

Views of Primary School Teachers about Smart Board A Sample from Ağrı

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Abstract: Smart boards are the important material of today's educational technologies. With the recognition of the contribution of smart boards to education, its usage has started to increase in our country as well. The numbers of the studies about the education technologies are also increased. In the related literature, there are studies about the use of smart boards in the lessons but there are few researches that reflect the opinions and experiences of primary school teachers about smart boards. The aim of this study is to examine the views of primary school teacher about smart board usage. Descriptive method was preferred in the study and a questionnaire including open-ended questions was used. The study included 30 voluntary primary school teachers from Doğubeyazıt, Ağrı. The data obtained from the responses of the teachers to the questions grouped based on their common points; the frequencies and percentages of these responses calculated. The findings of the study showed that the smart board is a useful technological material, it facilitates students' learning and positively affects the students' attitudes to the subject. It activates the students and attracts the attention of them. It is also seen that teachers' knowledge about effective use of smart board is limited. They use the smart board as a projector. It is suggested that teachers should be given an in-service training course to teach different methods to use smart board.

Keywords: Education, Technology, Smart boards, Primary school teachers

Introduction

Technological developments have an impact on all areas of our life one of which is education. They influenced the organization of teaching process. One of the leading tools of today's educational technology is smartboard. Smartboard is an interactive whiteboard which exhibits the image on a touchable and writable screen. By the aid of smartboard (SB) student can watch and listen teaching material (such as animations, videos, power point presentation or graphics), the teacher can save information for future use (for example class discussion at the end of the lesson) (Preston & Mowbray, 2008).

There are many advantages of the SB. It is possible to connect SB to the internet easily and to access information from different resources. By the aid of the internet connection, field experts' opinions from different countries can be obtained easily. It is not necessary to be in the same place to reach an information from a person. The teacher can scan any part of the text in the book and display it on the screen with the help of SB. This provides both time and material economy for the teacher (Starkings & Krause, 2008).

The smartboard (SB) was started to use in 1990s in European countries and USA. In Turkey the use of SB in the classes has become widespread with FATİH Project (MEB, 2011). The aim of equipping classrooms with smartboards is to increase the effectiveness of teaching and to provide better learning environment. Because today's learners are growing up with iPad, computer, android phone and tablet. Teachers should be informed and encouraged for the effective use of technologies to meet the students' need.

There are many factors for effective usage of any technology, one of them is teacher. If teacher does not know how use SB, s/he will not use it during learning process (Tor & Erden, 2004). In this respect, the opinions of teachers on their usage of SB are important to determine the problems of teachers and to solve them. Studies have showed that instructive innovations were not successful when users have not been supported with suitable skills for effective usage (Pelgrum, 2001).

In the literature there are studies examining teachers' or students' views about SB (Bulut & Koçođlu, 2012; Akgün & Kuru Yücekaya, 2015; Çoklar & Tercan, 2015; Karakuş & Karakuş, 2017). Teachers and the students emphasized mostly three points; ease of use, useful material and positive attitude (Adıgüzel, Gürbulak ve Sarıçayır, 2011). Other studies searched the usage of SBs in learning environment and their effects on education (Yıldızhan, 2013; Özenç & Özmen, 2014). The studies presented that SB increases students' motivation and attitude and contributes to academic achievement. It enables importing various resources, offers greater lesson planning (Alghamdi & Higgins, 2015).

In conclusion there are studies searching teachers' *perceptions of educational technologies; technology competencies; use of technologies in the class*. However, there are limited study conducted with primary school teachers and searching current situations in the primary school classes. Primary education is very important for formation of basic knowledge of the students. Students' meaningful learning is important for further learning. But lessons such as math and science have concrete concepts. New educational technologies are useful to overcome these teaching problems. So that teachers' perceptions of these innovations are important for effective teaching. Because of that this kind of study was prepared to determine the primary school teachers' opinions about the SB.

Method

Research Model

In this study, it was tried to describe the opinions of primary school teachers about the SB. It was aimed to reveal existing situations in the classes and to answers the question "what is happening in the class?". So that survey research model was preferred.

Sample

The sample of the study consisted of 30, primary school teachers working in different primary schools, in Ağrı, Dođubeyazıt. These teachers participated to the study voluntarily.

Instrument

A questionnaire consisting open-ended questions was used to collect the data. It included four items in order to attain the objective of the study. At the end of the study, students' opinions also searched with a question. The questions were designed based on an expert about assessment. After designing of the questions, it was conducted a pilot application with a primary school teacher. The questions were revised in the light of this pilot study.

The questionnaire was given by hand to the subjects. Teachers wrote their answers on the sections left on the paper. The papers were collected by the researcher.

The answers of the teachers were grouped according to their similarities and were analyzed with Microsoft Office Program, "Excel 2010". Their percentages were calculated and then transformed into tables to increase the readability.

Results

In this part, the findings related to the responses that teachers gave for the survey questions are discussed and presented as tables.

The first question in the survey asks teachers about their condition and reason for using the smart board. The findings related to the teachers' responses are presented in Table 1 and 2.

Table 1. Teachers' opinions about their condition of using the smart board

Given responses	Frequency (F)	Percentage (%)
Yes	30	100
No	0	0

As it is seen in Table 1, all teachers stated that they use the smart board in their courses. The reasons related to teachers' responses are presented in Table 2.

Table 2. The findings related to teachers' reasons for using the smart board

REASONS	F	%
It facilitates teaching.	29	96,6
It increases my productivity in teaching.	29	96,6
It increases my classroom performance.	27	90
I think that the smart board can be used as multifaceted.	27	90
It increases my efficiency in my profession.	23	76,6
I can realize my desires (within the scope of education) quickly.	20	66,6
The people I am influenced in my profession believe the necessity of using a smart board.	9	30
My students think that I need to use a smart board.	9	30

As it is seen in Table 2, the teachers indicated that smart board is increasing the productivity in teaching and facilitating teaching.

In the second question of the survey, teachers were asked what word or words smart board evokes in their minds. The findings related to the given responses are presented in Table 3.

Table 3. The findings of what smart board means for classroom teachers.

Given responses	F	%
Technology	16	53,3
Visuality	14	46,7
Simplicity	7	23,3
Productivity	6	20
Being scientific	5	16,7
Internet	4	13,3
Accessing	3	10
Education	3	10
Others	7	23,3

When Table 3 is analysed, it is seen that teachers mostly use the word "technology" related to the smart board. Besides, they also use visuality, simplicity, internet, productivity, being scientific, education, access, multifaceted material and activity. It was determined that teachers use the words fictional, sharing, communication, ECN (Education, Computer Network), voice, speed, multiple intelligence education, interesting, and clear material under the title "others".

In the third question of the survey, teachers were asked about their level of using the smart board. The findings related to their responses are presented in Table 4.

Table 4. The findings related to teachers' level of using the smart board

Given responses	F	%
Good	13	43,3
Medium	10	33,3
Very good	4	13,3
Frequently	3	10

As it is seen in Table 4, teachers stated that their use of the smart board is at a reasonable level. It was established that the number of the teachers who use a smart board at a medium level is close to a reasonable level and the number of those who use a smart board at a very good level and frequency is less.

In the fourth question of the survey, teachers were asked in which courses they use the smart board. The findings related to teachers' responses are presented in Table 5.

Table 5. The findings related to course or courses in which classroom teachers use the smart board

Given responses	F	%
All Courses	16	53,3
Mathematics	13	43,3
Turkish	11	36,7
Free Activities	6	20
Social Studies	3	10
Music	3	10
Science	3	10
Others (English, Visual arts)	3	10

According to the data in Table 5, most of the teachers use the smart board in each class. The classes in which the smart board is frequently used are Mathematics and Turkish. It is determined that they do not use smart board much in Free Activities, English, Science and Social Studies courses. Based on the teachers' responses, it is seen that they prefer using the smart board least in Visual Arts course.

By teachers' opinions, students were also asked to state their ideas about the smart board. Themes were created for the students' responses, and these themes are presented in Table 6.

Table 6. Students' opinions related to the smart board

Given Responses	F	%
Enjoyable	13	43,3
Lecturing	11	33,3
Television	5	16,7
Video	4	13,3
Wise Board	4	13,3
Image	3	10
Learning	3	10
Others	10	30

It was found out that students mostly mentioned that smart board is enjoyable. They stated that the smart board is used in lecturing. Few numbers of students stated the words video, very good, wise board, learning, touch-operated, television and music. Under the "Others" title, there are statements such as seeing, hearing, watching, writing, image, smart, colour display, book, remarkable, understanding well, and information.

Discussion

According to the findings of this study, it was established that teachers adopt smart board positively. The teachers who use smart board stated that using smart board increases students' academic success, makes students active, provides visual learning, and increases positive attitudes. This finding has parallels with the results of the researches done by Çoklar and Tercan (2014) and Erduran and Tataroglu, 2009. In the relevant research, it is mentioned that smart board has advantages such as making student active, increasing students' positive attitude, motivation and academic success, enabling continual and effective learning and using time efficiently. In the educational sense, smart board is an education technology with which computer and projector can be carried or fixed, in which teachers can convey their own materials in a multifunctional way via a specific software and which provides material richness via the internet support, and it is increasingly used by teachers (Adıgüzel, Gürbulak & Sarıçayır, 2011). Altınçelik (2009) stated that smart board provides students with a flexible learning environment by providing visual, audial features, it plays a vital role in enabling effective and productive learning environment.

The results showed that primary school teachers use a smart board at a good or medium level. The usage of smart board requires from the teacher both technical and pedagogical knowledge (Al-Faki & Khamis, 2014). Korkmaz and Cakil (2013), also stated that teachers have limited knowledge about how to use smart board. Therefore, maximum level of success can be achieved with the in-service training that will be provided for teachers about both how to use the smart board with new teaching theories and how to benefit from the features of smart board efficiently. If teachers think that the use of the smart board is beneficial in education, they will use a smart board more effectively in their courses.

The primary school teachers indicated that they use smart board in all courses, especially math and Turkish language lessons. Teachers reflect the math problem and the text of the Turkish language book on the board easily. They do not waste time to write them. But they use smart board limited in the science lesson. Erduran and Tataroğlu (2009) also examined the teachers' opinions who use smart board in science and mathematics courses, and they determined that the smart board has a positive effect on the learning environment and by increasing students' interest it makes them more participant.

The findings also revealed that, students believe that the smart board is useful and enjoyable. Visual and audial elements are effective on more than one sensory organ. In a study done by Kaya and Aydın (2011) at the primary school level, it was revealed that students understand lessons better with smart board applications, they can absorb more quickly thanks to multimedia properties enabling subjects to be presented more visual and audial. Besides, connecting the smart board to the internet affects the lesson positively. In addition to them, in the study, it was stated that the smart board increases the interest in the lesson, so students' participation in the course becomes positive.

Conclusion and Recommendations

In conclusion, primary school teachers from Ağrı, Doğubeyazıt, who participated in the study voluntarily use smart board in their classes. The sample is limited. Different studies may carry out with larger subjects and obtain data related to primary school teachers' opinions, skills, knowledge on the use of the smart board, and the contribution of the smart board to primary school students.

Like other studies the data of this paper showed that the smart board is beneficial both for teachers to teach and for students to learn. Therefore, as well as schools in the centre, the smart board needs to be popularised in schools in towns, villages and hamlets. Accordingly, the opportunity of infrastructure for the internet needs to be provided for the places where the internet infrastructure is absent or little.

The internet infrastructure in schools needs to be improved. With a high-speed internet infrastructure, more online course activities can be applied on the smart board. Smart boards in schools should be checked regularly in order to avoid crashing so interruptions in education in schools where the smart board is used can be prevented.

One important point is that primary school teachers cannot use smart board, professionally. Teachers may be supported with trainings by the experts on using smart boards. In-service training courses can be popularised and held frequently in order to increase the level of using a smart board. Moreover, lesson contents can be developed in for teachers to make a course presentation on smart board. By this way, teachers do not spend more time to prepare material for the smart board.

Technological developments and changes affect the structure and function of educational institutions. Learners' needs also changes. The institutions which train teachers should hold continuously renewed courses to teach teachers different, the most effective and economical use of information technologies (Akpınar, 2003).

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