

# **NATIONAL RESEARCH REPORT - KENYA**

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# INTRODUCTION

- Status of pedagogical integration of ICT in education in ten selected educational institutions in Kenya.
- The data was collected between October 2007 and August 2008 and entered in the Panaf Observatory on ICT in Education in Africa ([www.observatoire-tic.org](http://www.observatoire-tic.org)).

# Introduction to research team

- University of Nairobi
- Dr. Christopher Gakuu
- Dr. Harriet Kidombo
- Research team: Dr. Omondi Bowa
- Ann Ndiritu; Naomi Gokonyo and Augustine Mwangi

<b>SCHOOL</b>	<b>TYPE</b>	<b>LOCATION</b>	<b>GENDER</b>	<b>OWNERSHIP</b>
Aga Khan High School	Secondary	Urban	Mixed	Private
Enna Girls School	Secondary	Semi-Urban	Girls	Private
Kenya Technical Teachers College	Teacher Training	Urban	Mixed	Public
Musa Gitau Primary School	Primary	Semi-urban	Mixed	Public
Musa Gitau Secondary School	Secondary	Semi-urban	Mixed	Public
Ruraka Academy	primary	Urban	Mixed	Private
St, Joseph's Githunguri High School	Secondary	Rural	Boys	Public
Green Garden School	Primary	Rural	Mixed	Private
Tigoni Primary School	Primary	Rural	Mixed	Public
Uthiru Girls High school	Secondary	Urban	Girls	Public

# METHODOLOGICAL CHALLENGES

- Ambiguous questions in the interview guides and questionnaires
- multiple interpretations by both the respondents and the researchers.
- Emergence of new factors which conflicted with data collected earlier due to time lag
- Change of respondents in subsequent visits resulted in conflicting descriptions of ICT use in some schools.

# METHODOLOGICAL CHALLENGES

- Logistical issues - difficulties in securing appointments with the head teachers, uncooperative attitude
- Too busy and unavailable for interviews.
- Discomfort with taking photographs of their schools
- Payment for taking pictures
- Unwillingness by teachers to give documents such as lesson plans for unexplained reasons.
- Technological challenges of using the iPod and camera.

# LESSONS LEARNED

- Effectiveness of focus groups discussions
- Importance of team approach in data collection - division of labour.
- Value of triangulation
- Use of mixed-method approach in research

# DATA ANALYSIS AND RESULTS

## **a. National ICT Policies**

- Recognize the role of ICTs in education and development.
- ICT as a universal tool in education and training.
- Emphasizes its integration to improve access, learning and administration.
- Seek to establish policy frameworks; install digital equipment, connectivity and network infrastructure.



## a. National ICT Policies.....

- Basic computer knowledge in teacher training
- Seeks to facilitate universal access and equitable distribution of ICT infrastructure
- Reach formal and non-formal education sectors
- Affirmative action for gender and youth, Arid and Semi Arid Lands (ASAL) areas, Islands, rural and urban-poor schools, and special needs institutions.

## b. Status of ICT equipment, connectivity and access

- 9/10 Learning institutions had computers.
- 6/10 of the institutions were connected to the internet.
- 3/10 of the computers were connected to internet.
- The ratio of learners to computers was 1: 24
- 8/10 of the institutions had an ICT advisor/technician.
- All the schools offered computer skills to teachers and students.
- All learners and teachers had access to computers in the school.

# ICT integration in Teacher Training

- The KTTC has a clear presence of ICT in her teacher-training curriculum.
- ICT is inbuilt in all curriculum subjects. There is an educator professional development programme that focuses on the teacher –trainer.
- Weekly professional training in ICT
- 33.62% have participated in continuing education professional development courses that included ICT integration

## c. Factors that encourage ICT use

- Availability of basic ICT equipment
- Management support in all the schools
- Provision of literacy skills to learners- 40 – 100 hrs per week
- Investment in educational resources – Encyclopaedias, CD – ROMs
- ICT skills of the school manager and ICT awareness among teachers and learners
- Urbanization

## d. Factors that hinder ICT use

- The lack of a unifying National ICT Curriculum –
- Lack of ICT infrastructure –
- Technophobia
- Lack of ICT skills by educators and school managers
- Government has not employed ICT technicians for the schools –
- Converting manual teaching notes to ICT format requires both time and skill.
- Teachers feel that this is also an added load –
- Old, slow computers - donations

## **e. Impact on teaching and learning...**

- Access to learning materials installed in Encarta encyclopaedia etc.
- Improved grammar and spelling
- Clarified concepts in the sciences and mathematics
- More interesting presentations to the learners
- Improved the formatting, editing, storing and retrieval of information

## f. Policy and equity issues

- Gender
- Local content
- Special needs
- Language

# POLICY DIALOGUE - outcomes

- Invest in professional training of teachers
- Introduce ICT integration in teacher training curriculum
- Regular equipment maintenance
- Need for effective leadership
- Modernize classrooms to accommodate ICT use.



# POLICY DIALOGUE- outcomes.....

- Need for effective supervision of computer labs by school management –
- Provide optimum access to the labs
- Review the sample to make it more representative
- Incorporate more partners so as to broaden the scope and research capacity

END

- THANK YOU