



Stakeholders' views about the FATİH Project: Smart EFL classrooms

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Abstract

Turkey has launched a large national initiative to integrate information and communication technologies in education. FATİH project, valued at 8 billion\$ and with tablet computers for every student from grade 5 to 12, interactive white boards and internet connection in every class, is often defined as ambitious, massive, grandiose and high-tech. The current study aims to investigate the effectiveness and efficiency of FATİH Project based on the views of stakeholders with particular reference to language teaching and learning process. The study has been carried out at a high school in Ankara, which has been a part of the project from the piloting phase. Forty three participants including seven English teachers, 20 students and 10 parents, two school administrators, three project officials and the General Director of Innovation and Education Technologies have been administered semi structured interviews. The study has revealed a distinction between the views of policy makers (officials in Ministry of National Education and Directory of Innovation and Education Technologies) and those of users (teachers and students). It appears that more briefings are needed to inform the teachers and students about the goals and planning of the project to ensure devotion and belief into the effectiveness of the project. The results also indicate that interactive whiteboards helped both language teachers to teach English effectively and students to improve language skills especially in listening, reading and writing by providing motivation via use of technology whereas tablet PCs are not thought to be cost effective by teachers, parents and students because of some technical and practical reasons.

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Keywords: Tablet use; language learning; FATİH Project; interactive whiteboard; educational technologies

1. Introduction

Fatih Project: In line with the integration of ICT technologies in education, Turkey devised a project called FATİH, the acronym of 'Movement of Enhancing Opportunities and Improving Technology' in Turkish. This project, run by Ministry of National Education of Turkey (MoNE), has five components: a) providing equipment and software substructure, b) providing educational e-content and management of them, c) effective usage of the ICT in teaching programs, d) in-service training of the teachers e) conscious, reliable, manageable and measurable ICT usage. Although it was planned to be completed in 2015, the project is still on the move (MoNE, 2017).

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Turkey's FATİH Project aims to cultivate human capital by providing equal opportunities in education, improving the technology in schools, eliminating the digital gap and enhancing quality in education. To this end, a large-scale investment has been made to provide infrastructure and high speed internet access for each school, interactive boards for each classroom, tablets for individual use for teachers and students and a portal for educational content. Though none of these are unfamiliar in education across the world, it is the massive numbers (about 11 billion tablets and 450,000 interactive boards and internet connection) that draw attention to the implementation and success of the project. In accordance with the specified purposes, about 42.000 schools and 570.000 classes will be equipped with the latest information technologies such as IWBs with LCD panel, internet network infrastructure, multifunction printers and document camera (MoNE, 2012a). Moreover, from the beginning it was planned that 700 thousand teachers and 17 million students will be distributed tablet PCs (MoNE, 2012b). So, all classrooms across Turkey will be transformed into computerized classes, and all students from grade 5 to 12, for now it is from grade 9 to 12 though, and their teachers will have the opportunity to benefit from tablet PCs in and out of the class (Pamuk, Çakır, Ergun, Yılmaz & Ayas, 2013).

Turkey is, of course, not the only country taking such an initiative. Governments of some countries in different parts of the world provided students with tablets for educational purposes. Antigua and Barbuda Government started a project named GATE (Government Assisted Technology Endeavour) in 2012. The government announced to allocate more than 3000 tablets to school students (Tamim, Borokhovski, Pickup & Bernard, 2015). Brazil purchased 460.000 tablets to distribute schools within its tablet initiative (ibid.). In United Arab Emirates, a national education project named "The Mohammed Bin Rashid Learning Initiative" was launched in 2012. This project targeted to deploy 200.000 tablet devices to students at all levels of education (ibid.). South Korea proposed to provide 7.5 million elementary and high school students with tablets and to produce e-books within the project 'smart education' (Kim & Jung, 2010). Thailand government also aimed to distribute tablets with internet access to 1 million children within the project named 'One Tablet per Child' in March 2012 (Lesardoises, 2012). Despite not being nation-wide projects, some tablet initiatives has been launched across the United States in such School Districts as Los Angeles Unified, San Antonio Independent, Dodge City Public (in Kansas), Eloy Elementary (in Arizona), Coachella Valley Unified (in California). Some other countries such as Australia, India, Iran, Jamaica, Kazakhstan, Pakistan, Russia, the United Kingdom, and Uruguay attempted similar projects either in national level or on a small-scale aiming to equip the students with tablet PCs (Tamim et al., 2015). However, none of them targeted such massive numbers of IWBs and/or tablet PCs that Turkey aimed to deploy to the schools, teachers and students.

FATİH project was launched in 2012. The piloting of the project has started with the distribution of tablet PCs to 2,259 teachers and 9,435 students at 52 schools (48 high schools and four elementary schools) in 17 provinces in 2011-2012 academic year. The classrooms of 5th and 9th graders of these abovementioned schools were also equipped with IWBs (MoNE, 2012a). Currently, about 432 thousand (432,282) IWBs and 1 million 437 thousand tablet PCs have been delivered to the schools and to the elementary and high school students across the country, according to the data obtained from the General Directorate of Innovation and Education Technologies.

Studies and evaluation reports about the project might inform later and further stages of roll-outs and provide insight for other countries seeking answers to the question whether it can overcome the digital divide or it is just allocating the resources to attractive but not cost-effective technology. This study is an attempt to answer such questions by gathering the views of the planners and the implementers of the project with a particular reference to the EFL classroom.

ICT and Language Learning: The use of information and communication technologies (ICT) in education has become prevalent in the last decades. The opportunities that ICT has provided have been welcomed by educational authorities, and ICT (facilities) has been exploited to enhance educational processes all over the world (Bax, 2000, p. 199; Betcher & Lee, p. 1, 2009; MoNE, 2010; Thomas & Schmid, 2010, p. 2; Yang & Teng, 2014). Moreover, ICT has led to a prominent transformation in educational operations. For instance, the use of internet in education has made it possible to create online virtual atmospheres where people can find the opportunity to teach or learn (Peterson, 2011). This has helped also L2 learners since they have been able to experience real life occurrences via these virtual atmospheres (e.g. Second Life). Besides, with the help of multimedia resources L2 learners have had a chance to improve their intellectual and communication skills (Çelik, Arkin & Sabriiler, 2012; Millum & Warren, 2014).

In parallel with the abovementioned developments, there has been a great interest in using interactive whiteboards (IWBs) in classrooms which enable both teachers and students to make use of multimedia teaching by combining chalkboard, whiteboard, TV, video, projector, and computer (Yanez & Coyle, 2011, p. 446). Thanks to the facilities supplied, these boards have been increasingly used in L2 classrooms lately. Coyle, Yañez & Verdú (2010) indicated that IWB enables L2 teachers with many opportunities to teach with in novel, exciting and promising ways, which goes far beyond the facilities of traditional boards.

Although they are not widespread when compared to IWBs, tablet personal computers (tablet PC henceforth), on the other hand, have been in use very recently in education (Golonka, Bowles, Frank, Richardson & Freynik, 2014). Some countries across the globe launched projects which targeted to deploy tablet PCs to the teachers and students in order to make use of the facilities that ICT tools provide for education (Fri-tic, 2012; Gateway, 2004; Ingram, Willcutt & Jordan, 2008; Kim & Jung, 2010; Lewin & Luckin, 2010; Massé, 2012; Tamim et al. 2015; U.S. Department of Education, Office of Educational Technology, 2010; Windschitl & Sahl, 2002). Although there have been concerns about whether tablet PCs have been useful and efficient enough, the countries continue distributing tablet PCs to students for educational purposes (Bonifaz & Zucker, 2004).

1.1. Literature review

1.1.1. Use of Interactive Whiteboards (IWB) and tablet computers (PC) in L2 classroom

After its first production in 1991 (Shenton & Pagett, 2008), interactive whiteboards have been used in education since late 1990s (Beeland, 2002). These boards have been called in such names as smart boards (SBs), electronic whiteboard (EWBs), and interactive whiteboards (IWBs). “An IWB is a large, touch-sensitive board that is typically mounted on a wall and connected simultaneously to both a computer and a digital projector.” (Coyle, Yañez & Verdú, 2010).

An IWB can provide L2 teachers with many opportunities in L2 classroom that go beyond the facilities of the traditional board. There are mainly two types of activities involving IWB in the foreign language classes: Activities which support teaching and activities supporting the learning process. While the first one includes presentation of topics, teacher interaction with students and support for teacher organization; the other consists of oral skill support, cognitive process support, and motivation and emulation support (Gerard, Greene & 1999).

A tablet PC is a portable personal computer with a touchscreen. It combines many features that belong to more than one mobile device: It can do calculations, process word, and run many different applications such as Excel, PowerPoint and Adobe Reader (Golonka et al., 2014). So, using such devices with many features which can also ensure multimodality in teaching and learning an L2 might be beneficial since it is essential to address as many senses of learners as possible to ensure efficiency

and permanence in L2 learning (Eksi & Yakisik, 2015). Moreover, making use of authentic materials in language teaching also eases the process and provide with aiming the target more rapidly (Al-Azri & Al-Rashdi, 2014). Thus, multimedia resources and authentic materials can be easily benefitted through a tablet PC in L2 learning.

There are research studies that investigated the use of IWB in L2 classroom (Johnson, Ramanair & Brine, 2010; Coyle, Yañez & Verdú, 2010; Hur & Suh, 2012; Yañez & Verdú & Coyle, 2010; Oz, 2014; Adiguzel, Gurbulak & Saricayir, 2011). Johnson et al. (2010) interviewed with four IWB-trained language teachers and their students, and did direct classroom observation in order to reveal both teachers and students perspectives of what worked and what needed to be improved about the use of IWB in a language classroom. It was found that both teachers and students make personal transformations within the IWB context, and suggestions on how to use the properties of IWB depend on the experience, knowledge and culture of the teachers and students. The findings of this study implied collaborative work among teachers and more opportunities for teachers on how to use technology. In their research study, Hur and Suh (2012) collected multiple data that range from vocabulary tests of children to classroom observation from an intensive summer English class specific to Korean newcomers' children in the USA. They concluded that using IWB for visual presentations, interactive games and test reviews was useful for new vocabulary learning. Gerard and Widener (1999) stated that IWB promoted language teaching process in three ways: it promoted the interaction and communication in classroom, helped to provide new cultural and linguistic elements, and improved teacher's skills of organization. According to Pennington (1996), using only personal computers in education leads people to become antisocial. Since interaction in class is essential in language learning, in contrast to personal computers, an IWB, as a single resource combining many other resources, can help present a topic to everyone at the same time, and makes it possible to discuss on it.

There are also studies on tablet PC use for educational purposes, very little on L2 classroom though. In a study of elementary EFL students in Taiwan, Lan, Sung and Chang (2007) carried out a study in small reading groups with or without tablets in terms of collaborative, peer-assisted learning practices. The research revealed that the group having tablets attended more to the reading tasks, and worked more collaboratively. The students with tablets gave support and feedback, and avoided conflict. Liu (2009) conducted a case study with 64 Chinese EFL learners about using personal digital assistants (PDAs, similar to tablet PC) for creating learning environment for listening and speaking. Students were divided into two groups, one of which used PDAs and the other used equivalent printed materials and CD players. Analyses showed that the group studying with PDAs improved their listening and speaking significantly.

1.1.2. Research on the FATIH Project

FATIH Project has drawn much attention. While some studies have focused on the faulty and problematic areas of project as a whole making suggestions for the future enterprises (Akıncı, Kurtoğlu & Seferoğlu, 2012; Bilgen, 2012; Ekici & Yılmaz, 2013; İşçi & Demir, 2015; Pamuk et al., 2013; Pouezevera, et al., 2013; Uluyol, 2013), others have focused on the efficiency of the project with reference to specific school subjects.

In their study on science teachers' opinions regarding tablet PC use in science and technology courses, Daşdemir, Cengiz, Uzoğlu, & Bozdoğan (2012) determined advantages and disadvantages of this component of the project. On one hand, they found that science and technology course becomes fun with visuals and animations, and students' interest towards the course increases with such facilities through tablet PCs. On the other hand, the participants stated that students may break down the devices in a short time and the radiation that these devices spread may do harm to the students' health.

Çiftçi, Taşkaya and Alemdar (2013) investigated the views of classroom teachers of the project. They determined the technical problems and teachers' lack of competence in technology use as the disadvantageous; and that the project will enrich educational atmosphere and that the students will not carry heavy bags as advantageous side of the project. Öztan (2012) carried out an empirical study in his master's thesis on the effect of IWB use on the academic achievement of seventh grade students. While the control group was taught without the facilities of FATİH project, the experimental group benefitted from IWBs. The experimental group did better than the control group in courses. Students stated that science and technology class was more enjoyable with IWB, and they learnt better. Sakız, Özden, Aksu and Şimşek (2014) carried out a similar empirical study to find out the effects of IWB on academic achievement students at science and technology classes. They revealed that the students taught with IWB did better than the other students in this class. They also discovered the importance of the teacher factor in technology use. Ateş (2010) investigated the use of IWB in geography classes in secondary. He found that IWB use increased concentration, active participation and made the course enjoyable and interesting. Moreover, it boosted students' motivation towards geography classes. Demir and Yorulmaz (2014) examined IWB use in history classes. They found that IWBs have not been used effectively in history classes. They also revealed that teachers need training on technology use in general and IWB use in particular. Yorgancı and Terzioğlu (2013) researched the effect of IWB use on the achievement of and the attitude towards math course. They observed that IWB use both increased math achievement and affected students' attitude towards math positively.

Öz (2014) investigated the IWB component of the project aiming to obtain teachers' and students' views of the IWBs in EFL classroom. His findings showed that overall both teachers and students have positive perceptions of the benefits of IWB technologies in EFL classrooms. The study revealed that students' perceptions differed based on their English proficiency and hours of IWB use in a week, and the more both students and teachers engage in IWB the more they think positively about them. While more experienced teachers had favourable perceptions on IWBs, less experienced teachers had little positive perceptions. Savaş (2014), on the other hand, researched tablet PC use within the project as an instructional tool in EFL education. This researched discovered that pre-service EFL teachers regard tablet PCs as effective instructional tools. As has been seen, the studies that focused on FATİH project and/or its components with regard to EFL classroom in Turkey are rare. Besides, the existing studies handled one component of the project –either tablet or IWB use. Moreover, both the studies on the overall project and the ones that handled the project with regard to teaching specific school subjects did not take all stakeholders' view into account. Thus, this study is intended to fill these gaps in the relevant literature.

1.2. Research Questions

In line with the purpose of integrating and benefitting from ICT in education, Turkey started the FATİH Project which comprises the deployment of massive numbers of IWBs to classroom of elementary and high schools and tablet PCs to the teachers and students in these schools across the country. Studies in the relevant literature researched IWBs and tablet PCs in the scope of FATİH project in terms of their use in education in general (Ekici & Yılmaz, 2013; İşçi & Demir, 2015; Pamuk, et al., 2013; Pouzevera, Dinçer, Kipp & Sarışık, 2013) and in teaching specific school subjects in particular (Ateş, 2010; Demir & Yorulmaz, 2014; Sakız, Özden, Aksu & Şimşek, 2014; Yorgancı & Terzioğlu, 2013). However, just a few studies focused on this project with regard to L2 education in the Turkish context (Öz, 2014; Savaş, 2014). This study aims to reveal the influences of FATİH Project on education in general and on L2 teaching and learning in particular. It also examines the way how the project has been going on in terms of the use of IWBs and tablet PCs, and the aspects in which the project has been successful or problematic by taking the perspectives of all the

stakeholders –both the policymakers as planners and the other stakeholders as users in the field- of the project with a particular focus on its use in language learning. Therefore, the research questions that guided this study are:

1. What are the perspectives of its stakeholders on FATIH Project in general with respect to the contributions, flaws and suggestions for improvement?
 - a) What are the policy makers' views? b) What are the views of the users in the field?
2. What are the perspectives of its stakeholders on FATIH Project in relation to the EFL classroom the contributions and flaws of and the suggestions for the project?
 - a) What are the policy makers' views? b) What are the views of the users in the field?

2. Method

The aim of the study is to evaluate the effectiveness and efficiency of FATIH Project in general and with regard to language teaching and learning in particular according to the results of the data gathered from both relevant institutions and a high school which has been a part of the project since the initial stages. Based on the perspectives of all the stakeholders participated, this study investigated the use of interactive white boards which were given to schools, and tablets which were distributed to students as part of the project. It was intended to uncover the contribution of these components to the EFL classroom, and the flaws and issues of FATIH project in relation to L2 learning and teaching.

2.1. Participants

Participants of the study were the Director of YEGITEK (Innovation and Educational Technologies), three members of FATIH Team at the Directorate of YEGITEK, which is the authority responsible for running FATIH Project, and two school administrators, seven English teachers, twenty students and ten parents at a high school in Ankara, the capital. The school is newly built and 20 kilometres away from the city centre of Ankara. It has a young teacher profile –particularly in language teaching branch- despite its close proximity to the centre[†]. The majority of the students' families are socioeconomically from the middle and middle-low class. The school accept only those students who are able to take the specified grade in the national examination.

2.2. Instrument

In order to collect data, semi-structured interviews were conducted with the participants. While the majority of them were one on one interview, some of them were conducted as focus group interviews.

2.3. Data Collection and Analysis

Each interview was recorded with the help of a voice recorder. Interviews targeting different specific groups –such as English teachers, administrators etc.- included different open-ended questions, there were overlapping questions in the interviews though. In order to conduct the study, the researchers visited the pilot school five times during one month.

The data collected were transcribed, and then analysed with content analysis “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278). The interview

[†] Teachers collect points as they get experienced (and get old). The more points a teacher get, the more his/her possibility to work in big cities or city centres increases.

transcripts were analysed to extract “meaning” through a search for themes in the data. The analysis held a directed and top-down approach in which the researchers identified key concepts as initial coding categories (Potter & Levine-Donnerstein, 1999), namely contributions and flaws of the project and suggestions for improvement. As for the trustworthiness of the coding, the coding of the transcripts was assigned to two coders to ensure inter-coder reliability.

3. Results

The findings are presented under two main headings based on the research questions; namely FATIH Project in general and in EFL context with respect to contributions, flaws and suggestions for improvement. Under each heading the views of the stakeholders are presented bilaterally; the policy makers (views of the Principal of YEGITEK, government officials working on FATIH Project) on one hand and the users in the field (views of school administrators, teachers, students and their parents) on the other.

3.1. *The Views of the Stakeholders about FATIH Project in General*

3.1.1. *Policy Makers’ View*

The Director of YEGITEK pointed out the contributions of FATIH Project in a very large scope. In addition to the announced aims and contributions of the project such as increasing opportunities in education and providing support for the disadvantaged students, the director mentioned that FATIH Project contributes to the human capital and exportation of the country. The Mobile Device Management (MDM) system developed to connect the tablets and to allow interaction in the classroom has been sold to Taiwan and South Korea. Vestel, the manufacturing company for the IWBs, has started to manufacture for eight European brands and employs 36 thousand people. He also stated that they regularly conduct surveys to collect feedback from students, teachers, and schools about the use of tablets and IWBs and materials.

The results of the interview with the project officials in YEGITEK indicated that they observed the piloting process closely. As far as understood by their explanations, they are aware of about all faulty aspects of the project since they stated that there has been a huge amount of information flow from all of the pilot schools. Starting from the minimal technical problems students, teachers and school administration had, they seemed to know every flaw of the project including the most important ones. They think that the lack of interaction between IWBs and tablets, the compatibility problem of the operating system and the program, insufficient e-content for the courses are among the most crucial drawbacks of the pilot.

FATIH Project officials seemed enthusiastic about conducting the project, and very hopeful about its future despite all problems and difficulties the stakeholders faced. Their ideas on improving the projects are:

- Providing the interaction between IWBs and tablets
- Making the operating system and the program compatible
- Enhancing e-content for each courses and permitting use of private content providers’ materials (like Vitamin, an e-content provider company for high school subjects)
- Getting over all the technical problems with IWBs and tablets
- Enabling permanent contact with schools in case of unexpected problems

Training teachers and preparing them for the process psychologically

The director of YEGITEK expressed sincere belief in the efficacy and future of the project. He told that the tablets will be used interactively in the classroom through MDM. Currently, one and a half million tablets can operate on the system and this number will increase to ten million. He said he believes that tablets will be used in the classroom effectively and for self-study at home. One official in YEGITEK acknowledged that there have been a number of problems in the implementation of the project due to large numbers involved stating that

“Maybe a few years of prior preparation even before the first tablets were distributed would be a lot better to eliminate problems. However, no government waits to harvest the products of such a huge project. The project has been promoted in elections and tablets have been distributed before there were sufficient learning materials. Yet, we have learnt a lot at every step getting feedback from schools”.

3.1.2. Users' View

Number The school principal pointed out that the students have been very satisfied with IWBs and have been enthusiastic about using tablets. They emphasized that with FATİH Project, the teachers could benefit from a wide variety of teaching materials, which boosts both teachers' and students' achievements. The principal also pointed to the benefits and practicality of the design of the IWBs as they are composed of three sliding pieces, one chalkboard, one white board and the touchscreen interactive board: *“The IWBs enrich the classrooms with visuals and media. The teacher can use any of the boards by just sliding.... They can use the IWB to support the lesson with visuals”.*

As for the specific views of the principal and vice principal on the two most important components of FATİH Project, they discriminate between IWBs and tablets in terms of their use and contribution to classes in general and EFL classes in particular. They find IWBs very effective in teaching and learning whereas they state that effective use of tablets seems improbable. While they think that the money spent on IWBs worth it because they have been efficiently used as expected; yet the money spent for the tablets has been wasted since they are almost never used because of some technical and practical reasons. The principal has stated that

“The IWBs are more durable than tablets. They are dynamic in the classroom, more efficient, up-to-date and user-friendly than projectors. The Tablet phase is not very realistic tough. They are for individual use. Just as difficult as studying with mobile phones in a class. They may fall and break down. Think that you are in a class of 34. All the students have the tablets and they may break down or run out of batteries.... There are 870 students in the school and 8 hours of lessons during the day. The batteries last for about two hours. How can they be charged?”.

Despite obvious contributions, the school administration listed some problems as follows: Lack of interaction between IWBs and tablet PCs, lack of e-content for tablets, battery and charging problems, cracks and misuses, short life-span and other technical failures. Both the principal and the vice principal have mentioned lack of their contact with the project officials lately. Although the administration and teachers were provided information about the project in the beginning of the pilot, and got help when they faced problems, they had almost no contact with the project officials in the last three months. Another major problem they highlighted was staff change in YEGITEK. The principals complained about frequent staff change at the centre of FATİH project, which aggravated their job about implementation.

English language teachers pointed to contributions of the project, yet, they say in practice it has a number of flaws. One major problem is the lack of technical support. Another is the frequent changes in implementation of the project. In one of the teacher's words,

“We have received a five-day training, which is OK if you have a background. But we have troubles due to frequent changes in the policy and implementation. When we had the IWBs first, they had PARDUS (developed by TUBITAK) and Windows as the operating system, but later only PARDUS is used. However, we had training about a different system that works on Windows. What operates on Windows does not work on PARDUS”.

The teachers stated that such changes and ambiguities cause lack of enthusiasm and commitment in teachers. Lack of technical help was the second most important problem in the process. There are no permanent staffs in charge of technical support for the project at school.

Being digital natives, the students have already been ready for such kind of a ‘technological’ project. They are very happy to reach multimodal content through especially IWBs (visuals, auidial materials, 3D movies etc.). The students find the facilities of the project useful, effective, time-saving and motivating. They benefit from these facilities not only in classes but also out-of-class such as during the break time or at home for fun. Similar to the other stakeholders of the project, students evaluate IWBs and tablets differently. While they state their satisfaction of IWB use in EFL classes, they didn’t mention much about tablets as they stopped using the tablets anymore after some technical and practical problems they faced.

Although the students seem very enthusiastic about IWBs and tablets, the problems they faced are similar to the one highlighted by the principals and the teachers. Additionally they complained about losing their homework materials because of lack of protection against viruses at IWBs. As for the tablets, students are not happy that most of their teachers don’t want tablets in classes. They are also not satisfied with excessive restrictions in tablet use. Some of the students, on the other hand, didn’t like the trouble shooting process since it takes too long to get their tablets back.

As far as it was understood from the focus group interviews with the parents, it seemed that parents do not know much about the project. However, some of them showed their awareness of the project by explaining their ideas on IWBs. They found IWBs very practical and time-saving. As for the tablets, although some parents displayed their content with them, the majority did not mention them positively. There are different ideas among parents: Some think that tablets are not useful. Some say their children do not use tablets at all. The majority complain about their children’s playing games with tablets all the time saying *‘I wish they hadn’t given the tablets’*.

The principals and English teachers, in general terms, were satisfied with the IWBs; however, they were pessimistic about the tablets. Three years of experience in piloting gave them the idea that teaching with tablets are almost impossible, at least with the current conditions. Furthermore, they evaluate the investment on tablets as ‘waste of money. Therefore, they suggest that the government pay more attention to IWB, solve the technical problems, improve it, enhance e-content for each course to be used through this board. Sharing similar beliefs about tablet computers, the parents want the government to find solution to the use of tablets in an uncontrolled way.

3.2. The Views of the Stakeholders about FATIİH Project with respect to EFL Classroom

3.2.1. Policy Makers’ View

Based on their observations and school visits, the officials in YEGİTEK state that English language teachers are among the ones who use the elements of the FATIİH project most. The Director of YEGİTEK stated that they have assigned teams of teachers and academics to prepare contents for each subject, including English. Between the dates June 2016 to February 2018, the schedule assumes that 13 thousand lessons will have been prepared. Yet, so far 256 lesson contents (all subjects- not only in English) have been delivered and only 110 lessons among these have been accepted. In general, he expressed concerns about the quality of the lesson contents saying that *“The digital world is vast and*

multimedia should be used more. However, most of the lesson content we have received so far seems to have failed to go beyond traditional lectures. They cannot exploit ICT to the full". As to English language teaching materials in particular, however, the director could not give any specific information. The officials in YEGITEK also stated that practising teachers are contributing language learning materials and activities. After a moderating team has examined and approved the materials, they are made available on EBA (an acronym in Turkish for *Educational Informatics Network*), which is an online platform where students and teachers can find content for school subjects.

3.2.2. Users' View

According to the principal and the vice principal, English teachers make use of the project's facilities in their EFL classes intensively. They emphasize that the English teachers have adopted the project easily and quickly as they have more opportunity to contact the newest technology due to their lower average age. In addition, in the school principal's words, *"English language teaching materials are varied and publishing houses prepare versions of course books that can be used in IWBs. Probably that's why English teachers use it more effectively"*.

English teachers have been very interested in FATIH project. They stated that they use both IWBs and tablet computers in EFL classes. They are very satisfied with such facilities since they have found the opportunity to make use of a wide variety of resources for their EFL courses. One of the English teachers emphasized this case by saying *'with the help of the technology that this project provided, it became possible for us to bring the world into the classroom'*.

Some other English teachers mentioned the multimedia facilities of IWBs and tablets implying that EFL classes require not only printed resources but also visuals and audial materials. According to English teachers, one of the major contributions of FATIH project components in EFL classes is higher levels of motivation. Both IWBs and tablets with internet access made it possible to reach rich resources that attract students' attention. Since EFL classes necessitate benefiting from authentic materials, some teachers have their students watch videos or films in English or lesson videos by native speakers of English.

Another contribution of the project is that it helped students improve their creativity. One of the English teachers gave an example relating this: The teacher assigned his student to prepare homework on tablets about 'explaining a process'. One of the students in EFL class worked on the production of an armour in his tablet, and narrated how to form an armour in his own words in English.

Since the majority of English teachers distinguished IWBs and tablets stating the low frequency of use of tablets in English teaching and learning process, most of their comments were on IWBs. Different from the aforementioned contributions of IWBs, they have had some other positive effects on EFL classes: They enabled more engaging lessons, enriched classrooms with the use of internet-based materials, and motivated both teachers and students in teaching and learning English. They are also time-saving and practical, and they promote multimodality in EFL classroom.

As to flaws of the project with respect to the EFL classroom, the English language teachers pointed that a major issue was the insufficiency of the materials that are compatible with the system. Use of materials by publishing houses is somehow accepted; however, ironically, it is not allowed to make students buy course books other than those distributed by MoNE for free. EBA also prepares materials but they are not sufficient. This issue got harsh criticism especially from English teachers because of huge amount of e-material need for EFL course. English teachers found tablet use practically unmanageable. The aforementioned problems relating to tablets and their use made English teachers lose their interest and motivation towards this component of FATIH project.

The students highlighted some of the advantages of the project in EFL classrooms. They described it particularly useful and efficient in practising listening, making presentations and using visuals in the lessons. While a few students stated that they use tablets for studying English, it was revealed in the interviews that most of them use them for fun (playing games mostly). The parents, on the other hand, cannot specifically comment on the project with reference to English language learning.

4. Discussion

The current study on views of stakeholders about FATİH Project reveals that the two sides of the coin, namely the Ministry of Education- YEGİTEK as policy makers and the users such as students, teachers, school administration and the parents differ a lot in terms of their priorities, the problems they face and their belief and commitment. It appears that the policy makers in Ministry of National education and YEGİTEK have stronger faith in the project and its contributions both in education and in economy and human capital. Despite some problems, they suggest every step in the implementation have provided them with insight and therefore cannot be regarded as waste of money. The policy makers also believe that technology integration in education is inevitable and as mentioned by Director of YEGİTEK *“According to the 2015 figures of TUIK (Turkish Statistics Institute), 92% of mobile owners in Turkey are using smart phones and 90% of them use social media. How come these people cannot adapt to education with tablets?”*. However, despite the obvious benefits and inevitability of enhancing classroom with technology, this cannot be achieved or exploited without teachers’ commitment. English language teachers are quite happy to benefit from IWBs in the classroom using videos, audios and visuals. They believe the project facilities allow for creativity in students. Yet, they find e-content insufficient for language teaching. They also complain about changes in implementation and lack of contact with decision makers. It appears that the vision of the MoNE cannot be fully recognized by the teachers. No top-down change can last without support from the bottom; therefore, the MoNE should inform the teachers and students about the goals and planning of the project to ensure devotion and belief into the effectiveness of the project. Some teachers believe that the tablets are supposed to replace books. However, the officials in YEGİTEK mentioned that they are meant to enrich the classrooms and to be used for homework and self-study. The idea that tablets can make all other traditional learning materials redundant is found unreasonable by the teachers; however, this is not what is planned by the policy makers. There appears to be a lack of briefing. As declared by the Director of YEGİTEK, they are holding training pre-service teacher training programs in five faculties of education. It might be suggested that the implementation should expand to include all faculties of education throughout the country. Given the fact that there are 983,000 teachers practising in schools in Turkey, mere pre-service training could not bridge the technology gap in teachers. More frequent and comprehensive in-service trainings should be held. Although there have been 768,000 man-hour training given so far, there seems an obvious need for more training to convince teachers.

One other major distinction is about how the two main components of the project- IWBs and tablets- are viewed in terms of their usefulness and efficiency. In general, all users view IWBs as useful whereas they feel tablets cannot be used efficiently. Some of the English language teachers acknowledge that tablets are being used by self-study by some students. Still, more e-content should be uploaded or be available in EBA to construct the view that tablets are for learning not for gaming only.

Looking at other similar project throughout the world, it appears that every country aims to cultivate their human capital and improve quality in education through technology integration.

Though the contexts are diverse, poorer and developing countries seem to rely on and trust investment into technology more compared to more well-off and developed ones. Therefore, studies about FATİH Project, its implementation stages, benefits and problems might be useful. More studies should be conducted to evaluate the longer term benefits in success in education in the Turkish context to inform later and further stages of roll-outs and provide insight for other countries when they decide to allocate large-scale investments from their limited budget.

5. Conclusions

This study investigated the views of the stakeholders of FATİH project about its on-going pilot scheme in relation to English language teaching. The contribution of the project facilities to teaching in general and EFL teaching in particular, the drawbacks of the project and suggestions of stakeholders about the future of the project were gathered through one on one and focus-group interviews.

Based on the findings, it can be stated that the project officials are enthusiastic and ambitious about continuing the project by getting over the problematic aspects of it and improving depending on the changing needs. The stakeholders are also happy with the project although they partly denounce it, favouring IBWs and disapproving tablets. The common point that the stakeholders complained mostly about is tablet use due to very significant technical and practical problems which led teachers and students to stop using tablets. Although the project officials have the idea of even carrying out evaluation and assessment of learning via tablets, the principals, teachers and students find this almost utopic for similar reasons.

The FATİH Project provided contribution to EFL teaching practices with motivating both teachers and students, presenting a wide variety of resources that address multiple senses of students, and enabling internet access. Despite its crucial problematic aspects, tablets made it possible for teachers to assign students homework or projects that engage students in learning and practising English. The tablets also enabled students to reach rich and authentic materials which contributed multimodality in learning English.

In spite of the abovementioned contributions, there occurred undesired cases in the implementation of the project. Interaction lack between IWBs and tablets, disintegration between operating system and programs designed to use in it, insufficient content that can be used in IWBs and tablets, and finally tablet-specific practical problems are the most crucial drawbacks of FATİH Project.

Consequently, it seems vital that the government pay more attention to the project –if they want to maintain it in the future- by taking the problematic areas into consideration and finding quick and permanent solutions to them. If the government is really decisive about distributing more tablets to students, they should fade the accumulated pessimistic ideas about them away by taking necessary steps.

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References

- Adigüzel, T., Gürbulak, N., & Sariçayır, H. (2011). Akıllı Tahtalar Ve Öğretim Uygulamaları/Smart Boards And Their Instructional Uses. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8(15).
- Akarsu, O., & Dariyemez, T. (2014). The reading habits of university students studying English language and literature in the digital age. *Journal of Language and Linguistic Studies*, 10(2), 85-99.
- Akıncı, A., Kurtoğlu, M., & Seferoğlu, S. S. (2012). Bir teknoloji politikası olarak Fatih Projesinin başarılı olması için yapılması gerekenler: Bir durum analizi çalışması. *Akademik Bilişim Konferansı*, 1-3.
- Ateş, M. (2010). Ortaöğretim coğrafya derslerinde akıllı tahta kullanımı. *Marmara coğrafya dergisi*, (22).
- Bax, S. (2000). Putting technology in its place: ICT in modern foreign language teaching. In K. Field (Ed.), *Issues in modern foreign language teaching* (pp. 199-210). London, England: Routledge Falmer.
- Beeland, W. D. (2002). Student engagement, visual learning and technology: Can interactive whiteboards help?. Retrieved from http://chiron.valdosta.edu/are/Artmanscript/vol1no1/beeland_am.pdf..
- Betcher, C., & Lee, M. (2009). *The interactive whiteboard revolution: Teaching with IWBs*. Victoria: ACER Press. Retrieved from http://schoolnet.org.za/CoL/ACE/course/classroom/documents/iwb_revolution.pdf
- Bilgen, A. (2012). Chalk vs. tablet: Can FATİH Project revolutionize the Turkish education system. *The European Strategists*.
- Bonifaz, A., & Zucker, A. (2004). *Lessons learned about providing laptops for all students*. Boston, MA: Development Center, Inc. & Northeast and the Islands Regional Technology in Education Consortium.
- Coyle, Y., Yañez, L., & Verdú, M. (2010). The impact of the interactive whiteboard on the teacher and children's language use in an ESL immersion classroom. *System*, 38(4), 614-625. <http://doi.org/10.1016/j.system.2010.10.002>
- Çelik, S., Arkın, E., & Sabriler, D. (2012). EFL learners' use of ICT for self-regulated learning. *Journal of Language and Linguistic Studies*, 8(2), pp-98.
- Çiftçi, S., Taşkaya, S. M., & Alemdar, M. (2013). Sınıf öğretmenlerinin FATİH Projesine ilişkin görüşleri The opinions of classroom teachers about Fatih Project. *İlköğretim Online*, 12(1).
- Daşdemir, İ., Cengiz, E., Uzoğlu, M., & Bozdoğan, A. E. (2012). Tablet Bilgisayarların Fen Ve Teknoloji Derslerinde Kullanılmasıyla İlgili Fen Ve Teknoloji Öğretmenlerinin Görüşlerinin İncelenmesi/Examination Of Science Teachers' Opinions Related To Tablet Pcs Using In Science And Technology Courses. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(20).
- Demir, S. B., & Yorulmaz, E. (2014). Tarih derslerinde akıllı tahta kullanım durumunun incelenmesi (Bir durum çalışması). *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, (28), 15-38.
- Ekici, S., & Yılmaz, B. (2013). FATİH Projesi üzerine bir değerlendirme. *Türk Kütüphaneciliği*, 27(2), 317-339.

- Ekşi, G., & Yakışık, B. Y. (2015). An Investigation of Prospective English Language Teachers' Multimodal Literacy. *Procedia-Social and Behavioral Sciences*, 199, 464-471.
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: a review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105.
- Fri-tic. (2012). *Projet One to One iPad: Visite de l'Institut international de Lancy*. Retrieved July 11, 2012 from [http:// www.fri-tic.ch/dyn/bin/45214-46185-1-fritic_visite_onetooone_lancy_v2.pdf](http://www.fri-tic.ch/dyn/bin/45214-46185-1-fritic_visite_onetooone_lancy_v2.pdf).
- Gateway. (2004). *One-to-One laptop initiatives: Providing tools for 21st century learners*. Folsom, CA: Center for Digital Education
- Gerard, F., Greene, M., & Widener, J. (1999). Using SMART Board in Foreign Language Classes.
- Gérard, F., & Widener, J. (1999). A SMARTer way to teach foreign language: The SMART board interactive whiteboard as a language learning tool. Retrieved August, 23, 2010.
- Hsieh, H. & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15 (9), 1277-1288. DOI: <https://doi.org/10.1177/1049732305276687>
- Ingram, D., Willcutt, J., & Jordan, K. (2008). *Laptop initiative evaluation report*. University of Minnesota: Center for Applied Research and Educational Improvement.
- Isci, T. G., & Demir, S. B. (2015). The Use of Tablets Distributed within the Scope of FATİH Project for Education in Turkey (Is FATİH Project a Fiasco or a Technological Revolution?). *Universal Journal of Educational Research*, 3(7), 442-450.
- Johnson, E. M., Ramanair, J., & Brine, J. (2010). 'It's not necessary to have this board to learn English, but it's helpful': Student and teacher perceptions of interactive whiteboard use. *Innovation in Language Learning and Teaching*, 4(3), 199-212. <http://doi.org/10.1080/17501229.2010.513444>
- Jung Won Hur & Suhyun Suh (2012) Making Learning Active with Interactive Whiteboards, Podcasts, and Digital Storytelling in ELL Classrooms, *Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research*, 29:4, 320-338, DOI: [10.1080/07380569.2012.734275](https://doi.org/10.1080/07380569.2012.734275)
- Kim, J. H-Y., & Jung, H-Y. (2010). South Korean digital textbook project. *Computers in the Schools*, 27(3-4), 247-265.
- Lan, Y. J., Sung, Y. T., & Chang, K. E. (2007). A mobile-device-supported peer-assisted learning system for collaborative early EFL reading. *Language Learning & Technology*, Vol 11(3), 130-151.
- Lesardoises. (2012). *Les tablettes dans l'éducation la Thaïlande*. Retrieved July 12, 2012 from <http://lesardoises.com/11123/les-tablettes-dans-leducation-la-thaïlande-franchit-le-pas-pour-328-millions-de-dollars.html>.
- Lewin, C., & Luckin, R. (2010). Technology to support parental engagement in elementary education: Lessons learned from the UK. *Computers & Education*, 54(3), 749-758.
- Liu, T.-Y. (2009). A context-aware ubiquitous learning environment for language listening and speaking. *Journal of Computer Assisted Learning*, 25, 515–527.
- Massé, O. (2012) *Rapport au sujet de l'expérimentation de l'académie de Bordeaux sur l'usage des tablettes tactiles en français*. Bordeaux: IA IPR.

- Millum, T., & Warren, C. (2014). *Sharing not staring: 21 interactive whiteboard lessons for the English classroom* (2nd ed.). New York, NY: Routledge.
- MoNE (2012a) *Milli Eğitim Bakanlığı FATİH Projesi*. Retrieved from: <http://fatihprojesi.meb.gov.tr>
- MoNE. (2017) *Milli Eğitim Bakanlığı FATİH Projesi*. Retrieved from: <http://fatihprojesi.meb.gov.tr/proje-hakkinda/>
- MoNE. (2012b). *Milli Eğitim Bakanlığı, Milli Eğitim istatistikleri*. Retrieved from: http://sgb.meb.gov.tr/istatistik/meb_istatistikleri_organ_egitim_2011_2012.pdf
- MoNE (2010). *Milli Eğitim Bakanlığı, FATİH Projesi: Fırsatları Artırma ve Teknolojiyi İyileştirme Hareketi*. Retrieved from: <http://fatihprojesi.meb.gov.tr>
- Moss, G., Jewitt, Carrey, L, R., Armstrong, V., Cardini, A., & Castle, F. (2007). *The interactive whiteboards pedagogy and pupil performance evaluation: An evaluation of the schools whiteboard expansion (SWE) project*: London Challenge. Institute of Education, University of London. Research report no: 816.
- Öz, H. (2014). Teachers' And Students' Perceptions Of Interactive Whiteboards in The English as a Foreign Language Classroom The Turkish. *Online Journal of Educational Technology* – July 2014, volume 13 issue 3
- Öztan, A. C. (2012). *Fen ve teknoloji öğretiminde akıllı tahta kullanımının ilköğretim 7. sınıf öğrencilerinin akademik başarılarına etkisi*. (Yayımlanmamış Yüksek Lisans Tezi), Necmettin Erbakan Üniversitesi, TÜRKİYE.
- Pamuk, S., Çakır, R., Ergun, M., Yılmaz, H.B., Ayas, C. (2013). "The use of tablet PC and interactive board from the perspectives of teachers and students: evaluation of the FATİH project" *Educational Sciences: Theory & Practice*, 13(3), 1815-1822. 2013 - See more at: <http://acikerisim.sinop.edu.tr:8080/xmlui/handle/11486/758?show=full#sthash.pJMgY2OT.dpuf>
- Pennington, M. C (1996). *The power of CALL*. Houston, TX: Athelstan Publications.
- Peterson, M. (2011). Towards a research agenda for the use of three-dimensional virtual worlds in language learning. *Calico Journal*, 29(1), 67-80.
- Potter, W. J., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, 27, 258-284.
- Pouzevara, S., Dinçer, A., Kipp, S., & Sarışık, Y. (2013). Turkey's FATİH project: A plan to conquer the digital divide or a technological leap of faith. *Turkey: RTI International & Education Reform Initiative (ERI)*.
- Sakız, G., Özden, B., Aksu, D., & Şimşek, Ö. (2014). Fen ve Teknoloji dersinde akıllı tahta kullanımının öğrenci başarısına ve dersin işlenişine yönelik tutuma etkisi. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 18(3), 257-274.
- Savas, P. (2014). Tablet PCs as instructional tools in English as a foreign language education. *TOJET: The Turkish Online Journal of Educational Technology*, 13(1).
- Shenton, A., & Pagett, L. (2008). From 'bored' to screen: the use of the interactive whiteboard for literacy in six primary classrooms in England. *Literacy*, 41(3), 129–136.
- Tamim, R. M., Borokhovski, E., Pickup, D., & Bernard, R. M. (2015). Large-scale, government-supported educational tablet initiatives.

- Thomas, M., & Schmid, E. C. (Eds.) (2010). *Interactive whiteboards for education: Theory, research and practice*. New York, NY: IGI Global.
- Uluyol, Ç. (2013). ICT integration in Turkish schools: Recall where you are coming from to recognise where you are going to. *British Journal of Educational Technology*, 44(1).
- U.S. Department of Education, Office of Educational Technology. (2010). *Transforming American education: Learning powered by technology*. Washington, D.C. Retrieved July 1, 2012 from <http://www.ed.gov/edblogs/technology/netp-2010/>.
- Van Dusen, G. (2000). Digital dilemma: Issues of access, cost, and quality in media enhanced and distance education. *ASHE-ERIC Higher Education Report*, 27(5), 1–120.
- Widener, J., Greene, M. & Gérard, F. (1999). Using SMART Board in Foreign Language Classes. In J. Price et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 1999* (pp. 1268-1273). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Windschitl, M., & Sahl, K., (2002). Tracing teachers' use of technology in a laptop computer school: The interplay of teacher beliefs, social dynamics, and institutional culture. *American Educational Research Journal*, 39(1), 165-205.
- Yang, J. Y., & Teng, Y.W. (2014). Perceptions of elementary school teachers and students using interactive whiteboards in English teaching and learning. *Journal of Interactive Learning Research*, 25(1), 125-154.
- Yáñez, L., & Coyle, Y. (2011). Children's perceptions of learning with an interactive whiteboard. *ELT Journal*, 65(4), 446-457. <http://doi.org/10.1093/elt/ccq069>
- Yorgancı, S., & Terzioğlu, Ö. (2013). Matematik öğretiminde akıllı tahta kullanımının başarıya ve matematiğe karşı tutuma etkisi.. *Kastamonu Eğitim Dergisi*, 21(3), 919-930.

Paydaşların FATİH Projesi'ne ilişkin görüşleri: Akıllı İngilizce sınıfları

Öz

Türkiye, bilgi ve iletişim teknolojilerini eğitime entegre etmek için büyük bir ulusal girişim başlatmıştır. 8 milyar dolar değerinde olan ve 5 ila 12 yaş arası öğrenciler için her sınıfta interaktif beyaz tahtalar ve internet bağlantısı olan tablet bilgisayarlarla harmanlanan FATİH projesi, genellikle, iddialı, masif, görkemli ve ileri teknoloji olarak tanımlanmaktadır. Mevcut çalışma, dil öğretim ve öğrenim süreci ile ilgili olarak paydaşların görüşlerine dayanarak FATİH Projesinin etkinliğini ve verimliliğini araştırmayı amaçlamaktadır. Çalışma, pilot çalışma aşamasından itibaren projenin bir parçası olan Ankara'da bir lisede gerçekleştirilmiştir. Yedi İngilizce öğretmeni, 20 öğrenci ve 10 ebeveyn, iki okul yöneticisi, üç proje görevlisi ve Yenilik ve Eğitim Teknolojileri Genel Müdürü de dâhil olmak üzere 40 katılımcı ile yarı yapılandırılmış görüşmeler yapılmıştır. Çalışma, politika yapımcılar (Millî Eğitim Bakanlığı ve Yenilik ve Eğitim Teknolojileri Müdürlüğü yetkilileri) ve kullanıcıların

(öğretmenler ve öğrenciler) görüşleri arasında bir ayrım olduğunu ortaya koymuştur. Projenin etkinliğine olan bağlılığı ve inancı sağlamak için projenin hedefleri ve planlaması hakkında öğretmenleri ve öğrencileri bilgilendirmek için daha fazla eğitim verilmesi gerektiği görülmektedir. Sonuçlar aynı zamanda interaktif yazı tahtalarının hem İngilizce öğretmenlerinin İngilizce'yi etkili bir şekilde öğretmelerine, hem de öğrencilerin özellikle dinleme, okuma ve yazma konusunda dil becerilerini geliştirerek teknolojinin kullanımı yoluyla motivasyon sağlamasına yardımcı olurken, tablet PC'lerin öğretmenler, ebeveynler ve öğrenciler tarafından bazı teknik ve pratik nedenlerden dolayı uygun maliyetli olmadığı düşünülmektedir.

Anahtar sözcükler: tablet kullanımı; dil öğrenme; FATİH Projesi; interaktif beyaz tahta; eğitim teknolojileri

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