

**TO INVESTIGATE THE USE OF ICT IN EFFECTIVE LEARNING  
AND TEACHING MATHEMATICS IN NYERI SOUTH SUB-COUNTY**



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E37S110 / 02027**

**RESERCH PROJECT SUBMITTED TO MT. KENYA UNIVERSITY IN PARTIAL  
FULFILMENT FOR THE REQUIREMENT OF BACHELOR'S OF EDUCATION  
(SCIENCE) OF MT KENYA UNIVERSITY.**

**AUGUST 2012**

## ABSTRACT

ICTs have the potential to play a powerful role in enhancing the tools and environment of learning and preparing students to acquire skills, competencies, and social skills fundamental for competing in the emerging global “knowledge” economy.

Research and experience has shown that ICTs, if well-utilized in the classroom, have the potential to enhance the learning process in the following 6 ways:

Motivate and engage students in learning. It has been shown that students are motivated when learning activities are authentic, challenging, multi-disciplinary and multi-sensorial.

Bring abstract concepts to life, especially when concepts go against immediate intuition and common knowledge.

Foster inquiry and exploration.

Allow students to use the information acquired to solve problems, formulate new problems, and explain the world around them.

Provide access to world wide and local information sources.

Provide a means to communicate, share research, and join projects across geographical borders.

Several investments into computerising schools have not achieved the desired learning outcomes because the overall strategies were neither comprehensive nor realistic.

International best practice highlights that ICT integration should cut across all levels of the education sector, but experience also notes that the costs of integrating ICT into the entire education system can be overwhelming. An innovative approach to infrastructure, staff development, technology deployment, and community involvement is necessary.

Information and communication technologies (ICTs)—which include radio and television, as well as newer digital technologies such as computers and the Internet—have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life