

### **Teacher Concerns towards the Fatih Project in Education**

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### **ABSTRACT**

Developments in the field of knowledge and technology are affecting education systems. Most of the research regarding educational use of technology emphasize the importance of integration of information and communication technologies to the learning-teaching process. Since 1984 where Turkey's efforts started on technology integration, various projects established for this purpose. Announced in 2010, The FATIH Project in Education (Increasing Opportunities and Technological Improvement Movement) is the most recent and the most extensive project of Turkey in this direction. One of the most important roles in the FATIH Project in Education is on teachers who are the main practitioners and playing a key role in this process. Beginning from the implementation of the FATIH Project in Education some difficulties are encountered by teachers. These difficulties are thought to have created some concerns in teachers. The main objective of this study is to define the views and concerns of classroom teachers regarding the FATIH Project in Education and to propose solutions for overcoming these concerns. Qualitative research design is used in the study. The study group of this research is classroom teachers who serve in primary schools in the academic year of 2015-2016 in Çanakkale. Purposeful sampling method and semi-structured interview form is used to collect data. Results showed that teachers have both positive and negative point of view regarding to project. Teacher concerns regarding the implementation of the FATIH Project in Education are named as; (1) concerns about classroom management, (2) concerns about technology use, (3) concerns about technological infrastructure support, (4) concerns about the educational content, (5) concerns about the students, and (6) concerns about the parents.

### INTRODUCTION

Developments in the field of knowledge and technology are increasing rapidly, and developed countries are trying to adapt their policies in this direction. These rapid changes are affecting education systems as well as affecting all aspects of our lives. The change in information and communication technologies are also changing the qualities of the workforce needed and it has become a necessity to develop education systems in this direction (Güllüpınar et al., 2013). Therefore, in this process, it becomes important to allocate resources for technology assisted teaching and to train teachers in line with these goals who play an important role in the use and teaching of technology.

Most of the research conducted about the use of technology in education show that the technological tools increase students' interest, desire and curiosity for learning. It is also emphasized that use of technology in the process of learning and teaching in education provides multiple learning environments for students (Aksal, 2011; Delen & Bulut, 2011; Polat & Güzel, 2011; Kenar, 2012; Dedebali & Saracaloğlu, 2016; Saracaloğlu et al., 2017). Research results also show that use of technology in the process of learning and teaching is continuously increasing (Berrett et al., 2012; Inan and Lowther, 2010), but technology integration still does not fully take place (Tondeur et al., 2017).

The initial use of information technologies in education in Turkey started in 1984 with the establishment of "Specialized Commission on Computer Education at Secondary Schools" by MEB (The Ministry of National Education) (OECD, 2007). Since then, various projects have been carried out at every level of Turkish education system in order to use emerging technologies in education and ensure that teachers and students make use of information technologies. Started in 1998 within the TEP (Basic Education Program) supported by the World Bank, more than 3000 IT (Information technology) classes were established throughout the country and computers were distributed to schools (OECD, 2007). The ADSL Connection Project established by MEB in order to provide rapid and reliable internet connection for the schools affiliated to MEB. Within this project, more than 42000 schools equipped with ADSL connection by 2005 (State Planning Organization, 2004). MEBSIS (Information System of the Ministry of National Education) which is associating and enhancing some



other previously established systems such as ILSIS, E-School and KDS, was established in 2007 in order to automate province educational directorates of MEB (Bayrakçı, 2007).

The FATIH Project in Education (Increasing Opportunities and Technological Improvement Movement) announced in 2010 is the most recent and the most extensive project of MEB. Prior to the announcement of FATİH Project in Education, in the Information Society Strategy (2006-2010) report, Turkey stated its vision of transformation into information society as "being a global competitive and highly prosperous country that has become a focus in science and technology production, uses information and technology as an effective tool, generates more value through information-based decision-making processes" (DPT, 2006). MEB stated that the FATIH Project in Education is put into effect in order to improve the technology in education and training process so that ICT (information and communication technologies) can be addressed to more sensory organs during the process of learning and teaching (Güllüpinar et al., 2013).

In this context, the FATIH Project in Education was established in 2010 by MEB "with the purpose of providing equal opportunities in education and improving the technology in schools in a way that informatics technology tools to engage more senses in the educational process" (MEB, 2018). It is aiming to make radical changes in the field of education by integrating information and communication technologies to education system (Ekici & Yılmaz, 2013). As also stated after starting the project, in the Turkey's Teacher Strategy Document, which contains the 2017-2023 goals published in 2017, the purpose of educational system is to "train free individuals who; are useful to society, are taking social values, gained effective communication skills, is adaptable to change, gained necessary skills to access and effectively utilize learning resources, is capable of using information and communication technologies effectively, reconciled to oneself and society, is initiative, is researcher, is questioning and gained critical thinking skills" (MEB, 2017).

Within the project, it is planned to fund services such as providing hardware and broadband Internet connection to all classrooms, providing e-content for course subjects, establishing platforms for the integration of teachers into IT (MEB, 2018a). The FATIH Project in Education composed of 5 steps; (1) hardware infrastructure improvement, (2) e-content provision and management, (3) effective use of CT in training programs, (4) inservice training for teachers in classroom use of CT (computer technologies) and (5) installing broadband network infrastructure and installing conscious and safe CT use (Çekiç & Kuşçu 2017). The project is also supported by some other governmental institutions; The Ministry of Transportation, The Ministry of Science, Industry, and Technology, The Ministry of Economy, The Ministry of Finance, The Ministry of Development, The Secretariat of the Treasury, and TÜBİTAK (The Scientific and Technological Research Council of Turkey).

The EBA (Educational Information Network) which is an online social educational platform started its publication life in 2012 led by YEGITEK (The General Directorate of Innovation and Educational Technologies) within the scope of the FATİH Project in Education. It aims to enable the integration of technology into education by using information technology tools and supporting efficient use of materials (EBA, 2018). The EBA portal presents every kind of digital content such as; educational applications, e-courses, e-books, e-documents, audio-visual documents, e-magazines, news and etc. produced by experts, teachers and students in order to strengthen the integration of education with technology. It helps teachers to collaborate with their colleagues and share educational materials with students. For students, EBA provides opportunity of enhancing their learning outside of the school. They can collaboratively work with peers and teachers, communicate with them and share educational materials, follow the tasks assigned their teachers and study any subject at any time (EBA, 2018). Turkish government also recognizes the need to regulate some aspects of Internet usage in schools. For this purpose, TUBITAK which in fact is not directly connected to MEB, is focused extensively on Internet security and content filtering for school connections (Education Reform Initiative, 2013).

FATIH Project in Education was first established in the 2011-2012 academic year as a pilot project in 17 provinces and 52 schools and continued to spread throughout the following years (Dursun et al., 2013; Güllüpınar et al., 2013). MEB stated that tablet computers will be given to all teachers and students in the long term, each class will be provided with a computer connected to the internet, and computer technologies such as interactive smartboards. And besides each school will be provided with at least one multi-function copier, interactive board, document camera and microscope camera.

The project is aimed to be completed in 2016. Evaluating the officially shared project data in 2017, result is that the current point reached is far away from the main objective. Mostly quantitative data are coming into view since the start of the FATIH Project in Education. The regulations related to the project more often examine the hardware components, leaving the pedagogical dimension which should be the main focus of the project. Topics need to be developed such as; teachers' and students' interaction quality with EBA, satisfaction level of EBA



with the needs of teachers and students, reflections of EBA practices on process of learning and teaching, and the overlap ratio of the content with the goals of the curriculum (TEDMEM, 2018).

The most important responsibility in the implementation of the FATIH Project in Education is on teachers who are the main practitioners and playing a key role in this process (Güllüpınar et al., 2013; Banoğlu et al., 2014). So that, in-service training for teachers has seen as one of the components of the project in order to increase teachers' information and skills on conscious use of technology. Four different types of education were planned for this purpose; (1) face-to-face trainings, (2) distant trainings, (3) local trainings and (4) training through LMS (learning management system) (MEB 2018b). Initially, content of these in-service trainings mostly consisted of basic ICT subjects and practices. However, as emphasized at the Educational Technology Summit held in June 2016, studies on the development of the EBA in FATİH Project in 2015 have been carried out more intensively than the previous years. First of these studies is to educate teachers about digital content development. In this context, 1000 teachers working on 12 different provinces where EBA studios established were trained by academicians and experts trainers on topics such as digital content, script writing and design (TEDMEM 2015).

#### Aim of the Research

Pedagogical and developmental issues are important factors for the integration of ICT within the scope of FATİH Project in Education (Pamuk et al., 2013). ICT may not be used effectively as expected due to usage difficulties, teachers' inadequacy of knowledge and skills, and the insufficient support for teachers (Akbaba & Altun, 2006; Yıldırım & Göktaş, 2009; Uluyol, 2013). So that acceptance level of teachers on this kind of initiatives is important in terms of reaching the project goals.

The FATIH Project in Education is being implemented in schools since 2011 and some difficulties are encountered by practitioners, namely teachers. These difficulties are thought to have created some concerns in teachers. As being the practitioners, examining teacher views on the use of technology in schools has great importance in order to shed light on the current situation and the future of the project (Deniz, 2005). From this point of view; the main objective of this study is to define the views and concerns of classroom teachers regarding the FATIH Project in Education and to propose solutions for overcoming these concerns.

#### **METHOD**

Qualitative research design is used in the study which adopts an interpreting approach to the problem of the research based on a holistic view of interdisciplinary (Altunişık et al., 2010). In qualitative research, there is usually no attempt to generalize beyond a certain state; this situation is left to the reader to measure its applicability (Büyüköztürk et al., 2013; Sönmez & Alacapınar, 2011).

### **Study Group**

The study group of this research is the classroom teachers who serve in primary schools in the academic year of 2015-2016 in the Çanakkale province. Purposeful sampling method is used in order to determine the study group. In the purposeful sample, aim is to select information rich cases or situations that will enlighten the problems studied in the research (Tarhan, 2015). Results of this study is limited to the expressions of the 36 teachers who serves in primary schools and voluntarily participated in the study. There are 21 male and 15 female teachers in the study group. In terms of seniority, participants have a seniority gap of 3 to 41 years. Eight of the participants stated that they had received training for the FATIH Project in Education and 28 participants stated that they did not receive any training for the FATIH Project in Education. 16 of the participants thought that their level of knowledge is sufficient and 5 of the participants thought that their level of knowledge about the FATIH Project in Education is insufficient. 15 of the participants stated that they have some knowledge about the project. Descriptive information of the study group is given in Table 1 below.

### **Data Collecting Tool**

Semi-structured interview form is used for data collection. In order to determine interview questions, using the relevant literature, a semi-structured form was developed to determine the views and concerns of the classroom teachers on the FATIH Project in Education. This form, then presented to two experts and their opinion taken into consideration before finalizing the interview form. In order to ensure the validity of the form in terms of language, interview form was examined by two faculty members studying in the field of Turkish Language Education. Determined deficiencies were corrected before the interviews. A pilot study carried out to three classroom teachers and their recommendations were taken into consideration on finalizing the interview form. For external validity, participant opinions were directly supported by the research findings in the findings section.



### **Data Collection and Analysis Process**

Researchers, themselves collected the data by visiting the schools and using the semi-structured interview form prepared to determine the opinions of teachers working in primary schools. A briefing was given to the participated teachers about the filling of the interview form before the application of the form. Content analysis method is used to analyze the data obtained within the scope of the research. In content analysis, verbal or written expressions are coded and integrated according to the messages and meanings they contain in an objective and systematic manner (Tavṣancıl & Aslan, 2001). In the study, the density and the importance of a specific item were defined by determining the frequency of the expression being seen quantitatively. The four steps suggested by Corbin and Strauss (2007) were followed to analyze the obtained data. The data are first coded, then the themes are created. In later stages, themes were arranged and interpretations of the findings were made. In the process of creating sub-themes according to the data obtained, all answers were read separately by researchers and sub-themes were created under specific headings. These themes are named as; (1) concerns about classroom management, (2) concerns about technology use, (3) concerns about technological infrastructure support, (4) concerns about educational content, (5) concerns about students and (6) concerns about parents. Codes (P1, P2, P3 ...) are used to present and tabulate the data. Results of the study is supported by making direct quotations from participants' expressions where necessary in the research.

**Table 1. Study Group Descriptive** 

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Participant	Gender	Seniority	Project related	Level of knowledge			
			training taken	about the project			
P1	Male	25	Yes	Partially			
P2	Male	22	Yes	Yes			
P3	Male	37	No	Partially			
P4	Female	22	Yes	Yes			
P5	Male	17	Yes	Yes			
P6	Female	15	Yes	Partially			
P7	Male	37	No	Yes			
P8	Female	41	No	Partially			
P9	Female	37	No	Partially			
P10	Female	29	No	Yes			
P11	Male	39	No	Partially			
P12	Male	30	No	Yes			
P13	Male	38	No	Yes			
P14	Female	17	No	Yes			
P15	Female	10	No	Partially			
P16	Male	9	No	Partially			
P17	Male	29	No	Yes			
P18	Female	26	No	Partially			
P19	Female	3	No	Partially			
P20	Male	26	No	Yes			
P21	Female	27	No	Yes			
P22	Male	35	No	No			
P23	Female	15	Yes	No			
P24	Female	30	No	Partially			
P25	Male	30	No	Partially			
P26	Male	28	No	Yes			
P27	Male	37	No	Partially			
P28	Male	36	No	No			
P29	Male	30	Yes	Yes			
P30	Female	35+	No	Partially			
P31	Male	36	No	Partially			
P32	Male	6	No	Yes			
P33	Female	10	No	No			
P34	Male	7	No	Yes			
P35	Female	6	No	No			
P36	Male	11	Yes	Yes			



#### **FINDINGS**

Findings obtained in the research are presented below in the light of the research questions and research themes.

### **Viewpoints to FATIH Project in Education**

Expressions of the study group are categorized and frequency and percentage distributions of defined categories are given in Table 2 below. 15 of the participants indicated that they favored the FATIH Project in Education, while 4 of the teachers stated that they do not favor the project. 11 participants stated that the project have both positive and negative aspects.

Table 2. Opinions of the Study Group towards the FATIH Project in Education

Opinions	f	%
Positive	15	50,0
Negative	4	13,3
Both Positive and Negative	11	36,7
Total	30	100

# **Positive Perspectives on the FATIH Project in Education**

Following statements can be given as examples of positive expressions of the classroom teachers regarding the FATIH Project in Education:

Three opinions stand out when positive teacher expressions on the FATIH Project in Education are evaluated; (1) easier access to information, (2) addressing more sensory organs and gaining students' attention and (3) having no difficulties in adjusting students to what they already are accustomed to. In addition, teachers think that the project will resolve technological infrastructure inequalities of schools and provide equal opportunity in education.

# **Negative Perspectives on the FATIH Project in Education**

Following statements can be given as examples of negative expressions of classroom teachers on the FATIH Project in Education:

Teachers whose expressions are negative about the project think that students will become passive because of the readily provided information, that there will be some problems in implementation due to the inadequate technological infrastructure and that the project will limit reading and writing activities of the students.

### **Both Positive and Negative Perspectives on the FATIH Project in Education**

Examples of both positive and negative expressions of classroom teachers on the FATIH Project in Education includes the following expressions:

"It's nice to do visual lessons. Learning by sight is more permanent for children. But there are problems with writing activities. Continuous use of smartboards is unexciting for students" (P5).

<sup>&</sup>quot;I find it positive since teachers can reach resources quickly" (P7).

<sup>&</sup>quot;In terms of change of mindset in education is extremely positive. It directs the children to a kind of technological environment they are accustomed to" (P15).

<sup>&</sup>quot;Positive, in terms of equal opportunity in education and training and in terms of addressing more sensory organs" (P18).

<sup>&</sup>quot;This period, which is a child of visual age, is developing only by seeing and doing. It's easier to reach more than one lesson activity for each acquisition" (P26).

<sup>&</sup>quot;Positive, in terms of being a ready-made resource for the teacher" (P28).

<sup>&</sup>quot;Technology and visuality gain the attention of the students" (P31).

<sup>&</sup>quot;It makes both teachers and students passive since it provides ready-made information and software. Research and experimenting activities are being truncated" (P10).

<sup>&</sup>quot;A project whose infrastructure is not well prepared. Educational tools are malfunctioning often. There are restrictive items in research and software" (P13).

<sup>&</sup>quot;The physical condition of the classroom is not appropriate. Usage of the tools in reading and writing activities is insufficient" (P29).



"Taking advantage of technology relaxes teachers, visual lesson is more permanent for students, but students only learn what is prepared for them in this project, this is a monotype of education. The structure of the education system should be based on the researching and development" (P8).

"It is extremely positive in terms of change of mindset in education. It guides children in the technological environment that they are accustomed to. But I think the infrastructure is not appropriate" (P15).

"Students will be more active. It will address students with different types of intelligence. Teachers do not have enough knowledge. Time management and infrastructure problems will be experienced" (P16).

"Technology is used in the classroom. Educational courses have not yet been provided for more accurate and efficient use" (P27).

Teachers who think that the project has both positive and negative aspects are especially concerned about (1) inadequacy of the educational content, (2) possible problems that may occur due to lack of knowledge and (3) possible time management issues in the classroom.

### Study Group's Concerns towards the FATIH Project in Education

Teacher concerns regarding the implementation of the FATIH Project in Education are named as; (1) concerns about classroom management, (2) concerns about technology use, (3) concerns about technological infrastructure support, (4) concerns about educational content, (5) concerns about the students and (6) concerns about the parents. These concern categories are given in Table 3 below as frequency and percentage of occurrences. In addition, percentages of the concern categories are given in order to compare with other categories. According to research results, teachers are particularly concerned about the use of technology and the support for the technological infrastructure. It seems that teachers are less concerned about the parents.

Table 3. Study Group's Concerns towards the FATIH Project in Education

<b>Concern Categories</b>	Teacher Concerns	f	%	Total %	
	Dispersion of students attention	2	1,6		
	Discipline problems	8	6,3		
Concerns about	Problems in attracting students	3	2,3		
classroom	Elderly teachers authority problem	1	0,8	16,4	
management	Adaptation problem	2	1,6		
management	Students are constantly passive	3	2,3		
	Decreased need for teachers	1	- ) -		
	Inability of students to use smart board	1			
	Lack of required training	12	9,4		
	Failure during use	3	2,3		
Concerns about	Unintended use	2	1,6	21.1	
technology use	Inability to use the smartboard effectively	3	2,3	21,1	
	Limitation by the Ministry of Education (censorship)	6	4,7		
	Possibility of electric shock hazard	1	0,8		
	Inadequate internet (fiber infrastructure)	11	8,6	21,1	
C	Who will provide technical infrastructure support	2	1,6		
Concerns about	How long technical infrastructure support will be provided	2	1,6		
technological infrastructure support	Rapid deterioration	1	0,8		
mnastructure support	Implementation without a ready technological infrastructure	9	7,0		
	No permanent expert staff in the school	2	1,6		
	Content preparation is time consuming	2	1,6	1.4.1	
Concerns about	Inadequacy of provided MEB content	12	9,4		
educational content	Putting students away from research	2	1,6	14,1	
	Teachers inadequacy of using content	2	1,6		
	Not having PC and Internet access	5	3,9	12,5	
	Being irrelevant	1	0,8		
parents	Lack of information about the project	9	7,0		
	Bringing the financial burden (PC, internet)	1	0,8		
	Conformation to laziness	4	3,1		
	Increased technology dependency	2	1,6		
Concerns about the	Disabled students are not taken into consideration	1	0,8	14,8	
students	Decrease of book reading	1	0,8		
	Increase in behavioral disorders	1	0,8		
	Lack of socialization	2	1,6		



Student health	1	0,8
Inadequate board size for students	1	0,8
Students damage equipment	3	2,3
Inadequate level of readiness of students	1	0,8
Decrease in writing skills	2	1,6

#### **Concerns Regarding Classroom Management**

Along with the applied FATIH Project in Education, teacher concerns related to classroom management mostly focused on; disciplinary problems followed by problems on gaining students' attention and passivity of students. Some teachers have expressed that they have no concerns about classroom management. Example statements of the classroom teachers about "classroom management" are presented below.

### **Concerns Regarding Technology Use**

Within the scope of concerns about the use of technology, it is found that teacher concerns mostly arise from the fact that teachers are not provided necessary training, and restriction of the accessible content (censorship) by MEB. Some of the teachers indicated that they have no concerns about the use of technology. Example expressions of the classroom teachers regarding "concern about technology use" are given below.

"I believe that the teachers are inadequate in terms of using technology so that they will not be able to immediately adapt. Not enough information provided for teachers" (P20).

# **Concerns Regarding Technological Infrastructure Support**

Within the framework of concerns about technological infrastructure support research results show that teachers emphasize the lack of internet infrastructure (fiber infrastructure) and being put into practice with a not ready technological infrastructure. Absence of an expert staff in schools appears to be another concern. Some of the teachers stated that they have no concerns about the support for technological infrastructure. Below are example statements of the classroom teachers about "concerns about technological infrastructure support".

<sup>&</sup>quot;There are disciplinary problems. There are problems in gaining attention" (P5).

<sup>&</sup>quot;Especially for teachers over a certain age, this technology will be difficult to learn and use. I think that these teachers have a very high incidence of authority problems" (P15).

<sup>&</sup>quot;Adaptation problems may occur. The teacher may be late to intervene in the disciplinary events that may arise in the classroom while dealing with the smart board" (P16).

<sup>&</sup>quot;Reduced adaptation and reduced need for teacher can negatively impact classroom management" (P20).

<sup>&</sup>quot;The class is uncontrollable while trying to start up the smart board. There is a lot of noise in the students" (P30).

<sup>&</sup>quot;There may be problems such as not being able to control students" (P34).

<sup>&</sup>quot;I have no worries. Because I do not think that a good teacher would have any problems regarding classroom management in whatever circumstances" (P35).

<sup>&</sup>quot;I think it makes things easier while encouraging laziness" (P6).

<sup>&</sup>quot;The use of technology is good because it provides visualization while learning, but it makes students more dependent to technology and laziness" (P10).

<sup>&</sup>quot;First, all the employees involved in the use must have a good training and be discussed" (P11).

<sup>&</sup>quot;Most of the teachers do not have technological competence. In addition, infrastructure remains as a problem in most schools. In case of failure, the education may be halted" (P16).

<sup>&</sup>quot;I am worried about the virus infection to the smart board. I also worry that the smart board has features I do not know" (P19).

<sup>&</sup>quot;Before the project was implemented, its infrastructure had to be ready. Unfortunately, I do not think schools are still have an adequate infrastructure" (P15).

<sup>&</sup>quot;No expert personnel to intervene in case of a problem" (P16).

<sup>&</sup>quot;I do not think that enough support would arrive in a short time in the event of a malfunction" (P20).

<sup>&</sup>quot;The internet is troubled. Speed is slow. It is difficult to control until the page is opened. It takes time to prepare the presentations. The ministry is inadequate on presentations" (P29).

<sup>&</sup>quot;Yes. I am very worried about it. Our school does not have a primary school computer teacher. We do not know what to do in the event of a malfunction. We worry about not knowing where to go in case of a problem after the installation, and not knowing whether or not we could get support after the installation phase" (P34).

<sup>&</sup>quot;Infrastructure needs to be very good. It must be thought of as the finest detail from every side, from the grounding line of the electricity to the safe use of the internet. Because we are addressing in elementary school. Our children are so active and very curious" (P35).



### **Concerns Regarding Educational Contents**

Educational content is one of the most important pillars of the FATIH Project in Education. According to research results, it seems that classroom teachers particularly pay attention to the inadequacy of the content provided by MEB. Some of the teachers have expressed that they are not worried about provided educational content. Below are examples of classroom teacher concerns about "educational contents".

- "I worry that it will accustom students to ready-made and keep them away from research" (P8).
- "Because of MEB's secure internet policy, students cannot reach the sites other than the specific ones in the school; ready-presented educational content may sometimes be inadequate" (P16).
- "I do not think that available educational contents are adequate" (P17).
- "Although they are signed in 2<sup>nd</sup> and 3<sup>rd</sup> grades cannot enter every section of EBA" (P18).
- "Materials provided by Assistive resources are not adequate. We cannot enter every website. I find it complicated for elementary school. Maybe it's okay, for high school" (P30).
- "It will be difficult to find any content for every course, and it could be difficult to create content in courses such as Traffic" (P34).

### **Concerns Regarding Parents**

One of the most important components of education is parents. In the context of concerns about parents, teachers seem to emphasize the parents' lack of information about the project, and the lack of internet access and PCs in parents' homes. Some of the teachers have stated that they do not have any concerns regarding the parents. Below are example statements that classroom teachers indicated within the framework of "concerns about parents".

- "The FATIH Project in Education needs to be fully explained to the parents" (P7).
- "Parents who doesn't not have a Pc and internet access would have to buy these technologies which will create a financial load for them" (P10).
- "Families have no information about this project" (P13).
- "I think families who do not have adequate technological infrastructure in their home will have difficulty in helping their children" (P15).
- "Even if there are internet and computers at homes, parents' lack of sufficient knowledge and technology may cause the parents to be missing from the school-student-parent cooperation" (P16).
- "Parents need to be informed about the technology they use in their homes, even if it is not at school-class level" (P27).
- "Parents may want it to be used more. This leads to problems" (P34).

## **Concerns Regarding Students**

Student is the most important pillar of the education. Other elements converge around it. In this respect, concerns about students related to the FATIH Project in Education are important. According to research findings, teacher concerns are gathered under different subheadings in this framework. Particularly, classroom teacher concerns are; conformation to laziness, damage of the students to the equipment, increase of the technology dependency and decline in the writing activities. Again, some of the teachers expressed that they do not have any concerns about students. Below are sample statements that the classroom teachers expressed in the context of "concerns about students".

- "Perhaps a compassion, students will see the use of the Internet for useful work. I am worried about the conformation of laziness and technological dependence because both the content and software are ready-made" (K10).
- "There is not enough explanation about disabled students. I understand that disabled students are not considered in the first place. Precautions must be taken to use proper to the goal and to prevent tablets from being used for playing computer games" (K15).
- "Reading book will be even less. Behavioral disorders can occur. The problem of socialization will arise" (K16).
- "I think it will have negative effects on students' health. I do not think it is right to present ready information. I do not think it supports student-centered education programs" (K17).
- "Students see the smartboard as a gaming tool" (K18).
- "Decrease in verbal expression, decrease in socialization and having difficulties in using tools. The fact that the size and the installation of the smartboards is not suitable for elementary school students" (K20).
- "The readiness of the students may not be sufficient. In addition, students should be informed well in order to prevent damage to the smartboards" (K33).



# CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The most basic element of classroom management is teacher. From this point of view, in order to be able to carry out all kinds of innovations and changes in the education system in an effective manner, attitudes and perspectives of the people who will apply it, namely the teachers on the field, are extremely important. As a result of this research, it is found that teachers, in general, have positive attitudes about the FATIH Project in Education. However, they also pointed out some negative aspects of the project. Generally speaking, teachers who have positive point of view stated that (1) technology facilitates the work, (2) technology make it easier to access information, and (3) technology enables teachers to access resources quickly. Other positive aspects of the project were stated by classroom teachers are; guiding children to use the technological environment they are accustomed to, providing equal opportunity in education by bringing schools to the same level as technological infrastructure. Consistent with the positive point of view defined in this research, research conducted by Banoğlu et al. (2014) found that technology facilitates teachers' work, students learn to use the technology positively, and the FATIH Project in Education brought equality to the students who had no access to technology. In their research which is investigating school administrator opinions, Dursun et al. (2013) pointed out that teachers carried negative prejudices against technology in the first place but then these negative prejudices regarding technology have turned to positive after seeing the facilities provided by these innovations. In another study conducted with teachers by Gökmen et al. (2014), positive aspects of the project have been revealed as; the project enriches the teaching methods used by teachers, improves the active participation of students, help to reduce teacher's workforce and improves motivation of students. In the study conducted by Ciftci et al. (2013) with 80 classroom teachers, it was stated that the majority of the teachers (69%) regarded the project as important and necessary in order to keep up with modern age and enrich education.

Teachers who have negative point of view about the FATIF project stated that the project made teachers and students passive, that there were deficiencies in practice because the infrastructure was not well prepared, that training tools fail frequently and there were restrictive items in the research and software. Some of the teachers stated that they generally found the project to be positive, but that it had some limited aspects. Particularly, it is observed that teachers pointed out use of intelligent boards on a regular basis bore students, a uniform type of education is provided by the project, teachers do not have enough knowledge to apply the project and no inservice training provided for it. Banoğlu et al. (2014) emphasized some negative teacher views on the FATIH Project in Education as; inadequacy of in-service training, inability to raise awareness of the efficient use of interactive boards and lack of content. The study by Gökmen et al. (2014) also pointed out that inadequacy of training and time of in-service training are not appropriate. In the study conducted by Çiftçi et al. (2013), some of the teachers indicated their hesitation, while others negatively evaluated the project due to the lack of infrastructure.

Within the framework of concerns about classroom management, it has emerged that teachers are most concerned with possible discipline problems, problems in gaining attention and passiveness of students. In the research conducted by Türel (2012), it is emphasized that smartboards bring both students and teacher to passive status. Again, Dursun et al. (2013) pointed out that controlling the classroom became more challenging with the project. Banoğlu et al. (2014) also reported that there have been problems in terms of time management in the classroom. Gökmen et al. (2014) also reported the same conclusion as interactive boards sometimes cause problems in classroom management. Çelik et al. (2017) reported that teachers had difficulties on classroom management, lost their leading roles in the classroom, and lost communication and interaction with students through the integration of information and communication technologies. In the study by Durak & Sarıtepeci (2017) on the effects of using technology in education on classroom management, it is stated that the use of interactive boards in the classroom generally affects classroom management positively. However, when using a tablet computer in the classroom, the use of technology has resulted in time management issues, adverse student behaviors, lesson breaks because of the network connection problems, which in turn caused problems in classroom management.

Under the theme of concerns regarding technology use, concerns arise mostly from the fact that teachers are not given the necessary training. In addition, it is emerged that teachers have concerns on; not being able to use effectively because of content restriction policy applied by MEB (censorship), outages and failures during use and usage out of purpose. Cengiz (2012) emphasized the inadequacy of in-service trainings on how to use technology in the right place and in the right way and the necessity of educating teachers primarily for the implementation of the FATIH Project in Education. Dursun et al. (2013) also pointed out that delicate structure of the smartboards causing problems. In the study conducted by Çiftçi et al. (2013), the project was negatively evaluated in terms of applicability due to teacher-related problems, especially teachers' low level computer skills.



Under the theme, concerns regarding technological infrastructure support, teachers emphasized their concerns as; inadequacy of the Internet connection and putting the project into practice while the technological infrastructure is not ready. The lack of expert staff in schools and the uncertainty about who and how long the technical infrastructure support will be provided is also expressed as another concern factor. Technical insufficiencies related to the FATIH Project in Education are also on the agenda in many studies (Banoğlu et al., 2014; Türel, 2012; Dursun et al., 2013).

One of the most important pillars of the FATIH Project in Education is educational content. Teachers are particularly concerned about the inadequacy of the content provided by MEB. It is also emerged that teachers are concerned about their own inadequacies in the use of provided content and possibility of student standoffs from research activities. Dursun et al. (2013) stated that administrators found the provided content very limited. Gökmen et al. (2014) also found that the educational content of EBA is inadequate and does not cover all aspects of the courses.

Parents are an important stakeholder in education. As a result of the research, it seems that teacher concerns regarding the parents are concentrated on; the lack of information about the project and lack of internet access at home. In the study conducted by Güllüpmar et al. (2013), it was found that parents have both positive and negative views about the FATIH Project in Education. Similarly, in the same study, it is stated that parents do not have enough knowledge about the project but they generally see the project as positive and support it. This result is also consistent with teacher concerns found in this research. Therefore, it can be said that parents, as an important stakeholder of the project, are not yet actively involved in the process. Being knowledgeable about this process will also provide important contributions to the implementation of the project. Parents should have necessary information about this process, so that, they could make important contributions to the implementation of the project.

The most important component of the education is students. It is also the primary stakeholder to be affected and influenced by the FATIH Project in Education. Other elements converge around it. In this respect, it is also important to show the classroom teacher concerns regarding students. At this point, it appears that teacher concerns regarding the students are gathered under different subheadings. According to the results of the research; conformation to laziness, damage of the students to the equipment, increase of the technology dependency and decline in writing activities are especially the main concerns of teachers. Similar results have been found in this respect. In the research done by Dursun et al. (2013), it is stated that the project will affect student habits on writing and reading books in a negative way, students will be exposed to radiation, provided technologies will push students into an asocial structure and computer and technology dependency should be considered as an important problem. The study by Çelik et al. (2017) emphasizes that new technologies lead to lots of pedagogic problems such as; distraction in students, spending most of their time playing with these technologies, and becoming passive.

When results of this research are evaluated in general, the most important concern of teachers about the project is that sufficient information has not yet been provided. This is an important finding. The fact that practitioners are not informed about the application to be done, creates some concerns for them. These concerns are reflected in application in different ways. As stated in the report published by TEDMEM (2018), the expectations and needs of teachers and students in the FATIH Project in Education and perceptions, beliefs and skills of teachers on the integration of technology in education are just a few of the issues that need to be addressed within the pedagogical dimension of the project. In order to increase the quality of the education and to ensure equal opportunity in education, which is the ultimate goal of the project, efforts related to this dimension should go beyond regular in-service trainings and be shaped on the applications that will directly affect the learning process of students (TEDMEM, 2018).

Teacher concerns about the inadequacy of provided content on EBA is another striking result of this research. MEB is aware of is this issue. So that, studies on the development of the EBA in FATİH Project in 2015 have been carried out more intensively than the previous years (TEDMEM 2015). First of these studies is to educate teachers about digital content development. This may facilitate the application of the FATİH project. However, this situation still needs to be extended to all the teachers in the country.

Following suggestions can be made in line with the results of the study:

Technology is not a goal, but a tool. This situation should be explained to the teachers, parents and students by seminars and informative meetings.



Flexibility should be provided to teachers in preparing and applying the content. Because teachers think that the current practices are making them passive.

The FATIH Project in Education is not just about the use of smartboards in the classroom, it is a more comprehensive project. This situation should be first explained to teachers and other stakeholders in detail and with sample applications.

Difficulties on using smartboards distributed to schools before the technological infrastructure is not fully established leaded to disheartening of teachers from the project. In this context, it is necessary to solve the technological infrastructure as soon as possible.

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