Chapter 34
The Use and Uptake of Information and Communication Technology: A Turkish Case of an Initial Teacher Education Department

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ABSTRACT

In common with many countries, teacher education in Turkey has been facing a period of rapidly changing demands with respect to the use of information and communication technology. This chapter presents a case study of an initial teacher education department in Turkey. The study focuses on prospective English language teachers' views concerning various types of information and communication technology deployed by their teacher educators, their views of the information and communication technology-related course, their subsequent engagement of the information and communication technology, its emerging challenges, and their expectations to utilize information and communication technology in their future teaching. Data were collected using a questionnaire, interviews, and portraits of three teacher candidates. The results of the study reveal that the majority of the teacher candidates have positive perceptions towards integration of technology in their courses; however, they are aware of the lack of the pedagogical use of information and communication technology within their courses, and see the need for more use of such tools in their preservice teacher education programs.

BACKGROUND

The UNESCO World Education Report, *Teachers and Teaching in a Changing World* states that

Information and communication technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy (UNESCO, p. 2). The report continues that "educational systems around the world are under increasing pressure to use the

DOI: 10.4018/978-1-4666-8751-6.ch034

new information and communication technologies (ICTs) to teach students the knowledge and skills they need in the 21st century" (p. 3).

Indeed, developments in information and communication technology and its applications in teaching and learning call for teachers to effectively use the new learning tools in their instructional practice. The implication that *information and communication technologies* has for the initial teacher education is profound. With the emerging new technologies, designing and implementing effective *information and communication technology*-enabled teacher education programs becomes the key to fundamental educational reforms. The literature suggests that integrating *information and communication technology* into initial teacher education is essential to accomplish the intended change in developing prospective teachers' technical information and communications technology skills. This requires a systematic information and communications technology training for prospective and practicing teachers (Cuckle, Clarke, & Jenkins, 2000; Fisher, 2000).

Having realized the importance of educating teachers at the initial teacher education when the teachers are most receptive to learning how to integrate technology into instruction, Turkey, as in many countries, has introduced information and communication technology into its initial teacher education program. Improving the quality of education and promoting innovation, particularly in information and communication technology, has been among the policies of the Turkish Higher Education Council's (HEC) strategic objectives in education. To bring this about, Turkey introduced two major curriculum innovations at higher education; one in 1997 and the other in 2005. In 1998, following the restructuring of education faculties, which involved a major curriculum initiative at higher education, two information and communication technology-related courses were introduced into the initial teacher education departments: *The Computer course* aimed to equip teacher candidates with basic keyboard skills, word processing, graphic, spreadsheets, and basic programming applications. The *Instructional Technologies and Material Development* course aimed to familiarize prospective teachers with different instructional technologies, their functions and uses, development of instructional materials, *e.g.* spreadsheets, transparencies, slides, video, computer-based materials, and evaluation of various types of teaching materials through instructional technologies (HEC, 1998).

In 2005, the existing teacher education programs were redesigned into which technology was to be woven. With this curriculum reform, information and communication technology courses, which were previously introduced into the education system, were combined under a single one-semester course *Instructional Technology and Material Design,* to be delivered during the second-year in all of the initial teacher education departments.

A series of Turkish government publications has set out the aspirations of those in the political and educational sectors for benefits to national prosperity, which would arise from increased use of information and communication technology. The Turkish Ministry of National education has already introduced initiatives to promote the use of information and communication technology in Turkish schools, and has recently undertaken a major initiative, *Fatih Project,* a five-year program. The aims of this undertaking are to promote and extend the conventional uses of information technology to include information and communication technology-supported education through providing e-contents using *tablets* in education, and classroom information and communication technology equipments, such as LCD Smart Boards. The strategic aim of this project is to transform the teaching and learning to informa-