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An Overview of the Use of Interactive Whiteboards in Education

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Abstract

The purpose of this study is to FATIH project by considering the project components are of a situation analysis about the Interactive Whiteboard (IWB). The separation was made considerable amount of resources project reaches their goals will provide serious contributions to the education system. An important component of the project is the use of the IWB. Also in terms of the applicability of the project, actively involved in every stage of the process area, it is important that the opinions of FATIH trainer. In this study, the project of technical problems encountered in the effective use of the IWB, the IWB infrastructure works and suggestions for the success of the project. Research based on qualitative research methods and techniques. This study is descriptive research. This study served in Adana was conducted with FATIH project instructors. According to the findings of the board on the success of the project interactive would be useful to better levels of usage may be recommended, but also pay attention to some problems in this study.

Keywords: The use of technology in education, Interactive whiteboard, Instructor feedback

1. Introduction

As is the case in all areas in recent years, the use of technology in education increasingly and effectively from technology in every aspect of education regarding the path. Because the benefit of technological development in training students and teachers has benefits in many areas and in terms of the use of technology in today's world no longer has become a necessity (Çiftçi, Taşkaya & Alemdar, 2013).

To take advantage of technological advances in education Ministry of National Education planned by the innovations and to this day it's one of the most comprehensive in hers FATIH project. Ministry of National Education, aimed at improving the use of technology in schools Computer Technology (CT) - FATIH (movement to increase opportunities and technology) project. This project, in addition to the educational community since the agenda all segments of society by also has been closely monitored.

FATIH project, ensure equal opportunity in education and training and improve technology in schools information technology tools in the process of the learning-teaching will be more appeal to the senses, effective use in class; preschool, elementary and secondary level all schools laptop, LCD panel, the provision of Interactive Whiteboards (IWB) and internet network infrastructure. Within the framework of this project is planned to be given in-service training to teachers. In this process, programs, computer technology assisted education bringing compliance educational e-content will be created. FATIH project, Ministry of National Education is being executed by the Ministry of Transportation, is supported by the. Completion of the project's five years at the front (FATIH Project, 2012).

A great contribution to the educational system is expected to bring so much to the success of investments and projects a good planning, evaluation and analysis of the process is very important. At this point, as long as the learning environment: the impact of new technologies offered and any glitch can be used more effectively, the determination of the technology for the development of the right strategy. Using new technologies in the learning environment for teachers and students to identify problems and for as long as these issues to meet the expectations for steps. In the new technology that already must be made of the research on active users. Thus, users use the Interactive Whiteboards (IWB) and identified their problems and needs, the right for the use of this technology in the future effective strategies could be developed (Keser & Çetinkaya, 2013).

The whiteboard can be used to deliver instruction in a variety of ways that may be categorized based on three modalities of learning. The first modality is visual learning. Visual learning through the use of a whiteboard can range from the use of text and pictures to the use of animation and video. Auditory learning is the second modality. Activities that involve auditory learning include the use of words orally for pronunciation, speeches, and poems. The use of auditory learning might also include listening to sounds or music. The third modality of learning is tactile. Allowing students to physically interact with the board can assist with meeting the needs of

tactile learners. Numerous software programs can be used that involve user contact with the whiteboard. The extent to which each of these three modalities is incorporated into a lesson may determine the extent to which students are engaged in the learning process and, thus, are motivated to learn (Beeland, 2002).

The Interactive Whiteboard (IWB) presents both challenges and opportunities to teachers, particularly in terms of staff development and training (Beauchamp, 2004). Interactive Whiteboard (IWB) is regarded as one of the most revolutionary instructional technologies for various educational levels (Türel &Johnson, 2012).

Many studies have been made about the Interactive Whiteboard (Sünkür, Şanlı & Arabacı, 2011, Ikan, Dagan, Zorman & Zorman 2011, Sweeney, 2008), with the participants involved in the project were (Dinçer, Şenkal & Sezgin, 2013, Kayaduman ad., Altın & Kalelioğlu, 2015, Karal ad., 2013).

But the project every step of the tutorial of the project on the basis of opinions. In this study, we investigated the opinions regarding the project of project instructors.

2. Method

This research was conducted on the basis of qualitative research methods and techniques. Research is a case study. Case study data collected on a descriptive analysis was analysed through.

2.1. Research Design

In this study, the data contains open-ended questions were gathered with interview form. During the interview contains questions five demographic features, reviews of six questions were asked for the trainer. Posed the questions expert opinion mobilisers ' Handbook. Attending the talks were carried out face to face with the instructors. According to the expert opinion was completed interviews conducted with educators.

Descriptive analysis of the research part of the analysis method. This descriptive analysis created a framework for the operation, the data generated according to the frame and finally the identification and interpretation of the findings. In the study sample was chosen large enough, the topic discussed by topic with the researcher. Expert opinion on the issues of consistency review and confirmation of participants.

2.2. Participants

Research, in the province of Adana, 7 projects were conducted with the instructor who has work. Implemented for the open-ended questions in the implementation of the mobilisers' Handbook, qualitative research method for the purposes of sampling method used in the criteria of the sampling method used. Sencer (1989) for the purposes of sampling, for the purpose of research, according to a representative for the purposes of an example, rather than one or a few examples of the lower segment. In other words an appropriate sampling, intended to work around the universe means to make the observation that a segment of.

3. Results

Participants in the survey findings in accordance with the opinions of the department.

Table 1. Participants in the study according to the occupational distributions of seniority years

Professional Seniority	n	%
5-10 years	5	71.42
11-15 years	1	14.28
16-20 years	1	14.28

Table 1 participants in the study were examined between 5-10 years of seniority is 71.42% of those who have. Other professional seniority years are equal. This is seen as 14.28 % of.

Table 2. Interactive Whiteboard (IWB) Technical Problems

Sub-themes	f	%	Speech
Infrastructure	5	71.42	"School-wide high speed internet connection is not yet fully transferred. High speed connection filtering in schools, passed due to a busy connection cannot effectively benefit from" (E.2).
Software	2	28.57	"Software to not enough yet to use the lessons. For this reason, the point of too much content to teacher's preparation task falls. The most affected sectors teachers and pupils positive of course" (E.4).
Hardware	4	57.14	"The lack of a sufficient number of the USB port. I'm unable to intervene directly to my hardware. Any glitch in the changing of all the necessity of a module" (E.1).

Table 2 examined the most important technical problem related to Interactive Whiteboard (IWB) is the problem of infrastructure stated that the instructors. There are also significant problems arising from the hardware again that there is a problem with the 57.14% with trainers. Minimum rates poses technical problems with software 28.57%.

Table 3. Effective Use of the Interactive Whiteboard (IWB)

Sub-themes	f	%	Speech
Used more effectively every day	4	57.14	"Since the early years of a relatively active. It will increase the effectiveness of e-content, expands" (E.1).
Content development they worry about	2	28.57	"We don't tell wholly effective use of Interactive Whiteboard. Not used, also can not say. Can be used on the basis of training and curriculum areas and we need more appropriate content" (E.4).
Teachers are coming without a preliminary	3	42.85	"Knows how to use the technology and they are using the convenience benefits friends of ET efficient. This uses the teachers about 20% of our teachers, I'd say all undertaken" (E.3).

Table 3 participants in the study examined the use of the Interactive Whiteboard (IWB) educators more effectively is being used every day with 57.14%. Teachers' preparation and using the Interactive Whiteboard (IWB) content development and relief of distress in the necessary trainers.

Table 4. Interactive Whiteboards (IWB) Infrastructure Works

Sub-themes	f	%	Speech
Network engine problem	3	42.85	"Coordination of network infrastructure because it does not have Interactive Whiteboard assembly with sometimes network infrastructure discovery report and interactive exploration of physical inconsistency and the Interactive Whiteboard sometimes can be in the form of problems after one of the first" (E.5).
Electrical system problem	1	14.28	"In the sense of the Internet and energy infrastructure in the School Board that isn't set up efficient usage levels remained fairly low" (E.4).
Building competencies problem	2	28.57	"I think the appropriate technical infrastructure envisaged in the project but not the physical infrastructure of schools an appropriate" (E.1).

Table 4 use of Interactive Whiteboard (IWB) examined the infrastructure works. According to the table instructor's network infrastructure as the most important problem with 42.85% of the problem. In addition, the electrical system and building competencies that are referred to by trainers. Infrastructure work with the least electrical system problem that is clear from Table 4. This data is shown as 14.28%.

Table 5. Suggestions for the Project's Success

Sub-themes	f	%	Speech
Users motivation	4	57.14	"Teachers are practical training about the use of the Board must be given every year, is authoritative for the İnternet troubles, the company must notify the IT in the school guidance counsellor" (E.7).
Updating of the internet filter	2	28.57	"Internet filter is more efficient and fast updating with a system will lower the speed of the internet slowdown" (E.2).
Elimination of the need for software	3	42.85	"Software is very inadequate planks. That's why software to work must be installed on the IWB. Commercially available open-source, free, very useful program must be revitalized with system" (E.6).
Content development incentive	3	42.85	"Associate teachers have gained everyday objects with Visual learning activities and courses for a short and intense use of technology in education course before FATIH project with computer and internet use, the use of computers, regardless of whether the certificate of use of the internet, graphics, Office software, video and they need to be taken to the course for them to use your SIM" (E.5.).

Table 5 most educators who participated in the survey examined the success of the project in order to reach users should motivated. The issue of updating the internet with 28.57% filter table 5 is expressed in.

4. Conclusion

In this study, the project every step of the project tutorial on how to use the Interactive Whiteboard (IWB) reviews of work was attempted. Creation of technology infrastructure in schools and the use of technology in the project related to the support of this study, the expression of viewpoints is important.

The sheer size of this is no doubt a number of deficiencies in a project. This is seen in the use of the Interactive Whiteboard (IWB) troubles. Therefore in terms of the sustainability of the project the project the need for feedback from instructors cannot be ignored. Trainers of technical problems related to the Interactive Whiteboard, effective use, infrastructure works they had their minds on the issues. In addition, in order for the success of the project proposals.

As a result of this study can be in this suggestion;

Research, where he worked in different cities were included in the comparison can be made between cases where the instructors.

Use of the interactive board, the administrator may be further joint activities for teachers and students.

The progress of the project and execute the project will have a significant share in the success of our teachers use interactive board uses better level.

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