Evaluation of Candidate Language Teachers’ Level of Knowledge and Ideas towards the Use of Interactive Whiteboard

Yabancı Dil Öğretmen Adaylarının Akıllı Tahta Kullanımına Yönelik Görüşlerinin ve Bilgi Düzeylerinin Belirlenmesi

Selda KAYAK2, Elif KIR3

Abstract

This study tries to reveal what candidate language teachers studying at the foreign languages teaching department of a state university know about the usage of interactive white boards as well as a longitudinal project conducted by the Ministry of Education called FATİH. The questionnaire which comprised of seventeen questions was developed by the researchers upon taking expert opinions and was used as the main data collection tool. A total of 68 teacher candidates going different primary schools and high schools for compulsory “School Experience” course took part in the study. The knowledge and ideas of the students were identified with the help of the findings and some recommendations were made on teacher training and use of technology in this respect.

Keywords: Interactive Whiteboard (IW), Fatih Project, Foreign Language Education

Öz

Bu çalışmada, Yıldız Teknik Üniversitesi, Eğitim Fakültesi İngilizce Öğretmenliği bölümünde öğrenim gören öğretmen adaylarının akıllı tahta ve FATİH projesi hakkındaki bilgileri anket yolu ile veri toplanarak ortaya çıkarılınca çalışılmıştır. Toplam on yedi sorundan oluşan anket uzman görüşü alınarak araştırmacılar tarafından geliştirilmiştir. Çalışmaya “okul deneyimi” dersi kapsamında farklı ilköğretim ve lise öğrencileri toplam 68 öğretmen adayı katılmıştır. Elde edilen bulgular sonucunda öğrencilerin düşünceleri saptanmış ve bu doğrultuda öğretmen eğitimi ve teknoloji kullanımından ilgili önerilerde bulunulmuştur.

Keywords: Akıllı Tahta (AT), Fatih Projesi, Yabancı Dil Öğretimi

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2 Res. Asst. Dr. Selda KAYAK, Yıldız Technical University, Faculty of Education, Department of Computer Education and Instructional Technology, İstanbul, Turkey, skayak@yildiz.edu.tr
3 Assist. Prof. Dr. Elif KIR, Medeniyet University, Faculty of Education, Department of English Language Teaching, İstanbul, Turkey, elifk@medeniyet.edu.tr

Selda KAYAK, Elif KIR
Introduction

As we call this age “information age” or “technology age”, technology shows a fast development affecting every field of life today. These technological developments significantly have impacts on the field of education.

There are some technologies which attract more attention than other technologies in education and teaching, however whose degrees of successful integration into the classroom environment differ (Wood & Ashfield, 2008). The main feature of the interactive whiteboard, one of these technological tools, is its being an interactive board working with computer and projection connection. It is important that the screen of the whiteboard has a touch sensitive structure with the feature of being interactive.

Using new technologies facilitates education and teaching and makes learning enjoyable as it increases the interest of the students by providing much more interactive learning environment (MEB, 2014).

What is Interactive Whiteboard?

Interactive whiteboard is defined as an educative tool which enables the students and teachers to use the knowledge skillfully, to repeat the same thing, to interact with knowledge and to respond to teaching (Dill, 2008). The first interactive whiteboard was produced in 1991 (Shenton & Pagett, 2007).

The interactive whiteboard, one of the technologies used in education and teaching process, is a tool that works with a computer and projection connection. Besides, it has a large and touch sensitive screen (Erduran & Tataroğlu, 2009).

The interactive whiteboard is a useful presentation tool that can be used to substitute for nearly all traditional, modern and other classroom sources (for instance, blackboard, writing board, overhead projector, maps, pictures, numerical axes, books, calculators and video players) and it allows the teacher to have access with a single click to the bank of sources which normally take a long time to collect and require a large cabinet (Becta, 2006).

The interactive whiteboard is considered as a mediator in the interaction between the teacher and students when used for a long period of time by the teacher (Lewin, Somekh &
Steadman, 2008). The interactive whiteboards should be used in full potential if it is wanted to be used effectively in teaching and learning. Teachers should adapt this tool to the method they use and learn how to use the opportunities provided by the interactive whiteboard in learning interaction. New tools offer the opportunity to create new types of activities; however, these new types are not created by the tools themselves but created by the users as they improve their skills to use new tools.

**General Features of Interactive Whiteboards**

The components of the interactive whiteboard system include a computer, projection device and a panel with an active surface which functions also as a classroom board. The interactive whiteboard and projector connected to a computer are used with the interactive board software installed on the computer. This software allows the use of any infrastructure such as easy drawings, formula, pictures, maps, figures etc. which are ready to use for many classrooms during the lessons. The board which can be used with a pen also functioning as a mouse can also be used as a computer screen besides the interactive whiteboard software. This feature allows the opening of many presentations, video images, animation and office programs installed on the computer or kept in memory and use of the same on the board (Kaya & Aydın, 2011).

One of the most important components in the interactive whiteboard classrooms is the internet access via the computer connected to the network. Thus, the teachers might have the opportunity to enrich the lesson. Moreover, the active voting device which is a part of the system that can be used by the students when required and turn the results to statistical data per student can be integrated to these vehicles. The students have the opportunity to answer the test questions on the board without standing up with these devices offering choices from A to F.

Furthermore, the interactive whiteboard systems enable the fast summarization of the subjects of the lesson with the recording feature on the board and the fast repetition of the subjects especially before the exams and also the students to take the subjects with flash memories to their computers at their homes (Ateş, 2010).
In short, the unification of the multi-functional task structure of IW digital environment with the size and interaction of the whiteboard offers the opportunity to teach a multi-directional lesson. The board also provides the opportunity to write or draw pictures on board's screen without the need for a pen. Teachers can use elements such as voice, video and graphic altogether and thus have a multiple learning environment. IW enables internet connection and records the applications in the classroom (Adıgüzel, Gürbulak & Sarıçayır, 2011).

Advantages of Interactive Whiteboards

In terms of education, it is known that the interactive environment provided by the interactive whiteboards supports the active learning, its size helps cooperative and in group learning, it is suitable for students with sight or physical disabilities and it offers the opportunity to reuse and restructure of the prepared activities by recording the same (Kennewell & Morgan, 2003).

The internet sources, photos, flash animations, videos, documentaries and PowerPoint presentations that can be used via the interactive whiteboard systems can directly affect the interest of the students to the lessons. This also facilitates the classroom management by the teacher and ensures easy access to different intelligence areas (Ateş, 2010).

The interactive and touch-sensitive screen of the board allows the student and teacher to interfere in and make changes on the activities on the board and to record the same. It enables to render lessons more visual and active with sound clips, video and animation presentations, colors, images, screening and zooming in or out features. The prompt recognition of any mistakes or common conceptual errors and the ability to return back to correct the same can be considered as the most important advantage of the interactive whiteboard (Erduran & Tataroğlu, 2009).

Moreover, all works on the interactive whiteboards can be simultaneously recorded on the digital environment, be united with different applications and published on the internet.

The other advantages of interactive whiteboards might be regarded as follows:
• Easier understanding of the subject as it is not required to take notes during lectures
• Saving time
• Ensuring students to attend the lesson more cautiously and willingly
• Making the lessons more enjoyable both for the teacher and student
• The opportunity to attend a lesson by different classes and schools all together simultaneously via internet
• The ability to record the lessons on the interactive whiteboard to the computer and the reproduction of the same as lesson notes
• Ensuring the students not attending the lesson to follow-up the subjects
• The non-requirement to draw the same figures and schemes again by using the existing schemes or creating new schemes (for instance, drawings, figures, schemes etc.).

It is mainly assumed that using white boards has positive effects both on learning and quality of teaching. As a result, it is required from foreign language teachers to have basic knowledge and information of this tool in order to use it in an efficient way. Moreover, it is recommended in a number of studies that the innovations and developments in the use of information technologies such as the interactive whiteboards should be presented in the pre-service teacher training (Alev, 2003).

The examination of “Basic Primary School” and “Secondary School” curriculum of the Ministry of National Education in Turkey reveals that a great investment is made not only on the use of technology in teaching and but also the extension of the use of interactive whiteboards (Somyürek, Atasoy & Özdemir, 2009).

Scope of FATİH (Movement for Increasing Opportunities and Improving Technology) Project

FATİH Project aims to provide a laptop, projector and internet infrastructure to 620,000 classrooms of all pre-schools, primary and secondary schools for the effective use of Information Technologies tools in learning-teaching process in a way to address more sense
organs during the lessons in order to ensure equality of opportunities in education and teaching and improve the technology at schools.

The project named “Movement for Increasing Opportunities and Improving Technology” but known as FATİH in short has been carried out by the Ministry of National Education and supported by the Ministry of Transportation. It is planned to complete the IT hardware and software infrastructure, e-content requirement, updated teacher guide books, on-the-job trainings for teachers and conscious, reliable, manageable IT and internet use needs for the secondary schools in the 1st year, secondary stage of the primary schools in the 2nd year and first stage of the primary schools and pre-schools in the 3rd year (MEB, 2014).

FATİH project includes five main components. These components are as follows:

1- Provision of Hardware and Software Infrastructure,
2- Provision and Management of Educative e-Content,
3- Effective Use of IT in Teaching Programs,
4- On-the-job Trainings for Teachers,
5- Provision of Conscious, Reliable, Manageable and Measurable IT Use.

It is emphasized that there are two important elements for the success of the project. The first is to extend the computer literacy especially among the young people and the second is to educate the educators. Therefore, on-the-job trainings will be provided to 608 thousand teachers in order to improve their skills of using hardware and e-contents in classrooms (Kobi-Efor, 2010).

As stated by Kayaduman, Sirakaya and Seferoğlu (2011), the current situation of the infrastructure and competency levels of the teachers are required to be examined. The self-confidence of the teachers regarding the use of information technologies, the situation of use of computer technologies and the research on their perceptions are among the prioritized matters. Accordingly, it is recommended that teacher guides are prepared for the teachers in order to use the e-content effectively.

Use of Interactive Whiteboard in Foreign Language Teaching
The use of information technologies in foreign language teaching is gradually extending and the teachers are expected to arrange their foreign language lessons in accordance with these technologies. Thus, interactive whiteboards are started to be used extensively in especially foreign language lessons in several countries in recent years. For instance, the comprehensive and permanent research carried on the use and effectiveness of IW in primary schools in London reveals that the use of IW in mathematics, science and foreign language lessons has increased greatly (Moss et. al., 2007).

Mathews-Aydinli and Elaziz (2010) collected the ideas of teachers and students with their research carried out on 13 schools where interactive whiteboards are used in Turkey for teaching English. It was found out that both the teachers and students develop positive attitudes regarding the use of interactive whiteboards and believe that this tool is useful. The students think that the interactive whiteboard especially renders the lessons interesting and the teachers also think that this tool provides them flexibility. The most emphasized feature of the interactive whiteboard is the recording of the activities during its usage.

The study carried on the use of interactive whiteboards in foreign language lessons in Germany tried to understand the use and attitudes of interactive whiteboards by the teachers with lesson observations, video recording and interviews (Schmid, 2010). The analysis of data was done by a) preparation of materials for interactive whiteboard use, b) management of the interaction provided via interactive whiteboard and c) supporting the interactive whiteboard technology use. It is found out from the research that students are provided with opportunities they can interact with the learning environment and the interactive whiteboard, the students actively contribute to the learning process with the use of the interactive whiteboard, different learning styles are taken into consideration and language practice is provided.

Teachers stated in another research carried out with a group of teachers using the interactive whiteboard in foreign language lessons that the use of interactive whiteboard has a positive effect in foreign language lessons. Moreover, the teachers think that the success of teachers in lessons is directly proportional to preparation before the lesson and the roles of teachers in classes change with the use of interactive whiteboard (Gray et. al., 2007). The research also emphasizes the supportiveness of foreign language teaching.
Studies on the Interactive Whiteboard

William and Beeland (2002) state in the research named “Student Engagement, Visual Learning and Technology: Can Interactive Whiteboards Help?” that the students and teachers prefer use of interactive whiteboards in classrooms and the visuality provided by the interactive whiteboard increases the motivation and interest of students.

Fraser and the others (2009) tell in his research called “Enhancing Lesson Planning and Quality of Classroom Life: A Study of Mathematics Student Teachers’ Use of Technology” that the interactive whiteboard contributes positively to the learning of students and increases the quality of education when digital resources and appropriate pedagogy are used.

The research named “Comparison of ideas of Science and Mathematics Teachers regarding Use of Interactive Whiteboard in Education” prepared by Erduran and Tataroğlu (2009) with 35 science and mathematics teachers working at 4 public and 8 private secondary schools in İzmir in 2009 reveals that

- The use of interactive whiteboard has a positive effect on the learning environment and the interest of the students increases while using interactive whiteboards and the students participate more in lessons according to the teachers,
- There are some problems in use of interactive whiteboards such as technical problems and the lack of training given to the teachers,
- Especially technical problems distract the teachers from using an interactive whiteboard,
- Teachers do not find themselves sufficient to solve the problems they have regarding the use of the interactive whiteboards, and the materials and they have to receive some trainings regarding skills.

Ateş (2010) prepared a research named “Use of Interactive Whiteboard in Geography Lessons in Secondary Schools” by conducting surveys on a total of 148 students in the first
grade (9th grade) in 7 schools via 16 geography teachers in 2010. This research reveals the following findings by taking the opinions of teachers and students:

- It is found out that lessons such as geography with limited hours and many subjects are thought fast and effectively.

- It is found out that the previously covered lessons can be repeated fast thanks to the interactive whiteboard and if wanted, the records of the covered lessons can be given to the students and the students can make a good repetition in this respect.

- It is found out that the teacher ensures classroom control more easily as the students become more interested in the lesson with materials such as animations, graphics, images etc. used with an interactive whiteboard.

Purpose of the Study

The main purpose of this study is to determine the knowledge levels and ideas of foreign language teacher candidates on the use of interactive whiteboard and FATİH project. It was also aimed to analyze the gotten information with some variables.

The following research questions guided the study;

- How aware are candidate foreign language teachers about the interactive whiteboards and their use in teaching?

- Which functions of interactive whiteboards find them important?

- What do they think about the usage of interactive whiteboards and project?

- How aware are they about FATİH project which supports the use interactive whiteboard?

Method

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In this part, the model of the study which aims to determine usage of interactive whiteboards by candidate teachers, their knowledge and views on FATIH project is explained. Besides, information on data collection tool and analysis of data are given.

Data collection tool which was developed by the researchers was given to the 4th year students of the English language teaching department. Demographic information was gotten with the help of the tool. Not only the views and knowledge of the candidates but their usage level of interactive whiteboards were tried to determine. Besides, what the candidate teachers know about FATIH project and what they think about it were asked.

As the purpose of this research was to find out the knowledge and ideas of the chosen group on the use of interactive whiteboard and FATİH project, it was thought that the single screening model would suit the best for the study. Thus, the research was planned and carried out in accordance with the single screening model which tries to describe the variables regarding the unit and situation separately such as the relevant event and group (Karasar, 2004).

Participants

Participants were 68 candidate teachers of English studying at the language teaching of Yıldız Technical University. The students were asked to complete questionnaire prepared for this study as a part of their “School Experience” course which continues one year long. As a part of this course, the students were teaching and doing observation as an intern at the different primary and high schools in İstanbul at that time.

Data Collection Tool

Data collection tool used for the study was developed by the researchers. Question items were constructed in order to determine the views of candidate teachers about interactive whiteboards and their level of knowledge during data collection tool development. The help of related literature was gotten in the construction of items. After this step, necessary revision was made by getting feedback of the experts in this field. As the last step of the process, pilot study was conducted with a similar group of study group to make final version of the tool.
Data collection tool includes four parts. First parts aims to learn demographic information about participants. The second part includes questions which aim to reveal views and knowledge level of candidate teachers. In the third part participants were asked to grade the qualifications of interactive whiteboards they would prefer. Participants were asked whether they know the FATIH project or not in the 4th part and they were given an open ended question to write their opinions about the project.

Demographic information includes age, gender of the participants and background information about Computer Course.

A semantic grading scale which consists of “Yes”, Partially” and “No” options was used for the second part of the tool in order to get information about usage of interactive whiteboards.

In the third part which includes a question with five options, participants were asked to evaluate functions of the white boards in teaching from 1 to 5 according to their own perspectives of importance. It was aimed to learn preferences of candidate teachers to use interactive whiteboards’ functions by giving grades to given five functions.

In the last part of the data collection tool, it was tried to learn whether candidate teachers were aware of FATIH project or not. For this purpose, they were given “Yes”, “Partially” and “No” options. In addition, views of candidate teachers about the project were collected with the help of an open ended question of “What are your opinions about the project?”.

Data Analysis

The choice of “No” in the semantic type of grading was calculated as 1, “Partially” as 2 and “Yes” as 3. The lowest point to be taken from the second part of questionnaire was 15 and the highest point was 45. High points meant that the students’ level of awareness regarding the use of interactive whiteboards is high.

In order to learn whether there is a relation between the knowledge level of the students and the gender as well as the the taken computer courses was evaluated by using t-test. The variant analysis was used to decide whether there is a significant difference
according to the ages of participants. Besides, a frequency analysis was used to make an evaluation on points of choices.

Findings

Demographical information about participants like gender, age and whether or not they took computer class or not is given in Table 1 below.

**Table 1. Demographical Details**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Taken Computer Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Male</td>
<td>Between 20-22</td>
</tr>
<tr>
<td>65%</td>
<td>35%</td>
<td>82,4%</td>
</tr>
</tbody>
</table>

According to Table 1 65% percent of participants are female and 35% percent of participants are male. When we examine the age range it is seen that participants aged between 20-22 consists of 82,4% percent of the sample whereas participants aged between 23-24 consists of 10,3 percent. 7,35% percent of the participants is between 25-26 years old. 88% percent of the participants gave reply of yes to the question of whether they have taken computer class or not whereas 12% percent stated they have not taken computer classes.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>44</td>
<td>30,88</td>
<td>4,8427</td>
<td>,623</td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>31,94</td>
<td>5,2743</td>
<td></td>
</tr>
</tbody>
</table>

According to Table 2, the mean of the knowledge level of female students regarding the use of interactive whiteboard is 30,88 and the mean of knowledge level of the male students regarding the use of interactive whiteboard is 33,91. Regarding the p value (p<.05),
the knowledge level of female students regarding the use of IW is not statistically significantly different than the knowledge level of the male students regarding the use of IW.

In addition to this, the mean of points taken by the students is 31.41 which can be regarded higher than average.

**Table 3. Knowledge Level of Using Interactive Whiteboard According to Taken Computer Lessons**

<table>
<thead>
<tr>
<th>Taken Computer Course</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60</td>
<td>32.00</td>
<td>5.1222</td>
<td>.650</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>30.83</td>
<td>6.4627</td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 3, the mean of the students who took computer lessons regarding the knowledge level of using interactive whiteboard is 32 and the mean of the students who did not take computer lessons regarding the level of knowledge of using interactive whiteboard is 30.83. Regarding the p value (p<.05), the knowledge level of the students who took computer lessons regarding the use of IW is not statistically significantly different than the students who did not take computer lessons.

**Table 4. Knowledge Level of Using Interactive Whiteboard According to Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 20-22</td>
<td>56</td>
<td>31.98</td>
<td>5.2483</td>
<td></td>
</tr>
<tr>
<td>Between 23-24</td>
<td>7</td>
<td>32.28</td>
<td>5.4989</td>
<td>.915</td>
</tr>
<tr>
<td>Between 25-26</td>
<td>5</td>
<td>31.20</td>
<td>4.7644</td>
<td></td>
</tr>
</tbody>
</table>

The average age of teacher candidates in the group is 21.64. According to the Table 4, the mean of knowledge level of the teacher candidates who are aged between 20 to 22 regarding the use of interactive whiteboard is 31.98 whereas the mean of the knowledge level of teacher candidates who are aged between 23 to 24 regarding the use interactive whiteboard is 32.28 and mean for teacher candidates who are aged between 25 to 26 is 31.20. Regarding the p value (p<.05), it can be said that there is not any significant difference statistically between the knowledge level of the teacher candidates and their ages.

*Selda KAYAK, Elif KIR*
### Table 5. Knowledge and Use of Interactive Whiteboards

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Partially</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>1</td>
<td>Have you heard about Interactive Whiteboard?</td>
<td>57</td>
<td>83,8%</td>
</tr>
<tr>
<td>2</td>
<td>Have you watched any video related to the use of Interactive Whiteboard?</td>
<td>29</td>
<td>42,6%</td>
</tr>
<tr>
<td>3</td>
<td>Have you watched any lesson that Interactive Whiteboard is used?</td>
<td>22</td>
<td>32,4%</td>
</tr>
<tr>
<td>4</td>
<td>Have you attended any conference on Interactive Whiteboard?</td>
<td>19</td>
<td>27,9%</td>
</tr>
<tr>
<td>5</td>
<td>Have you had courses which Interactive Whiteboards is used?</td>
<td>10</td>
<td>14,7%</td>
</tr>
<tr>
<td>6</td>
<td>Have you used Interactive Whiteboard under the guidance of teacher in order to do presentations etc?</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>7</td>
<td>Have you used Interactive Whiteboard at the internship schools?</td>
<td>1</td>
<td>1,5%</td>
</tr>
<tr>
<td>8</td>
<td>Do you think that you need to get an education on Interactive Whiteboard?</td>
<td>14</td>
<td>20,6%</td>
</tr>
<tr>
<td>9</td>
<td>Do you think that you will be able to reach the necessary materials for the Interactive Whiteboard Usage?</td>
<td>45</td>
<td>66,2%</td>
</tr>
<tr>
<td>10</td>
<td>Do you know how to use Interactive Whiteboard technically?</td>
<td>7</td>
<td>10,3%</td>
</tr>
<tr>
<td>11</td>
<td>Do you think that Interactive Whiteboard usage will contribute to foreign language teaching and learning?</td>
<td>25</td>
<td>36,8%</td>
</tr>
<tr>
<td>12</td>
<td>Would you prefer using Interactive Whiteboard in your profession?</td>
<td>56</td>
<td>82,4%</td>
</tr>
<tr>
<td>13</td>
<td>Do you find yourself qualified enough to develop materials to be used in Interactive Whiteboard application?</td>
<td>38</td>
<td>55,9%</td>
</tr>
<tr>
<td>14</td>
<td>Do you think that you would use Interactive Whiteboard effectively in your profession?</td>
<td>58</td>
<td>85,3%</td>
</tr>
<tr>
<td>15</td>
<td>Do you find it proper spread of Interactive Whiteboard in all schools?</td>
<td>59</td>
<td>86,8%</td>
</tr>
</tbody>
</table>
The frequency analysis of the answers of the teacher candidates regarding the items related with the use of interactive whiteboard in education is shown in Table 5.

According to the table, 83.8% of the students stated that they are not aware of using the interactive whiteboard. Similarly, many of the participants expressed that they haven’t watched any video etc. regarding the use of interactive whiteboard (45.6%), any live lesson where the interactive whiteboard is used (60.3%) and have not attended any seminar regarding the use of interactive whiteboard (72%).

Moreover, it was found out that most of the participants tell have not taken any lesson in which the interactive whiteboard is used (83.8%). Almost all the participants (95.6%) have neither used the Interactive Whiteboard with the guidance of a teacher in order to make presentations etc. nor at the schools they go to for school experience (95.6%). However, 82.4% put forward that they will prefer the use of Interactive Whiteboard in their profession. Again a big percentage (85.3%) thinks that they can use IW effectively in their profession.

Only a small percentage of the students (10.3%) gave the answer of “Yes” for the question of “Do you know how to use the Interactive Whiteboard technically?” and 55.9% chose “Partially” for the same question. However, the mean of the teacher candidates who think that they need to receive training on the use of Interactive Whiteboards is 20.6%. The mean of the students who think that they can easily have access to the materials required for IW use is 66.2%. Similarly, 55.9% of the teacher candidates find themselves proficient in the development of the materials that can be used in IW application. 36.8% of the students think that the use of IW will contribute to the teaching-learning process of foreign languages. The mean of the students who find the extension of the use of interactive whiteboard in all schools proper is 86.8%.

Table 6. The Order of Priority Regarding the Functions of Interactive Whiteboard in Teaching

<table>
<thead>
<tr>
<th>Functions of Interactive Whiteboard in Teaching</th>
<th>Rank Importance</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1 Teaching with video related to the subject</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>2 Making a search related to the subject on the internet</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

Selda KAYAK, Elif KIR
Table 6 above shows the analysis of the answers to the question of “If you use the Interactive Whiteboard in your lessons, which of the features of the Interactive Whiteboard do you need to use the most? Participants graded the functions by using a rank of 1 to 5.

According to the results, the mean of function 2 which is “making a search related to the subject on the internet” got the highest mean with 10,3% for the rank of 1 and 38,2% for the rank of 5. Function of “presenting ready exercises to the students related to the subject” comes secondly in importance ranking. “Showing the visuals (picture, map, etc.) related to the subject” follows first two functions with a mean of 3,03. As it is seen in the Table 6 “Teaching with Power Point slides related to the subject” function got the mean of 3,2 whereas the function of interactive white board relating to the teaching with video got the mean of 3,1.

Table 7. Awareness Level of Participants for FATİH Project

<table>
<thead>
<tr>
<th>Do you know the Project called FATIH?</th>
<th>Yes</th>
<th>Partially</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>11</td>
<td>9</td>
<td>48</td>
</tr>
<tr>
<td>Percentage</td>
<td>16,2%</td>
<td>13,2%</td>
<td>70,6%</td>
</tr>
</tbody>
</table>

As it is seen in table 7, it was revealed that most of the candidate teachers (%70,6) do not know FATIH project. Besides, their answers to open ended question which aims to learn their views about the project were collected below.

Table 8. Ideas of Teacher Candidates about FATIH Project

<table>
<thead>
<tr>
<th>Total number of ideas</th>
<th>The number of affirmative ideas about FATIH Project</th>
<th>The number of unaffirmative ideas about FATIH Project</th>
<th>The number of suggestions</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>46,6%</td>
<td>26,6%</td>
<td>13,3%</td>
<td>13,3%</td>
</tr>
</tbody>
</table>
15 candidate teachers from study group gave answers to this question. With the help of an open ended question of “What are your ideas on FATİH project?” teacher candidates were able to express their opinions about the project in a more detailed way (see Appendix). Responses of the participants were analyzed after collecting all statements and then they were grouped according to their content. Four groups emerged after the analysis as it is seen in the Table 7. Statements indicate that most of the students have positive ideas on FATİH project (46.6%).

Conclusion and Discussion

This study was carried out with 68 candidate language teachers studying at the department of English Language Teaching of the Faculty of Education at Yıldız Technical University. The data was collected with a developed questionnaire. Opinions and knowledge of candidate teachers about interactive whiteboard usage were tried to determine with the help of data collection tool. In addition, their awareness for the FATİH project and what they think of it were taken.

Mean of the points gotten by the students is a bit higher than average. This case is different when other studies were examined. For example, as a part of the study carried by Fatih Project team views of the teachers on process of Fatih Project were collected at a pilot school. 23% percent of the teachers stated that they have enough information on the usage of interactive whiteboards in the classroom whereas 77% percent of the teachers stated that they do not have enough information in order to use this tool (MEB, 2015). Besides, the teachers who participated in the study do not believe in the necessity of interactive whiteboard usage in classroom activities. Similar to this research which is on the views of social science teachers about interactive whiteboard (Diyarbakır sample) it was found by Bulut and Koçoğlu (2012) that 60% of the teachers do not know how to use interactive whiteboards.

The examination of the collected data shows that there is not any significant relation between the participants’ knowledge level regarding the use of IW and cender. This result is not compatible with Yalçinkaya and Özkan’s research (2012). In Yalçinkaya and Özkan’s study named “Primary School Teachers’ Self Efficacy in the Use of Interactive Whiteboards”
(2012) there was a significant advantage for male teachers according to comparative analysis of self-efficacy level in the use of interactive whiteboards and gender.

There is also no significant relation between the students’ computer background and the knowledge level of the use of IW.

It was found out from the answers given to the items related with the use of IW in education that 83% of the teacher candidates are aware of the IW application; however, 49% have not attended any seminar regarding IW, 45% of the participants have not watched a video regarding the use of IW and 60.3% of them have not watched any lesson where IW is used. Moreover, all teacher candidates stated that they do not use IW at the lessons they have been taking at the faculty under the guidance of the teachers and 95.6% expressed that they do not use IW at the internship schools. If the fact of 72.1% of the participants have not attended any seminar regarding the IW is taken into consideration, it is seen that the teacher candidates should be trained on this subject. Giving some lessons at the faculty with the IW and sharing the lesson environments where IW is used with the students will ensure the teacher candidates to graduate by being aware about the use of this tool.

The result which emphasizes candidate teachers did not get any training about the topic is compatible with the results of Bulut and Koçoğlu’s study (2012). It was revealed in the study of Bulut and Koçoğlu (2012) that 60% of the teachers did not join in any training, conference and similar activities related to interactive whiteboards.

Half of the teacher candidates know interactive whiteboard usage technically. Similarly, in the study which was carried out by Başıbüyük and the others (2014) and named “Views of Teachers and Students on Interactive Whiteboard Usage in Maths Classes” it was realized that the teachers do not experience difficulty in usage of interactive whiteboards according to the category of technical knowledge and teaching skills.

Another important point is that even though most of the teacher candidates find themselves proficient in material development of interactive whiteboard this is the opposite in the study conducted by Banoğlu and others (2014). In the study which focused on
teachers’ views on Fatih Project by Banoğlu and others (2014) what teachers expressed was “I have basic skills but I am not able to develop materials”.

Although the teacher candidates do not get sufficient information on the use of IW, they develop positive attitudes regarding the use of IW in their own professional lives. While 82.4% told that they will prefer IW use in their own teaching activities, 85.3% thought that they will use the IW effectively in their profession. Moreover, 86.8% found the extension of IW to all schools useful.

Similar results were found in Oigara and Wallace’s study (2012). According to results of the research in which Oigara and Wallace (2012) investigated teacher candidates’ competency and comfort with SMART board technology, developing the personal technology skills of the teacher candidates is a necessary component to facilitate integration of interactive technology. The research revealed that most teacher candidates had limited exposure to SMART board technology integration in teaching and learning process. Teacher candidates also stated that the lack of interactive whiteboard emphasis and insufficient exposure were barriers in their own implementation. In regard to teacher candidates’ perceptions about SMART board use, the findings revealed a positive attitude towards integration.

The analysis of the answers given to the relevant item regarding FATİH project reveals that 70.6% is not aware of this project. The ideas of the teacher candidates who are aware of the project were learned with the help of an open-end question. Most of the statements were positive statements. The teacher candidates believe that this project will be useful, provide visualization and contribute to the language teaching process.

Positive views of teacher candidates on Fatih project are consistent with the views of teacher candidates in the study of Banoğlu and others (2014). In this study, it was seen that teachers see Fatih Project not only as a project which helps them to develop their teaching skills from cognitive perspective but also as a project which encourages them to do research, motivates them for teaching and helps them to develop positive attitudes towards technology.
The teacher candidates were also asked to put some of IW functions in the order of priority. “Showing visuals regarding the subject” among the provided five functions was ranked the first and it was followed by the functions of “teaching the lesson by showing videos regarding the subject”, “teaching the lesson with Power Point presentations on the subject”, “having the students to solve ready exercises regarding the subject” and “to make researches on the subject on the internet”.

This study was restricted with the students of the last grade studying at the department of English teaching at Yıldız Technical University. The students of other universities in Turkey can be integrated for the further studies. More studies might be carried out in order to learn about the knowledge, ideas and applications of the foreign language teachers at other provinces and other types of the schools.

Besides, the suggestions given below may be presented according to gotten results of the study;

1) According to the result which is related to knowledge level of candidate teachers about interactive white board usage; The IW and its use should be integrated into the lesson contents in lessons regarding the computers or information technologies at higher education institutes which train the teachers. Homework and projects should be prepared to help the teacher candidates to use IW effectively.

2) According to the result which shows that most of the candidate teachers did not take any course in which interactive whiteboard was used; use of the IW by the lecturers at the higher education institutes training teachers will set an example for the teacher candidates and ensure that the teacher candidates will develop information and attitudes regarding this subject.

3) According to the result which states that candidate teachers do not need a training on interactive whiteboard usage; On-the-job trainings and seminars for
the use of the IW in foreign language teaching should be prepared for the teachers teaching foreign languages.

4) According to the result which implies that candidate teachers think of interactive whiteboards contribute to teaching of foreign languages; The use of the IW by the teachers and teacher candidates at the schools should be encouraged.

5) The contents should be prepared based on the subjects which the teacher candidates need the most or think to be the most important in the curricula to be prepared.

6) According to the result which presents that candidate language teachers have lack of information on FATIH Project; Promotion brochures and seminars including the scope and aims of FATIH project should be prepared for the teacher candidates.

Appendix

15 students in study group wrote answers to the question of “What are your ideas on FATIH Project?”. In table 8 below all statements which were grouped as positive comments, negative comments and other comments were clearly given.

- I find it useful to use technology at school.
- I object to foreign English teachers to be brought under the project.
- The PR works carried out by the project regarding the use of tablets should also be carried out in other stages of Fatih project. It is a common fact that Fatih project only includes tablets to be provided to 15 million students. These misunderstandings should be corrected. Moreover, materials should be developed for the tablet aspect of the project. IW and tablet should be integrated and the course books should be digitalized.
- I do not think it will be implemented as required. However, I think that if it is effectively realized, it will contribute to the education system.
- The sudden use of this method which is partially used in countries such as Japan, England etc. may cause confusion. However, I think it is useful.
I think that it should be used effectively in all fields. I am sure that the lessons will be both enjoyable and educative for the students at primary and secondary schools.

I am certain that it will be a necessary and useful application.

It is the interactive whiteboard developed in order to use visuality more clearly in lessons.

The implementation of the project should be taken to the national education level from the pilot region level.

I believe that it will be useful. However, I found the explanations about the IW insufficient.

I only know that it is a project regarding the use of interactive whiteboards in all schools in Fatih.

I think that it will be a good project. It provides the teachers and students with facilities regarding the language teaching process.

I do not think that the project can be effectively implemented in Turkey.

It is a very effective method in English teaching. The students will pay attention and interest to the lessons. However, taking into consideration the principle of equality in education, there will be problems regarding its access to all schools in the entire world and not everybody can use this method.

Although the project is good, I do not think the student infrastructure and the group are not entirely ready for this application. I think there will be problems in terms of techniques and costs.

References


Mathews-Aydinli, J. & Elaziz, F. (2010). Turkish Students’ and Teachers’ Attitudes Toward the Use of Interactive Whiteboards in EFL Classrooms. Computer Assisted Language Learning, 23 (3).


**Extended Summary**
Assessing Candidate Language Teachers’ Level of Knowledge and Ideas towards the Use of Interactive

Selda KAYAK, Elif KIR

It is mainly assumed that using white boards has positive effects both on learning and quality of teaching. As a result, it is required from foreign language teachers to have basic knowledge and information of this tool in order to use it in an efficient way.

The examination of “Basic Primary School” and “Secondary School” curriculum of the Ministry of National Education in Turkey reveals that a great investment is made not only on the use of technology in teaching and but also the extension of the use of interactive whiteboards.

The main purpose of this study is to determine the knowledge levels and ideas of foreign language teacher candidates on the use of interactive whiteboard and FATIH project. It was also aimed to analyze the gotten information with some variables.

The following research questions guided the study;

- How aware are candidate foreign language teachers about the interactive whiteboards and their use in teaching?
- How aware are they about FATIH project which supports the use interactive whiteboard?
- What do they think about the usage of interactive whiteboards and project?
- Which functions of interactive whiteboards find them important?

In the study, a questionnaire was developed in order to determine candidate language teachers’ knowledge and ideas regarding the use of interactive whiteboard and FATIH project. With the help of collected data demographical features of teacher candidates
who received education at the department of foreign languages teaching were revealed. In addition, at what level candidates use interactive white board, priority order of white board functions from their perspectives and how much they know about this tool and FATIH project were statistically analyzed by using SPSS package program.

As the purpose of this research was to find out the knowledge and ideas of the chosen group on the use of interactive whiteboard and FATIH project, it was thought that the single screening model would suit the best for the study. Thus, the research was planned and carried out in accordance with the single screening model which tries to describe the variables regarding the unit and situation separately such as the relevant event and group (Karasar, 2004).

This study was carried out with 68 candidate language teachers studying at the department of English Language Teaching of the Faculty of Education at Yıldız Technical University. The data was collected with a developed questionnaire including likert and open-end questions in order to determine the knowledge level, ideas of the teacher candidates regarding the use of “Interactive Whiteboard” and FATIH project as well as the ranking of interactive white board functions.

The examination of the collected data shows that there is not any significant relation between the participants’ knowledge level regarding the use of IW and. There is also no significant relation between the students’ computer background and the knowledge level of the use of IW.

The analysis of the answers given to the relevant item regarding FATIH project reveals that 70,6% is not aware of this project. The ideas of the teacher candidates who are aware of the project were learned with the help of an open-end question. Most of the statements were positive statements. The teacher candidates believe that this project will be useful, provide visualization and contribute to the language teaching process.

The teacher candidates were also asked to put some of IW functions in the order of priority. “Showing visuals regarding the subject” among the provided five functions was
ranked the first and it was followed by the functions of “teaching the lesson by showing videos regarding the subject”, “teaching the lesson with Power Point presentations on the subject”, “having the students to solve ready exercises regarding the subject” and “to make researches on the subject on the internet”.

Citation Information