The Use of IT Tools in Everyday Classes Where Foreign Language is Taught

Meliha HANDZIC

International Burch University, Faculty of Engineering Sarajevo, Bosnia and Herzegovina mhandzic@ibu.edu.ba

Merdžana OBRALIC

International Burch University, Faculty of Economics Sarajevo, Bosnia and Herzegovina mobralic@ibu.edu.ba

Emir CICKUSIC International Burch University, Faculty of Economics Sarajevo, Bosnia and Herzegovina ecickusic@hotmail.com

Abstract. This paper aims to present the situation of using IT tools in everyday classes where foreign language is taught. The research is empirical. The survey study was conducted among students of a new private university in Bosnia and Herzegovina. The questionnaire was applied to students from 17 to 25, male and female students learning 2 foreign languages. The results of the study can be the useful resource for future research and help better practical implementation of IT tools in the class.

Keywords: IT tools, foreign language, user satisfaction: survey

1. Introduction

The world is in the midst of multidimensional transformation: technological, economic, social, cultural and political. To succeed in such a world, organisations need to have better educated workforce. Thus, it is important to prepare next generations of graduates to live and work in the new "information age". In response to the growing demand for educated workforce, universities are replacing or complementing traditional methods of teaching and learning with IT supported approaches.

The use of IT tools in tertiary education in developed countries is very high. IT tools are employed to help students' learning process and to increase the quality of offered education. The use of IT tools may also boost students' learning interests (Handzic and Chumkovski 2004, Handzic and Hoor, 2005). Lecturers can also benefit from IT. By using sophisticated IT tools, they can better and more easily express themselves and add more meaning to what they want to say (Shum et al. 2010).

In developing countries such as Bosnia and Herzegovina (BiH), the use of IT in teaching and learning at universities is relatively low. However, through stable and evolutionary development and implementation, it may be possible to achieve greater IT adoption in this country's education sector (Habul and Obralic 2009). The purpose of this paper is to examine those factors that can explain and predict students' IT usage behaviour in learning foreign languages at a new private university.

The paper is organized as follows. It starts with this section introducing the issue of IT tools usage in everyday classes where foreign language is taught. Next, the paper presents relevant literature on information technology adoption. Then, the paper proceeds with a discussion on research methodology. After that, the results are examined and discussed. Finally, the main findings and their theoretical and practical contributions are assessed and the ending conclusions are drawn.

2. Literature Review

The review of previous research on IT adoption reveals the extensive use of three adoption theories. The most widely used model is Davis' Technology Acceptance Model (TAM). This model assumes that an individual's perceptions of IT usefulness and ease of use are two key beliefs that influence the person's intended or actual IT use (Davis 1989). Another popular approach used to investigate factors that influence IT adoption is Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980). According to TRA, social norms held by groups to which an individual belongs put additional pressure on the person to conform and thus influence his/her intention regarding the use of IT. Yet another theory relevant for studying IT adoption is Roger's Innovation Diffusion Theory (IDT). This theory identifies a series of innovation characteristics (eg. relative advantage, compatibility, complexity, trialability and observability), organizational characteristics (eg. formalization, centralisation, openness, interconnectedness, slack and size) and adopter characteristics (eg. familiarity and motivation) that are related to innovation adoption (Rogers 2003).

Furthemore, one can notice several similarities between constructs from Media Richness Theory (MRT) by Daft and Lengel (1986) and those from TAM, TRA and/or IDT. For example, medium capacity employed by MRT is similar to perceived relative advantage or usefulness. In addition, self-efficacy beliefs defined by Compeau and Higgins (1995) are similar to perceived ease of use. Finally, system quality construct from the DeLone and McLean IS Success Model (DeLone and McLean 1992, DeLone and McLean 2003) is comparable with the innovation characteristics and its perceived usefulness.

From the review of the major adoption and related theories, it is evident that they are complementary and if integrated could provide even stronger model than if each theory is used on its own. Therefore, this research uses constructs from all the above theories to explore the factors that influence IT tools usage in teaching and learning foreign languages in the University context.

3. Research Method

A survey study was conducted to explore the adoption of IT tools in a university setting and from the students' point of view. The survey was chosen as a preferred research method due to timeliness, low cost and convenience factors.

The survey questions were set to find out how participants perceive IT tools medium richness, usefulness, self-efficacy, ease of use, social norms and their intentions to use IT to support their language study. All questionnaire items used to measure these constructs were adapted from prior studies and had proven validity and reliability. The questionnaire consisted of a mixture of closed and open-ended questions. Sixteen closed questions were used to find out the extent of agreement on various statements and to ease the analysis and synthesis of the results. The responses were captured on seven-point Likert scales with end points 1 — strongly disagree and 7 — strongly agree. Four open-ended questions were used to acquire basic demographic information (age, sex, language) and additional textual comments on any IT aspects of interest. The survey was designed to allow anonymity so that the subjects could freely express their thoughts and feelings.

Subjects for this study were undergraduate students enrolled in two foreign language programs. A total of 150 students participated in the current study. Survey forms were distributed to the participants during regular classes by one of the authors. It took between 15 and 20 minutes to answer all survey questions. Then, the participants' responses were collected, encoded, entered into the computer file and analyzed using Microsoft Excel spreadsheet program. The results of the analyses performed are presented in the following section.

4. Results

Rating Scores

Mean respondent scores for six variables (usefulness, ease of use, intention to use, social norm, selfefficacy and media richness) were calculated by language (Turkish, English), gender (male, female) and age (junior, 17-20, senior, 21-28). Then, t-tests were performed to examine any potential differences between different subject groups. Summary results are presented in Table 1.

Table 1. Results of analyses for six variables by three subject groups

Subject groups	Useful- ness	Ease of use	Intention to use	Social norm	Self efficacy	Media richness	
1.Turkish	5.73	4.95	5.73	5.73	5.66	5.56	
2.English	5.21	4.63	4.70	5.39	5.16	5.05	
difference (t-test)	Sig P=0.017	Sig P=0.069	Sig P=0.001	Ns P=0.136	Sig P=0.041	Sig 0.014	
1.Female	5.45	4.82	5.17	5.53	5.36	5.32	
2.Male	5.40	4.65	5.12	5.44	5.42	5.13	
difference	Ns	Ns	Ns	Ns	Ns	Ns	
(t-test)	P=0.818	P=0.382	P=0.897	P=0.706	P=0.761	P=0.416	
1.Junior	5.23	4.74	4.96	5.46	5.29	5.23	
2.Senior	5.69	4.80	5.39	5.57	5.49	5.32	
difference	Ns	Ns	Ns	Ns	Ns	Ns	
(t-test)	P=0.899	P=0.413	P=0.897	P=0.612	P=0.618	P=0.920	

The results from Table 1 indicate significant differences in perceptions and behaviours between Turkish and English language students, but no differences due to their gender or age groups.

English subjects had significantly worse opinions about the richness of IT as a medium of instruction and learning than Turkish subjects (5.56 vs. 5.05). Accordingly, they had significantly lower perceptions of IT usefulness (5.21 vs. 5.73) in studying foreign languages than their Turkish counterparts.

Furthermore, English subjects rated their IT self-efficacy and subsequent ease of use of IT significantly poorer compared to Turkish subjects. The mean scores of English subjects were significantly smaller than those of Turkish subjects for both self-efficacy (5.16 vs. 5.66) and ease of use (4.63 vs. 4.95).

Consequently, English subjects expressed significantly lesser intention to use IT to support their language study than Turkish subjects (4.70 vs. 5.73). This was evident despite similar acknowledgement by both English and Turkish subjects of the current social norm in favour of using IT in the process of studying foreign languages (5.39 vs. 5.73).

Textual Comments

To investigate deeper the potential reasons behind differences in scores between English and Turkish subjects, content analysis of textual comments was done in both language groups. The analysis revealed that all comments made by Turkish subjects were favourable, while those made by English subjects were mixed.

On a positive side, there was general recognition of the necessity, importance and potential of IT in supporting teaching and learning of foreign languages. On the other side, there was a clear and loud request by English subjects to explain IT subject matter in a better and more understandable manner, as well as include more advanced IT topics in addition to basic ones.

Such comments suggest that the lack of necessary advanced IT knowledge and skills may be the main barrier to greater intentions to use IT among English subjects. This implies that these students need to be exposed to more sophisticated learning media and gain more practice in using IT in order to form more favourable opinions of its usefulness and ease of use, and subsequently change mind about their usage intentions.

5. Discussion

Main Findings

Consistent with previous research on IT adoption, lower perceptions of IT usefulness and ease of use were found to lead to lesser intentions to use IT in language study. The self-reported lack of advanced IT

knowledge and skills among English subjects was found to be the main reason for poorer perceptions of IT richness and usefulness, as well as self-efficacy and ease of use, when compared to their Turkish counterparts. The findings indicate that both IT usefulness and ease of use are important to students.

Implications

The study has significant implications for theory and practice. The findings showed the influence of perceived IT richness and thus usefulness and perceived IT self-efficacy and thus ease of use on students' intentions to use IT in their study of foreign languages. Further findings revealed that the lack of advanced knowledge and skills was the major barrier to IT adoption in learning. In short, the study provided useful insights into IT adoption process in higher education.

Based on the study findings, the community of foreign language students and teachers can devise strategies to promote greater application of state of art IT applications; produce better plans to service different members of language teaching and learning community; apply IT applications and training that better meet students' and teachers' needs and ensure that they get necessary IT skills.

Limitations and Future Research

Like all research, this study has certain limitations. Thus, sample of participating students is relatively small and may not be representative of general student population. Constructs in the study were measured subjectively and from the students' point of view. Lecturers may have different views. All subjects were from the same newly established private institution. Consequently, there may be differences between private and public, new and long-established institutions. So, in future research, attention should be given to collect more representative data, include different types of users, and delineate the concerns of public and private universities, IT adopters and non-adopters.

6. Conclusions

This study examined students' perceptions and behaviours regarding various aspects of IT support in studying foreign languages at the university level. The findings showed that the adoption of IT (i.e. intention to use IT) in this context was contingent upon critical factors such as advanced IT knowledge and skills as reflected in perceptions of IT media richness, usefulness, self-efficacy and ease of use. The findings also showed that social norms played little role in students' decisions to adopt. These findings make important contributions to theory and practice by providing empirical evidence of critical IT adoption factors, and suggesting how they can be used to improve foreign language study in practice. Finally, these findings provide a basis for further research that would address current limitations and extend research to other adoption issues in varying tasks, contexts and participants.

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Appendix A – Survey Questions

No:	Statement	Strongly disagree	Disagree	Slightly disagree	Not sure	Slightly agree	Agree	Strongly agree
1	I believe the use of the IT tools is helpful for my learning foreign language		2	3	4	5	6	7
2	The quality of students' learning will be improved by using the IT tools		2	3	4	5	6	7
3	I believe the IT tools will boost students' learning interests		2	3	4	5	6	7
4	Learning to operate the IT tools should be easy for me		2	3	4	5	6	7
5	It is easy for me to become skilful in using the IT tools		2	3	4	5	6	7
6	I think IT tools will be difficult to operate		2	3	4	5	6	7
7	I intend to use the IT tools when it becomes available		2	3	4	5	6	7
8	Our lectures would support the use of the IT tools while teaching		2	3	4	5	6	7
9	I believe I could use the IT tools if I had the help for reference		2	3	4	5	6	7
10	I believe I could use the IT tools if someone showed me how to use it first		2	3	4	5	6	7
11	I believe I could use the IT tools if I had used a similar package previously		2	3	4	5	6	7
12	If the lecturers feel very strongly about something (positively or negatively), the IT tools allows them to show their feelings.		2	3	4	5	6	7
13	The IT tools allow the lecturer to add meaning to what they want to say by using as many cues (body language, voice, tone, etc) as possible.		2	3	4	5	6	7
14	The IT tools allow the lecturer to be flexible with the way language (verbal, non-verbal and/or graphics) is used in order to increase understanding	1	2	3	4	5	6	7
15	Nowadays use of IT in all sectors is inevitable		2	3	4	5	6	7
16	I believe that most whole research is done with usage of IT	1	2	3	4	5	6	7