The Smart Learning Potential of Turkey's Education System in the Context of FATIH Project

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EXECUTIVE SUMMARY

This chapter explores the FATIH project and examines and analyzes the views of school administrators on the contribution. Literature review and qualitative method are conducted so as to accomplish these goals. The project has a very high potential to contribute to the smart learning environment of Turkey. However, in practice, it needs to be implemented fully.

INTRODUCTION

The main aim of this study is to share the outcomes of the FATİH Project as Turkey's case on smart learning environments (SLE) and smart learning technologies especially focusing on the "Education Information Network" or EBA (Eğitim Bilişim Ağı in Turkish). The Turkish Ministry of National Education (MoNE) has a vision to enhance learning using the latest ICT and smart technologies. According to Zhu, Yu, and Riezebos (2016), "the objective of smart education is to improve learners' quality of lifelong learning. It concentrates on contextual, personalized and seamless learning to promote learners' emerging intelligence and ease their problem-solving ability in smart environments" (p. 15). FATİH ('Fırsatları Artırma ve Teknolojiyi Iyileştirme Hareket' in the Turkish Language) means increasing opportunities and improving technology movement (YEĞİTEK, 2017a). The FATİH Project was initiated by the Ministry of Turkish National Education on November 22, 2010 (YEĞİTEK, 2011). It aimed at providing access

to information and transfer of knowledge within some of the educational activities carried out in nearly 54,000 schools including pre-school, primary school, junior high school, and secondary public schools of Turkey. It has influenced nearly one million teachers and nearly eighteen million students from different school levels except for higher education level (YEĞİTEK, 2017a). This chapter aims to open a debate on the contribution of the project to SLE- which actually does not focus on SLE explicitly.Based on a national mandate and structure, the Turkish education system has adopted universal principles of education as a vital objective that reflects a philosophy of pedagogical and scientific progress. For thousands of years, education, and training that manifested within a triangle of school-teacher-student has now used new, multifaceted, multi-channel alternatives with the use of technologies in the education system.

Problem Statement

With FATİH Project, the school administrators bear a tremendous responsibility for procuring the technology, organizing the educational environment which needs technology providing a repertoire of strategies mapped to the curriculum when using new technologies as well as planning teachers' professional development to enable them to use IT effectively in the class. They also have the added responsibility such as the management of a new culture of technology enhanced learning inschools (Turan, 2002). Further, there are also new roles that school administrators need to be trained in with regards technology integration. These new leadership role of school administrators expressed as technology leadership (Anderson & Dexter, 2005; Sincar & Aslan, 2011) are important to allow school administrators to be more comfortable in using technology and trust themselves to use these skills effectively, eventually increasing their motivation to integrate technology in schools successfully (Hacıfazlıoğlu, Karadeniz&Dalgıç, 2011). Therefore, this study is important. It aims to examine and analyze the views of school administrators on the strengths and weaknesses of the students' use of interactive board and tablets in the FATİH Project in the context of highlighting learning practices and their effects on student education. The following research question guided this study:

What were the benefits and challenges of interactive board and, tablets inTurkish students' education process with regard to the views of school administratorsin the context of emerging technologies for smart learning and roles of the technologies?

LITERATURE REVIEW

Information and communications technologies have altered learning environments intensely for the last 50 years. Innovations and developments such as use of computing technologies and the Internet in learning and teachinghave been an ongoing process (Spector, 2014, p.1). Moreover, teaching technology changes occasionally as a result of alterations in the current models of human cognition and learning. A major change throughout the behavioral sciences that began in the 1980s started to affect classroom learning and supporting technologies (Scardamalia & Bereiter, 2014, p. 1). Furthermore, the learning behaviors of learners and so teaching approaches have been altered through improvements in technology (Chen, Cheng & Chew, 2016, p. 1). Nowadays, learners use mobile devices and applications so that they can reach information and knowledge, and interact socially (Singh & Hassan, 2017, p. 4). In short, it is understood that, in parallel with the developments in technology, educational institutions have benefited from the technology in its activities of realizing the learning and teaching activities. As an

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