Information and Communication Technologies in Schools A Handbook for Teachers

or

How ICT Can Create New, Open Learning Environments

(Book Review)

By Ramazan Güzel (ramazanguzel@gmail.com) District Directorate of National Education, Gemlik, Turkey



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Introduction

Technology is the collection of techniques, skills, methods and processes used in the production of goods or services or in the accomplishment of objectives, such as scientific investigation.(Wikipedia, 2016) In 20th Century, technology and technological developments have developed rapidly and it made the world a smaller place. With the help of technology, today information is easily and rapidly accessible through devices of telecommunication.

Information and Communication Technology (ICT) is a very broad term and it refers to all equipment, applications and services that involve communication. When it is narrowed down to ICT in education, it refers to Information and Communication Technologies used in educational settings. ICT in education helps learners to reach universal education, it provides equity in education and it increases the quality of the learning and teaching. It plays very important role in the way we communicate, learn and live.

"Information and Communication Technologies in Schools, a Handbook for Teachers or How ICT can Create New, Open Learning Environments" publication, with seven chapters provides very basic presentation and utilization of ICT in education. It is complementary handbook to the other ICT publications published by the Division of Higher Education at UNESCO. This publication is a handbook for teachers and teacher educators who would like to know and use the ICT in their classrooms.

The aim of the publication is to help teachers while forming new, open learning environments with ICT. It directs teachers to implement the ICT curriculum successfully in the classrooms. Moreover, this publication helps teachers to get a practical and realistic approach for curriculum and teacher development. All of these explanations in the book can be implemented quickly and cost effectively, according to available resources.

Chapters

This handbook consists of seven chapters.

Chapter I, "Society, Learning Imperatives, and ICT" explains general effect of Information and Communication Technology (ICT) on economy, globalization and education. It scrutinizes the individual needs and expectations of society from ICT. This chapter also mentions about the radical changes in education and schools and give reasons about the cause of this change.

It gives hints by depicting local circumstances to Ministries, educational managers and schools to cope with ICT changes. This chapter also mentions about ICT's effect on curriculum, teacher development. This chapter ends with the terminology used in ICT.

Chapter II, "ICT: New Tools for Education" deals with technical subjects. It describes the ICT tools very detailed used for education. Explanations are very simple and understandable that educators may easily benefit from these tools without prior knowledge.

Chapter III, "Schools in Transition" explains old, classical schools' strong and weak points as an organization. Schools' changing roles over time, teachers' and learner's role in the classroom, and the solutions for the problems encountered is examined in this chapter. It is suggested to use or introduce ICT to solve the problems which are encountered. As a consequence of using ICT in classrooms, changing pedagogy is stated. In addition, constructivist and connectivist learning theories are expressed.

Chapter IV, "ICT in Learning and Teaching" explores teaching and learning activities with the use of ICT in education. This chapter opens new doors for teachers who use ICT in their classrooms. Many activities which can be enriched by using ICT in the classrooms are described in separate titles.

Chapter V, "Structuring the School Continuum" offers solutions to problems for practical use of ICT in schools. It demonstrates how ICT should be used in a sample class. From the position of the chairs to position of the computers are reported for successful ICT application in the classroom. Besides, this chapter displays how ICT can be implemented in different classes such as primary school classroom, foreign language classroom, music classroom, teachers' room etc.

Chapter VI, "Mathematical Fundamentals of Information Science" examines the fundamentals of computer science and technology. This section explains the informatics in education as having three interrelated aspects. 1- Fundamental, theoretical informatics. 2- ICT and issues in science other field of human culture related to ICT. 3- Use of CT in educational activities.

Final chapter VII, "ICT and Educational Change" examines strategies of change, stages and indicators of ICT integration, and dimensions of ICT development. It also informs the needs to restructure schools according ICT usage. This final chapter accordingly suggests planning for ICT in learning.

Evaluation

Information and Communication Technologies in Schools, a Handbook for Teachers or How ICT can Create New, Open Learning Environments delivers very detailed presentation and utilization of ICT in education. This publication is very good resource to teachers and teacher educators. In reviewing this book, the first thing that attracts the readers' attention is the layout of the publication. Content, organization, and reference sources are efficient enough for this publication which aims to help teachers while forming new, open learning environments with ICT. However, the cover page image and watermark image in the first nine pages are not very relevant with use of ICT in education. Globe in the UNESCO Headquarter garden and the Eiffel Tower doesn't make any sense with ICT. Instead of this image, more convenient image could have been selected.

This publication allows the reader to easily follow the use of ICT in the classroom by giving authentic examples. The book is divided into seven chapters and first chapter starts with the background information of the ICT. Second chapter explains very detailed ICT tools used for education. Some tools mentioned in this chapter under storage title have already been outdated. It shows that how fast technology changes and how fast it wears out the old technology. Third chapter mentions about the change in learning environment with the use of ICT by examining it from teachers' and students' view. In the fourth chapter, it proposes new pedagogical methods in learning and teaching. In my opinion, this chapter is foremost part of this publication. It explains the organization of the learning process with the use of ICT and examples are can easily be implemented in classrooms. Fifth Chapter describes the place of ICT in school learning activities. This chapter also defines how to structure ICT in school curricula. It gives very good examples but these examples do not relate directly to the teachers because educational authorities and school directors are also related to school curricula. This chapter is addressing everyone; school directors, educational authorities, parents and community. Sixth chapter deals with theoretical informatics and ICT issues in science and other fields. Background information is given under such titles Forerunners and Founders of Informatics, Fundamentals of Informatics. Readers can build the concept of major components of informatics in education in their mind with the help of this chapter. Last chapter offers strategies for the restructuring the school environment to use ICT. There are also practical suggestions for planning to use ICT in schools.

References

Wikipedia. (2016). https://en.wikipedia.org/wiki/Technology