ICT-enhanced Development of Teacher Educators in Africa

Temechegn Engida (PhD)
Program Officer, ICT Use in Education
UNESCO-IICBA

t.engida@unesco.org
www.unesco-iicba.org

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Part 1: Theme and issue addressed by the presentation

- Following the development of UNESCO’s ICT-CFT, UNESCO-IICBA has developed ICT-enhanced teacher standards for Africa (ICTeTSA).
- ICTeTSA is a small complementary segment of the ICT-CFT for teacher educators’ professional development formulated by involving policy makers, heads of teacher education departments and other high-level experts in the Ministries of Education of SSA countries. The standards and corresponding competencies serve as a guideline/toolkit for institutional and individual capacity building in the area of ICT for teacher education.
- IICBA also published in 2011 ICT-enhanced teacher development (ICTeTD) model that guides classroom instruction based on the standards and competencies.
It was then realized that the successful use of ICT4TED depends to a large extent on a supportive policy environment at the national level. It was also clear that, whether at the global or national levels, women are underrepresented in all ICT decision-making structures including policy and regulatory institutions, ministries responsible for ICTs, boards and senior management of private ICT companies.

This presentation, therefore, highlights the "policy" component of the UNESCO-IICBA ICT program aimed at assisting African countries in the development of relevant ICT in Education policies and strategies, through capacity building initiatives and the development of policy tools.
IICBA’s work in this regard attempted to enhance the capacity of teacher education policy makers in mapping and planning for implementation of national ICT in education strategies by employing the already developed standards and model.

The major issues addressed included, but are not limited to:

- policy makers’ knowledge and skills in systematically mapping the present situation of ICT4TED,
- development of ICT-enhanced teacher education programmes,
- planning for implementation of ICT4TED, and
- empowering women in ICT4TED decision making.
Part 2: How ICT brings added value to the issue/theme

- Mapping and planning an education sub-sector program with a complete picture of the sector activities is a tedious work and requires inputs from both national and other sub-sectors programs. Mapping and planning for national ICT in education programs requires knowledge of a) the national vision, goals and plans, b) the educational context, and c) the specific standards and models for teacher development.

- A successful plan also includes all the dimensions of change: vision, skills, incentives, resources and action plans. Successful planners make informed decisions based on examining best practice elsewhere.

- ICT is therefore needed to properly document the mapping and planning processes, to speed up the processes through sharing of data and documents, to generate multiple scenarios for the programs and showing the best-fit scenario for the specific educational context. It facilitates the sharing of best practices among Member States within the RECs and beyond.
The capacity building exercises on mapping and planning for national ICT in education programs that IICBA conducted in all RECs of the SSA took participants through the following steps:

1) mapping of national vision, goals and plans by taking into account national vision and development priorities, development goals and plans, educational profile of the population, and gender-related development plans,

2) mapping of educational context by taking into account the educational structure, national educational goals and plans, the teaching and learning environment, human, financial and physical resources,

3) mapping of ICT in education by taking into account readiness of the ICT sector in terms of policies, plans and projects, preparedness of the ICT sector in terms of infrastructure, technology availability, quality of telephone service, computer technical support, cost of basic services, regulatory framework, and availability of expertise, and

4) the relevance and strategies of incorporating the ICTeTSA and ICTeTD in the teachers professional development schemes.
Part 3: Main lessons learned

- Participants from Member States in Africa stressed the importance and timely nature of the capacity building exercise as it gives very clear guidelines in how the ICT in education programs should be placed in a more comprehensive analysis/mapping of all the factors needed for a successful plan.

- It was learnt that countries in the RECs are at various stages in this regard and that such REC-based capacity building activities give the opportunity to learn, share experiences and harmonize their programs thereby contributing first to regional integration and mobility and ultimately to continental ones.

- It was clear that there needs to be a paradigm shift from the training of teachers and teacher educators through separate courses of IT, subject matter and pedagogy to the one that integrates technology, pedagogy and content (TPCK) as advocated in ICTeTSA and ICTeTD. This shift however requires time as it needs rigorous training of teacher educators. It also requires change in their attitudes towards the use of ICT in teaching and learning.
Participants stressed that building the capacity of 1 or 2 persons per country as was done through the RECs workshops might not bring the intended change in policy, strategy and practices as it is less probable that these participants could transfer the skills and knowledge acquired through such short period of time. It was thus suggested that, if Member States are convinced, it would be more profitable to build the capacities of a critical mass of personnel at national level through some sort of self-benefiting funds-in-trust mechanism or through convincing bi-lateral development partners operating in each Member State to financially and technically support the capacity building exercises. Such approaches will ultimately bring the intended reform and innovation at ground level.
As a follow up activity, IICBA has developed six capacity building modules based on the ICTeTSA and ICTeTD for training teacher educators of six subject areas, namely:

- African Geography
- African History
- Biology
- Chemistry
- Mathematics
- Physics

These modules will be ready both in print and online form to be used by the intended users.
Thank You!