UNESCO-China Funds-in-Trust
Strengthening ICT Integration and Use in Teacher Education

Tanzania

20 March 2019
Overview

- Key Achievements
- National Priorities and CESA
- Digital Material Produced
- Capacity Building
- Sustainability
Key Achievement 1
Capacity Development

- Integrating ICT in teaching and learning
- Tutors (Science, Maths and Languages)
- 35 Teachers Colleges (TC) (11 – 35 TCs)
Key Achievements 2
Mobile Learning Innovation

Language, Science, Mathematics Apps

Visual Physics
Pocket Mathematics
Swahili Sayings
English Pronunciation
Key Achievement 3
Advocacy for Internet Provision

✓ Cost Analysis for connecting all 33 TCs to the National ICT Broadband Backbone (NICTBB)

✓ Minister decision to allocate a budget for Internet provision at the TC in the Annual Education Sector Budget

✓ Inclusion of Internet Provision activities in the African Development Bank Project and Teacher Education Support Program
Key Achievement 4
Development of ICT Guidebooks

✓ ICT integration guidebooks for Kiswahili and English Languages
✓ Designed according to the Teacher Education Curriculum
✓ Serve as an ICT self learning tool
✓ Guidelines for developing digital Kiswahili content
Key Achievement 5
Research Studies

☑ Assessment of Problems and Challenges in Teaching and Learning of English and Swahili Languages

☑ Survey of Teachers' Perceptions of ICTs in Education and Impact on Motivation and Career Progression
National Priorities on ICT and Education (P) – FYDP and ESDP

- P1: Strengthening Science, Technology and Innovation
- P2: Expanding use of ICT in Education and Training
- P3: Sustainable and effective use of Kiswahili as a National Language

CESA - Strategic Objectives (SO)

- SO 1: Revitalize the teaching profession to ensure quality and relevance at all levels of education
- SO 3: Harness the capacity of ICT to improve access, quality and management of education and training systems
in your country align with the national priorities and needs, and also the regional priorities and needs? E.g. relation to UNDAF etc. Please give 3-4 major examples.
The most significant CFIT moments and impact

“I will educate my student about mobile apps that will improve their learning process”

Morogoro TC Tutor
Evidences of:

- Flipped classroom
- Flexible learning
- Increased Interaction
- Dynamic Learning

Physical Presence
Student benefits

Learning anytime/any place
Digital Materials CFIT Online Platform

Users:

✔ Tabora TC LMS: 32 tutors and 600 teachers students
✔ Monduli TC LMS: 60 tutors and 1010 teacher students
✔ OUT TC LMS: 1018 tutors from 33 TCs
Contextualization of ICT-CFT

How has the ICT-CFT been contextualized in Tanzania?
**Contextualization of ICT-CFT**

<table>
<thead>
<tr>
<th>Component:</th>
<th>Approach:</th>
<th>Technology Literacy</th>
<th>Knowledge Deepening</th>
<th>Knowledge Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDERSTANDING ICT IN THE CLASSROOM</td>
<td></td>
<td>Policy awareness</td>
<td>Policy awareness</td>
<td>Policy innovation</td>
</tr>
<tr>
<td>CURRICULUM AND ASSESSMENT</td>
<td></td>
<td>Basic Knowledge</td>
<td>Knowledge application</td>
<td>Knowledge society skills</td>
</tr>
<tr>
<td>PEDAGOGY</td>
<td></td>
<td>Integrate technology</td>
<td>Complex problem solving</td>
<td>Self-management</td>
</tr>
<tr>
<td>ICT</td>
<td></td>
<td>Basic tools</td>
<td>Complex tools</td>
<td>Pervasive tools</td>
</tr>
<tr>
<td>ORGANISATION AND ADMINISTRATION</td>
<td></td>
<td>Standard classroom</td>
<td>Collaborative groups</td>
<td></td>
</tr>
<tr>
<td>TEACHER PROFESSIONAL DEVELOPMENT</td>
<td></td>
<td>Digital literacy</td>
<td>Manage and guide</td>
<td></td>
</tr>
</tbody>
</table>
Institutionalization ICT-CFT

Awareness:
ICT-CSTT awareness created among key education stakeholders, including, the Teachers Education Department, Tanzania Institute of Education, Conventional and ODL higher learning institution offering Teachers Education.
Rollout Plan:
ICT-CSTT rollout plan was formulated during an education stakeholders workshop and shared with Ministry of Education Science and Technology (MoEST).

Provides recommendations for:
- MoEST
- Regulatory bodies
- Educational Institutions
Institutionalization ICT-CFT

- ICT-CSTT submitted to the Office of the Deputy Permanent Secretary for approval by Ministry of Education Science and Technology Management Team.

- Awaiting formal submission of the ICT – CSTT by MoEST to Tanzania Institute of Education (TIE) for integration in the Teacher Education curriculum.
CFIT Materials Development

CFIT Phase II
- Guidelines for Teaching English Language Subject Using Information and Communication Technologies.
- Taaluma Na Utaalamu Wa Kufundishwa Kiswahili Kwa Kutumia Teknolojia Ya Habari Na Mawasiliano.
- Guidelines for Developing Digital Content for Kiswahili.

CFIT Phase I
- Guidelines for Teachers on How to Integrate Information and Communications Technology (ICT) in Teaching and Learning Physics.
- Guidelines for Teachers On How To Integrate Information and Communication Technology (ICT) in Mathematics Subjects.
- Guidelines for Teachers On How to Integrate Information and Communication Technology (ICT) in Biology.
- Guidelines for Teachers On How to Integrate Information and Communication Technology (ICT) in Chemistry
UNESCO CFIT Project Tanzania planned to support materials development and digitization for language subjects.

OUTCOMES:

✓ Midterm Monitoring Report and Ministry of Education Science and Technology recommended that the funds be directed to additional capacity building which was critically needed.
CFIT Training

Training of the Trainer (TOT) + Cascading Mode of Training = Training Methodologies applied
138 Tutors from 35 public TCs benefited from Training of the Trainer Capacity Development
CFIT Training – Cascading Mode of Training

660 Tutors from 35 public TCs benefited from Cascading Mode of Training

Cascading Mode Capacity Development

- Sci & Maths Tutors: 173
- Language Tutors: 487
CFIT Training

Facilitators: Experts from the Open and Distance Learning Institution (Open University of Tanzania)

Beneficiaries: Tutors from 35 Public Teacher Colleges

Outcomes: 801 Tutors introduced to the basic understanding of the ICT-CSTT and capacitated with skills on how to use Mobile learning technologies and applications in teaching and learning
Sustainability

SUSTAINABILITY ACTION PLAN (SAP) FOR
CFIT PROJECT

JULY 2018
Sustainability

**Technology**
- Functional LMS and DL
- Scalability of the LMS and DL
- System Upgrade

**Institutional Level**
- Capacity Building
- Blended learning modalities
- ICT equipment Maintenance & upgrade
- Advocacy for internet connectivity

**Policy level**
- Quality assurance
- Operationalization of ICT-CSTT
- ICT infrastructure in the TC
Sustainability

ICT Infrastructure

✓ Web analytics tools have been integrated in the developed systems to monitor user patterns.

✓ Minster’s promise to include a budget for Internet provision at TCs in the Annual Budget for Education Sector.

✓ ADB Project will support connectivity of six TCs to the NICTBB and the TESP will support the 29 TCs
Both the AFB and TESP project have a strong component of capacity development on ICT integration in teaching and learning.
Areas For Future Development

✔ Scaling up CFIT Project interventions to Zanzibar

✔ Capacity Building for In-Services Teachers in Tanzania Mainland on integrating ICT in teaching and learning.
Thank you

Regina Monyemangene - National Project Officer
UNESCO
r.monyemangene@unesco.org