ATTITUDES OF STUDENTS TOWARDS LEARNING OBJECTS IN WEB-BASED LANGUAGE LEARNING

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ABSTRACT

Language education is important in the rapidly changing world. Every year much effort has spent on preparing teaching materials for language education. Since positive attitudes of learners towards a teaching material enhance the effectiveness of that material, it is important to determine the attitudes of learners towards the material used. Learning objects (LOs) are a new type of material on which many studies have been conducted in recent years. The aim of this study is to determine the attitudes of students towards LOs in web-based language learning. To this end, the study was conducted in English I Course at the Department of Computer Programming in Kırıkkale University in 2010-2011 Fall Semester. Seventy LOs appropriate for six-week long lecture program were integrated into the Learning Management System (LMS) of Kırıkkale University. The study group consisted of 38 students. After the six weeks long implementation period of the study, an attitude scale was administered to the students. The findings indicated that students in web based language education have positive attitudes towards LOs.

Keywords: Learning Object, Web-based Learning, Language Education

INTRODUCTION

Knowing a foreign language is very important for most of the people in an increasingly connected world. There has been an increase in the number of people wishing to learn a foreign language. To teach a foreign language is difficult in traditional classroom setting where there is inadequate space. Web-based language education seems a solution for this problem. All over the world, many educational institutions have started to provide internet-based lectures (McCormick, 2000). Advances in educational technology have affected learning and teaching methods significantly, leading this change. (Kuo & Chen, 2004). Demiray and Sever (2009) states that “online distance learning has gained reliability in recent years”. According to Holmberg “There is no tenable reason why any language should be considered unsuitable for distance teaching and learning; rather, there is much evidence of the effectiveness of distance teaching of foreign languages” (2005: 166-167).
The demand for web-based language learning has increased and online technologies have contributed notably to language education (Mirici, 2009: 603) and e-learning technologies can be used to teach English (Uşun & Kömür, 2009). Larson (1999) and Li (1999) states that the nature of internet and its web-based interactive structure is beneficial for language education (cited in Soon, Suan, Baniamin & Mamat, 2004). Distance language education is spreading as White (2005:55) states:

The developments in new technologies, the emergence of virtual learning environments and the demand for lifelong flexible learning opportunities have given rise to a marked increase in language learning through distance education – both in terms of new providers and new participants. While at one time distance education struggled for recognition, the viability of distance environments for language learning is now well established.

Materials used in web-based language learning are important as a supporting tool for the lesson. In web based language education there have been notable changes in the opportunities that distance education presents to the language learners (White, 2006) and internet has a potential for developing language education (Chun & Plass, 2000). Seljan, Banek, Špiranec and Lasić-Lazić (2006) suggest that new technologies provide limitless opportunities for language education. There have been great changes in materials used in web-based education and web-based language education is no exception. Formerly based on letters and text, distance education now uses a wide variety of digital materials. These materials are no longer a complement of text-based materials; they completely transform the web-based education consisting of digital materials (Blyth & Davis, 2007). These materials have capacity to improve the quality in learning and the printed material is not the key source of access of information thanks to information and communication technologies (Masrur, 2010).

Material development requires much time, effort and money. Reducing these costs is valuable. According to Yousuf, Anwar and Sarwar (2008:124) “The course materials which constitute the mainstay of distance education are crucial to the success of distance learning programmes”. Materials used in web-based language learning are important in order the students to achieve better learning. Kartal states (2005:82) that language education needs technological inventions more than any other social science field. According to Polsani (2003: 10) “LOs are the most meaningful and effective way of creating content for elearning”. LOs are a new material type on which many studies have been conducted (e.g. Hodgins, 2002; Gibbons, Nelson, & Richards, 2000; Wiley, 2000; Muzio, Heins & Mundell, 2002; Baruque & Melo, 2004; Ally (2004); Karaman, 2005; Nurmi & Jaakkola, 2006a, 2006b; Griffiths, Stubbs & Watkins, 2007; Kay & Knack, 2007; Kay & Knaack, 2008; Türel, 2008).

There has been an ongoing debate on what a learning object is. However, no consensus has been achieved until now. One can be surprised by the abundance of definitions of LOs in the literature. According to Wiley (2007:347) “almost every article written about learning objects provides its own unique definition of the term”. Since this study deals with the attitudes of learners towards LOs in web-based language education, no effort will be put into overcoming the definition debate. However, in order to get an idea of what learning object is, it is wise to have one. According to Wiley “Learning objects are any entity, digital or non-digital, which can be used, re-used or referenced during technology supported learning” (Wiley, 2000).

LOs are different from other more common learning materials thanks to their special characteristics (Sosteric & Hesemeier, 2004: 30).
A learning object can be any tool such as text, graphics, video, animations, games, tests and simulations and a combination of these make it superior than other web-based sources (Hannewald, 2009). Every year much effort is wasted to prepare learning materials for language education. The characteristics of LOs may prevent wasting much time, money and effort in developing learning materials. Web-based language education rapidly accepts new technologies. When it comes to language education in Turkey accepted by many scholars ineffective, LOs seem a logical effort to eliminate this shortcoming (Başal, 2011). LOs strengthen its place in the education community (Harman & Koohang, 2005: 68). According to Kay (2009: 1810) if LOs are planned effectively, it will probably useful for the sake of the students in distance education.

No one can seriously question the importance of the attitudes of teachers and students towards a teaching material in enhancing the learning process. Positive attitudes towards the material will probably enhance the effectiveness of a lecture. The aim of this study is to investigate attitudes of students in web-based language learning towards LOs.

**METHOD**

This study aims to determine the attitudes of students in web-based language education towards learning objects. There were 38 students in the study group. The study group was formed from Computer Programming Department of Distance education of Kirikkale University for the following reasons:

- Their appropriate preparedness level for web-based environment
- Their education was totally structured web-based
- Their volunteer preference for web-based education

For the six-weeks long application period of the study, text-based material was prepared. In addition to this material, 70 LOs including audio, video, flash animations, PowerPoint presentations, tests, quizzes were prepared and integrated into the Learning management System (LMS) of Distance Education Center of Kirikkale University (KUZEM) in the 2010-2011 Fall Semester for English I lecture of Computer technologies Department.

There were 3 choices in developing LOs to be used in this study. These are determination of the learning objects from the object repositories, converting existed appropriate materials into learning objects and developing them from scratch. In this study LOs are prepared both by the conversion of appropriate materials and preparation of them by the researcher. There were three reasons for this approach to have been adopted:

- Not finding learning materials appropriate for the subjects and inadequate variety of learning objects in the repositories
- Easiness of converting existed material to learning objects
- Will of the researcher to prepare learning objects by taking recommendations from the field experts to provide a variety in learning objects

For the conversion PowerPoint presentations prepared for the ‘Basic English Grammar’ book written by Betty Azar and A. Hagar were used by taking permission through e-mail from the publisher. In addition to this, some of the LOs were prepared by the researcher. In the preparation step of LOs, studies related to the preparation and development of them in the literature was taken as a reference. In these studies some of the principles for preparing LOs are as follows:
Learning objects should be formed from a combination of audio, video and text as far as possible.
Learning objects should be prepared as simple as possible.
Subjects should be disintegrated and should include small pieces that the students can follow easily.

The aim of this study is to investigate attitudes of students in web based language learning towards LOs. To this end, attitude scale adapted from the study conducted by Sevindik (2006) on smart classes. This 40-item scale was administered to the study group after the six-week long application period.

**FINDINGS**

What are the views of students in web-based language education towards learning objects?

In this study, an attitude test adapted from Sevindik (2006) and 40-item likert scale attitude test was administered to the students. Since it aims to determine the views of students, no need was seen necessary to re-do the validity and reliability of the attitude scale. There are negative and positive statements about LOs in the attitude scale. Depending on the results it can be seen that students’ attitudes towards them are highly positive. The results can be seen in Table 1.

Table 1. Determination of Students’ Views on Learning Objects Used in Web-based Language Learning

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>( \bar{x} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning with learning objects are interesting.</td>
<td>74911</td>
<td>3,9211</td>
</tr>
<tr>
<td>2. Information presented with learning objects is quite clear.</td>
<td>50036</td>
<td>4,5789</td>
</tr>
<tr>
<td>3. Lectures presented with learning objects are enjoyable.</td>
<td>48885</td>
<td>4,3684</td>
</tr>
<tr>
<td>4. Having lectures with learning objects is easy.</td>
<td>76182</td>
<td>3,5263</td>
</tr>
<tr>
<td>5. Learning with learning objects is fun.</td>
<td>22629</td>
<td>4,0526</td>
</tr>
<tr>
<td>6. Studying with learning objects is exciting.</td>
<td>85383</td>
<td>4,0263</td>
</tr>
<tr>
<td>7. I remember what I learnt with learning objects better.</td>
<td>49536</td>
<td>4,6053</td>
</tr>
<tr>
<td>8. I prefer studying with learning objects at other times.</td>
<td>45961</td>
<td>4,7105</td>
</tr>
<tr>
<td>9. I feel that the learning process is under my control while I am studying with learning objects.</td>
<td>75995</td>
<td>4,2632</td>
</tr>
<tr>
<td>10. I also want to study other lessons with learning objects.</td>
<td>48078</td>
<td>4,6579</td>
</tr>
<tr>
<td>11. I feel a strong desire while studying with learning objects.</td>
<td>75053</td>
<td>3,6316</td>
</tr>
<tr>
<td>12. I think that I use my talents more effectively while studying with learning objects.</td>
<td>89610</td>
<td>3,8158</td>
</tr>
<tr>
<td>13. I totally concentrate on the subject I study while studying with learning objects.</td>
<td>44626</td>
<td>4,2632</td>
</tr>
<tr>
<td>14. I intensify my efforts while studying with learning objects.</td>
<td>84166</td>
<td>2,3158</td>
</tr>
<tr>
<td>15. I feel myself confident while studying with learning objects.</td>
<td>68928</td>
<td>3,8947</td>
</tr>
<tr>
<td>16. I feel myself comfortable while studying with learning objects.</td>
<td>48078</td>
<td>4,3421</td>
</tr>
<tr>
<td>17. The things that I learnt with learning objects are interesting.</td>
<td>44626</td>
<td>4,7368</td>
</tr>
<tr>
<td>18. Learning objects were arranged in a way that encourages learning.</td>
<td>48078</td>
<td>4,6579</td>
</tr>
<tr>
<td>19. The knowledge presented with learning objects meets my expectations.</td>
<td>50036</td>
<td>4,5789</td>
</tr>
<tr>
<td>20. While I was studying with learning objects I feel that I will be successful in the exam.</td>
<td>50601</td>
<td>4,4737</td>
</tr>
<tr>
<td>21. I feel that what I learnt will be useful for my future.</td>
<td>55173</td>
<td>2,5789</td>
</tr>
<tr>
<td>22. Learning objects contribute to the permanency to what I learnt.</td>
<td>36954</td>
<td>4,8421</td>
</tr>
<tr>
<td>23. Learning objects increase my interest to the subjects.</td>
<td>45961</td>
<td>4,7105</td>
</tr>
<tr>
<td>24. The difficulty level of learning objects is appropriate: neither hard nor easy.</td>
<td>47107</td>
<td>4,3158</td>
</tr>
</tbody>
</table>
25. Learning objects increase my curiosity to the subjects. 39286 4,8158
26. What I learn with learning objects supports my previous knowledge. 50036 4,4211
27. Learning objects is effective in increasing my success. 50390 4,5526
28. The idea of studying with learning objects irritates me. 77661 1,7895
29. I want to study other lessons with learning objects. 66886 4,3421
30. The subjects presented with learning objects are not boring. 31101 4,8947
31. Since learning objects are boring, I don’t want to make lessons with them. 50601 1,5263
32. I think learning objects are not different from other materials. 1,09441 1,7895
33. Although lessons presented with learning objects are boring, I have to continue my education. 80362 2,0526
34. Learning objects irritate me. 77661 1,7895
35. Learning objects are the teaching materials which I dream of. 61512 4,0000
36. Learning objects are effective in giving problem solving skills. 82286 2,1579
37. Learning objects affect my motivation in a positive way. 50390 4,5526
38. Subjects enriched with learning objects are enjoyable. 43085 4,7632
39. Learning objects are effective in giving feeling of perfection. 78978 1,6053
40. Receiving education with learning objects is the right of everybody. 41315 4,7895

<table>
<thead>
<tr>
<th>Standard deviation and Arithmetic Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,5872</td>
</tr>
</tbody>
</table>

Depending on the results given in Table 1, it is seen that students found LOS interesting ($\bar{x}=3, 9211$), enjoyable ($\bar{x}=4, 3684$), exciting ($\bar{x}=4, 0263$) and entertaining ($\bar{x}=4, 0526$). They want to study with LOs ($\bar{x}=4, 7005$) and want to study other lessons with LOs ($\bar{x}=4, 6779$). These results show that LOs used in the study attracted students. Moreover, from the findings showing that LOs were arranged attractive ($\bar{x}=4, 6579$) and they evoke interest of the students ($\bar{x}=4, 7105$), it can be concluded that LOs in the study were in good quality.

Students in the study absolutely disagree that LOs were irritating ($\bar{x}=1, 7895$) and disturbing ($\bar{x}=1, 7895$). They do not find LOs complex ($\bar{x}=1, 5263$) and do not think that LOs are like other learning materials ($\bar{x}=1, 7895$). All these findings show that students in the study do not have a negative views about LOs, showing the students acceptance of these materials. The finding that students also want to study other lessons with LOs ($\bar{x}=4, 6579$) is important. It can be concluded that students find the materials used in other lessons inadequate and express their wish to have LOs also in those lessons.

There are positive and negative statements about LOs in the attitude scale. Students’ evaluations about the statements are mostly in favor of LOs. In other words, students have positive attitudes towards LOs. Since positive attitudes towards a teaching material are important in enhancing the effectiveness of the lecture, LOs can be accepted as preferable material type supporting the lectures.

**DISCUSSION AND CONCLUSION**

Attitudes of student towards a teaching material are important in all learning environment and web-based language learning is no exception. Institutions providing web-based education should take into account the attitudes of students (Daniels & Christie 2000). 40-item likert scale was used in this study to determine the attitudes of students in web-based language education towards LOs.

In the light of research findings, it was determined that students had positive attitudes towards LOs. The results of attitude scale showed that students find LOs enjoyable, interesting and they learn easy with this material.
The results of studies conducted by Bradley and Boyle (2004), Kay and Knaack (2008), Torres, Marriott and Ramos (2009), Baki and Çakıroğlu (2010) and Cameron and Bennett (2010) on the attitudes of students towards LOs are consistent with the results of this study. In other words, these studies show that students have positive attitudes towards LOs which is consistent with our study.

In the study conducted on LOs with 40 students of Computer and Instruction technologies department of Education Faculty of Ege University, Ceylan (2008) found that students have positive attitudes towards LOs. In their study, Schibeci et al. (2008) found that students found LOs motivating and enjoyable. An interesting finding of this study is that introvert students resisting to traditional class approaches and having low academic achievement participated actively in lectures supported with LOs. In their study conducted on students of in primary and secondary schools of Australia and New Zealand, Lowe et al. (2010), found that students like LOs since they are innovative and visually appealing. Moreover, Çakıroğlu (2010) in his study on using LOs in math lesson found a significant increase in the attitudes of students who uses LOS. Yarar (2010) in his study in social sciences lesson found the same results that students have positive attitudes towards LOs. The results of our study are consistent with all the studies mentioned above.

Although the aim of this study is to determine the attitudes of students towards LOs, in the literature there are studies aiming at determining the attitudes of teachers towards LOs (e.g. Celebrate Work Package7, 2004; Schibeci et al., 2008; Türel, 2008). Baki and Çakıroğlu (2010) found that despite troubles teachers experienced due to the difference of LOs they express that LOs have positive effects on students’ motivation and learning. Moreover, in a wide scale study conducted on the schools in Europe, McCormick and Li (2006) found that teachers have positive attitudes towards LOs. Kay and Knack, in their investigation of the literature on LOS, evaluated 58 studies only eight of which were on the use of LOs found that both teachers and students have positive attitudes towards LOs (Kay, 2009:1809-1910).

Positive attitudes towards a teaching material both by students and teachers show that the use of LOs is welcomed by both groups. It can be concluded that LOs can enhance the effectiveness of learning depending on such a consensus on a teaching material. LOs towards which students and teachers show positive attitudes can contribute to the learning environment one of which is the subject of this study, web-based language learning. Integrating LOs into the web-based language learning is important since students show positive attitudes towards them.

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