EFL Learners' Attitudes towards Using Computers as a Learning Tool in Language Learning

Orachorn Kitchakarn
Bangkok University, Thailand
orachorn.k@bu.ac.th

ABSTRACT
The study was conducted to investigate attitudes toward using computers as a learning tool among undergraduate students in a private university. In this regards, some variables which might be potential antecedents of attitudes toward computer including gender, experience of using computers and perceived abilities in using programs were examined. Data was collected from 192 undergraduate students enrolled in two fundamental English courses (EN012 & EN 013). The instrument in this study was a questionnaire. The findings revealed that students had positive attitudes towards using computers as a learning tool. The factors of gender and experience of using computers were not found to affect students' attitudes while the factor of perceived abilities in using programs had an effect on their attitudes.

Keywords: computer, attitude, EFL students, language learning

INTRODUCTION
When moving from the teacher-centered instruction to student-centered instruction, technology is the important support to develop the students learning. Computers become powerful tools in educational settings. They provide facilities and support to students' learning activities (Isman,et al (2004). Recently, there has been a substantial increase in interest and activity in using computers to improve quality in teaching and learning. Computer-based learning has an impact on education by affecting students' productivity (İşman, A., Çağlar, M., Dabaj, F., Altınay, Z. & Altınay, F., 2004). Computers provide valuable learning experiences for young children and show a great impact on their learning and development (Chen & Chan, 2006; Kerawalla & Crook, 2010; Sackes, Trundle, & Bell, 2011; Lim, 2012).

While learning English, computers can support and facilitate the roles of the teacher in order to enhance students' skills to perform well in reading, writing, listening and speaking activities. Using computers and Internet can improve EFL learners' language abilities, and they also reach real learning experiences. In addition, computers contribute beneficially to learners' learning and development (McNabb, 2005; Chen & Chan, 2006; Kerawalla & Crook, 2010; Theodotou, 2010; Amendum, Vernon-Feagans, & Ginsberg, 2011; Sackes, Trundle, & Bell, 2011; Lim, 2012). They gain the opportunity to access useful language resources and communicate with native English speakers through computers and Internet. Moreover, students can learn listening, speaking, reading and writing English through real-world situations (Yang & Chen, 2007). In addition, computers are important in language learning because they help students to think critically in their learning process and make them have active and stable knowledge. That is, they are provided with more creative activities through using computers.

Computers also facilitate teachers in their teaching. Teachers can handle a lot of activities and carry out programmed functions at amazing speed through computers. They can check exercises after students are done anytime anywhere. Computers also help to solve the problem of individual difference. In this regard, students can be given the tasks that suit their ability. They can be moved gradually from easier to more difficult tasks according to their levels. They can be stimulated, drilled or explained a certain task when they fail to do it successfully by using computers. (AlKahtan, 1999 cited in Ahmad & Sulaiman, 2013).

When computers are implemented in language courses, the students' roles, attitudes, reflections are important points to be considered in terms of the effectiveness of technology use in instruction. Related literature indicated that EFL learners usually had positive attitudes towards the computer technology use in classrooms (Abu Jaber & Abu Omar, 2000; Garcia, 2001; Daigle, 2003; Isman et al, 2004; Karakas, 2011; Abedalaziz, Jamaluddin & Leng, 2013; Award & Alkaraki, 2013). Similarly, Kutluca Tamer(2011) determined the status of computer usage and the attitudes toward computers of prospective preschool teacher and to investigate of several variables on their attitudes. Results indicated that prospective preschool teachers had positive attitudes toward computers about taking computer course and computer ownership. The findings indicated that learners placed a lot of importance on using computers in their study.

When the factor of gender was taken into consideration, female students tend to have more positive attitudes towards learning and working with computers (Hashim & Mustapha (2004). Kay (2008) found that males have

significantly more positive affective attitudes toward computers. However, in many studies, gender did not have an impact on learners' attitudes. For instance, there was no significant difference between male and female students in their attitudes towards Internet and computer use (Abedalaziz, Jamaluddin & Leng, 2013). There were not even significant differences between male and female students in terms of being motivated to use computers and computer facilities for communication and writing (Karakas, 2011; Isman et al, 2004).

When the factor of experience or year of using computers was investigated, most findings revealed a possible impact on learners' attitudes. For example, in Miltra (1998)'s study, respondents who reported higher use of computers indicated a more positive attitude toward computers on all the different attitude scales. The result suggested that computers were used for several different activities, and the level of use was related to attitudes toward computers. Similar finding was stated in a study conducted by Divine and Wilson (1997). It showed that students with more experience in computing showed more positive attitudes toward computers, clearly in terms of confidence and non-anxiety. Likewise, many studies reported that greater frequency of computer use leads to positive attitude (Garland & Noyes, 2004; Teo, 2006). There was only a study which showed that experience in using computers did not affect learners' attitudes (Isman et al, 2004).

Computer knowledge is a critical factor which should not be disregarded. Mohd et al (2007) found a significant correlation between computer attitudes and students' computer skills. Similarly, in a study conducted by Norzaidi et al (2007), a significant correlation was found between the students' attitudes towards computers and their computer skill levels.

RESEARCH QUESTIONS

1. What are students' attitudes towards using computers as a learning tool?
2. Are there any statistically significant differences in students' attitudes towards using computers as a learning tool based on gender, perceived abilities in using programs and experience of using computers?

RESEARCH METHODOLOGY

Population and Samples

The population of this study was 400 undergraduate students who enrolled in EN 012: English for Daily Life and EN 013: English for Expressing Ideas in the first semester of 2012 academic year. The sample size was calculated based on Krejcie and Morgan Table. When the population is 400, the samples should be at least 196. The researcher decided to use 200 samples. 100 students are those studying EN012, and 100 students are those studying EN 013. However, when the questionnaires were returned and checked, it was found that only 192 out of 200 questionnaires had been completely filled out. So, there were 192 samples in this study.

Research Instrument

In order to investigate students' attitudes towards using computers as a learning tool, a questionnaire was used to collect the data. The first part gathered personal information from the respondents who were asked to answer the questions on gender, age, computer ownership, school they graduated, and experience of using computers. The second part consisted of six items, asking students to rate their abilities in using programs in a form of five-rating scale. The third part was a survey of students' attitudes towards using computers as a learning tool. This part contained 16 items and was in a form of five-rating scale.

As for the validity of the questionnaire, the draft questionnaire was examined and corrected by three specialists in English teaching field. Two items were changed at the stage of expert validation. The values of congruence index for items in five-point rating scale parts were proper, as they were between 0.67 and 1.00. The congruence index for the whole questionnaire was 0.96. To investigate the internal consistency among all items, the questionnaire was piloted with 30 students and calculated for reliability value using Cronbach's Coefficient Alpha. The result revealed that the reliability coefficient value was 0.795, which depicted rather high internal consistency in almost all of the items.

Data Analysis

Data were statistically recorded and analyzed by SPSS/Window program. Frequencies and percentages were used to analyze personal data of the respondents. The mean scores from the second part were calculated to indicate the degree of ability of using programs based on the criterion of ±.5SD. The average mean of ability was 3.72 with standard deviation of .47. So, a mean score of 3.96–5.00 indicated a high level, 3.49–3.95 indicated a moderate level and a mean score of 1.00–3.48 indicated a low level.

Table 1 Perceived Abilities in Using Programs Shown in Three Groups

Group	Range of Score	Number
low	Lowest through 3.48	65
moderate	3.49-3.95	55
high	3.96-5.00	72

Means and standard deviations were utilized to answer the first research questions and presented in a table based on the following ranges: 1.00-1.50 = very negative, 1.51-2.50 = negative, 2.51-3.50 = moderate, 3.51- 4.50 = positive, 4.51-5.00 = very positive. To answer the second research question, t-tests and One-way Analysis of Variance were employed to compare students' attitudes towards using computers as a learning tool in terms of gender, perceived abilities in using programs and years of using computers. Tukey's multiple comparison tests were further conducted to find out differences of each pair.

RESULTS

The samples of this research are 192 undergraduate students enrolled in two English courses. Of these, 63.5% are female and 36.5% are male. The majority of them (92.7%) are aged between 18-20 years, and the rest (7.2%) are more than 20 years old. When categorized by types of school they graduated, 66.7% of the respondents report they come from government schools while 33.3% of them are from private schools. In addition, 99.5% of them have their own computer while .5 % has no computer.

Table 2 Personal Data of Respondents' Shown in Frequency and Percentage

	Frequency	Percentage
1. Gender		
- Male	70	36.5
- Female	122	63.5
2. Age		
- 18-20 years	178	92.8
- > 20 years	14	7.2
3. School		
- Government	128	66.7
- Private	64	33.3
4. Experience of using computers		
- 1-10 years	89	46.4
- More than 10 years	103	53.6
5. Computer Ownership		
- Yes	191	99.5
- No	1	.5

Results Pertaining to Research Question 1

Table 3 shows that all items exhibited mean values above 3.51, and the overall mean score was 4.05, indicating positive attitudes toward using computers as a learning tool. When considering each item, it was found that the third highest mean scores were no.3 (Using the computer helps learners search and get information related to English language and others from around the world , $\bar{X}$= 4.33), no. 4 (Using the computer in learning English makes me more enjoyable, $\bar{X}$= 4.22), and no. 2 and 16 (Using the computer while doing activities or assignments saves time/ Using the computer in learning English makes me download teaching materials or upload assignment and homework easily, $\bar{X}$= 4.17). However, the attitudes toward using the computer as a learning tool which help them improve grammatical knowledge were reported as the lowest mean score (No. 13, $\bar{X}$= 3.81).

Table 3 Students' Attitudes towards Using Computers as a Learning Tool

Items	Mean	S.D.
1. Using the computer makes me learn and do my assignments easier and more convenient.	4.13	.78
2. Using the computer while doing activities or assignments saves time.	4.17	.76
3. Using the computer helps learners search and get information related to English language and others from around the world.	4.33	.70

4. Using the computer in learning English makes me more enjoyable.	4.22	.68
5. Using the computer in learning English increases my creativity.	3.99	.65
6. Using the computer in learning English increases my productivity.	4.03	.74
7. Using the computer in learning English makes learners more autonomous.	4.10	.72
8. Using the computer in learning English improves learners' critical thinking.	3.92	.74
9. I have more opportunities to practice my writing while using the computer.	3.87	.76
10. While using the computer, I can improve my reading skills.	4.10	.69
11. Using the computer in learning English helps me learn and use new vocabularies.	4.10	.68
12. Using the computer in learning English helps me practice my listening and speaking skills easily.	3.88	.70
13. Using the computer in learning English helps me improve grammatical knowledge.	3.81	.79
14. Using the computer in learning English helps me communicate with my teacher and classmates easily.	3.97	.77
15. Using the computer in learning English helps me update my course information.	3.91	.70
16. Using the computer in learning English makes me download teaching materials or upload assignment and homework easily.	4.17	.78
Total	4.05	.51

Results Pertaining to Research Question 2

This research question asked about differences among students' attitudes towards using computers as a learning tool in terms of gender, experience of using computers, and perceived abilities in using programs.

Table 4 indicates that male and female students had similar attitudes towards using computers as a learning tool ($\bar{X}$= 4.05, 4.04). T-test analysis was conducted to examine a significant difference in students' attitudes between the two groups. The result reveals that no statistically significant difference was found in attitudes between male and female at the level of .05. This means that male students had the same attitudes as female students.

Table 4 A Comparison of Attitudes Classified by Genders

Variable		n	Mean	S.D.	t	Sig
genders	male	70	4.05	.53	.209	.834
	female	122	4.04	.49		

When the t-test was used to find out whether experience of using computers had an effect on students' attitudes towards using computers or not, it was found that there was no statistically significant difference in attitudes between the two groups of students with long and short experience of using computer. As shown in Table 5, the students' attitudes towards using computers as a learning tool did not depend on how long they used computers.

Table 5 A Comparison of Attitudes Classified by Experience of Using Computers

Variable		n	Mean	S.D.	t	Sig
Experience of Using Computers	1-10 yrs.	89	4.04	.48	-.079	.937
	> 10 yrs.	103	4.05	.52		

Table 6 demonstrated means and standard deviations of students' attitudes after they were categorized into three groups based on perceived ability of using programs. The findings showed that mean scores of low, moderate, and high abilities were 3.72, 4.09, and 4.30 accordingly.

Table 6 A Comparison of Attitudes Classified by Perceived Abilities of Using Programs

Variable		n	Mean	S.D.
Ability of Using Program	Low	65	3.72	.50
	Moderate	55	4.09	.39
	High	72	4.30	.42

Table 7 indicated that the F value was 30.153 with a P value of .000, so this was significant at P< .05. The results showed that the students' attitudes towards using computers as a learning tool were dependent on their perceived abilities of using programs (low, moderate, high). That is, at least one pair differed in their attitudes.

Table 7 Differences among the Three Groups of Abilities of Using Programs Regarding Attitudes towards Using Computers as a Learning Tool

Source of Variances	Sum of Squares	Degree of Freedom	Mean Square	F
Between Groups	11.797	2	5.898	30.153**
Within Groups	36.971	189	.196	
Total	48.767	192		

P < .05

Therefore, Tukey multiple comparison tests were further conducted to determine which groups significantly differed. The results indicated that three pairs had different attitudes toward using computer as a learning tool. That is, statistically significant differences were found between students with low ability and those with moderate ability, students with moderate ability and those with high ability, as well as students with low ability and those with high ability.

Table 8 The Results of Tukey Tests for the Differences in Students' Attitudes

Perceived Abilities of Using Program		Mean Differences	Sig
Low	Moderate	.371	.000
Moderate	High	-.213	.029
Low	High	.584	.000

DISCUSSION

It is no doubt that students perceived the usefulness of using computers as a learning tool due to their positive attitudes. The finding goes in line with EFL learners in other studies who had positive attitudes towards the computer technology use in classroom (Abu Jaber & Abu Omar, 2000; Garcia, 2001; Daigle, 2003; Isman et al, 2004; Karakas, 2011; Abedalaziz, Jamaluddin & Leng, 2013; Award & Alkaraki, 2013). The finding indicates that most students prefer to use computers in language learning because computers can help them search and get information related to their studies around the world. They can learn listening, speaking, reading and writing English through real-world situations (Yang & Chen, 2007). Moreover, they can store and display information more easily. It saves their time in doing tasks. The finding can be supported by Salih Usun and Kampusd Anafartalar (2004) who stated that computers help learners do assignments more efficiently.

It is interesting to find that abilities of using programs have an impact on students' attitudes toward using computers as a learning tool. This is probably because the respondents might have difficulty in using some programs. Not knowing much about programs makes them work ineffectively. For instance, when students were assigned to use PowerPoint to make a presentation, it may take them some time to learn more about the useful tools in this program before work. The finding was found to be similar to some studies which found a significant correlation between students' attitudes towards computers and their computer skill levels (Mohd et al, 2007; Norzaidi et al, 2007).

Based on the finding, gender did not have an effect on students' attitudes towards using computers as a learning tool. That is, female students had similar attitudes to male students. This might be because both male and female students had to fulfill the same requirement of the course. They similarly use computers as a tool to complete the given tasks and assignments. Both male and female students recognize the importance of using computers in language learning. The finding was found to be similar to many previous studies in that there was no significant difference between male and female students in their attitudes towards Internet and computer use (Abedalaziz, Jamaluddin & Leng, 2013; Karakas, 2011; Isman et al, 2004).

This study also found that years or experience of using computers did not have an impact on attitudes. This might be because young people can adapt themselves to a rapidly changing world where technology has become central to lives. They learn to use a wide range of technologies without difficulty. Basically, computers are perceived as the most important learning tool that can be used to facilitate learning and in daily lives. As a result, users did not differ widely in their attitudes towards using computers. The finding was similar to that in one study (Isman et al, 2004), but it was not in accordance with most studies which found that students with more experience in computing showed more positive attitudes toward computers (Miltra, 1998; Garland & Noyes, 2004; Teo, 2006).

REFERENCES

Abedalaziz,N., Jamaluddin, S., & Leng, C.H. (2013)Measuring Attitudes towards Computer and Internet Usage among Postgraduates Students in Malaysia. TOJET: The Turkish Online Journal of Educational Technology – April 2013, Volume 12 Issue 2.

Al-Khadash and Al-Bishtawi, (2009) Attitudes toward learning accounting by computers: The impact on perceived Skills. Journal of Accounting and Taxation Vol.1 (1), pp 001-007, April, 2009.

Amendum, S., Vernon-Feagans, L; Ginsberg, M.(2011). The Effectiveness of a technologicallyfacilitated classroom-based early reading intervention: TheTargeted Reading Intervention, *Elementary School Journal*, *112*(1), 107-131.

Award and Alkaraki (2013). Attitudes of students towards using computers in learning English. English for Specific Purposes World, Issue 37, Vol,13, 2013.

Chen, J. & Chan, C. (2006). Using computers in early childhood classrooms: teachers' attitudes, skills and practices. *Journal of Early Childhood Research, 4*(2),169-188.

Daigle,R.J.(2003).Computer attitudes of traditional versus non-traditional accounting students. Fifth Annual Information Systems Educator Association Conference and Faculty Training. Louisiana State University Department of Accounting E.J. Ourso College of Business Administration Baton Rouge, LA 70803-6304 225-578- 6275.rjdaigle@lsu.edu

Divine, R. L., & Wilson, J. H. (1997). Antecedents of student attitudes towards computers. Journal of Marketing Education, 19(2), 54-66.

Garcia,Juan,Coll. (2001). An instrument to help teachers assess learners' attitudes towards multimedia instruction. Education, 122(1).94-101.

Garland, K. J., & Noyes, J. M. (2004). Computer experience: a poor predictor of computer attitudes. Computer in Human Behavior, 20(60), 823-840.

Hashim, H. R. and Mustapha, W. N. (2004). Attitudes towards learning about and working with computers of students at UITM. The Turkish Online Journal of Educational Technology, 3 (2), 1303-6521.

Hunt, N. P., & Bohlin, R. M. (1993). Teacher education students' attitudes towards using computers. *Journal of Research on Computing in Education*, *25*(4), 487-489.

İşman, A., Çağlar, M., Dabaj, F., Altınay, Z. & Altınay, F. (2004). Attitudes of students toward computers. The Turkish Online Journal of Educational Technology – TOJET, 3 (1), Article 2.

Karakaş, A. (2011). Motivational Attitudes of ELT Students towards Using Computers for Writing and Communication. The Journal of Teaching English with Technology, 11(3), 37-53. (2011)

Kay, R. H. (2008). Exploring gender differences in computer-related behavior: Past, present, and future. In T. T.

Kidd & I. Chen (Eds.), Social information technology: Connecting society and cultural issues(pp. 12-30). Hershey, PA: Information Science Reference.

Kerawalla, L. & Crook, C. (2010). Children's computer use at home and at school: context and continuity, *British Educational Research Journal*,*28* (6)751-771.

Kutluca, T. (2011) A Study on Computer Usage and Attitudes toward Computers of Prospective preschool Teachers. International Journal on New Trends in Education and Their Implications: January - March 2011 Volume: 2 Issue:1 ISSN 1309-6249

Lim, E. (2012). Patterns of kindergarten children's social interaction with peers in the computer area, *International Journal of Computer-Supported Collaborative Learning, Online First*, 4 July 2012.

McGrath, D., & Thurston, L. P. (1992). Sex differences in computer attitudes and beliefs among rural middles school children after a teacher training intervention. Journal of Research on Computing in Education, 24(3), 468-490.

McInerney, V., McInerney, D., & Sinclair, K.(1990).Computer Anxiety and Student Teachers: Interrelationships between computer anxiety, demographic variables and an intervention strategy. Paper presented at the AARE Annual Conference The Changing Face of Professional Education., University of Sydney.

McNabb ,M.L.(2005). Raising the Bar on Technology Research in English Language Arts ISTE, 38(1).

Mitra, A. (1998) .Categories of computer use and their relationships with attitudes toward computers. Journal of Research on Computing in Education, 30, 281-95.

Mitra, A., & Steffensmeier, T. (2000). Changes in student attitudes and student computer use in a computer-enriched environment. *Journal of Research on Computing in Education*, *32*(3), 417-434

Mohd D, Chong S, Azizah A, Salwani M, Rafidah K, Ruhana Z (2007). The effects of students' backgrounds and attitudes on computer skills in Malaysia. Inter.J. Manage. Educ. 1 (4): 371-389.

Norzaidi, M.D. and Intan Salwani, M. (2007) Information Technology Management Model: An Introduction, Selangor: University Publication Centre, UiTM.

Sackes, M, Trundle, K & Bell, R. (2011). Young children's computer skills development from Kindergarten to Third Grade, *Computers &Education*, *57*(2), 1698-1704.

Shashaani, L. (1997). Gender differences in computer attitudes and use among college students. Journal of Educational Computing Research, 16(1), 37-51.

Teo, T. (2006). Attitude toward computers: a study of post-secondary students in Singapore. Interactive Learning Environments, 14(1), 17-24.

Theodotou, E. (2010). Using computers in early years education: What are the effects on children's development? Some suggestions concerning beneficial computer practice. A paper presented at *International Scientific Conference "eRA-5": The SynEnergy Forum*. T.E.I. of Piraeus 15-18 September.

Usun, S. and Anafartalar, K. (2004) Important learning dimensions influencing undergraduate students learning and academic achievement in higher education, The Turkish Online Journal of Educational Technology – TOJET October 2004 ISSN: 1303-6521 volume 3 Issue 4 Article 3

Woodrow, J. E. (1987). Educators' attitudes and predispositions towards computers. Journal of Computers in Mathematics and Science Teaching, 6(3), 27-37.

Yaghi, H. (1997). Pre-university students' attitudes towards computers: An international perspective. *Journal of Educational Computing Research*, *16*, 237-249.

Yang, S. C. & Chen, Y. 2007. Technology-enhanced language learning: A case study. Computers in Human Behavior, 23, 860 – 897.