Parallel to this learners experienced frustrated imposed ICT courses where theoretical notions largely surpassed practical experiences, a necessary condition to allow effective learning to occur.

3. The study

The research theory upon which we have built our methodology is referred to as Exploratory Practice. It is mainly based on “existing pedagogical practice as a research tool”. In this sense, Allwright and Lenzuen (1997) described it as follows:

“Exploratory Practice is a sustainable way of carrying out classroom investigations that provides language teachers (and potentially the learners also) with a systematic framework within which to define the areas of language teaching and learning that they wish to explore, to refine their thinking about them, and to investigate them further using familiar classroom activities, rather than ‘academic’ research techniques, as the investigative tools.” (Allwright and Lenzuen, 1997: 73)

In the following paragraph a broad overview is presented about the sitting and the participants, as well as the research instruments that we used to analyze the educational context, psychological and technological aspects related to both teachers and learners.

To describe the educational context we use the SWOT analysis grid and underline the areas where strength and opportunities exist as well as weaknesses and threats which may exist. It is important to have a global view about all possible environmental variables that influence both teaching and learning to effectively take place.

To explore the perceptions and attitudes of learners and teachers using different ICT tools and related applications; and suggest effective ways to better integrate ICT in English language teaching and learning respectively, questionnaires to both teachers and learners were used. As far as the teachers’ questionnaire is concerned, the ICT Usage Survey was adopted. The learner’s questionnaire consists of different sections relating to actual uses of ICT. This will help us discover which type of internet users they are and reflect on possible pedagogical activities that may be designed to meet their learning styles through technology.

Questioning learners in terms of their actual ICT uses or surveying teachers’ ICT usages is not enough, if taken in isolation. The data should be analyzed within a more global examination of the educational context at hand. The obtained results, put together, inform us the plan strategically and guide us in our attempt to design a psycho-pedagogical framework for ICT integration in an ELT context, i.e.; in an ESP course at EPSECG of Oran. Our research procedures are based on observation, questionnaires to learners and teachers as well as a SWOT Audit of EPSECG. The four levels of analysis are as follow: pedagogical evaluation, psychological evaluation, organizational evaluation and technological evaluation.

4. Preliminary results and final conclusions

This is merely a qualitative interpretation of the first results obtained through the questionnaires and the SWOT analysis of the educational context.

Teaching and learning is a tandem where psychological, pedagogical and cultural variables melt together imposing a kind of continual adjustment to balance between the evolving needs of learners and the requirements of the curriculum goals. Conversely, to ensure that more flexible access to learning opportunities appropriate redesign of the learning environment as well as a reconsideration of the underlying factors (psychological and pedagogical) impose themselves; it is necessary to seek innovative approaches, which ensure more effective and truly sustainable learning. Enabling change in ESP teaching/learning through ICT integration requires the implementation of strategic organization that is not possible unless supported by a suitable change process on both a psychological and a pedagogical level. A pedagogical framework when teaching a foreign language using ICT then stands as a set of principled actions that might help the educator to fit the right methodology to the existing variables including: learners, the institutional context, and the expected outcomes.

On the other hand, integration in schools misses beforehand strategic planning where clearly defined objectives have to be set, processes of integration to be discussed and organized and relative stakeholders to be consulted to better evaluate the enablers and obstacles intrinsic to any process of change underlying any innovation
adoption. When willing integrate effectively ICT in the teaching /learning ESP, educational, psychological, organisational and innovation issues should be raised. Our primary goal to design framework is to decipher the interplay of the different variables that may influence teachers and learners to maximize the potential benefits of technologies in language learning/teaching contexts favoring by this way more meaningful language learning experiences.

Christensen (1998) states that “teachers’ attitudes toward computers affect not only their own computer experiences, but also the experiences of the students they teach”. It is necessary to evaluate/audit our practices, depict the whole teaching practice and state clear pedagogical objectives so as to refine the structural change/plan that is necessary to go through to meet our objectives. Teachers may choose to completely or partially modify their teaching practices or redefine their whole approaches to teaching and then adopt new teaching methodologies that better support underlying assumptions of ICT aided instruction. For learners this may mean to discover other ways to access information, resolve problems, work in collaboration, etc. In a whole an enhancement of their learning styles and then an increasing opportunities to learn. To maximize the potentials of ICT in ESP should be paid to issues of culture of learning and culture of teaching. On the other hand, understanding the possible resistance to change related to ICT uses in ESP context of EPSECG, helps identifying the necessary strategy to overcome the pedagogical and psychological obstacles.

We expect that a successful ICT integration depends upon the development of a shared vision (Hughes & Zachariah, 2001). ICT policy-makers need to realize that teachers should not be excluded from school policy planning. ICT successful integration in a teaching/learning context requires the implementation of strategic organization that is not possible unless supported by a suitable change process at psychological and pedagogical levels. According to Gulbahar & Guven (2008): “providing schools with hardware, software and in-service training is not enough [...] there must be active involvement of the teachers concerned in the whole change process so that there is the element of “ownership” of the innovation”

On the other hand, Bryderup & Kowalski (2002) stress the importance of developing ICT school plan which defines the pathway to realize these goals is determinant towards ICT integration; and teachers engaged in this enterprise are likely to apply ICT in an innovative way Kozma (2003).Ultimately, we need to reflect on the pedagogical implications that ICT integration may engender in terms of changing roles, learning process, educational approaches and course design.

References


