

The Use of Multimedia Material of Teaching Modern Mathematics

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ABSTRACT

The world today is witnessing acceleration in all areas of science and knowledge, and the explosion of the third revolution, the so-called technological revolution. And the emergence of a new era the era of electronics and communications, led to obvious changes in all aspects of daily life. It will need to be on education systems to respond to these events, and attempt to put the principles and criteria for the selection of teaching methods appropriate for the renewal of education, and create a learning environment. The modern education must be compatible with changes that occur, where they can develop cognitive abilities and skills of the learner, which are difficult to develop by the traditional education system. This is what made us think in a new way of teaching mathematics to ninth grade in middle school in Iraq and the use of information technology and communications. The many students lack imagination, cognition, perception and analysis. The need working in this research on the use of information and communication technology through the design of the system contains the multimedia and interactive games designed to support the educational process and to overcome the difficulties faced by students. In addition to make mathematics from the world of rigid into a world full of movement and creativity.

Where the design of this application by using a special methodology supports multimedia called Multimedia Designs and Planning Pyramid (MUDPY). That contributed to the provide requirements of the user (Teacher \ Student) very well, where they were to reach these results through data collection and process of the questionnaire to the user, after the tested the system and evaluated by the user (Teacher \ Student). This has given great support to this study and makes them take a new dimension in the educational process, where it has borne the idea of expanding this experience and use in other sciences.

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LIST OF ABBREVIATIONS

E Learning	Electronic Learning
ICT	Information and Communication Technology
MUDPY	Multimedia Design and Planning Pyramid
LMS	Learning Management System
MMTMM	The Use of Multimedia Material of Teaching Modern Mathematics
HTML	Hyper Text Markup Language
UML	Unified Modeling Language
OOAD	Object Oriented Analysis and Design
IIS	Internet Information Services
ASP	Active Server Page
SQL	Structured Query Language
SPSS	Statistical Packages for the Social Science
ITML	Information Technology Markup Language
FLV	Flash Video
WMA	Window Movie Maker software
MAV	Window Media software

CHAPTER ONE

INTRODUCTION

Today the world is witnessing the launch of a missile in the field of Information and Communication Technology and the use of digital devices. That contributed to the transfer of knowledge from one place to another easily and accurately bound. And make the field of knowledge broader than ever before, now any student science to take what will benefit him through several sources, including the Internet. Especially in the educational process where students can learn through the use of computer and browsing through the Internet (Neo, 2005).

The technology support to educational process as well as support the teacher in giving information to students. The all this progress and development in science knowledge seen the note declining significantly in student learning and receiving of knowledge in all the sciences, especially in mathematics. Through several studies In the world and especially in Iraq, where an obstacle in the way of mathematics student has, attributed the cause of the failure of students in the study of mathematics inability of students to the perception and analysis and the ability of spatial (UNESCO Iraq, 2007). From this point is on the educational process that is working hard in the use of new techniques in teaching methods. It is this section of this study was to exploitation of the Information and Communication Technology and system design use standard multimedia in the teaching of mathematics.

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