PART I: Introduction

1. Background

eLearning Africa was launched five years ago in Addis Ababa in 2006. Successive conferences took place in Nairobi (2007), Accra (2008), and Dakar (2009). eLearning Africa 2010, the Fifth International Conference on ICT for Development, Education and Training, is being held under the patronage of the Zambian Minister of Education, the Honorable Ms Dora Siliya.

UNESCO-UNEVOC has been holding its Summit since 2007 (the 2nd eLearning Africa Conference). The 1st African UNESCO-UNEVOC TVET Summit on “Access to and Inclusion in TVET in Africa Through New ICT-Based Solutions”, the 2nd one was also on “Access to and Inclusion in TVET in Africa Through New ICT-Based Solutions”. The 3rd UNESCO-UNEVOC TVET Summit was on “Access and Inclusion: Improving TVET Through ICT-Based Information and Learning Solutions”. The present Summit was on “Flexible Learning: From TVET Policy to Skills Training Practice”.

2. Objectives of the Mission

− To present the perspectives of UNESCO BREDA and IICBA on ICT for TVET teachers professional development in Africa
− To identify possible partnership options
− To gain experiences on how Africa is progressing in terms on ICT for education
PART II: Main Activities and Outcomes of the Mission

A. 4th African UNESCO-UNEVOC TVET Summit

3. Background

The 2010 TVET summit was intended to have two main elements: The adoption by TVET institutions and skills training providers of 1) a technology-supported, blended curriculum strategy, and 2) an innovative, cooperative program for vocational orientation and initial vocational training in sport stadiums (related to sports facilities management). However, for reasons beyond the control of the organizers, the second element was not presented and discussed.

The first element, Blended Learning in TVET, aimed at investigating what is meant by blended learning in skills development and how it has the potential to improve the quality of learning and teaching. Blended learning teaching materials and approaches can be used to support initiatives that improve institutional flexibility and access. The organizers advocate that a long-term strategic focus to mainstream blended learning supports a broad range of TVET policy aims.

Blended learning is not wholly dependent upon a sophisticated eLearning technology infrastructure. The workshop is focusing on examining those things that can be done differently using a combination of existing or easily developed resources alongside required organizational changes; effectively linking policy with practice. This does not infer a wholesale transformation, but is an attempt to combine teaching quality improvement and, at the same time, improve access for under-represented groups e.g. the informal economy workforce.

Participants of the summit were expected to identify possible barriers to introducing technology-enhanced program delivery and to discuss the change management processes required to move an institution towards more blended flexible learning approaches and what local strategies could be most effective.

The target audiences of the TVET Summit were TVET policymakers, institutional managers or teachers who are interested in the use of technology to enhance quality and introduce more flexible approaches to skills training in technical and vocational subjects.

As part of this Summit, Mrs. Ann Therese Ndong Jatta, Dir/BREDA, requested Mr. Temechegn Engida to represent her and speak on behalf of her. To that effect she covered also the expenses for the participation of Mr. Engida at the Summit as well as the 5th eLearning Africa Conference held from 26 to 28 May 2010 in Lusaka, Zambia.
4. **Session I: Opening**

The first session of the Summit was chaired by Ms Alison Mead Richardson, Education Specialist-Skills Development, Commonwealth of Learning (COL). In her introductory remark, she stressed that the UNEVOC TVET summit is the largest pre-conference event at the eLearning Africa. Over 72 professionals registered to attend the event.

The welcome statement was by Mr. Muzano Simumba, Director, Vocational Education and Training, Ministry of Science, Technology and Vocational Training, Zambia. In his statement he pointed out that the use of ICT for education and training is important Zambia and that the country is developing ODL strategies for TVET that includes policy guidelines. The strategy aims at providing quality TVET through ODL. The unit for Vocational Education and Training of the Ministry of Science, Technology and Vocational Training is one of the centers of UNEVOC worldwide. Mr. Simumba further pointed out that TVET in Zambia is offered by both the public and the private sector.

As part of the official opening statement Mr. Saul Murimba, a representative the Dir/UNESCO Harare Cluster Office, pointed out the fact that the presence TVET policy by itself is not a sufficient condition for success. He stressed that in most SADC countries the budget for TVET is less that 1.6% of the national budget.

Following the opening statement, Ms. Richardson provided an overview of the 4th TVET summit and highlighted the full day program. She then invited Mr. L. Efison Munjanganja, Officer-in-Charge of UNESCO-UNEVO International Center for TVET, to make a keynote address.

Mr. Munjanganja’s presentation focused on such issues as the topical nature of TVET for development and innovation, the buzz about TVET development and innovation, show cases on ICT and flexible, learning, diversity of names to flexible learning, the structure and functions of the UNESCO-UNEVOC International Center for TVET, and TVETipedia—an online community platform to share relevant and high-quality TVET information (www.TVETipedia.org).

5. **Session II: Innovation and Technology: From Policy to Practice**

This session was on a presentation by Mr. George Herd from COL on the topic “innovation and technology: from policy to practice”. Mr. Herd made an elaborate presentation on the following issues:
a) Common TVET policy themes
Under this issue he raised such points as reducing poverty, increasing access, low quality (poor image), increase efficiency, and be demand driven. He also stressed that TVET as a sector, gets loaded with all the social, economic and basic survival issues of the day. The TEVET sector has a far greater policy burden than the schools and university sectors. These policy themes get translated into strategic objectives and passed down to the institutions where they are expected to respond and operationalize them – put them into practice! He also mentioned evidence in support of ICTs for education in which he mentioned that, in UK, more than 52,000 pupils moved from Grade D to C in science as a result of using ICT to support their learning, and this means that £694 million of teacher time would be gained if all schools used technology effectively – the equivalent of over 24,000 new teachers.

b) Resources
Mr. Herd listed and described the resources he considered are useful for TVET. Some of these are OERs, Web2, FLOSS, Mobile apparatuses, Social networking, Procurement alliances, Development partners, and the teachers.

c) Flexible and Blended (FaB) Learning
In flexible learning learners are able to choose the time and place for learning, whereas blended learning uses a mix of media. To do this, Mr. Herd stressed, you need flexible institutions able to find ways around the problems.

d) Institutional Strategy
Mr. Herd justifiably filtered the TVET policy themes and suggested an institutional strategy that combines ICT with Access, Efficiency, Equity, Relevance and Entrepreneurship. The combination of these themes with ICT should lead to a quality improvement agenda (QIA). He stressed that ICTs are about pedagogy and people; it is not about the technology. He also pointed out that QIA is a strategy that involves ICTs but that is not the end goal. The end goal is the transformation of the way the institutions in the TEVET sector work. The way it carries out its primary roles of educating for work. If industry and commerce do not change – and do not change quickly to meet the needs of the environment – they fail – not relevant to the market. He further argued that education needs to adopt aspects of this. Since our external environment is changing the imperative is to maintain our relevance to the economy and social and political aspirations of the politicians and the society we live in. He finally pointed out that policy makers and development partners should focus on quality improvement through ICT, long term sectoral view, collaborative networks, national support agencies, change management, target the pioneers and early adopters (build capacity from within), and TVET advocacy (that improves the image of TVET).
6. **Session III: ICT for TVET Teachers Professional Development in Africa**

This session, chaired by Mr. Mr. L. Efison Munjanganja, Officer-in-Charge of UNESCO-UNEVO International Center for TVET consisted of the presentation of Mr. Temechegn Engida, representative of Dir BRED, who is also the Program Officer for ICT use in Education in the UNESCO Institute for Capacity Building in Africa (IICBA).

Mr. Engida presented a paper on the topic “ICT for TVET teachers professional development in Africa” that consisted of the following sections:

a) **UNESCO/ILO (2002) Conception of TVET**

After briefly introducing TVET as an integral part of general education, a means of preparing for occupational fields and for effective participation in the world of work, an aspect of lifelong learning and a preparation for responsible citizenship, an instrument for promoting environmentally sound sustainable development, and a method of facilitating poverty alleviation, Mr. Engida stressed the importance of exploring strategies that capitalize on the nature of both ICT for teacher development and TVET as an essential area of teacher education.

b) **UNESCO/BRED’s Work on Revitalizing TVET in Africa**

Under this section Mr. Engida highlighted the objectives and recommendations of the workshop organized by UNESCO/BRED in collaboration with ECOWAS on revitalizing TVET in ECOWAS member countries, in August 2009 in Abuja hence known as the Abuja Process. He elaborated the major recommendation of the Abuja Process, which is the creation of an Inter Agency Task Team (IATT), consisting of the major technical and financial partners involved in capacity development, skills development, youth employment and poverty reduction to pull together their resources in support of the TVET revitalization effort.

c) **UNESCO/IICBA’s Work on ICTs for Teacher Development in Africa**

Mr. Engida, first and for most, argued that TVET teachers development should be viewed in the general context of teachers development in general. With this premise in mind he presented an elaborate account of IICBA’s work on the pedagogical integration of ICT in Africa, which is based on the general model of ICT for teacher education (ICT4TED). He stressed that the model is a general approach for individual and institutional capacity development that involves policy issues, curriculum development, teaching and learning, etc using appropriate technologies. The model was tested in the ECOWAS and SADC regions with financial support from the Chinese Government and BRED, respectively. Since the implementation of the ICT4TED model is a long-term project and requires financial and human support, Mr. Engida called for a strong partnership and collaboration among stakeholders. He stressed that no single agency can, or even should, tackle all these areas individually, and that there is an urgent need for strong and sustainable partnership among all stakeholders. Such partnership can enhance impact while reducing duplication of efforts and wastage of resources.
d) Making Links with Other UNESCO Initiatives

Based again on the premise that TVET teachers development is part of the general teacher development approach, Mr. Engida briefly presented to the audience the UNESCO TTISSA Toolkit. He pointed out that the toolkit is a diagnostic instrument that consists of six chapters (see figure below) and that it can be adapted to analyze the TVET teachers needs, challenges and strengths in Africa.

Once reliable national data is obtained through the Toolkit, a targeted intervention on ICT for TVET teachers professional development can be made.

e) Partnership

As a follow-up of his presentation asking for strong partnership among stakeholders Mr. Engida discussed during break times with some representatives of international stakeholders who were present at the Summit. One among these was Dr. Nils Tomes, Senior Advisor for Education, Science and Society of the British Council. Dr. Tomes was so positive about partnership, particularly in relation with her Organization’s work on Skills for Employability. Skills for Employability is a British Council programme that addresses the demand for skills in a global economy so that national educational and training systems are better able to respond to labor market demands and learner needs. The programme focuses on building strong relationships with industry and employers, governments and training providers, using the UK’s expertise on standards, innovation and creativity in the field of skills training where the UK is a market leader. Dr. Tomes also mentioned that the British Council-Africa, based in Nairobi, could be a potential partner at regional/Africa level.

The other potential partner is the Commonwealth of Learning, represented by Ms Alison Mead Richardson, Education Specialist-Skills Development. She stressed that a partnership particularly
through the Flexible Skills Development Initiative, described in the session presented below, would be more promising at this point.

7. **Session IV: Flexible Skills Development Initiative (FSDI)**

Session IV consisted of a presentation by Ms. Richardson and group work activities.

Ms. Richardson began her presentation by briefly introducing what COL is all about and then focused on the FSDI. She stressed that the Initiative is targeting EFA goals 3 and 6 and that its outcomes are three-fold:

- Increased efficiency by using ICT to improve administration and release capacity
- Increased access by using the released capacity to create a more flexible delivery structure
- Increased quality using ICT

She finally mentioned that COL is working in a 3-year plan and that it has just finished its first year of this period. In the 2009–2012 trienniums, COL will pursue eight initiatives in two sectors:

**Education**
- Open schooling
- Teacher education
- Higher education
- Virtual University for the Small States of the Commonwealth

**Livelihoods & Health**
- Skills development
- Learning for farming
- Healthy communities
- Integrating eLearning

The cross-cutting themes of *gender, quality* and *appropriate technology* are pervasive throughout the programme.

The group work was facilitated by Ms. Richardson and Mr. Herd. The facilitators posted the following guiding questions (see box below) and participants of the Summit were randomly classified into three groups.
The Promise of ICT in TVET: the potential for:

- Increased access
- Increased quality
- Increased efficiency

How can this potential be realized?

1. How is flexible learning dealt with in your national TVET policies?
2. What does flexible TVET look like in your institution in 2020?
3. What needs to happen in your institution to realize the potential of ICT in TVET?

The participants worked in their respective groups and the rapporteurs of each group presented their results (see appendix 1 for the summary).

8. Wrap-up and Closing

As part of the wrap-up the rapporters of the Summit presented the major points and stressed the following points:

- Ways of accelerating mobility of TVET teachers in Africa
- Since there are big gaps among the countries present in the Summit, UNESCO in collaboration with other partners should organize strategies of learning from each other.
- Apprenticeship in TVET should be encouraged more.
- Need for decentralization.

Finally, the closing remark was made by Mr. Munjanganja. He thanked all the participants and stakeholders who have contributed their share to the success of the Summit. For instance, he thanked Mrs. Ndong Jatta, Dir/BREDA for the financial support as well as for covering the participation of Mr. Engida.

The Summit that began at 9:30 of 26 May 2010 was officially closed at 17:20 of the same day.

B. 5th International Conference on ICT for Development, Education and Training

9. Background

With nearly 350 speakers from approximately 48 countries, 4 plenary sessions, 60 sessions in 10 parallel conference strands, 17 demonstrations and best practice examples, 10 Insaka sessions, 21 pre-conference events and a number of exciting features, eLearning Africa is once again a landmark in pan-African capacity building for ICT-enhanced education and training. eLearning
Africa 2010 has been actively supported by the Zambia National eLA Committee, which has brought together a broad range of public, private and community based groupings in the preparation and organization of the event.

10. Opening

The opening ceremony was chaired by Hon. Dora Siliya, MP, Minister of Education, Zambia and was expected to be officially opened by President of the Republic of Zambia, His Excellency Rupiah Bwezani Banda. Due to personal reasons HE Mr. Band was unable to be present but represented by his Vice-President.

Before HE Vice-President of Zambia made his welcome speech, three speakers made plenary presentations. These were: 1) The Rt Rev Dr Solomon. Tilewa Johnson, Anglican Bishop of Gambia on the topic “The Online Social Education of Youth and the Digital Challenge to African Values”. 2) Stephen Dukker, CEO, NComputing, USA, on Desktop Virtualization: Bringing Green Computing and eInclusion to Africa”. 3) Shafika Isaacs, Independent ICT4D Consultant, South Africa, on Failure, Ignorance and Education System Transformation: Towards an Attitude of Wisdom”.

The keynote speakers attempted to relate how technology is changing the lives of millions of African citizens. Both on an educational and a social level, growing expectations and smarter technology call for an attitude shift. Inspiring keynote speakers from all levels of society shared their experiences with green computing, eInclusion and educational transformation, moving "towards an attitude of wisdom".

This session was concluded by the welcome speech of the Vice-President of Zambia who highlighted his countries engagement on ICTs for development and welcomed all participants.

11. Sessions Attended by Mr. Engida

The conference consisted of 10 parallel sessions within a block of time such as before and after coffee and lunch break. As such only selected lectures/demonstrations can be attended sometimes by running from one session to another depending on the topical interest of the participant. So Mr. Engida had the opportunity to attend and learn for the following sessions:

a) Policy Development
This session was exploring effective institutional policies on the nature and use of ICTs in schools and municipalities, as well as policies on open and distance eLearning across the African continent. In particular, Gabriel S. Konayuma’s presentation on “Analysis of eLearning and Distance Learning Policies in Zambia” was worth-mentioning. The study employed the tool of 6
C’s of policy options (Concentration, Clarity, Changeability, Challenge, Coordination, and Consistency) to analyze the policy making process and content of distance Learning and eLearning policies in Zambia. It was emphasized that having a good policy is not the end of the road in policy making. It’s just the beginning. The real work starts once the policy is launched. That is where consultation and collaboration become a key issue. African nations have a lot to learn from each other and outside Africa on how to implement good and effective ODL and eLearning policies.

b) Showcasing Mobile Learning in Africa
This session highlighted a range of inspiring projects and showcases how mobile learning is moving forward in Africa. The presenters from Kenya and South Africa illustrated how mobile phones have become a successful tool in the battle against illiteracy, and how health workers, medical students and teachers have come to depend on the benefits of mobile learning. They all illustrated how the mobile phone has become useful particularly in areas where Internet access is absent or limited. They all used the mobile phone in connection with the opensource software Moodle.

c) Capacity Development
The presentation in this session focused on how to leverage ICTs for capacity development in Africa? How can African academic institutions take full advantage of Open and Distance Learning? How do you weave the fabric of a successful capacity development program in eLearning? There were five presentations in this sessions dealing with ICT for capacity development issues in Zambia, Senegal, the SADC region, Zimbabwe, and the University of South Africa (UNISA). Of particular interest was the presentation by Mr. Richard Siaciwena, Southern African Development Community (SADC) Secretariat, Botswana. He pointed out that as a means of achieving its objectives SADC has committed itself to, among other things, promoting the development of human resources. Education and skills development has therefore been identified as an area of cooperation necessary for developing knowledge, attitudes, appropriate and relevant skills and human capacities necessary to promote investment, efficiency and competitiveness. In this context, Mr. Siaciwena added, the SADC Secretariat is implementing a Capacity Building in Open and Distance Learning (ODL) Project, with financial support from the African Development Bank. It is a five year project whose main purpose is to contribute to the development and deployment of effective, harmonized ODL, to increase access to quality education and training and support regional integration across SADC (African Development Fund 2006). The project was launched in June 2007 and implementation commenced in April 2008.

d) Evening Plenary
This plenary session was chaired by Hon.Dr. Kapembwa Simbao, MP, Minister of Health, Zambia. The plenary speakers were:
• Hon. Prof Geoffrey Lungwangwa, MP, Minister of Communication and Transport/Zambia on “Importance of ICTs for Socioeconomic Development in Africa”
• Tarkan Maner, Wyse Technology/ USA on “The Impact of IT and Communication Trends on Education and Social Change”
• Astrid Dufborg, SPIDER/ Sweden on “A Nationwide eHealth System with an In-Built eLearning Approach”
• Thabani Tonny Khupe, Intel Corporation/ South Africa on “Implementing Successful eLearning Programmes and Policies”

All speakers underlined, from different perspectives, the importance of technology and communication for social change. Discussing the latest technological developments and eLearning programs, the keynotes highlighted the opportunities that sustainable ICTs bring to education and eLearning in Africa.

PART III: Recommendations and Follow-up Needs

12. UNESCO BREDA and IICBA Visibility at the Conference

The eLearning Africa conference is an important forum for sharing experience and for learning the developments in ICT for development, education and training in Africa. It incorporates all sorts of technology. It is thus recommended that UNESCO BREDA and IICBA be visibly present in this annual event. The eLearning Africa conference has a great potential for BREDA and IICBA in expanding their partnership network. I, however believe, that a mere attendance at the event will bring out little. Rather, right from the first announcement of the eLearning Africa by the organizers, BREDA and IICBA-of course, together with the relevant body at HQ-need to get a slot (at least a half-day event) to present and demonstrate to the international participants about what has been done in the year as part of our capacity building efforts for our Member States. I know and had the opportunity to be one of the speakers of the eLearning Africa 2007 in Nairobi. At that time, there was a specific session devoted to UNESCO and three entities of UNESCO were represented: Section for Capacity Building and ICT in Education (Cedric Wacholtz), Section for TED (Caroline Pontefract), and IICBA (Temechegn Engida). Beyond our expectation, that UNESCO session was full of attendants and well appreciated. The UNESCO UNEVOC Summit is a wonderful example in that it sustained its visibility and impact regularly.

I would like to stress that our approach at the Conference need not only be at making traditional presentations on selected topics; rather, one could organize it in such a way that we generate data and suggestions for the way forward using already-there participants from different backgrounds and nationalities—at no cost of paying travel and accommodation.
BREDA and in particular IICBA need to treat the ICT for teachers professional development program as encompassing all teachers, irrespective of subject areas. Through such an approach, it is possible to widen the scope of partnership with those, for instance, that work on TVET teachers’ professional development. In this regard, UNESCO-UNEVOC International Center for TVET has expressed that the Center is at present very much interested in enhancing the capacity of TVET teachers in delivering their subject using ICTs and to that effect willing to work on partnership with others.

The appropriate section of BREDA dealing with TVET need also to explore the possibility of working with regard to the Skills for Employability program of the British Council based in Scotland. It is also necessary to explore the Flexible Skills Development Initiative (FSDI) of the Commonwealth of Learning.
### Appendix 1: Summary of Group Reports

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| 1. How is flexible learning dealt with in your national TVET policies?    | - Some countries, like Zambia, developed ODL policy that requires TVET also to be offered via ODL to increase access. Here the residential (face-to-face) mode is relatively small.  
- Learnership scheme/apprenticeship is employed in which the learner is involved in industry. The main industry in Zambia is the Bank. The scheme therefore involves the Bank—the Learner—the Institution. The Bank is able to pay some of the students’ fees in response to what the students are offering the Bank.  
- In many other African countries, multiple ministries are involved in TVET. One authority for TVET is commendable.  
- Standardization is needed for the face-to-face and the ODL programs on the same subject area to have the same quality standards.  
- Labor market assessment and labor market information systems (LMIS) are missing. |
| 2. What does flexible TVET look like in your institution in 2020?          | - More:  
  - Coordinated  
  - Uniform  
  - Relevant  
  - Use of ICT  
  - Quality  
  - Inclusive  
  - Appreciated (improved image)  
  - Staff (teacher) development in TVET and use of ICT  
- Use of mobile phones for teaching & learning  
- ICT-enhanced vocational trainers  
- Classroom free learning  
- Availability of user-friendly materials (digitized and relevant content materials in terms of language as well)  
- Will it be better if these materials can also be held with mobile phones?  
- Empowered TVET-oriented trainers  
- Competency-based online (continuous) assessment  
- Gender mainstreaming supported by TVET |
3. What needs to happen in your institution to realize the potential of ICT in TVET?

- An authority to coordinate TVET
- Need for open policy (considering both public and private)
- ICT infrastructure should be in place
- Capacity building for:
  - Training of trainers
  - Training of managers
  - Training of policy makers
  - Developing ICT experts
  - Developing demand-driven curricula
  - Regular review of the curricula
  - Relevant programs
  - Partnership (public-private)
  - Increased budget allocation
- Optimize the use of TV and radio for educational programs
- Use of simulations during training will significantly reduce cost
- Use of community of practice (COP) is an important aspect
- Use of TVET up to community level
- More investment on TVET
- Involve all stakeholders
- Need for alternative strategies to deliver TVET other than those that require electricity (particularly for rural Africa)
- Lobbying African governments to support TVET
- Harmonize stakeholders’ support through strategic plan for TVET
- A standardized certification for continental/regional integration
- Continuous monitoring & evaluation of the process
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<tbody>
<tr>
<td>Temechegn Engida</td>
<td>Julien Daboué</td>
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