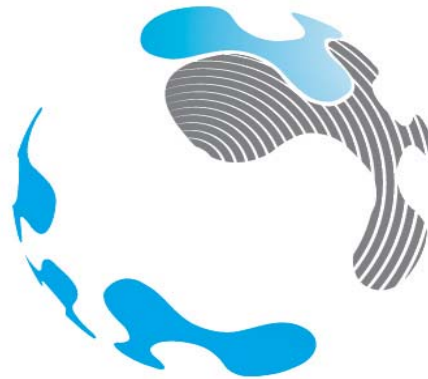


Teacher Professional Development Workshop Report



gesci
global e-schools and communities initiative
founded by the UN ICT Task Force

November 2006

*Multi-country workshop on Teacher Professional Development held from 11 – 13
September 2006 at Heja Lodge, Windhoek, Namibia*

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	Acronyms
AED:	Academy for Educational Development
COEs:	Colleges of Education (Namibia)
CPD:	Continuous Professional Development (Namibia)
ECT	Education Communication Technology (Namibia)
EDC:	Educational Development Center
EFA:	Education for All
ETSIP:	Education and Training Sector Improvement Programme (Namibia)
FCUBE:	Free Compulsory Universal Basic Education (Ghana)
GEEP:	Groupe pour l'Etude et l'Enseignement de la Population (Senegal)
GES:	Ghana Education Service
ICTs:	Information Communication Technologies
JS:	Junior Secondary
LRCs:	Learning Resource Centres (Kenya)
MDGs:	Millennium Development Goals
MoE:	Ministry of Education
MoESS:	Ministry of Education, Science and Sports (Ghana)
NEPAD:	New Partnership for Africa's Development
NIED:	National Institute for Educational Development (Namibia)
NTCs:	National Teachers Colleges (Uganda)
ODL:	Open and Distance Learning
PDEF:	Programme de Développement de l'Education et de la Formation (Senegal)
PEDP:	Primary Education Development Plan (Tanzania)
PTCs:	Primary Teachers Colleges (Uganda)
PTTCs:	Primary Teacher Training Colleges (Kenya)
SEPD:	Secondary Education Development Plan (Tanzania)
SS:	Senior Secondary
SSA:	Sub-Saharan Africa
TDMS:	Teacher Development and Management Strategy (Tanzania)
TED:	Teacher Education Division (Ghana); Teacher Education Department (Uganda)
TEP:	Teacher Educators' Program (Tanzania)
TESSA:	Teacher Education in Sub Saharan Africa
TPD:	Teacher Professional Development
TRCs:	Teacher Resource Centres (Tanzania, Namibia)
TTCs:	Teacher Training Colleges
TTISSA:	Teacher Training Initiative for Sub-Saharan Africa
UNAM:	University of Namibia
UNESCO:	United Nations Education, Cultural and Scientific Organisation
USAID:	United States Agency for International Development

Teacher Professional Development Workshop Report

The multi-country Teacher Professional Development workshop organised by GeSCI was held at Heja Lodge, Windhoek, Namibia, from 11 – 13 September 2006.

Background

Sub-Saharan Africa (SSA) is considered to be one of the most educationally challenged regions of the world. It is estimated that 40% of primary age children do not go to school, and of those who do, a large proportion do not achieve an adequate level of skills as a result of the poor quality of teaching (UNESCO Institute of Statistics, 2002). To meet the Millennium Development and Education for All Goals, school enrolment would need to expand rapidly. UNESCO (2000) projected the number of primary school children in Africa to rise from 106 million in 2000 to 139 million in 2015. This implies an equally rapid expansion in the number of teachers. In addition, there is the devastating effect of the HIV/AIDS pandemic on the composition of the teaching force. In some SSA countries more teachers are lost to AIDS each year than are trained through the teacher education system. It is therefore clear that the inevitable pressure on the demand for initial training, support needed by many unqualified and under qualified teachers, and the career-long need for professional updating and support for all teachers will increase. If SSA countries are to meet the Millennium Development Goals (MDGs) and the Education For All (EFA) targets in a timely manner, they would need strategic interventions to tackle the massive teacher supply, upgrading and quality requirements for EFA.

The Global e-Schools and Communities Initiative (GeSCI) commissioned a study in May 2006 to scan the Teacher Professional Development (TPD) landscape in Sub-Saharan Africa in order to identify existing and planned regional TPD initiatives, gaps in the provision of TPD, and where GeSCI could potentially add value to existing initiatives, particularly with regard to utilising Information Communication Technologies (ICTs) in innovative ways to strengthen and enhance TPD, and as a result improve the quality of education in general. The scan provided an overview of TPD initiatives at regional level (i.e. in Sub Saharan Africa), but it was deemed necessary to explore TPD more specifically in a multi-country approach with a number of selected countries with whom GeSCI has already engaged, and with whom GeSCI might potentially engage. To this end, a workshop was held on 11-13 September 2006 at the Heja Lodge, Windhoek, Namibia.

Objectives

The strategic objective of the workshop was to identify and define GeSCI's role in supporting knowledge sharing, networking and collaboration for TPD in Sub Saharan Africa with particular reference to the selected countries. The countries invited to the workshop were: Ghana, Rwanda, Mozambique, Tanzania, Namibia, Kenya, Uganda and Senegal. However, owing to logistical issues, the representatives from Rwanda could not attend. Representatives from the regional TPD initiatives, e.g. UNESCO (TTISSA)

NEPAD e-Schools, TESSA Project and some resource persons had also been invited but as a result of prior commitments and other constraints, could not attend. Resource persons from the Department of Education, South Africa, and from Trinity College, Dublin, attended as well.¹ The workshop was held on 11-13 September 2006 in Namibia, as Namibia was going to launch its national ICT in Education Implementation Plan and showcase its achievements with regard to ICT in Education. It was decided to hold the TPD workshop back-to-back with the Namibia ICT Implementation Plan launch in order to expose the workshop participants to the launch and related activities, as well as to provide them with some insights into GeSCI's modes of operation and approaches in working with Ministries of Education.

The specific workshop objectives were:

- To share information, knowledge, best practice and lessons learned based on country and regional experiences with Teacher Professional Development and Training Plans with particular reference to the role ICTs can play in TPD
- To discuss and debate various models of Teacher Professional Development and ICT integration
- To discuss ways in which GeSCI could support existing Teacher Professional Development initiatives in Africa at regional and/or country levels.

Format of workshop

The workshop sessions consisted of the official opening at which the GeSCI Executive Director and the Deputy Permanent Secretary of the Ministry of Education (MoE), Namibia (on behalf of the Minister) officiated, chaired by the Under Secretary of Formal Education. There were plenary sessions, small group activities, gallery walk and buzz groups and a SpeedGeeking² session over the 2-day period.³ The workshop was facilitated by Ms Shafika Isaacs (formerly the Executive Director of SchoolNet Africa, currently Director of Education at Mindset, South Africa) assisted by the GeSCI Education Specialist and the Director of the National Institute for Educational Development (NIED), Namibia. The able facilitation by Ms Shafika Isaacs ensured that the participants stayed focused and that the main objectives were achieved, namely to identify the gaps and challenges facing TPD in the countries represented, and to explore possible ways in which GeSCI could assist in addressing these gaps and challenges.

¹ Attendance list is appended as Appendix 1.

² SpeedGeeking: 5 minute demo/pitch making at most 4 major points. Demos run in parallel with small groups rotating when whistle is blown or bell is rung after 5 minutes. Keep presentations tight and informative. Good for after lunch or when participants become tired of sitting and listening.

³ Workshop programmes appended as Appendix 2.

Summary of presentations

The workshop was officially opened by the Deputy Permanent Secretary, Mr Stanley M. Simataa, on behalf of the Minister of Education. He welcomed the participants warmly not only to the workshop, but also to Namibia. In his view such workshops served as platforms for the exchange and sharing of ideas and experiences. He regarded it an honour for Namibia to have been selected to host a workshop bringing together a wealth of African expertise and experience in the field of TPD. He provided a brief overview of Namibia's Vision 2030, the Education and Training Sector Improvement Programme (ETSIP), the ICT in Education Policy and the ICT Implementation Plan, which are all geared towards transforming Namibia into a knowledge-based society. He indicated that a knowledge-based society is built upon the use of modern ICTs which are seen to be important economic engines for development. He also mentioned the key reforms by the MoE related to the integration of ICTs across the education sector, including the development of the ICT in Education Policy, the establishment of the ICT in Education Steering Committee and the ICT in Education Implementation Plan. He stressed the importance of TPD as it is often not given the attention it deserves, especially once teachers have received their initial training. He highlighted that TPD programmes should meet certain norms, standards and criteria. He mentioned GeSCI's role as a strategic advisor to the MoE in assisting with the formulation and development of the Ministry's ICT in Education policy, plans and strategies.⁴

The Executive Director of GeSCI, Ms Astrid Dufborg, in her address, expressed her gratitude that the countries invited responded so positively to the invitation. She provided an overview of GeSCI's history, the rationale for why it was founded by the UN ICT Task Force, what GeSCI does, its approach (end-to-end), its work in Africa, how it operates, lessons learned, and GeSCI's expectations for the workshop.⁵

The GeSCI Education Specialist, Dr Patti Swarts, situated the workshop in the context of the current needs of and requirements for teachers, and pointed out the trends and developments which would be shaping teacher professional development in the future. She referred to the global crisis of preparing and supplying well-educated teachers, fast-changing technologies, globalisation and new demands on teachers. The implications of these trends and developments would have a significant impact on how teachers would have to be prepared and supported throughout their careers. As a result of the rapid changes and increasingly complex environments in which teachers would need to operate, it was necessary to forge collaborative structures and strategic partnerships at institutional, country and regional levels to deal more effectively with the complex issues and demands, particularly in the context of scarce resources and challenges related to sustainability. Teachers remain the key even in a technologically rich and advanced environment.⁶

⁴ Full speech is appended as Appendix 3.

⁵ Presentation appended as Appendix 4.

⁶ Presentation appended as Appendix 5.

Workshop proceedings⁷

Day 1

In the introductory session participants expressed their expectations and concerns. The expectations were mainly about sharing experiences, learning from their colleagues (e.g. about ODL, models, how to integrate ICTs into the curriculum), and developing a better understanding about the issues pertaining to TPD and ICTs. Their concerns centred around their ability (or not) to influence country policies, lack of capacity and resources in these fields, coordination of initiatives, their experiences regarding follow-up and operationalisation of the outcomes of workshops, and the enormity of the task with regard to TPD and ICTs.

During the Gallery Walk and SpeedGeeking sessions on Day 1, country representatives provided an overview of the information contained in the templates the countries completed in preparation for the workshop.⁸ The main issues raised were about improving the quality and quantity of TPD ('more and better teachers') and to enhance teaching and learning through the integration of ICTs. The strategies for improving the quality and quantity of TPD would be by reviewing and strengthening existing pre-service and in-service teacher education programmes to align them to the needs and demands of the respective countries and to use Open and Distance Learning (ODL) enhanced by ICTs where appropriate.

During this session, the contribution from the South African participant focused on the guidelines and principles contained in the Department of Education *White Paper on e-Education* (<http://www.education.gov.za>) and the need to move away from teacher-centred, examination-driven and content-based learning to learner-centred, facilitated and outcomes-based learning. This would require the development of high levels of knowledge and skills among educators.

The participant from Ireland provided a brief overview of the Irish experience on deploying and using ICTs in schools. Some pitfalls and successes were highlighted, as well as lessons learned. The main lesson arising from this intervention was that even where teachers are in general adequately trained, they need to be well-prepared for utilising ICTs effectively in their teaching.

Day 2

The facilitator provided a summary of the presentations and discussions of the first day. Participants formed groups to brainstorm what is a 'good teacher' and what would constitute an 'ICT proficient teacher' to contextualise the discussions on how to manage

⁷ A summary of the proceedings is appended as Appendix 6.

⁸ A summary of the templates is appended as Appendix 7. The comprehensive templates are available on request but not appended because of their bulkiness. South Africa and Ireland did not complete templates as the participants were invited as resource persons. No template was received from Mozambique, but some information on the TPD system was provided during the Gallery Walk.

in-country TPD initiatives and private sector TPD initiatives, the domination of technology in the ICT in Education space, the possibility of establishing a community of practice for ICTs in Education, and how to harness higher education institutions for TPD and ICT integration. Among the qualities of a 'good teacher' identified by the groups were: life-long learner; reflective, thoughtful, innovative, creative; competent professional in both pedagogy and content; team player; facilitator of learning and change. With regard to the 'ICT proficient teacher' the main attributes identified were: ICT literate and competent; confident with technology; ability to use ICTs effectively for teaching and learning; attitude of openness to change.

When they reported back on the brainstorming session, participants identified issues for further exploration – not only at the workshop, but as on-going discussions- which in the main focused on:

- Where is the problem with TPD: in the system; with teacher educators or teachers?
- Managing change and supporting teachers in change management
- The role of leadership in enhancing TPD
- What is ICT 4TPD?
- ICT and pedagogy: how does ICT impact on pedagogy?
- Basic teaching skills, pedagogy, content knowledge and ICT skills: how do they relate to one another?
- ICT as a subject versus integration and application
- Resourcing of MoEs: is it sufficient?

The groups reported as follows:

Management of different in-country TPD and ICT initiatives

- ICT in Education policy and framework clearly defining requirements (including e-readiness) and standards for ICT deployment and effective utilisation.
- Establishment of an ICT Steering Committee with core responsibility for providing leadership and coordination of ICT policy activities. Key stakeholders must be involved in ICT activities - teachers are essential members. The Steering Committee may set up sub-committees to deal with *inter alia*: Deployment, Curriculum and Content, Training and Usage, Management and Leadership, Maintenance and Technical Support, Monitoring and Evaluation (as per the end-to-end system). The Steering Committee must control the flood of ICT initiatives and ensure that initiatives conform to approved framework and standards.
- Establishment of a Management Office/Secretariat to carry out administrative/secretarial responsibilities as per decisions of the Steering Committee.
- Issues relating to time and difficulties in convening meetings may be addressed through on-line discussions

Advocacy strategy to address technology domination in ICT in Education space

- Creating awareness among stakeholders on the importance of ICT in education through seminars/symposia/workshops, radio and TV talk shows. Target educational policy makers and implementers to develop their capacity in ICT and hold stakeholder meetings for ICT educators and ICT engineers/technicians.
- Forging Public-Private partnership/collaboration.
- Issuing policy guidelines to institutions and service providers on types of ICTs to be supplied and deployed.
- Set ICT technical standards for educational institutions.
- Set ethical and safety standards, procurement criteria for institutions and vet ICT donations using the set procurement criteria.
- Put in place sanctions for non-compliance by institutions and service providers.
- Establish community practice groups.
- Target ICT in Education units for capacity building.

Management of private sector initiatives

- Identify the needs (research) and develop ICT policy to address needs
- Develop framework and timeframe for TPD
- Develop the training guidelines of packages and standards and review the training packages/modules from time to time
- Bring teachers on board
- Collaborate with private sector partners depending on the needs already identified
- Provide guidelines for participation by private sector (collaboration) e.g. start with MoE
- Be proactive as private sector is usually fast moving

Establishment of community of practice for ICTs

- The group defined a community of practice for ICTs as a group of educationists committed to the promotion of ICT in Education, supporting one another on an on-going basis by sharing educational resources, technical experiences and concerns to raise and address relevant issues.
- The community would achieve its goals more effectively and efficiently by sharing its collective experiences and in this way would add value.
- It will create mailing lists, a virtual resource centre to post relevant documents and other resources, hold an annual face-to-face forum to address specific topics or issues mutually agreed upon. The GeSCI website could possibly host a question and answer forum and annual forum discussions as well as ‘think pieces’ on identified topics.
- Rotating moderation for managing electronic discussions.

Harnessing higher education institutions

- Strengthen collaboration with MoE and practitioners by
 - establishment of planning committee
 - taking a more aggressive role in HET to promote research and feedback
 - building linkages for coordination
 - focusing on pedagogy and needs of society
- Learn more about ICTs by
 - clarifying the role of higher education institutions with regard to ICTs in Education
 - collecting and disseminating knowledge about ICTs in the education system in their respective countries and in the region
- Inter-faculty and inter-university collaboration that will focus on
 - pedagogy and examination system
 - integration of ICT into the curriculum (emphasis on pedagogy instead of on technology).

Day 3

GeSCI's role

The possible role that GeSCI could play was discussed in relation to the issues identified, raised and discussed. The following suggestions were put forward by the participants for analysis, further discussion and consideration by GeSCI:

- Become central point for TPD and ICT issues e.g. GeSCI website could host various documents on TPD and ICTs in Education
- Initiate projects and serve as resource base
- Assistance to better definition/development of policies for in- and pre- service teachers, including ICT competency
- Facilitate policy development in participating countries
- Assist in reviewing TPD programmes to ensure ICT integration
- Support advocacy programme with ICT and TPD focus
- Support capacity building regarding TPD and ICT in Education issues for leaders and teachers
- Offer technical assistance in curriculum review regarding ICT integration
- Use GeSCI expertise to strengthen research initiatives with universities, MoEs and educational institutions involved in ICTs
- Develop advice on schemes and incentives to motivate teachers
- Support networking and sharing of promising practices
- Assist with resource mobilisation for ICTs in TPD
- Provide advice on country initiatives regarding ICTs in TPD
- Maintain contact with participants of workshop on ICTs and TPD issues

During the discussion on these suggestions it was indicated that the suggestions would be analysed and considered by GeSCI to ascertain whether and to what extent they fit into the GeSCI vision and Africa strategy and if so, to what extent they would be feasible and could be accommodated. GeSCI leadership would then present their recommendations on the way forward regarding the Africa strategy to the GeSCI Advisory Council and donor partners. GeSCI, the Advisory Council and donor partners would deliberate on the recommendations and the way forward.

Workshop evaluation

The participants' views of the workshop are fully reflected in Appendix 6, but in general they indicated that the workshop met their expectations and fulfilled its objectives, although they identified areas which they would have liked more clarity on, e.g. the relationship between pedagogy and ICTs, the role of ICTs in TPD, how to integrate ICTs into classrooms and TPD (in-service and pre-service) programmes, and what role GeSCI could play in supporting TPD initiatives in countries. In their view the time was too short to attend adequately to these issues, and they expressed the wish to continue the discussions in some other way. They indicated that they better understood the necessity to effectively integrate ICTs into the education system and that there was an urgency to do so. They expressed their satisfaction with the facilitator and the participative methods used during the workshop.

GeSCI internal deliberations

The GeSCI team met on 16 September 2006 to discuss the outcomes of the workshop in relation to GeSCI's mission, vision, approach and the development of its Africa strategy.

The conclusions reached at the meeting were included in the Africa strategy presented to the GeSCI Advisory Council and donor partners.

The outcomes of the workshop were considered within the framework of the principles guiding GeSCI's work with developing country partners i.e. of being *demand driven* and *comprehensive* in approach and ensuring *contextualized, transformative and coordinated* programmes to add value, complement and harness existing efforts. The recurrent issues which were raised during the workshop were the relationship between pedagogy and ICTs and the integration of ICTs into teaching and learning, as countries seem to struggle to deal with them effectively.

Integrating technologies effectively into learning systems is complicated as technologies are very different in their potential and use and their successful implementation depends on appropriateness and context. After deliberation the GeSCI team concluded that GeSCI would adopt a new work stream called "ICTs for teaching and learning" in view of the recurring concerns raised at the workshop and also by partner countries about ICTs and pedagogy and integrating ICTs into the education system. Under this work stream GeSCI would provide targeted support and advice to enable Ministries of Education to better understand the issues related to ICTs in teaching and learning, and to assist them to develop appropriate frameworks, policies and strategic plans. In this way, GeSCI could respond in a more strategic and comprehensive way to the main challenges faced by countries of integrating ICTs into their education systems with regard to:

- Integration of ICTs across the curriculum and within the education system and not simply focusing on ICT skills training.
- Pedagogy and how ICTs can improve pedagogy. In schools, ICTs can be used as pedagogical tools to enhance learning outcomes, provide skills and competence, opportunities for lifelong learning and vocational education, prepare for work or create opportunities for work, and can enhance productivity.
- Teacher preparation and teacher professional development in order to equip and empower the teacher to realize the potential and benefits of ICTs in the classroom. At teacher education level, the appropriate use of technologies can complement, enrich, enhance and add value to educational institutions, delivery systems and instructional materials. The role of teachers needs to be re-defined in terms of new requirements for training and teaching, new competencies and new skills.

As part of the Africa strategy, the knowledge and tools generated under this work stream will be shared with the MoEs of GeSCI partner countries and the countries represented at the workshop.

GeSCI Advisory Council deliberations

The GeSCI Advisory Council met on 9 October 2006 and in general approved the thematic areas/ work streams presented in the Strategic Plan for 2006 -08. The thematic areas presented included ICTs in teaching in learning.

The way forward

GeSCI will further elaborate on the sub-components of the thematic area on ICTs in teaching and learning (i.e. integration of ICTs across the curriculum; pedagogy and how ICTs can improve pedagogy; ICTs and teacher preparation and professional development), and work in collaboration with partner countries and other parties (including those countries represented at the TPD workshop and organizations operating at regional level e.g. UNESCO, Open University, NEPAD, SchoolNet Africa), to develop frameworks and tools to address the needs, demands and challenges of SSA countries with regard to the sub-components within the thematic area. In this regard a core group of experts will be constituted to advise and assist GeSCI in taking a longer term strategic perspective and to explore practical solutions to a range of identified issues related to ICTs in teaching and learning.

The countries which participated in the TPD workshop will be kept informed of developments with regard to this thematic area. GeSCI will endeavour to share information, lessons learned, promising practice and tools with regard to this thematic area with the countries which participated in the workshop. In this respect the possibility of establishing a community of practice is being considered.

Acknowledgements

The GeSCI team, the facilitator and resource persons would like to express their appreciation for the positive and constructive way in which each of the country representatives participated in the activities and discussions of the workshop. GeSCI appreciates the excellent facilitation provided by Ms Shafika Isaacs (Director of

Education, Mindset South Africa) and the stimulating and thoughtful contributions made by the resource persons.

GeSCI would also like to thank the Namibian Ministry of Education for providing logistical support to the workshop, i.e. secretarial support, drivers and vehicles.

Appendix 1: ATTENDANCE LIST: DAY 1 – 11TH September 2006

WORKSHOP ON TEACHER PROFESSIONAL DEVELOPMENT

NO.	NAME	ORGANIZATION	JOB TITLE	TELEPHONE
1.	Rafael Bernardo	INDE-Mozambique	Head of Department	258-824973040
2.	Astrid Dufborg	GeSCI, Dublin	Executive Director	
3.	Ginger Bester	Dept. of Education - SA	Dept. Chief Ed. Spec.	+27 12 3125068
4.	B. Nsumba Lyazi	Ministry of Educ. & Sport	Ass. Comm. for Sec. Educ.	256 772440890
5.	P.V. Akoto	TED Accra Ghana	ICT & Dist. Educ.	+233 24451989
6.	S. Agyeman-Duah	CRDD/GES, Ghana	Director, CRDD	233-21683668
7.	T. Seefeldt	Min. of Educ. Khomas reg. Namibia	Acting Director	09 264 61 293 436
8.	Isaac Asiegbor	CRDD/GES, Ghana	Head Assessment (CRDD)	233-244750467
9.	E.K. Dadebo (Rev.)	Min. of Education - Ghana	Coord. ICT in Educ. Progr.	233-244675257
10.	C. Alexander	Windhoek College of Educ. Namibia	Senior Lecturer	09 264 61 2703235
11.	M. Hidengwa	Ongwediva College, Namibia	Head of Department	09 264 65 230001
12.	Babacar Fall	Groupe pour l'Etude et l'Enseignement de la Population, Senegal	National Coordinator	
13.	Emily Masinjila	Min. of Education - Kenya	Senior Asst. Director	+254318581
14.	Khalid Bomba	GeSCI– Namibia - MoE	CPF	09 264 61 293 335
15.	Joyce J. Msolla	Min. of Educ. & Voc. Training, Kenya	ICT in Teacher Ed. Project Coordination	255-0754698642
16.	Basiliana C. Mrimi	Morogoro T.C., Tanzania	Teacher Educator (TEP)	+255755027889
17.	M.A.O. Ocen	MoE S: Kampala, Uganda	Commissioner (T.E)	2560772427346
18.	G. Shakwa	MoE – NIED, Namibia	SEO – Prof. Development	0811282027
19.	A. Ilukena	MoE – Head Office, Namibia	Under Secretary Formal Education	09 264 61 293 335 09 264 811 221513
20.	J. van Wyk	MoE – Namibia	Deputy Director - IT	081 2560112
21.	C. Mowa	MYNSSC, Namibia	Analyst Programmer	081 2372658
22.	C. Mushe	MoE, Namibia	Science & Tech. Officer	+264 61 270 6141
23.	M.S. Chabala	UNESCO, Namibia	Education Specialist	+264 61 291 7000
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28.	Kor Jacob M.A.	Training College, Ghana	(Somanya) Principal	0209354931
29.	Alex Twinomugisha	GeSCI, Dublin	ICT Specialist	+353 1 642 5283
30.	Patti Swarts	GeSCI, Dublin	Education Specialist	+353 1 642 5284
31.	Shafika Isaacs	Mindset, South Africa	Education Director	+27 11 4081545
32.	Hertha Pomuti	NIED, Namibia	Director	

Appendix 2: Workshop Programme

Supporting Teacher Professional Development in Africa

A GESCI MULTI-COUNTRY WORKSHOP

Date: 11-13 Sept 2006

Venue:

Heja Lodge, Windhoek, Namibia

Workshop Facilitators

Dr Patti Swarts: GeSCI

Ms Shafika Isaacs: Mindset, South Africa

Resource Person

Ms Hertha Pomuti, National Institute for Educational Development (NIED), Namibia

Workshop Objectives

- To share information, knowledge, best practice and lessons learned based on country and regional experiences with Teacher Professional Development and Training Plans with particular reference to the role ICTs can play in TPD
- To discuss and debate various models of Teacher Professional Development and ICT integration
- To discuss ways in which GeSCI could support existing Teacher Professional Development initiatives in Africa at regional and/or country levels.

Workshop Programme

DAY ONE: 11 September 2006

<i>Time</i>	<i>Topic</i>	<i>Objective</i>	<i>Facilitation Method</i>	<i>Materials Needed</i>
11h00-13h00	Opening Ceremony	To formally open the workshop	Speeches	Data Projector and Screen
13h00-14h00	LUNCH			
14h00- 14h30	Expectations and Concerns	Getting to know each other at the workshop	Buzz group	Colour Cards Brown Sheets Koki Pens
14h30-16h00	Teacher Professional Development in Africa National Experiences	Knowledge and information sharing on country programmes	Gallery wall and buzz groups for national reports	A3 blow ups of templates on display on wall
16h00-16h30	TEA			
16h30-18h00	Teacher Professional Development in Africa	Knowledge and Information sharing on regional	Speed Geeking ⁹	Flip Chart sheets Kokis Prestik

⁹ SpeedGeeking: 5 minute demo/pitch making at most 4 major points. Demos run in parallel with small groups rotating when whistle is blown or bell is rung after 5 minutes. Keep presentations tight and informative. Good for after lunch or when participants become tired of sitting and listening.

	Regional Experiences	programmes		
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DAY TWO: 12 September 2006

<i>Time</i>	<i>Topic</i>	<i>Objective</i>	<i>Facilitation Method</i>	<i>Materials Needed</i>
9h00-10h30	Summary of models presented on day 1	To recap on the learning of day before	Presentation Input using cards	Brown sheets Cards Kokis
10h30-11h00	TEA			
11h00- 13h00	Towards More and Better African Teachers: Overcoming Challenges	To explore strategies to overcome critical challenges	Group Work: 1. Managing Various in-Country Initiatives 2. Managing Private Sector TPD Delivery 3. Harnessing Higher Education Institutions	Flip Chart Sheets
13h00-14h00	LUNCH			
14h30-16h00	Group Reports and Discussion	To learn from group discussion	Report back	Flip Chart sheets Kokis Prestik
16h30-17h00	TEA			
17h00-18h00	What role for GeSCI	To ascertain from participants ideas for GeSCI's role	Facilitated Plenary Discussion	Flip Charts Koki's

DAY THREE: 13 September 2006

<i>Time</i>	<i>Topic</i>	<i>Objective</i>	<i>Facilitation Method</i>	<i>Materials Needed</i>
9h00-11h00	Summary of Discussions on Role For GeSCI : conclusions and recoms	To recap contributions from previous day's discussion and agree on recoms	Presentation Input using cards	Brown sheet Cards Kokis
11h00-11h30	TEA			
11h30- 12h00	Evaluation and Closing Remarks	To Conclude the Workshop by getting feedback on the workshop process and content from participants	Brief questionnaire	Questionnaires Prepared

Appendix 3

KEYNOTE ADDRESS PRESENTED BY THE HONOURABLE MINISTER OF EDUCATION, NANGOLO MBUMBA AT GeSCI TEACHER PROFESSIONAL DEVELOPMENT WORKSHOP AT HEJA LODGE, 11 SEPTEMBER 2006.

**Director of the Ceremonies
Honourable Chief Director, Ministry of Education of Ghana**

**Executive Director of GeSCI
Cooperating Partners
Distinguished Guests
Members of the Press
Ladies and Gentlemen**

At the dawn of the millennium, the world is at the peak of the information age where the use of information and communication technologies (ICTs) impacts virtually on every facet of human life, national and the international economy. Like all democratic societies, the discussions begun with a call to determine “where we are” and “where we want to go” (GRN, 2004: Vision 2030). Vision 2030 emerged as a response setting out Namibia’s development path for social, political, economic and cultural progress and equity.

Director of Ceremonies, Ladies and Gentlemen: Key among the goals of Vision 2030 is the development of a knowledge based society, which is built upon the use of modern ICTs that is underway throughout the world. According to Vision 2030, one of the key targets for the year 2030 is that the ICT sector will be “the most important economic engine for development in Namibia. The development of the education and training sector as well as the mainstreaming of ICTs throughout the education sector is considered of primary importance for ensuring progress towards the realization of Vision 2030.

The Ministry of Education is attending to key reforms related to the integration of ICTs across the education sector within the framework of Education and Training Sector Improvement Plan (ETSIP).

In early 2004, the Ministry of Education formed the ICT and Education Steering Committee to coordinate the many ICTs in education projects and activities, which had begun to operate across the education sector. The ICT and Education Steering Committee includes the Ministry of Education, other line Ministries, tertiary institutions, local and international NGOs, donor partners, volunteer organizations and the private sector.

June 2005 the ICT Policy for the Education sector was launched by Right Honourable Prime Minister Nahas Angula. The development of this policy was characterized by a blend of local and international participation.

Apart from the development and launch of the ICT and Education Policy, during 2005 the Ministry of Education embarked on a ambitious sector reform programme now known as the Education Training Sector Improvement Programme (ETSIP) to increase the efficiency of the education and training system. ETSIP aims to increase the number of skilled and employable Namibians through a strong focus on improving educational quality.

Director of Ceremonies, Ladies and Gentlemen, today I do not have to speak at length about the Ministry’ ICT in Education Policy, permit me now to reflect on the aims of the GeSCI Teacher Professional Development(TPD) workshop and perhaps on the importance of teacher professional development.

I’m informed that prior to this workshop, GeSCI commissioned a preliminary study on teacher professional development programmes in Africa that integrate the use of ICTs in learning and teaching within primary and secondary education. From the findings of this study, GeSCI developed the Teacher Professional Development template, which drives the agenda for this workshop.

The main purpose of this template is to gather information and data on the Teacher Professional Development (TPD) programmes, both pre-service and in-service, in the selected countries in order to inform the dialogues, discussions, debates and formulation of outlines and strategies at the TPD workshop currently being held in our beautiful country, Namibia. The use of the template is expected to generate a report, which, together with the TPD workshop report, will form a comprehensive set of data/information on TPD in countries such as Ghana, Rwanda, Mozambique, Tanzania, Namibia, Kenya, Uganda and Senegal. This data will inform the development of realistic frameworks and interventions for TPD in these countries, as well as GeSCI’s role in the development process.

The strategic objective of the workshop is that all participants identify and define GeSCI's role in supporting knowledge sharing, networking and collaboration for TPD with particular reference to the selected countries.

It is my wish that countries invited to the workshop, Ghana, Rwanda, Mozambique, Tanzania, Kenya, Uganda and Senegal will feel at home. It is a great honour for us a country to host this historic academic forum in Namibia.

This workshop comes at the right time especially when national standards and framework to guide Teacher Professional Development are needed the most. Normally, the area of teacher professional development is often not given the attention it deserves after a teacher completes initial teacher training.

We have a lot to learn from research on guidelines for effective teacher professional development. Existing literature "National Center on Adult Literacy, 2004" shows that effective teacher professional development should meet the certain norms and standards. These criteria would normally include:

- Adoption and adaptation of concepts from research and the stated needs and competencies of teachers and other stakeholders
- The process of involving the teacher in setting aspirations and objectives
- Instruments and method to encourage the teacher to develop new ideas and understanding
- It involves integrating information of many types and from a variety of sources, and;
- The utilization of an instructional model that is responsive to learner needs and requests and adapts instructions to suit a variety of learning styles and preferences (National Center on Adult Literacy, 2004).

On behalf of the Ministry, I salute GeSCI for having chosen Namibia as the hosting country. Flanked by a presence of other renowned international TPD providers such as UNESCO's Teacher Training Initiative for Sub Saharan Africa (TTISSA), NEPAD eSchools Teacher Training Project and Teacher Professional Programme and the Teacher Education in Sub-Saharan Africa (TESSA) programme, I have no doubt that the objective of the workshop as described previously, will be achieved.

Director of Ceremonies, Ladies and Gentlemen, before I conclude, it would only be suitable to share with you some of the key achievements that we have attained so far where GeSCI, our strategic advisor has contributed significantly both in terms of expertise and resources:

- Completion of comprehensive ICT Implementation Plan Guide ready for launching on September 13-14.
- Facilitated the establishment of a Project Management Office in the Ministry of Education to manage the Implementation Plan. GeSCI made it possible financially by appointing a Project Manager and Project Analyst for 12 months to help manage the ICT in education activities.
- Assisted the Ministry with the development of a proposal for improving internet connectivity for all educational institutions which embraces, enhances, and expands existing XNET structure. The overall aim is to double the amount of internet bandwidth to all educational institutions on a dedicated basis.
- Supported the Ministry to develop the ICT Literacy Certification for use by entire Namibian society, i.e. Development of the First Foundation Level ICT Literacy Certification. Work began in January and full manuals will be available towards the end of this month.
- Creation of Curriculum and Training Manuals for five modules aimed at providing teachers with pedagogic skills in integrating ICTs in the curriculum.
- Another milestone was the development of an instrument to evaluate digital content packages and the actual evaluation of the initial sets of e-Content packages recently undertaken by GeSCI' Education Specialist, Dr Patti Swarts and NIED. These packages include Maths, Science, and English for Grades 8-12
- With the help from GeSCI through their international partnerships, Accenture Development Partners (ADP), the establishment of a National Education Technology Service and Support Centre (NETSS). NETSS Centre is now a certainty. The framework has been approved and the Governance Trust was legally created the last week in August.

Among others, the NETSS Centre will be responsible for:

- the central distribution centre through which all ICTs destined for educational institutions will be cleared
- ensuring adherence to agreed upon minimum standards on all ICTs deployed
- creating a help desk with toll free number available to provide technical support for all schools, etc.
- We anticipate that NETSS will open its doors formally in October 2006.

I have outlined these remarkable achievements, not just to indicate what value partners bring to the table, but to pay tribute to GeSCI and express gratitude for their strategic guidance.

We started this journey collectively in 2004 and hope we will continue to build on the momentum and energy that ignited from this partnerships for many more years to come.

Sometimes we agree to disagree, my wish is that this occasion will unite us all and that the workshop objectives will be met.

I am confident that you know about the launch of the ICT in Education Initiative, TECH/NA! on the 13th September 2006 and the exhibition event on the 14th September 2006. You are cordially invited to attend these events and share our moment in history.

May you have fruitful deliberations! Enjoy your stay in Namibia.

I THANK YOU.

Appendix 4

GeSCI Brief – Astrid Dufborg, GeSCI Executive Director

Background

- GeSCI established in 2003 by the United Nations ICT Task Force
- Promoted by Ireland, Switzerland, Sweden and Canada
- Headquartered in Dublin, Ireland
- Overarching goals are to:
 - Raise global standards of education for communities in the Partner countries
 - Make the UN Millennium Development Goals and especially quality education for all a reality
- Focus initially on Asia, Africa and Latin America

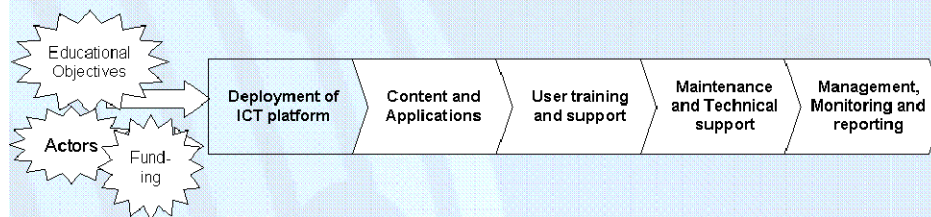
Our Rationale

- Improving education a cornerstone of sustainable socio-economic development and a key mechanism to enabling people to share in a country's prosperity.
- Great challenge exists- an estimated 350 million school-aged children not attending school and more than 800 million illiterate adults worldwide
- ICTs provide an opportunity to realize the EFA goals

What we do

- Support Partner countries to maximize the impact of ICT for Education (ICT4E) and ICT for Development (ICT4D)
- Convene and align existing efforts and stakeholders for large scale impact
- Provide strategic guidance and support in policy and project development, management and implementation
- Facilitate resource mobilization
- Work at the local, national, and international level
- Use a **multi-stakeholder** approach to focus on delivery

Our Approach



- A complete & sustainable approach **that is focused on an end to end model** and is comprehensive, demand-driven, efficient, capable and coordinated
- Supported by a team that includes experts in education and ICTs, and others with experience in both the private and public sectors.
- Learn and transfer international observations, experiences and best practices in implementing ICTs for Education

Some lessons we have learnt

- **Common challenges**

- Programs driven by ICT and not by Education (ICT is only a tool)
- Need to grow practices in education and improve pedagogy
- Curriculum usually out of step with today's needs
- Forever pilot syndrome
- Deploying ICTs without considering other end-to-end components

- **Major recurring issues in most countries**

- Teacher training and empowerment
- Infrastructure and Connectivity
- Content

- **Important to have**

- A Guiding Policy on ICTs in Education by the Ministry of Education
- A comprehensive Implementation Plan developed with input from all partners and that highlights priorities, targets, resources, time lines and outcomes

GeSCI work in Africa

- GeSCI currently works in Namibia, Ghana and Rwanda in Africa

- Outside Africa, GeSCI works with India and Bolivia

- GeSCI is supporting these partner countries' policy development, strategic planning and effective implementation of their ICT4E initiatives following a coordinated and comprehensive approach

- GeSCI is also considering working with other countries including Kenya, Uganda, Tanzania, Senegal and Mozambique

Expectations of TPD workshop

- Identify gaps in Teacher Professional Development
 - What could/should GeSCI do?
-

Appendix 5

**Trends and Developments in Teacher Professional Development – Patti Swarts.
GeSCI Education Specialist**

Context

- **Global crisis: supply of educated and well prepared teachers**
 - **Between 10 and 13 million additional teachers required to reach MDGs and EFA targets by 2015**
 - **Knowledge-based economy and globalisation: emergent occupations and new patterns of employment opportunities**
 - **Fast-changing technology and new demands on teachers**
 - **Innovative and radical solutions required**
 - **SSA one of most educationally challenged**
-

What are the Trends?

- **Technology all pervasive – new market forces**
 - **Complex and fast-changing environments**
 - **Changing expectations and demands: increased pressure on teachers and teacher education**
 - **New ways of thinking about education, schooling and learning: ICTs offer new notions of lifelong learning and learning societies**
 - **Wide access to new resources and tools for learning**
 - **New roles for teachers; new skills required**
 - **Emphasis shifting from teaching to learning**
 - **In-service training (WBL) more legitimacy and status**
 - **More involvement of private partners – virtual institutions**
-

Implications for TPD

- Significant impact on role of teacher and nature of education
 - “Exploded classroom”
 - Complexity of integrating new and rapidly changing technologies
 - More flexible learning and delivery
 - More inclusive view of learning
 - Greater choice of learning modes
 - Consultation and collaborative planning
 - System wide interventions
 - Strategic partnerships
-

Call for collaboration, given

- The complexity of issues
 - Rapid rate of change
 - Far reaching implications
 - Dearth of evidence-based research
 - Scarce resources and overlapping jurisdictions
-

For consideration ...

- **Central purpose of any innovation: improvement of quality of learning and outcomes of education**
 - **Imperatives: sound policy, informed decisions, good practice, effective leadership, monitoring**
 - **Clarity on how and for what purposes teachers are to be prepared**
 - **Technology servant of education practice, not its master**
-

Finally ...

In the words of Lord Young:

“ Technology cannot walk alone. It needs the human touch. Students need another human being who cares about them.”

Teachers remain the key: how do we equip and support them and use them optimally in our different contexts?

Appendix 6

Summary of Teacher Professional Development (TDP) Workshop

(This is a preliminary report. The more comprehensive report with the speeches, presentations and completed templates will follow in due course).

OPENING SESSION

Participants from the following countries attended the workshop from 11- 13 September 2006 at Heja Lodge, Windhoek, Namibia:

- Senegal
- Uganda
- Ghana
- Kenya
- Tanzania
- Mozambique
- South Africa
- Namibia
- Ireland

(Attendance list attached as Appendix 1)

The workshop was officially opened by the Deputy Permanent Secretary, Mr Stanley M. Simataa, of the Ministry of Education on behalf of the Minister of Education. He welcomed the participants warmly not only to the workshop, but also to Namibia. In his view such workshops served as platforms for the exchange and sharing of ideas and experiences. He expressed his pride in Namibia having been selected to host a workshop bringing together a wealth of African expertise and experience. He provided information on Namibia's Vision 2030, the Education and Training Sector Improvement Programme (ETSIP), the ICT in Education Policy and the ICT Implementation Plan, which are all geared towards transforming Namibia into a knowledge-based society. The Executive Director of GeSCI, Ms Astrid Dufborg in her address expressed her gratitude that the countries invited responded so positively to the invitation. She provided an overview of GeSCI, its approach and how it operates. The GeSCI Education Specialist, Dr Patti Swarts situated the workshop in the context of the needs of and requirements for teachers and pointed out the trends and developments which would be shaping teacher professional development in the future.

The able facilitation by Ms Shafika Isaacs ensured that the participants stayed focused and that the main objectives were achieved, namely to identify the gaps and challenges facing TPD in the countries represented, and to explore possible ways in which GeSCI could assist in addressing these gaps and challenges. On Day 1 the participants shared their expectations and concerns with regard to the workshop.

DAY 1: EXPECTATIONS

The participants' expectations included the following:

1. Share experiences with others, particularly on ICT4E
2. Help expand ICT to other countries
3. [More information on the] Implementation Plan in Namibia
4. [Discuss] Distance education models in African countries
5. [Discuss] Model for continuous professional development programme
6. Share how ICTs are used in schools
7. What is working in TPD

8. Skills [with which] to equip teachers [to use] ICT as tool for teaching
9. What is happening in ICT4
10. What countries do to train teachers using ICTs
11. [Information] on ODL
12. Opportunity to work with GeSCI on ICT Implementation Plan
13. Understand challenges to TPD and [discuss] working solutions
14. How to integrate ICT into curriculum
15. Discussing the way forward
16. Enhance capacity to deliver goods
17. Relate TPD and work in other countries
18. How curriculum is reformed in other countries
19. How to develop TPD considering ICTs
20. How to integrate curriculum reform with TPD
21. How to take into account HIV/AIDS; ICT; civic education and leadership
22. How to prepare and build partnerships in and out of schools
23. How to adopt shared experiences
24. [Hoping] My experiences [will be] of use to everyone
25. Listen to practitioners

CONCERNS

The concerns raised included the following:

1. Follow-up [after the workshop and maintenance of] ongoing links
2. Follow-up of programmes/policies
3. Legal backing to implement lessons learned
4. How to influence country policies on TPD
5. Coordination of efforts for quality improvement
6. [How to]Identify collaborative roles of various partners
7. Enormity of task [as] requirement for ICTs large
8. Bureaucracy [and its effect on] implementation
9. Divergent challenges [participants] may not agree on possible solutions
10. [sometimes there are]‘Good’ plans, but implementation not feasible
11. Capacity and lack of ICT resources
12. Capacity to cope with ICT demands
13. May not achieve workshop objectives
14. Time limit [on] sharing experience
15. Policy and resource environment and how [to] enable implementation
16. Inability to operationalise conclusions
17. Finding ways to implement outcomes of workshop in country

The participants also discussed the strategies and plans of the various countries as they relate to TPD and ICTs during the ‘Gallery Walk’ session.

GALLERY WALK SESSION: COUNTRY STRATEGIES AND PLANS

Countries representatives highlighted the following issues on their posters:

Kenya

1. Raise quality and standards of primary school teachers from P/certificate to Diploma
2. All teacher educators to be trained in basic ICT skills

3. All involved in teacher education and training at institutional level to be equipped with ICT skills and knowledge
4. Train technical staff
5. Develop a sustainable system in INSET for ICT integration in teaching and learning – harmonization of INSET programmes
6. Strengthen existing pre-service training on ICT integration in teaching and learning
7. Facilitate research and development in ICTs - dissemination of outcomes.

ICT Strategy Components:

- Technical support and maintenance
- Harnessing emerging technologies
- Digital equipment and content
- Partnerships and resource mobilization
- Accreditation

Uganda

1. The Ministry (MoES) has developed an ICT policy for Education. The ICT policy will work towards the achievement of the Uganda Vision 2035 and the broad aims of Education as stated in the Government White Paper on Education 1992. The MoES also has a staff development policy.
2. The MoES ICT strategy has a 5 year plan, which includes:
 - Setting an ICT framework
 - Balancing ICT applications and computer science
 - Focusing on curricula and teachers – a consultant was procured to assess T.E. status in the country
 - Focusing on equity
3. Enhancing teacher education through ICT
 - Providing access and infrastructure
 - Professional development:
 - ICT foundation skills
 - Integration of ICT into teaching and learning
 - Tutors attended Online Courses called Teaching to Standards, some completed, others did not complete their course.
 - Local content development
 - Creating policy guidelines
 - Management for sustainability
 -

What has been done so far on the above:

- Providing access and infrastructure:
 - Connect-ED laboratories constructed at Kyambogo University in 8 Pilot PTCs
 - Kyambogo University developed an ICT strategy and master plan for integrating ICT in its operations
- Local content development:
 - The curriculum for PTCs has been enhanced and transformed electronically and are available as on line materials and CD-ROMS using multi media

- Creating policy guidelines
 - PTC ICT policies and operational guidelines were developed and distributed to pilot PTCs. PTC staff participated in the development of the policies and guidelines.
- Management for sustainability
 - The MoES formulated a policy on ICT development in Teachers Colleges which allows colleges to charge students some ICT development fees.
 - An impact and scalability assessment was carried out on the Connect-ED. Project. This will guide the MoES on scaling up ICT to the remaining Teachers' Colleges
 - Use of both Pre-Service and In-Service to produce adequate teachers, particularly for the Primary Education sub-sector.
 - There is an outreach programme that handles primary teachers' PD and SMAT and that handles Secondary Science and Maths teachers.

Ghana

1. Using ODE approaches to train untrained teachers
2. Upgrading of Teacher Training Colleges to Diploma status
3. Updating skills of serving teachers through an institutionalised INSET system - TRG, started DTSTs
4. Upgrading of Teacher Training Colleges to ensure tertiary status by 2010/ICT Centres
5. Development of ICT faculty and enhancement of practical training in Tertiary institutions
6. Establishment of an award scheme for teachers who integrate ICT in teaching/learning: "National Innovative Teachers Award for Digital Content"
7. Payment of allowances to teacher trainees
8. Integration of ICT (implement ICT in Education Policy) (www.edughana.net- visit us!!)

Senegal

TPD, a key element for improving quality of education (building students competencies and skills).

1. Current Policy

Definition of Pre- and In-Service programs – higher priority

 - a) Pre-service
 - Pre/Elementary school teachers = trained in pedagogy and innovations
 - Secondary Schools teachers trained in specific field and didactics/psycho-pedagogy
 - b) In Service
 - Pre/Elementary school teachers pedagogical animations by Inspectors
 - Secondary school teachers training sessions run by Inspectors
2. ICT initiatives for improving TPD

Three initiatives:

 - RESARAD
 - World Links / GEP
3. Way Forward
 - Definition of framework for integrating ICT in Education
 - Advocacy for decisions - schools managers

Namibia

Strategies to improve quality of teaching:

- ETSIP (Education and Training Sector Improvement Programme)
- ICT Policy in Education
- 15 Year Strategic Plan: one of its components is to strengthen teaching competencies in subject mastery and pedagogic skills.
 - 1st Step: Competencies required are defined
 - 2nd Step: Teacher Standards are developed
 - Standards will inform teacher professional development programmes (Inset and Preset)
 - Develop a comprehensive teacher education reform plan (revision of teacher education curriculum, institutional development, staff development for teacher educators)
- Establishment of Advisory Council for Teacher Education
- Establishment of database for service providers involved in Continuous Professional Development (CPD)
- Development of CPD model and structures for implementing CPD programmes at regional levels.
 - Conducting needs assessment for both novice and practicing teachers
 - Develop programmes to cater for learning needs

For more information: www.nied.edu.na

South Africa

National Curriculum Statement

Principles

1. Social Transformation: in post apartheid society
 - redress education imbalances of past
 - equal education opportunities
2. Outcomes – based education:
 - move away from teacher-centred, exam-driven, content–based learning to learner-centred, facilitated and outcomes-based learning
3. Development of high-levels of knowledge and skills
4. Integration and applied competence
 - Integration of academic and skills-based training
5. Valuing indigenous knowledge systems
 - Focus on African philosophical base

White Paper on e-Education

Guidelines / Principles

Levels

Entry

Adoption

Adaptation

Appropriation

Innovation

For more information: www.education.gov.za

Mozambique

Minimum entrance qualification (primary) is Grade 10 + 1 year teacher training to produce more trained teachers within short time-frame

- Need to support the 1 year training
- Programme for distance education being developed
- Moving from content training to pedagogic training
- In-Service training to improve teacher competencies
- Developing teachers' handbooks using student materials
- ZIP (similar to cluster system) – sharing of experiences, support system, etc.
- Education Implementation Strategy (2005 – 2012) for whole education sector including teacher education.

United Republic of Tanzania

Strategies underway (plans) for more and better teachers: DEPD 2001 – 2009 SEDP.

1. Teacher Education curriculum review to balance content and pedagogy knowledge and skills and introduce field attachment teaching practice.
2. Expansion of enrolment and raising entry qualifications for student teachers
3. Enhance the use of participatory teaching and learning methods in colleges and schools
4. Conduct upgrading courses for underqualified teachers

5. Develop ICT curriculum for teacher education
6. Implement ICT in teachers colleges through:
 - Hardware, software, installation and connectivity
 - Training tutors and student teachers on ICT applications and technical aspects
7. Conduct ICT in-service teacher education programmes for practicing teachers to facilitate ongoing training
8. Run teacher educators' courses for quality pedagogy.

Irish Experience

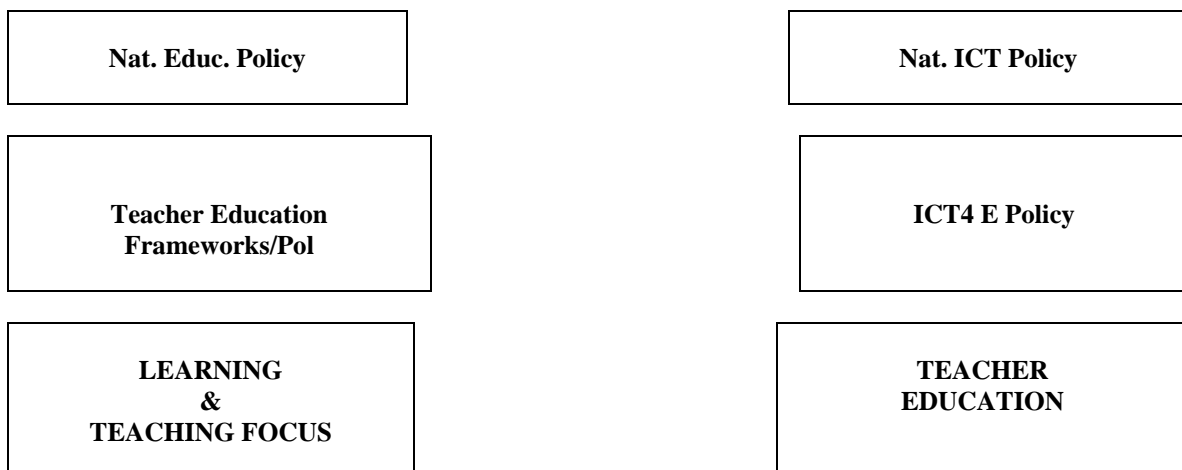
A brief overview in diagrammatic form was provided of the Irish experience on deploying and using ICTs in schools. Some pitfalls and successes were highlighted as well as lessons learned.

For more information: www.ncte.ie and www.cs.tcd.ie/crite

DAY 2: SUMMARY OF DAY 1

At the start of Day 2 a short summary of Day 1 discussions was presented by the facilitator.

- All countries have a **plan** for education
- Process of developing **quality standards** (Namibia)
- Minimum **entrance qualification** (Mozambique) vs raising entrance qualifications (Kenya, Ghana, Tanzania)
- **Upgrading** process
 - courses for qualified teachers
 - TTIs to tertiary status
- Provision of **basic ICT skills** to all teachers (Kenya)
- **Pedagogy innovation** training (Senegal)
- Regional **TT Centre** (Senegal)
- ICT foundation skills, and **integration of ICT in** learning, teaching and **local content** (Uganda)
- **Curriculum** for PTCs **online** (Uganda)
- **Payment allowances** for trainees (Ghana)
- **Award** scheme (Ghana)



‘GOOD TEACHER’ and ‘ICT PROFICIENT TEACHER’

In order to contextualise the discussions on issues relating to managing in-country TPD initiatives, managing private sector initiatives in TPD and harnessing higher education institutions for TPD and ICT integration small groups discussed the concept of a ‘good teacher’ and what would constitute an ICT proficient teacher. In their discussions the groups came up with the following:

The qualities of a ‘good teacher’

- Life-long learner
- Reflective, thoughtful, innovative, creative, challenges learners
- Support learners in making connections/application
- [Have certain] Attitudes and values
- Learn more; reinforce
- [Have] Moral values
- Empowers learners to learn
- Encourages learners to interact
- ‘Swim’ together
- Apply co-operative learning approach
- Withstand the test of time
- Is a professional, learner, teacher
- Team player
- Facilitator of learning: ability to change and manage change
- Applies learner-centred approach, has problem-solving skills
- Is competent in terms of content and pedagogy

ICT Competent and Proficient

- Use ICT for teaching and learning
- Empower learners to use ICTs for learning
- ICT literate
- Confident with computer: openness to change → attitude to develop skills to build knowledge

ISSUES

The participants raised the following issues for further exploration, not only at the workshop but as an on-going discussion:

- Pedagogy – How [does ICT impact on pedagogy]?
- Basic teaching skills, pedagogical content knowledge and ICT skills. How [do they fit and relate to one another]?
- What is it: ICT 4 TPD?
- ICT as a subject vs. integration and application
 - curriculum and methodology
- Elaborate [on] award schemes
- Few textbooks but prepare teachers → [the role of]national exams.
- Operationalise [ICTs in education] – how ?
- Building communities of interaction – how?
- Role of leadership in enhancing continuous development of teachers.
- Paradigm shift and ICT integration
- Where [is the] problem: system; teacher educator or teacher?
- Resourcing of MoEs? [Is it] Sufficient.
- Ongoing teacher support , especially [for] new teachers
- Integration of HIV/AIDS [into TPD programmes]
- Motivating teachers
 - Policy change
 - District teacher support
- Needs assessment [for development of courses/programmes] and monitoring system
- Support cadre and support system [for teachers]
- De-centralization of TPD activities and quality
- Combine with central system of monitoring - advocacy
- Tutor [for]cluster of schools – lack of commitment of teachers, overload of teachers
- Role of teachers unions and associations
- Managing change and supporting teachers in change management

- [The role of] school management
- EFA goals → [impact on] schools, teachers
- Database for service providers - mechanisms

The participants divided into groups to discuss how to manage different ICT initiatives in-country, managing private sector TPD delivery and harnessing higher education institutions for TPD and ICT programmes. The groups reported as follows on their discussions:

HOW DO WE MANAGE/COORDINATE DIFFERENT ICT INITIATIVES

1. The following must be in place:
 - ICT in Education Policy
 - ICTE Policy Framework/Blueprint that clearly defines requirements and standards for ICT deployment/exploitation
 - E-readiness documentation
2. Establish an ICT steering committee with core responsibility for providing leadership and coordination of ICT Policy activities. Membership – key stakeholders involved in ICT activities (Teachers essential)
3. Establish a Management Office/Secretariat to carry out administrative/secretarial responsibilities as per decisions of the Steering Committee.
4. Issues relating to time and difficulties in convening meetings may be addressed through on-line discussions.
 - NB** a) The Steering Committee may set up sub-committees to deal with inter alia: Deployment, Curriculum and Content, Training and Usage, Management and Leadership, Maintenance and Technical Support, Monitoring and Evaluation.
 - b) The Steering Committee must act as a DAM to check floods of ICT initiatives and ensure that initiatives conform to approved blueprint and standards

WHAT KIND OF ADVOCACY STRATEGY CAN WE USE TO ADDRESS TECHNOLOGY SPACE DOMINATION AND ICT IN EDUCATION SPACE?

ADVOCACY STRATEGY:

1. Creating awareness among stakeholders on the importance of ICT in education.
 - Seminars/Symposia/Workshops
 - Radio and TV Talk Shows
2. Stakeholders' meetings for ICT educators and ICT engineers/technicians
3. Forging Public-Private partnership/collaboration
4. Issuing policy guidelines to institutions and service providers on types of ICTs to be supplied and deployed

5. Set ICT technical standards for Educational Institutions
6. Set procurement criteria for institutions
7. Vet ICT donations using the set procurement criteria
8. Set ethical and safety standards
9. Put in place sanctions for non-compliance by institutions and service providers.
10. Target educational policy makers and implementers to develop their capacity in ICT.
11. Establish community practice groups
12. Target ICT in Education units for capacity building

MANAGING THE DOMINANCE OF THE PRIVATE SECTOR

- Identify the needs (research)
- ICT policy in place (derived from the needs)
- Prepare the on-going time-table for teacher training
- Develop the training guidelines of packages and standards
- Bring teachers on board
- Review the training packages/modules from time to time
- Collaborate with all private sector partners depending on the needs already identified
- Guidelines for entry by private sector (collaboration) e.g. start with MoE
- Proactive as private sector is usually fast moving

TPD COMMUNITY OF PRACTICE

DEFINITION: A GROUP OF EDUCATIONISTS COMMITTED TO THE PROMOTION OF ICT IN EDUCATION, SUPPORTING EACH OTHER ON AN ONGOING BASIS BY SHARING EDUCATIONAL RESOURCES, TECHNICAL EXPERIENCES AND CONCERNS TO RAISE RELEVANT ISSUES

WHY? ADDED VALUE

The community intends to achieve its goals more effectively and efficiently by sharing its collective experiences

- HOW?
- Creation of a mailing list (e-mail)
 - Creation of a virtual resource centre where we post all relevant documents and resources
 - Face to face annual forum to address specific topics or issues

- Question and answer forum (GeSCI Website?)
- Forum discussions
- Rotating moderation ('think pieces')

HIGHER EDUCATION INSTITUTIONS

1. Strengthening collaboration with MoE and practitioners
 - Establishment of planning committee
 - Aggressive role in HET to promote research and feedbacks
 - Linkage building for coordination
 - Focus on pedagogy and needs of society
2. Learning more on ICTs
 - Spelling out the role of HIs
 - Accumulating and disseminating knowledge about ICT in the Education System
3. Inter-faculty and inter-university collaboration:
 - Focus pedagogy and examination system
 - Integration of ICT into the curriculum – teacher training at school level i.e. emphasis to be put on pedagogy instead of only putting it on technology

DAY 3: GeSCI ROLE

The possible role that GeSCI could play was discussed in relation to the issues identified, raised and discussed. The following suggestions were put forward by the participants for analysis, further discussion and consideration by GeSCI:

- Become central point [for TPD and ICT issues]: website – host various documents on TPD
- Initiate projects – also serve [as] resource base
- Assistance to better definition/development of policies for in- and pre- service teachers including ICT competency
- Facilitate policy development in participating countries
- Assist in revisiting TPD programmes to ensure ICT integration
- Support advocacy programme with TPD focus
- Support capacity building for leaders and teachers
- Offer technical assistance in curriculum review
- Use GeSCI expertise to strengthen research initiatives with universities, MoEs and educational institutions involved in ICT
- Develop advice on schemes and incentives to motivate teachers
- Support networking and sharing of promising practices
- Resource mobilisation assistance for TPD – in-kind etc.
- Advisory role on country initiatives
- Keep the contact
- Observe protocol (?)
- Advocacy role with government and inter-government structures

EVALUATION OF WORKSHOP

In the last session the participants expressed themselves (in their own words) as follows on whether and to what extent the workshop fulfilled their expectations:

I would be very happy if I went back with a group photograph for participants		No social programs after daily sessions	
How to enhance the change process in terms of TPD and ICT	Came to “Namibia” but did not see “Namibia”	Issues of PEDAGOGY and ICT integration still not quite clear	
Details of integrating ICT in pre- and in-service of teacher professional development not fully tackled	No enough time to clarify issues which were raised	Role of GeSCI still not clear- needed to be consolidated	
I would be very happy if at the end of the workshop I went back with brief report on the way forward	We have listed the possible ways that GeSCI can help but we don’t know which one can work.	Daily sessions were too long. It should have ended at 17h00 hours local time	
Not yet clarity on essence of ICT integration in all classrooms. Involvement in workshops of – INSET TEACHER – ED./HODs - TEACHER	GeSCI role, steps forward	The processes of integrating ICTs into the curricula of various subject	More focus should be used for workshop, covering the activities outlined
What ICT content is needed for practising teachers	The role of ICT in supporting TPD did not come up clearly.	Would like to see a mechanism in place to allow for ongoing contact/updates on progress/collaboration	Not fitting well to the template
Time frame too short to exhaust a lot of ideas	Content urgent absorption conceptualisation on ICT in TPD without creation of re effects		Inadequate previous day activity reporting
Workshop is too short. More days needed for indepth analysis of issues	Integration of ICT in TPD but spell out key role players	Little creative use of ICT in the workshop to model how ICT can support collaborative learning	What is the promising model for integrating ICT in teaching did not come up clearly
I am not yet clear as to how GeSCI will help participants’ countries to help the process of TPD	Participatory approaches towards the reforms in TPD	Facilitators have been very friendly and down to earth	Adequate training workshop materials
Sharing of information on ICT - Integration	The participatory method used has been excellent	How useful assistance from GeSCI could be for strengthening ICT	Innovative aspect of facilitators which gave participants more time to talk

Good facilitation throughout resulting in a well directed workshop	Team building	How to take properly pedagogy and ICT to enhance TPD	The workshop was a good experience for me especially the fact we share experience with the colleagues from other countries. I also learned a different perspective in terms of how ICT can be integrate into teaching
I am very much impressed by the way colleagues from GeSCI argue about ICT and how ICT can benefit teaching as well as the way they could support countries	Facilitation skills – open and accommodating	Participating approaches to workshop	The knowledge generated from the discussions
Gained insight that there are assumptions regarding what ICTs can do in education – also linked to the “disjoint” between ED specialists and ICT experts	Participatory approach in constructing ideas, propositions a recommendations	Learn from failures	Team building strategies
My expectations about the workshop were fulfilled and motivated to integrate ICT in my college programmes	ICT can add value in TPD	Experiences from other countries	The urgency to be seri ICT well articulated
Deep insights on issues in TPD and roles of ICTs	The fluency of the facilitator’s mode of facilitation	Idea of need for ICT integration in education (esp. in TPD) clarified	Sharing of experience participating countries knowledge
Facilitation techniques: keep an eye on the learning environment and activate in accordingly	Facilitation participation, accommodation meals	Meeting people and sharing experiences	The need to operationalise fully the concept of pedagogy in TPD to get good teachers
Gaining clarification on what is meant by ICT integration into the curriculum	Feasible and workable areas for possible follow up identified	Hearing of the initiatives, progress and status of ICT implementation in Africa & Ireland	Strategy used presenting country strategic plans saved time and offered opportunity for useful and timely interventions
Participants took active part in the workshop discussions	Reinforcement that education is the core and should lead ICT process – not vice-versa	Facilitation process I was very much impressed by the way the workshop facilitated - Facilitator was more focused - She was flexible and needs driven - She was firm - She was resourceful and directive - I had an understanding that ICT is more about con science and the teacher needs to have depth knowledge as computer is concerned. Now I know the idea of I	

education. Multi experiences in the field of teacher education.
 - I did not know much about the vision of my own country far as TPD
 - I did not know much about the positive impact of ICT on teacher profession Development

.Organisation in meeting participants at airport excellent	Production of reading/reference materials	Using ICT to improve teaching environment	learning	- Planning to teach - Student interaction - Managing cooperative learning - Facilitation
1. A tool for enhancing learning and teaching	Became? Ingredient of Education	- Classroom Organisation and managementt	Pedagogy involves teaching strategies and techniques.	
2. An ingredient of education		- Inclusive EDN	ICT skills that match with techniques and strategies. If ICT does not match teaching techniques, they cannot be used.	
3. Part of the educational environment		- Remedial Teaching	* ICT can be used to display words for pronunciation (but not for writing). ICT can also be used for planning the teaching.	
4. Use it as an ingredient		- Assessment		
Information Access	Help in constructing knowledge	Communication		- Planning to use ICT as tools
Use of appropriate methodology	Provides better opportunity for learners to explore	- Research - Development of T/L materials - Accessing and sharing good practices		Sourcing information (including research)
Teaching Aid (Audio, visual...)	Use of appropriate methodology	Provides better opportunity for learners to explore		Promotes visualization - presents abstract concepts in concrete forms aiding better understanding of concepts.
Efficient depending on the user needs	Cost effective depending on the prevalent condition on the ground.	Enhances learning process		Time saving ad a tool.
Exciting hence motivating	- Facilitators communication and collaboration between teachers without time and space constraints + Supports continuous development. - Makes school admin. Easier freeing teachers time for teaching ICTs can improve conceptual	Bridge the gap between abstract and concrete	ICT is a tool for knowledge acquisition	engagement

- understanding
- Improve lesson planning
- Helps with immediate feedback
in assessment

Art and science of using ICT to facilitate learning.

THE WAY FORWARD

The GeSCI team, in consultation with their Advisory Council, donor partners and other relevant parties will analyse, discuss and consider the outcomes of the workshop, and will in due course inform the countries which participated in the TPD workshop of the way in which the issue will be taken forward and the way(s) in which GeSCI might engage with them.

ACKNOWLEDGEMENT

The GeSCI team, the facilitator and resource person would like to express their appreciation for the positive and constructive way in which each of the country representatives participated in the activities and discussions of the workshop.

Appendix 7

Summary of TPD Country Templates

Overview

<u>Context</u>	<u>TPD Structure</u>	<u>ICT Infrastructure</u>
<p>Ghana</p> <p>MoESS overall responsibility for TPD through TED within GES. 38 TTCs for basic level teachers, and University of Cape Coast and University of Education, Winneba for SS teachers, TTC lecturers and technical teachers. 4 private TTCs. Needs 15 000 teachers annually for basic level (FCUBE), but TTCs produce only 9 000.</p>	<p>Pre-Service:</p> <ul style="list-style-type: none"> - 3 year diploma by TTCs - 4 year diploma (by distance) by TTCs - 4 year degree (B Ed.) by University of Education, Winneba and University of Cape Coast - 2 year post diploma (by distance and face-to-face) 	<p>Number of projects at the institutional level as well as through the MoESS geared at deploying and exploiting ICTs. All 38 TTCs have computer labs but not adequately equipped; some TTCs have internet. Training provided to selected TTC staff. Universities received AVU grants and are well-equipped.</p>
<p>Kenya</p> <p>Public and private colleges and universities provide TPD. 3 categories of training institutions: Primary Teacher Training Colleges, Diploma Colleges for secondary school teachers and universities for secondary school teachers and teacher trainers. 20 public PTTCs, 1 Technical Teachers' College and 3 National Polytechnics. 16 000 students in primary colleges and 2 000 in Diploma Colleges. 9 000 students graduate on average per year.</p>	<p>Teacher training in-take administered centrally at national level:</p> <ul style="list-style-type: none"> -2 year certificate for primary school trainees - in-service training delivered by distance learning supported by Teacher Advisory Centre Tutors - in-service training for secondary schools mainly through face to face residential courses - 4 year degree (BEd) offered by universities 	<p>Computers recently acquired by colleges, but inadequate at a ratio of 1:4 (except in Technical College where it is 1:1); not networked; some colleges not connected to internet. One university with AVU status.</p>
<p>Namibia</p> <p>MoE overall responsibility, with NIED coordinating TPD for basic and JS teachers and UNAM responsible for SS. 4 COEs providing pre-service training for basic and JS teachers; NIED supported by TRCs providing in-service upgrading and CPD for all teachers and teacher educators of colleges. 2 200 full-time students in COEs; 900 at UNAM.</p>	<ul style="list-style-type: none"> - 3 year diploma by COEs - 4 year integrated BEd by UNAM - 4 year diploma for basic education teachers by distance and face-to-face: NIED, COEs, TRCs, UNAM - CPD as and when required by NIED through TRCs and cluster centres. - Colleges offer Integrated Media and Technology Education (IMTE) which 	<ul style="list-style-type: none"> - 4 COEs have ± 250 PCs in total - Broad range of ICTs at COEs, UNAM and most TRCs - Robust, up-to-date computer labs with 20+ workstations, internet connectivity, printers and digital projectors at each College -UNAM has sufficient ICT equipment for students but lacks dedicated ICT

	<p>incorporates the use of media and ICTs in pedagogy.</p> <ul style="list-style-type: none"> - All 1st year students at UNAM enrol for Computer Literacy as mandatory course - ECT module targets ICT literacy and prepares teacher trainees in ICT integration 	<p>equipment within Faculty of Education for pre-service teacher trainees</p> <ul style="list-style-type: none"> - Some TRCs possess 5+ PCs and internet for use by teachers, students and other users.
<p>Senegal</p> <p>TPD perceived as key element for performance of education system; policy in place prioritising pre- and in-service training</p>	<ul style="list-style-type: none"> - 1 year programme for pre- and elementary teachers in pedagogy and innovation at regional teacher training centres - 2 year programme for junior and senior high teachers in subject didactics and psycho-pedagogy at University Cheikh Anta Diop - Inspectors trained by School of Education. - In-service training is done by Inspectors after 6-month programme by School of Education - Management of in-service programme supervised by a cohort of General Education Inspectors selected from teachers at the University 	<p>Computer rooms or computer laboratories are available in most of these TPD institutions</p>
<p>Tanzania</p> <p>2 plans in which TPD is crucial factor: PEDP (2001) and SEDP (2004)- quality improvement and capacity building through pre- and in-service education and TRCs. 18 teachers colleges prepare primary teachers awarding the Grade A certificate and 14 prepare secondary teachers awarding a diploma.</p>	<ul style="list-style-type: none"> - 2 year residential course for pre primary and primary school teachers to receive Grade A certificate - 2 year diploma course for ordinary level secondary school teachers - university degree for advanced level secondary school teachers and college tutors -in-service teacher education for teachers in primary and secondary schools and college tutors is attained by involving teachers' colleges and universities employing distance learning methods - primary and secondary teachers attend seminars and workshops conducted in TRCs for professional development. -tutors at colleges have well-defined in-service programme, Teacher Educators' Program (TEP). 	<ul style="list-style-type: none"> -Most institutions have problems of: accessing teaching resources; communicating with the MoE and amongst themselves; inability to give student teachers the experience of using new technology - None of the colleges are using ICT as a teaching tool and few managers are trained in ICT applications -Project entitled 'ICT Implementation in Teacher Education' commenced in May 2005 to improve quality of education in colleges and schools. - Project activities and outputs include hardware and software purchase and installation coupled with onsite training -Tutors/technicians are being trained following Cisco IT essentials course

<p>Uganda</p> <ul style="list-style-type: none"> -TED responsible for 47 PTCs and 8 Secondary Colleges - 2 types of PTCs: Core and Non Core : Core PTCs run pre-service, in-service and outreach courses; Non Core run only pre-service. - Public and private universities also deliver TPD courses - Kyambogo University develops curricula for teacher and tutor training and Kyambogo and MOES set entry requirements - Education Standard Agency monitors standards 	<ul style="list-style-type: none"> -PTCs run 2 year programmes and award Grade III Teaching Certificates - NTCs run 3 year programmes - Initial (?) PTC in-service training lasts 3 years - On-going professional development for serving teachers: seminars, workshops, upgrading courses 	<ul style="list-style-type: none"> -CONNECT-ED Project providing connectivity for educator development - Implementing partners: MoES, Kyambogo University, USAID, dot EDU, AED, EDC - Goals: to provide access, professional development, management, policy guidelines and local content development - Certificated training of tutors, pre- and in-service students in ICT foundation skills and integrating ICTs into teaching and learning - Tutors also trained in on-line materials development - Curriculum for PTCs available on-line and pilot PTCs developed own websites - PTC policy and operational guidelines developed collaboratively
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Assessment

Existing state	Desired state	Opportunities
<p>Ghana</p> <ul style="list-style-type: none"> - Overcrowded classrooms as result of expansion (av. P:T ratio 28:1 pre-school; 35:1 primary; 19:1 JSS) - Serious lack of infrastructure and materials -High levels of untrained teachers (30% of the teachers in the classroom) -No structured curricula for in-service teachers in ICT skills -No alignment between ICT skills and integration into curricula for teachers and schools -Limited opportunities for ICT skills training via in-service training options -Limited infrastructure and ICT facilities in the TTCs -Limited coordination between units involved in TPD issues -High attrition rate of teachers who leave for studies 	<p>Educational Reform implemented leading to:</p> <ul style="list-style-type: none"> -Improved and effective teacher preparation (pre-set and inset) including ODL methodologies and continuous in-servicing -Upgraded TTCs with tertiary status by 2010 -Adequate and enhanced ICT faculties and facilities -ICT effectively integrated and aligned in school and teacher education curricula -Effective monitoring of training institutions 	<ul style="list-style-type: none"> -Educational Reform programme to be implemented in 2007/08 academic year -New projects initiated. _ICT introduced as subject at SS level -ICT in Education Policy and Implementation Plan -Strategic advice and technical support from GeSCI

<p>Kenya</p> <ul style="list-style-type: none"> - Technical College only well - equipped laboratories; other colleges have LRCs with libraries (old equipment and materials) -Most tutors lack ICT skills - Only one Technical Diploma College established in use of ICTs -Curriculum for training students in basic ICT skills available; training started one year ago 	<ul style="list-style-type: none"> -Quality and standards from certificate to diploma level raised for primary school teachers - PTC curriculum and pedagogical skills upgraded - Adequate ICT infrastructure - Tutors, technical staff and teachers trained in ICTs 	<ul style="list-style-type: none"> -Policy framework and integration of ICT in education and training - ICT introduced in PTTC - NEPAD e-Schools Initiative - Technical expertise available in country
<p>Namibia</p> <ul style="list-style-type: none"> - Currently no formally qualified teacher educators to offer ICT major/specialisation (e.g. Computer Studies) in COEs - CPD still largely centralized (at NIED, TRCs) - Not enough support and follow-up on training - Staffing and time limitations; CPD programme not backed by government mandates- process slow and not taken with necessary urgency. 	<ul style="list-style-type: none"> -National Standards Performance Indicators for Schools and the current National Standards for Teachers implemented - Model for site-based CPD approved, backed by concerned parties and firmly established in schools and colleges - Self-assessment by all educators at the site for responsive programmes -Teacher leadership in CPD and the sharing of best practices 	<ul style="list-style-type: none"> -Development of model for site-based CPD with bulk of professional development within schools, clusters, and regions rather than at centralized locations -Ability to localize professional development support, increase relevance, access, and community involvement - Understanding of and vision for continuous professional development -Coherent national standards and framework to guide CPD (National Teaching Standards and School Performance Indicators)
<p>Senegal</p> <ul style="list-style-type: none"> -Revision of Education law (1998); strategic development plan (PDEF; 2000) to increase access and improve quality - TPD and structured policy key elements for performing education 	<ul style="list-style-type: none"> - Systematised programme of TPD providing enough teachers for all levels - Most teachers systematically 	<ul style="list-style-type: none"> - Experiences of pilots for integrating ICT into educational system at School of Education - Government commitment to promote use of ICT in education -MoE equipping schools with up to date computers -Soft loans to teachers to acquire personal computers

<p>system</p> <ul style="list-style-type: none"> - Regional Training Elementary centres with staff selected from cohort of pre- or elementary inspectors. - Management of the junior and senior high schools trained through distance education -School of Education: two third of faculty have been secondary teachers with PhD in specific field. -48% of teachers belong to “emerging cohorts of teachers”: not systematically trained before their recruitment. 	<p>trained</p> <ul style="list-style-type: none"> - Defined framework for integrating ICT into education system - Adequate equipment and programmes for tutors 	<ul style="list-style-type: none"> - Schools connected to the Internet at specially reduced cost -3 major initiatives promoting the use of ICT in TPD (RESAFAD, WorldLinks, GEEP) -NEPAD e-Schools Initiative - Network of community multimedia centres throughout the country established by UNESCO
<p>Tanzania</p> <ul style="list-style-type: none"> -Programmes few, sporadic, not effectively coordinated and not articulated (repetition, time consuming) -Inadequate coverage in providing teachers with relevant exposure to cope with current demands 	<ul style="list-style-type: none"> - Improved TPD by developing Teacher Development and Management Strategy to address identified issues - Strengthened collaboration with development partners through capacity building - Revitalised TRCs to deliver TPD - Systematic in-service programmes for all serving teachers - Clear articulation arrangements between in-service and university programmes 	<ul style="list-style-type: none"> -Development of Teacher Development and Management Strategy -Commencement of project for Implementation of ICT in Teachers Colleges - Syllabuses for ICT at primary, secondary and teacher education (Certificate and Diploma) developed -Participation in GeSCI TPD workshop in Namibia - learning from and sharing with other countries
<p>Uganda</p> <ul style="list-style-type: none"> -Some trained staff but inadequate for TPD demand - Constraints of wage bill - NTCs: tutors mostly with Bachelor degrees and few PhDs; PTC tutors largely diploma and B-degree holders; few M-degree holders -ICT in Education Policy in place 	<ul style="list-style-type: none"> -Adequate staff and funding to effectively deliver TPD -Framework provided by ICT in Education Policy - 5 year ICT strategy implemented focusing on curriculum, teachers and equity -Adequate investment in ICT infrastructure and professional development at all levels -ICT proficiency forms part of certification and promotion 	<ul style="list-style-type: none"> - TPD for serving teachers ongoing (more intensive for primary teachers) - ICT in Education Policy and 5 year ICT strategy (work plans and business plans) - Policy for ICT development to ensure sustainability (allows for charging of fees) - Capacity building at Colleges -Support from and involvement of University of Kayambogo

criteria
- Incentives to retain ICT skilled teachers

Way Forward

Next 5 years	Requirements	GeSCI's role
<p>Ghana</p> <ul style="list-style-type: none"> - Number of plans to address challenges - Several projects initiated by MoESS: use ODL approaches to train untrained teachers; upgrading TTCs to award diplomas; . updating skills of serving teachers through continuous in-serving training; upgrading of the TTCs to ensure tertiary status by 2010; development of ICT faculties and enhancement of practical training in tertiary institutions 	<ul style="list-style-type: none"> - Broadbased capacity building for teacher educators, inspectors and planners covering a range of issues - Clear(er) policies including for in-service training, ICT in Education - Necessary infrastructure 	<ul style="list-style-type: none"> - Assistance to better definition/development of policies for in and p competencies - Support for defining and articulating ICT curricula - Advice on incentives to motivate teachers to integrate ICTs - Advice on physical infrastructure requirements for TTCs as it relat - Sharing of best practices and approaches used in other countries (a challenges in TPD - Provision of technical support for defining appropriate technology
<p>Kenya</p> <ul style="list-style-type: none"> -Train professional and technical staff -Purchase adequate equipment - Improve infrastructure and connectivity - Establish ICT capacity in all PTTCs - Digitise curriculum content. 	<ul style="list-style-type: none"> - Grants to colleges to procure ICT equipment - Development/ adaptation/acquisition of software - Capacity building at all levels 	<ul style="list-style-type: none"> - Partner with MoE and development partners to provide equipment infrastructure; training in ICT aspects including management in-co curriculum, and in-service materials, research.
<p>Namibia</p> <p>Achievement of key educational objectives over the next 5 years as contained in ICTs in Education Implementation Plan:</p> <ul style="list-style-type: none"> - ICT utilisation for teacher research, planning, and professional development - Integration of ICTs in instruction - ICT literacy for learners - ICTs as a subject for learners - ICTs for educational management. <p>Priority areas for the next 5 years:</p> <ul style="list-style-type: none"> - Pre-service and In-service Teacher Training Institutions - Schools with Secondary Grades 	<ul style="list-style-type: none"> - Processes of integration of ICTs to be guided by the ICT and Education Policy, ETSIP and ICT Implementation Plan. - Leadership and close monitoring by the ICT Project Implementation Office and the ICT Steering Committee - Robust working groups within the Steering Committee for all key components 	<ul style="list-style-type: none"> - Facilitating development of generic national standards for CPD to - Facilitating collaboration, networking and knowledge sharing with

<ul style="list-style-type: none"> - Vocational Education and Training Centres - National, Regional, and Community Libraries and Community and Adult Education - Primary Schools 		
<p>Senegal</p> <p>On-going formulation of ICT in Education Plan , strategies and reform initiatives and implementation of such</p>	<ul style="list-style-type: none"> - Advocacy programme designed for schools decision makers, and three cohorts of inspectors (pre- elementary schools, secondary schools and General Education) -Finalisation of policy for integrating ICTs into education system. - Reinforcing initiatives of civil society through SchoolNet Senegal to enhance current ICT programmes and to exert strong pressure on governmental policy 	<p>Collaborative project between GeSCI and the MoE with School of Education</p> <ul style="list-style-type: none"> - assist MoE in readjusting TPD programme by combining ODL and ICT - facilitate a more systematic TPD programme which can take advantage of the community multi media centres network - develop sub-regional (TPD?) programme with School of Education
<p>Tanzania</p> <p>Teacher Development and Management Strategy (TDMS) will be developed and will include all relevant issues pertaining to TPD including ICT issues</p>	<p>Human, material and financial resources to facilitate programme implementation.</p>	<ul style="list-style-type: none"> - Consultations to enhance achievement of set goals - Handling challenges through knowledge sharing, networking and collaboration with other countries. - Assistance with capacity building on technical issues and educational management
<p>Uganda</p> <ul style="list-style-type: none"> - MoES strategy has 5 year plan (Master Plan?) providing framework for balancing ICT applications and computer science, focusing on curriculum, teachers and equity - Implementation of policy and strategy - All educational institutions using ICTs to support teaching , to develop content -All teacher trainees at colleges and secondary students acquire ICT skills and become ICT literate - Investment in ICT infrastructure and capacity building for schools and training institutions 	<ul style="list-style-type: none"> - Investment in infrastructure and capacity building at all educational institutions - Tracking progress and development of ICT tutors and teachers with special ICT skills - Advocacy for change from teacher centred to learner-centred approaches - Mainstreaming of ICTs 	

<ul style="list-style-type: none">- ICT proficiency becomes a criterion for certification and promotion of teachers- Move away from teacher-based learning to learner-centred learning using ICTs- On-line teacher education courses available- Mechanisms to retain skilled ICT staff		
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