Teachers' Views on an ICT Reform in Education for Social Justice

Bülent Tarman
Gazi University, TURKEY

Ahmet Baytak
Harran University, TURKEY

Harun Duman
Ministry of National Education, TURKEY

FATIH project (Movement of Enhancing Opportunities and Improving Technology) is an information and communication technologies (ICT) project to promote social justice for all schools in Turkey. The educational movements and reforms in Turkish Educational System (TES) are not new but this project has a purpose to integrate the newest technologies into school curriculum nationwide. This study aims to explore how the FATIH project ensures social justice in the context of education. In order to achieve the goal, quantitative data is collected on teachers' views. The data is consisted of survey responses from teachers who practically involve in the project. The theoretical framework of the study was built on Cribb and Gewirtz' (2003) social justice perspectives which presents distributive, cultural and associational justice. The finding of the study shows that the teachers have hope that the project will overcome some injustice issues in TES but there are new injustice appearing with the project as well.

Keywords: Teacher Education, technology, social justice

INTRODUCTION

There are times for some words to be catchword or slogan. These words become trendier. Every single reform includes one of these words in their goals and purposes. The words such as global village, human rights, social justice, and the similar related to democracy and globalizations can be overused to persuade communities and nations. Social Justice is one of these words that have been used often in the last century.

What is social justice then? Before giving some definitions, the concern by Taysum and Gunter (2008)

Correspondence to: Bülent Tarman,
Gazi University, Gazi Faculty of Education
Social Studies Education Department,
Ankara, TURKEY
E-mail: btarman@gazi.edu.tr
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that defining social justice is problematic because in pluralistic societies people understand it differently must be kept in mind. However, to set our directions in this study, some commonly accepted definitions would be referenced.

Simply, social justice is defined in Wikipedia as "the ability people have to realize their potential in the society where they live" (Wikipedia.org). Light and Luckin (2008) see social justice as a formal expression of the feeling that the world does not treat all people fairly and that society should be made fairer. This term also used as a reason or excuse to reorganize society's resources and structures to make a more equal social environment (Light & Luckin, 2008). The word social justice itself has promises to make a better life for everyone and therefore most of the social reforms are named with it.

There are certain terms that represents social justice in an evaluation of a system; equity, right, access and participation. These terms are encounter in the literature to assure social justice. Woodward (2010), for example, explains social justice as promoting a more socially inclusive society for all people especially minorities such

State of the literature

- Social justice should be part of the educational context to build a equal community
- New technology developments have potential to both close or open the social justice gap between individuals and communities
- Providing equal opportunities does not mean providing social justice.

Contribution of this paper to the literature

- Providing new technologies is not the only solution to close the gap between students' inequality
- The new tablet technologies with the internet believed to bring justice to the educational system but the inequality between subjects areas still exist.
- Technological reforms in educational systems should be based on technology integration not based on tool oriented enrichment.

as children, disables, elders, and women. Rawls's book, Theory of Justice, is one of the main sources for the topic. Lookig with the philosophical eyes of Kants' justice, Rawls focus on fair choice situation for all to bring liberty and equality (1971).

Different views also stand up when defining the term social justice. For example, Sen (2010) thinks that before looking at the social justice, the causes of social injustice should be solved. In Sen's perspective social justice is taken deeply and he looks how individuals experience justice and injustice instead of simple check-ups of justice in society (2010). Even though having justice is crucial for social justice, treating everyone the same is found diverse in social justice (Furman & Shields, 2007).

THE LITERATURE REVIEW

To come close to the goal of this current paper, studies that focus on social justice and education have been reviewed. Since education is the main component and the mostly measurable institution of a society, there is a tendency to improve justice in learning places. However, Gale (2011) emphasizes that for equity the focus has shifted from 'getting an education' to 'what kind of education'.

The studies on social justice and education vary since some of them are about teaching social justice as a topic where some are about measuring the application social justice in the educational system. Some schools in developed countries teach social justice as course topic for a semester. Researchers such as Philpott and Dagenais (2012), conducted a study on teaching social justice in classroom. Another research group also takes

new teachers of social justice as their participants of the study and investigates their interactions (Sonu et al, 2012). There is also a study by Zimmerman and colleagues (2009) examine how facilitating a social justice and diversity (FAIR) project as part of curriculum in K-12 school settings. In another study, Garji and Rule (2009) integrated social justice in math and science lessons as a strategy for social justice education.

As it has been listed by Philpott and Dagenais (2012), social justice education has been taught under the following topics; culturally relevant teaching, improving the life chances of all children, teaching for diversity, multicultural education, antiopressive education, and addressing generic issues influenced by privilege and power.

After developments in transportation, the world became more diverse and because of that most schools are getting students with diverse cultures, religions, values and worldviews. Thus, Philpott and Dagenais (2012) indicate that there have been increasing calls to address issues of social justice in a variety of educational context.

On the other hand, social justice within education system has been discussed more critically. According to Furman and Shields (2007), social justice within education should have justice in access, sustainability, and the outcomes. Equality, justice, and democracy in education have been studied widely in higher education (Ty, 2011) and service learning (Ransom 2009). Tomul (2009) claims that the equal talents become equal when only they started equally with equal equipments.

Similar to education domain, social justice can be count in two types for technology domain; how to teach social justice with the current technology and how technology itself provides a learning environment that social justice is built in. Since the main goal of this study was the later one, strategies, technology devices, or platforms to teach social justice are not been discussed as part of this paper.

The rapid changes in technology unarguably bring a new issue in social justice. The term digital divide explains this social phenomenon well enough. The digital divide is seen as a technology gap between communities or generations where there are inequalities in access to information technology. It is part of stories that fishes never realize if they are in the water until they came out of it (Prensky, 2001). This metaphor is obvious for some who own enough technology but reject the digital divide. There is no doubt that digital divide exists because of geographical and economical causes (Tarman, 2009). There are more than a billion people in the world have not made a telephone call yet and double of this have not use a computer.

Technology is important for having social justice since it is beyond a tool anymore and shapes the social

context (French, 2007). As Dyson mentioned, technology itself, in theory, brings social justice (1997). For example, in the fourteen-century the printing technology provided opportunities for more people to have books and, thus, new technologies can extend justice to society (Dyson, 1997).

If students are not able to equally access the information, expecting the same outcomes becomes impossible. Hellsten pessimistically claims that:

> Instead the technology available and the information it provides are still mostly shared by elites, the already influential, affluent and educated sections of the population. The poor and illiterate, and those in acute need, tend to remain beyond the information reach; local, and particularly rural, development and quality of life gain very little from the new technology. (2007, p.3)

Technology on social justice it not newly discussed. In order to help children in Africa to access information on computer One Laptop Per Child (olpc.org) project has started but it was not found successful to provide equal opportunities. Mentioned in the Preface of the book by Rooksby and Weckert, social justice cannot be assured with just providing computers (2007). There are also issues such as inequalities based on training and so on. More radically, Hellsten thinks that the intention of technology was to connect people but now it is making digital divide and disconnecting many from the problems of their own societies (2007).

Working more deeply, researchers Banister and Reinhart have studied TPCK (Technology-Pedagogy-Content-Knowledge) and social justice domains (2011). The promise of TPCK is to provide environments where technology is more effectively and efficiently integrated with content and pedagogical guidance to impact students' learning. According to Banister and Reinhart, appropriate technology integration promotes social justice since it requires access and use of technology (2011). However, there is no doubt that new technologies such as mobile devises and web applications take technology integration moves beyond the access.

Conceptual groundwork

Social justice has been discussed within different subjects such as economics, sociology, and education and so on. Because of that there are different views and principles brought up. Since the scope of this paper is education, the related perspectives were taken for consideration. Researchers agree on these four main principles; equity to distribute resources; rights for all; access to economic resources and services; and participation in decision-making (Furman &Shields, 2007; Woodward, 2010; Ty, 2011).

Beyond these principles, the conceptual groundwork of this current paper is the framework of Cribb and Gewirtz (2003). The framework is selected since it covers more broadly and suits for evaluating social justice in educational systems. This framework has three main sections; distributive justice, cultural justice, and associational justice.

Distribution of resources is an openly evaluated process for justice in a community. The members of a community can easily judge whether there is justice by looking equal access to opportunities and equal distribution of resources. *Distributive justice* is about this equal access and equal distribution to improve the status of in needs (Cribb & Gewirtz, 2003). With the rapid development of technology, distributive justice becomes crucial for educational systems (2003). It can be argued that new technologies can make more differences in students' access to unequal resources that can directly influence their success.

Culture holds the differences with itself and therefore it may become a cause of injustice. To overcome that, *cultural justice* that promotes acceptance of differences and respect to all cultures becomes crucial. According to Cribb and Gewirtz cultural justice can be effective to overcome obstacles of social justice in a community (2003). Taysum and Gunter (2008) argued that recognizing all cultures can remove barriers of social justice when only individuals of these cultures also recognized. There are several studies that discuss having different cultures in school and its effects on learning (Tarman & Acun, 2010; Horenczyk & Tatar, 2002) but these studies would be beyond the scope of this study.

Justice usually becomes an issue when there is hierarchy of decision-making. In educational settings that governments often make policies and schools and students are expected to obey these rules. Thus, Taysum and Gunter criticize that and see it "dangerous to attempt to work for social justice in the school when the writers of policy texts are people far removed from the messiness of the day to day realities of the people whose identities they are shaping" (2008, p.6). *Associational justice* promotes and contributes to decision-making processes for all participations. Involving in decision-making process could help participants to shape their future based on their values, cultures and aims. Students and teachers' views about the teaching strategies, provided technology and assessment process are evidence of associational justice in educational settings.

FATIH Project

The Republic of Turkey considered itself as a social and justice state (T.C. Anayasası, 1982, madde 2). It is indicated in the Turkish State Constitution that education should promote equality, commonalty,

democracy and opportunities. Even though it is a constitution requirement and every politician promise before every election, inequality in education is still yielded. After 2000, there are obvious physical developments in education institutions. More schools have been built and more teachers are appointed. However, the digital divide is obvious in Turkey as well (Tarman, 2009).

Starting from 2010, Turkish Educational System integrated a new change to use new technologies such as tablet and interactive boards in classrooms. FATIH, as a word, has meaning of 'conqueror' in Turkish. FATIH project aims to give equally opportunities to everyone in education by providing more technologies. This goal is expected to overcome injustice that some places are not receiving adequate education because of geographical or cultural reasons. With the project, more than 600 thousands schools at different levels and locations would have tablet computers, interactive boards, and high-speed Internet connections (MEB, 2013).

The project is not limited to providing equipments. As part of the project, teachers would be trained to integrate technology effectively in their lessons. The project is planned for at least 5 years and in the first step, some teachers are already trained. After providing equipments and training teachers, e-learning materials for students and teachers are been developed. Overall, the project aimed to provide conscious, secure, manageable, and measurable information technology integrations for all.

Since the project had huge budget, its policy is beyond any educational reform. The government sees this project as a way to bring new technology investments into Turkey. Well known and the biggest technology companies are competing to be part of the project. Even though the project has already started and there are many school started the project, there are critics emphasizing that the plan is over date. There is no clear information on the official website of the project (fatihprojesi.meb.gov.tr) about what has been done and how many students received tablets. Main purpose of this study is to explore how a new technology reform promotes social justice in education. FATIH project which promise within its' name to enhance educational opportunities is a nationwide reform in the Turkish Educational System. Teachers are the main stakeholders of educational reforms, so that, their views about this project becomes important to look beyond the policies promising social justice with that project.

METHOD

This study is a non-experimental study. The research design of the study is a survey based study. Since the study explore teachers' views on an ongoing technology

policy, there survey based study was found as the most accessible way to collect data. The study conducted in 2013.

Participants

The criterion of this study called for participants is to maintain active teaching in a public school (private schools are not part of FATIH project unless they obtain their own equipments) and attend FATIH project training delivered by the experts. The sample selection was based availability of the participants. Teachers in a city of South East Turkey who qualified on those two criteria were emailed along with the questionnaire to participate in this online survey. The participants' rights about taking the survey such as leaving the survey anytime and not giving personal information were given at the beginning of the survey. The teachers were also reminded about the voluntariness of the survey. Among 300 teachers, 195 of them filled the survey. Two responses were omitted since they were not completed mostly. However, there are some participants left some questions as unanswered.

Data Collection and Analysis

The data of this study was a questionnaire as quantitative source. The questions were developed by the researchers and teachers and then confirmed with the experts in the local National Education Board. In order to ensure the validity of the research, the survey questions were organized carefully. The content validity was tested with the field expert whether or not the questions are reflecting the research goals. The questions were from a broad scale since the target population was from various majors in education. The questionnaire was developed based on the conceptual groundwork of this study; the framework of social justice by Cribb and Gewirtz (2003). In addition to four questions for demographic information, the survey has three sections; eight questions were about distributive justice, five questions about cultural justice, and six questions about associational justice. An open-ended question was also asked to obtain some qualitative data. The results are presented with descriptive analysis since this current study aims to illustrate teachers' views about the project. There was not any control or experimental group. The grouping was made only based on the demographic data such as gender, teaching major, years of teaching, or technology skill levels.

FINDINGS

The findings of this study are presented in three sections; demographics, social justice, and additional

comments. The social justice section has also three sections to stay with the categorical principles by Cribb and Gewirtz (2003).

Demographics

According to the collected data the 76% (140) of the participants were male where 24% (45) of them were female teachers. The FATIH project is planned to start with high schools first then middle schools. In the first 5 years, elementary schools are not part of the plan to receive tablet computers and interactive boards. As it was indicated, the participants of the study are among the teachers who have been in the FATIH project training. Thus, the differences between numbers for gender could be normal. There would be more females if elementary schools were also added.

The participants' major were also asked. Based on the responses, there is homogeneity of the participation among teaching majors in the Turkish Education System. As it has shown on table 1, Language and mathematics majors have most teachers as participants. This finding could be because of the high teaching hours for these courses in the educational system since Turkish Language and Math have usually more teaching hours comparing to other courses. The all results for teaching majors are listed (Table 1).

Digital divide between generations has been always discussed. Therefore, the participants' years of teaching which also shows their average ages are collected as data. There are interesting findings that could not exactly confirm the average teachers' ages in TES. According to the responses, teachers teaching for 1-3 years are 34% (64) of the participants. The teachers teaching for 10 or more years also have the same percentage. Teachers who have 5-10 years of teaching are 22% (41) of the all participants. The least group are teachers teaching for 3-5 years. They are 10% (19) of the participants.

The participants' technology skills were also asked. According to the responses most of the participants think that their technology skill levels are at very good (27%) and good (42%) levels. There is 24% (46) percentage that thinks their levels are 'so so' meaning that they have some skills to use computers but not at level to integrate technology in education. Among the

participants, 6% (11) knows 'little' about technology. This usually means that they can turn on a computer, check emails or visit websites but not more. There are unfortunately 1% (2) teachers who claimed that they do not know anything about technology. When we control the data, these teachers were physical education teachers. These teachers may think they do not need technology for their lessons or they might not take any technology class at all.

Distributive justice

As part of the purpose of this study, teachers' views about social justice and the FATIH project has been evaluated. Based on the framework, this part of the paper is divided into three sections and there are survey questions for this each section. The responses were at the Likert scale from 'strongly agree' to 'strongly disagree'. The findings are presented based on descriptive analysis.

The first section is distribution justice to check whether the distribution of technology resources is equally managed by this project and its results ensuring social justice between educational settings and students. There are eight questions asked in this section.

The first question is about students' equal opportunities at nationwide exams. In Turkey, nationwide exams are crucial since going a better high school or starting a university is based on these exams. Massive critics are against these exams that believed to promote only students at the better socio-economical background. When looking at the findings, the teachers have hope that students can have equal opportunities to be successful, more than 50% agree that there will be equality.

The second question in the survey was a reverse question to increase the reliability of the data. In this question, partly opposite to the first one, teachers asked whether or not the learning gap between the students will increase with the FATIH project. The results support the responses to the first questions. Among the participants, around 73% disagree (63% disagreement and 10% strongly disagreement) with that statement.

As it was mentioned above, justice for disables and students with difficulties is one of main criteria to ensure social justice in an educational setting. Thus,

Table 1. Teaching Major of the Participants

	N	F
Mathematics	30	16%
Language (Turkish or English Literature)	43	23%
Science (Chemistry, Biology, Physics)	22	12%
Social Studies (History, geography, Citizenship..)	26	14%
Art-Music	5	3%
Sports and Physical Education	14	7%
Others (Religion, Technology, psychology etc)	47	25%
Total	187	

Table 2. Teachers' views about Distribution Justice with the FATIH Project in TES.

With the FATIH Project;	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		
	N	F	N	F	N	F	n	f	N	F	total
It will bring more equal success in nationwide exams	21	11%	82	45%	30	16%	37	20%	14	8%	184
The learning gap between the students will increase	3	2%	22	12%	26	14%	116	63%	18	10%	185
It will bring advantage for students who problem with the classroom	32	17%	94	51%	25	13%	29	16%	6	3%	186
It will be advantage for the students who have learning difficulty	47	25%	95	51%	14	8%	26	14%	3	2%	185
This will be opportunity for students with disables	42	23%	103	56%	24	13%	13	7%	3	2%	185
Having different technology skills will promote more inequality	24	13%	67	36%	14	8%	72	39%	7	4%	184
There will be inequality for teachers who are at different ages	20	11%	78	42%	18	10%	65	35%	5	3%	186
It will bring more advantage for some teaching domains	87	47%	77	41%	14	8%	7	4%	2	1%	187

there were questions to understand teachers idea how FATIH project could promote such students' rights. The third question was about students who have difficulty with a social environment especially classroom. Most of the teachers (68%) think FATIH project will bring advantage for these students. The fourth question was about student with learning difficulty. In total, 76% of the teachers find the project as an opportunity for such students. In addition, teachers mostly, 79%, think that the FATIH project is an opportunity for students with a disability.

There are arguments about whether or not having different technology skill level promotes inequality between students. Uncertainty of this argument appeared in this study as well. Almost the same number of teachers agrees (36%) and disagrees (39%) with this argument (Table 2).

Age difference is believed as a cause of digital divide. Teachers were asked if their age differences could promote inequality between teachers. More than half of the participants agree with that statement (11% strongly agree and 42% strongly disagree). According to the data, teachers' ages are not influencing this decision. There were young teachers who support the statement and but older teachers also have mixed view about that.

Another interesting issue is whether or not technology reforms for justice such as the FATIH project promote a new injustice within. In other words, providing opportunities for one side is prompting inequality for another side is an important argument to discuss. Thus, teachers were asked if the FATIH project is bringing more advantages to some domains.

Interestingly, 47% of the teachers strongly agree and 41% of teachers agree with this statement.

Cultural Justice

Turkey is called 'mosaic' to refer the country mixed of different cultures. There are various languages spoken and several life styles lived in Turkey for centuries. Holding different cultures can become an issue for social justice. Teachers were asked what they think about the statement that accepting people with different life style will be promoted after the FATIH project. As it is shown on Table 3, more than half of the teachers (60%) agree and strongly agree with this statement. Disagreement with the statement is around 20%. Similar results are found with the statement that being tolerant for other cultures will increase. Agreement is at 57% and disagreement is 23% level.

With the development of new technologies, there is tendency that some people are becoming lag behind the world. The teachers were asked if the project would increase opportunities for the students to compete equally against students in other part of the world. Most of the teachers (70%) favor for the project for this perspective.

There are always arguments that being at different geographic and different socio-economic locations promote inequality for teachers. 30% strongly agree and 56% agree with the statement that the FATIH project will promote equality for teachers who work at different schools. Disagreement is at 7% level in total. The expectation that the project will bring equality between students has a the highest agreement percentage (86%).

Associational justice

Associational justice aims to promote all holders of the educational system to be part of the decisions related to them. From the courses to educational equipments, there are several components of an educational context. The FATIH project in that sense is aimed to be more than just supporting equipment since it has the Internet component. Teachers mainly (59%) think that students obtain more authority for their rights with the project.

Because of cultural values, similar to other eastern cultures, students in Turkey are found quiet to express their ideas and opinions. The participants thinking that students will find more opportunities to express their ideas and opinions are at 64% level. When the teachers were asked about statement that students will be more active for selecting what they want to learn about [with the FATIH project], there is a strong support (13% strongly agree and 67% agree).

Assessment has always been part of discussion in education systems. The statement that students will find more opportunities to see their performance in school was asked to the participant teachers. The responses show that most of the teachers are favor of this statement (79% agreement). In addition, students' awareness of the project is also a social justice issue. Teachers were asked if they agree or not about students' awareness of their benefits from the FATIH project. The agreement for this statement is 57% but the disagreement is 34%.

The fear that students may misuse technology was asked to the teachers. Teachers' responses show that teachers mainly do not have such fear. As it has shown on Table 4, 53% of the responses are disagreement with this misuse fear.

Additional Comments

In addition to quantitative data, there was a one open-ended question asked the teachers to collect some qualitative data. This data was used to support the quantitative data. In this section, there will be some comments from the participants responding an open-ended question. The question asked teachers to express their ideas about what should be done with the FATIH

Table 3. Teachers' views about Cultural Justice with the FATIH Project.

With the FATIH Project;	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		
	N	F	N	F	n	F	N	F	n	F	total
Accepting people with different life style will be promoted.	20	11%	91	49%	34	18%	35	19%	5	3%	185
Being tolerant for other cultures will increase	19	10%	87	47%	36	19%	34	18%	9	5%	185
There will be opportunity for the students to compete equally against people other countries	36	19%	96	51%	21	11%	27	14%	7	4%	187
It will promote equality for teachers who work at different schools	56	30%	103	56%	13	7%	10	5%	3	2%	185
The project is bringing equality between students	61	33%	99	53%	10	5%	12	6%	5	3%	187

Table 4. Teachers' views about Associational Justice with the FATIH Project.

With the FATIH Project;	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		
	N	F	N	F	n	F	n	f	n	F	total
Students obtain more authority for their rights	24	13%	86	46%	34	18%	33	18%	8	4%	185
Students will find more opportunities to express their ideas and opinions	20	11%	98	53%	28	15%	32	17%	7	4%	185
Students will be more active for selecting what they want to learn about	24	13%	124	67%	17	9%	15	8%	6	3%	186
Students will find more opportunities to see their performance in school	28	15%	119	64%	19	10%	17	9%	3	2%	186
Students are aware of their benefits from the project	25	13%	83	44%	16	9%	54	29%	9	5%	187
The project would direct students to misuse technology	6	3%	54	29%	21	11%	98	53%	6	3%	185

project to ensure a social justice in the education system. Not all teachers responded this question but there are various comments. Some focused on the same issue where some brought up global issue regarding education. In this section, some comments directly related to the scope of this paper, social justice, will be presented.

E-content should be for nationwide exams. In other words, lessons for these exams should be taught nationwide to have a social justice.

Number and type of resources should be increased.

It should not be expected from the teachers to prepare e-content for all lessons. Some teachers are not able to so. Some are always behind. What to do with their students. Thus, the whole system should be ready from the first day.

The learning software and e-content should be for students at different locations as well. Some students are at different learning levels. Schools in rural areas need more support.

Students who do have chance to access computer at home should be allowed to come school at night and on weekends for their extra studies with computers. Administrators need to change their conceptions about technology. They think using computers could cause trouble with computers and this is a barrier for teachers. Administrators and policy makers should also focus on teachers' motivation. Teachers who are more using technology in classroom should be promoted.

There should be specific trainings for each of teaching domains instead of a general training for all. Teachers views needs to be asked for educational reforms. Expert teachers should be encouraged to stay locations where there is more need.

To have justice, all school should have received at the same time [each years some school are getting tablets and interactive boards as part of the plan]

I am working in an area where most of students are not able to use a cell phone. They will have difficulty with tablets. More seminars are needed to inform teachers and students.

There were more comments on establishing technology infstructure first and then implementing integration. There were critics and complaints directly about the Internet access and lack of technical support. Those responses were not listed since they were about reporting a problem.

DISCUSSION

Digital divide was expected as one of the barrier for social justice in education. As the researchers claimed that technology is not just equipment for education but also part of the social context (French, 2007) and justice can come to society with technology (Dyson, 1997). Looking at with these perspectives, the results of this current study show that some teachers are still at low technology skill levels. This becomes an issue of digital divide where there are social and ideal differences between societies or generations. There was a digital

divide between the participants of this study but there is no strong evidence of data whether this divide was based on years of teaching, gender, or teaching major. To overcome digital divide in education, Banister and Reinhart suggest that teacher candidates should be prepared with TPCK model to be able to integrate technology into education (2011). Otherwise, knowledge divide may occur even if the gap between accessibility of resources is decreased (Graham, 2011).

Teachers' views show that a technology integration project like FATIH can become an opportunity for distributive justice in education. According the teachers' comments, there will be equal success in nationwide exams. Since nationwide exams are seen a crucial criteria for justice in education, this views are valuable. Students with learning difficulty or discipline problems, and disables are important criteria to ensure in education. Teachers' views about the FATIH project show that such technology support can promote distributive justice in school settings.

Setting justice in a system is not as easy as pressing one button. Interventions and developments for justice could cause a new injustice in one part. The findings of the study show that teachers mainly think that the FATIH project will bring more advantages to some teaching domains. In other words, the project is supportive for one learning area but not for another one. When the responses were analyzed, there is not a specific teacher group indicating this view. There could be several reasons making teacher thinking this way. The teachers' comments listed above are holding some clues of this view. Some teachers especially stated that there is lack of resources for their courses. The e-resources are only for specific learning areas. The weakness of integration in the some domains such as art, physical education, language exists in this case as well. More strategies and digital resources are needed for these domains as well. Hellsten also expressed a similar perspective that ICT policy is not just distributing technology but also training teachers how to integrate this technology in different areas (2007).

Social justice in a developing country that is a mixture of different cultures and values may not match with theoretical standards of justice. As mentioned before, Turkey contains various cultures and life styles. The participant teachers of this study believe that the technology project will be useful to promote cultural justice in Turkey. The project is also found as an opportunity to overcome geographical barriers for social justice in education. However, Hellsten thinks that this virtual connection and understanding of cultures may help recognizing others but the new technologies are disconnecting many from the problems of their own societies (2007).

The findings of this study support the argument by Taysum and Gunter (2008) that actual social justice

occurs not just with recognizing cultures but also with enabling all members of the society to make contribution to the community. The participants, for example, with high percentages, are agree with the statements that students obtain more authority for their rights, find more opportunities to express their ideas and opinions, and be more active for selecting what they want to learn about.

Assessment was found crucial for social justice in education (Syverson, 2007). The results of this study also show that with the FATIH project students will be able to see their performance. However, the exams to enter a university and a better high school are still an issue in Turkey. With the technology integration, teaching and learning is reshaping but there is no changes in the ways of exams take place. Thus, as it was indicated by Baytak, technology reforms should also include ways of assessment to ensure social justice in education (2011). Performance-based assessments or designed-based assessments are strategies to integrate in these new educational settings.

Another worthy point to discuss about associational justice is students' awareness of the project itself. According to the findings, only around half of the teachers think that the students are aware of benefits of the project. This is a common issue that is mostly neglected in educational reforms. However, associational justice requires more participation of students in the decision-making process. To ensure that for students by students perspective, which means students involve in the design and development process of the educational materials for them can be used. Before implementing a policy, students' views about such technology reforms, as part of need analysis, should be studied.

No research project is without limitations. There are some factors that may have affected the outcome of the study. Since the study was conducted in a one region, the number of the participants might be small. The comments section of the data could be extended and additional questions after the teachers' comments might improve the quality of the data. Instead of random selection, there could be specific number from each major area to make comparisons between teaching majors.

CONCLUSION

Reforms are expected to change parts of a system that has problem or redesign the system to work with new technology. The FATIH project standing for Movement of Enhancing Opportunities and Improving Technology aimed to settle social justice in Turkish Education System. In order to measure how the system is effective for social justice, a longitude study will be needed. However, understanding views of teachers who are the first counter of reforms in educations is crucial. The findings of this study show us that the teachers' believe that the project is overcoming important issues that are causing injustice in TES such as nationwide exams, cultural and physical barriers. The project is promising to reduce injustice between students who have learning difficulty or disability.

Nevertheless, the teachers' views also show that the project is causing a new injustice. Since the provided technologies and e-resources are only for some domain areas, other areas are neglected. Even though there is a belief that the project will bring justice for nationwide exams, in near future, some new injustices may appear with semi-integration of technology in education. Thus, the Turkish Education System which is exam-based should be performance-based or design-based.

Project like FATIH are long term and their effects are not limited to the implementation plans. The hidden effects of the project on students can be observed for years and years. In addition, these kinds of technology project are reshaped after new developments. Thus, new studies will be needed. A specific study can compare how the project is affecting one domain but not another one. If using tablets in a lesson is motivating the students, not using in another lesson could decrease interest against this lesson.

Since students are the main component of an education system, students' views and behaviors have to be studied to have clear effects of such technology reforms. After studying all components and making the necessary interventions, technology reforms may turn education system to what Hellsten called as "knowledge society" or "global village of wisdom" (2007). Overall, 'education first' is a common expression in Turkey to give advise after a problem occurs. This must be accepted in different countries as well. FATIH project in that sense can start an 'educational justice' first to have a practical 'social justice' in societies.

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