Three recent African reports

- **Synthesis Report** – Critical knowledge, skills and qualifications for accelerated and sustained growth (ADEA, 2012)

- **New Education Model for Africa** (AfDB, 2012)

- **eLearning Africa Report** (education for all) (2012)
ADEA - Synthesis Report

Vision for the future of sustainable development through a rebuilding of education and training systems - the necessary integration of ICT in these reforms in:

- promotion of critical skills in mainstream education
- Reform of TVCD and role of ICT
- Enhancing teaching skills and curriculum development and delivery
- Towards equality of access and achievement
- Digital literacy
Survey of 50 educational professional confirms across Africa that **ICT enhanced learning** is widely embraced

- By 2015 100 million will earn $3000+
- By 2060 99% will have broadband at home
- Literacy levels will be 97%
- Currently, just 20% complete secondary school
- 10 million dropouts from primary school
- The average 15 yr. old is not in school
Figure 1. Number of out-of-school children by region and sex, 1990-2009

Total: 101 million
Female: 17 million
Male: 11 million

Total: 67 million
Female: 21 million
Male: 17 million

Total: 40 million
Female: 24 million
Male: 12 million

South and West Asia
Sub-Saharan Africa
Rest of the world
The highest levels of education and training, particularly in key future sectors and occupations.

**Priorities for developing technical and vocational skills**

- **Youth unemployment stands at 60%**
  - The urban and agricultural informal sector which employs up to 90% of the working population is under-qualified
  - The sectors and occupations with high potential for the future lack adequate levels of skills

- **To do everything possible to ensure that the present generation is not a sacrificed generation**

- **To raise the level of qualification of young people and adults and in particular to train master craftsmen**

- **To develop a TVSD system that goes up to the highest levels of skills and qualifications**

**Achieving the priorities implies:**

- A strategic vision
- Significant investment
- A charter for partnership governance
- Cooperation and sharing between countries

**Figure 6 TVSD priorities**
AfDB-New Education Model for Africa

Five key themes:

1. Increase connectivity → greater access through eLearning especially to rural areas
2. Use of ICT → better teachers and higher quality Education
3. Must meet energy needs for ICT to flourish
4. Ownership of Digital resources
5. Develop PPP’s between Gov and service providers and academia
Teaching and Learning in 21C

- Huge Changes in Society and Everyday Life
- Huge changes in the Economy and Work
- Centrality of ICT as change agent
- Little Change in Education – little use of ICT
- No real change to *what* we teach, *how* we teach and *how* we assess learning
EU perspective

- **e-skills manifesto (EU 2010)** refers:
  - young people use digital technologies more, but are less appreciative of its value. Falling interest in ICT studies
  - Stereo-type of the male nerd – boring and lacking creativity
  - unrealised value of digital games, devices and media tools for creativity and learning
EU perspective

- formal ICT courses/modules seen as procedural and boring
- Parents regard user ability as sufficient - this does not constitute tech-savviness
- schools should ensure that students are equipped to extend their e-skills beyond casual consumer-level use to the application of ICT for the benefit of business and society
- no ability to critically assess information sources
A Conceptual structure for 21C skills

- **Ways of thinking**
  - Creativity and innovation
  - Critical thinking, problem solving
  - Learning to learn, metacognition

- **Ways of working**
  - Communication
  - Collaboration (teamwork)
21st Century skills

- **Tools for working**
  - Information literacy
  - ICT literacy

- **Living in the world**
  - Citizenship – local and global
  - Life and career
  - Personal, social responsibility

(ref. AT21C...
ICT Cluster - centrality of ICT in reform

Six themes on mainstreaming ICT:

- Leadership in schools to drive institutional change
- Digital competencies and transversal skills for the future workforce and for citizens in a connected world society
- Towards a new learning paradigm - ICT enabled innovation in pedagogy to improve a learner-centred approach → more innovative learning and teaching processes
Mainstreaming ICT

- professional development – the teacher at the centre. Critical and quality use of digital content and tools
- research on learning in a digital society – looking at holistic approaches and effective use of ICT and its impact on learning processes and outcomes
- “Ensuring equality of access and supporting participation and achievement”
It speaks about a transformed education:

“education curricula focus on equipping people with the capacity to learn and develop transversal skills such as critical thinking, problem solving, creativity, teamwork and communication skills. Entrepreneurial skills are widely available or included in curricula”

“We must rethink assessment and judge students on their skills and ability to learn rather than just knowledge” (OECD)
Assessment determines teaching & Learning

- Current assessment almost irrelevant in relation to the skills, knowledge, attitudes of self-directed and collaborative learning that are now necessary.

- Assessment is the priority in classroom instruction with a long-term focus on what is to be tested and on coaching and memorisation.

- New forms of assessment need to measure the higher order skills.
Content – Interactive digital “textbooks”

- Textbooks
- Interoperability - common standards. CFF IMS Common Cartridge
- 10 years --- all digital content will be multi-modal
- Seamless connection to multi- media interactive content
- Easy to customise and to integrate
- Providing consistent progression
- Global catalogue - teachers view all resources
Policy and implementation

Must address:

- ICT infrastructure /learning configured
- Broadband internet
- Leadership & Planning
- ICT in the Curriculum
- Professional development
- e-Learning Culture
- Digital content for learning
ICT integration at school level

- e-learning planning team led by principal
- Internal promote ICT integration and internet safety
- Equipment provision, renewal and upgrade
- Integration of student devices - mLearning
- Ubiquitous access to broadband internet
- Centralise controls and reducing ICT operating costs
- Telephony charges - VOIP/SKYPE/Google chat
- Video Conferencing
- CMS/VLE/Admin/social networking
A future roadmap

- Need for **more concrete data** on effective use of ICT on which to base policy recommendations
- Need to **support schools and teachers** in their teacher training practice – ICT in pre-service and in-service
- A **network of innovation** engaged in the validation of innovative approaches on how to use ICT effectively in the classroom
What is GESCI’s role in improving formal education provision in Africa?

Based on our remit and our expertise

Up to now:

• ICT Policy advice and development to Ministries
• ICT integration in TVET strategic advice and support
• Teacher professional development design and delivery initiatives towards mainstreaming model
• Technology tools, equipment configurations and infrastructural design
Where to?

- Implementation strategies for ICT integration
- School-based demonstration projects of ICT integration leading to mainstreaming
- Technological advice, hardware specs and ICT tools
- ICT Leadership in schools
- Teacher professional development models (ITE & Inset)
- Digital content resources for T&L
- Interactive digital textbooks advice and guidance
- Develop policies and strategies for internet safety in schools
GESI role in Technical /vocational skills development?

- ICT integration approaches in technical and vocational skills provision
- ICT skills and digital media skills
- How to support the continuum from skills to enterprise and jobs?
- How to formally interface with digital enterprise development, entrepreneurialism and enterprise creation?
- **Developing a skills base for the digital media enterprises – particularly the cultural industries**
Informal learning

• 6% of age cohort in any kinds of TVET (global av. 26%)
• Relationship with Informal learning?
• How collaboration with NGOs? for informal learning initiatives?
Support social and economic development

- Knowledge-based innovation – supporting STI
- Research for innovation in practice – feed policy makers.
- Innovative solutions to social issues
- Innovative youth employment initiatives – in collaboration
- Linking with human rights based approach of Donors
- ICT for literacy and numeracy
- Tangible collaboration with NGOs and agencies
Cont..... The knowledge society domain

- Role in delivery of accredited professional development blended learning courses
- Building on ALICT experience by developing accredited PD programmes in the civil society arena
- Themes include: new educational approaches, projects and practices to develop abilities to live together; justice and peace projects; international cooperation; social inclusiveness; Circular Economy
- Projects incorporating mobile technologies
Elements of a new strategy for GESCI (2012 – 2015)?

Provide Expert advice in:

- Policy advice for ICT integration in national/regional systems of education
- Strategies for effective and efficient implementation of ICT – the elements
- Role in TVSD reform against the backdrop of Africa’s social and political time-bomb – youth unemployment
- Is there a role for us in informal learning; how do we activate this and in partnership with whom?
Pre – strategy considerations for GESCI

- What expert services, internal skills and profession development are required to make effective and relevant responses to:
- Africa’s increasing confidence in its own abilities for economic development
- Knowledge of Donors’ changing perspectives on development aid priorities – human rights based
- Revised views of African organisations (AUC AfDB ADEA etc.) on what interventions and assistance can usefully be supplied by GESCI
GESCI – public image

- Advocacy from all perspectives
- Web presence – relevant content - place to visit; linked to ALICT community of practice
- Research development and dissemination