

‘Transforming Teacher Education ICT for Teaching and Learning’

**A Seminar for Deans of Education from universities in SADC countries
concerning the progress of ICT integration in teacher education.**



Sir John Daniel, President of the Commonwealth of Learning opening the seminar

On April 29th 2010 the Commonwealth of Learning with support from Intel, Microsoft and SchoolNet SA hosted a higher education seminar for Deans of Education and Heads of Schools of Education in teacher education institutions in South African and other The Southern African Development Community (SADC) countries.

The event held in Cape Town was well attended by 42 invited delegates, eighteen representing South African higher education institutions, ten from SADC institutions and fourteen delegates who were either speakers or representing other institutions or organisations related to the use of ICT in education.

Delegates

The following higher education institutions were represented: Prof Maureen Robinson, Cape Peninsula University of Technology; Prof Rudi Laugksch, University of Cape Town; Prof Zubeida Desai, University of the Western Cape; Prof Peggy Siyakwazi, Durban

University of Technology; Prof Denise Zinn, Nelson Mandela Metropolitan University; Prof Seugnet Blignaut, North West University; Prof Pentecost Nkhoma, Tshwane University of Technology; Prof Duan van der Westhuizen, University of Johannesburg; Prof Gawie du Toit and Ms Sara Musgrave, University of the Free State; Dr Paul Goldschagg and Ms Claudette Muller, University of the Witwatersrand; Prof George Moyo, University of Fort Hare; Drs Desmond Govender and Derek Moore, University of KwaZulu-Natal; Dr Muavia Gallie, University of Pretoria; Prof Thidziambi Tshivhase-Phendla, University of Venda; Dr Hemant Bessoondyal and Mr Ken Cathan, Mauritius Institute of Education; Prof Rehabeam Auala, University of Namibia; Prof Angelo Macuacua and Prof Eugénia Cossa, Universidad Edward Mondlane, Mozambique, Prof Richard Tabulawa, University of Botswana; Dr Joseph Mutangira, University of Swaziland; Prof John Arul Phillips, Asia eUniversity.

The South African departments of education were represented by Dr Whitfield Green, Director: Initial Professional Education of Teachers, Department of Higher Education and Dr Leila Goosen, Deputy Director, Curriculum Innovation, Department of Basic Education. Other representatives were Sir John Daniel and Trudi van Wyk from the Commonwealth of Learning; Parthy Chetty, Intel Corporation; Angela Schaerer, Microsoft SA; Gerald Roos, Educational ICT Consultant at SchoolNet SA; Kobus van Wyk, Khanya; Mike Chiles, FCSSA; Ms Stamenka Uvalic-Trumbic and Zeynap Varoglu, UNESCO Higher Education Quality Assurance; Dominic Savage, BESA; Dezlin Jacobs and Janet Thomson, SchoolNet SA.



Delegates from The Institute of Education, Mauritius, Durban University of Technology, University of Fort Hare and the Nelson Mandela Metropolitan University.

Background

Transformation of teaching and learning environments has been taking place worldwide, often as a result of the introduction of information and communications technologies (ICT). These changes have generated new information sources and new learning processes, which have contributed to changing the role of teachers. Many countries have realised the need for redefining the roles of teachers and have responded by launching professional development programmes that train pre-service and in-service teachers in the effective uses of ICT for teaching and learning. Learning to use computers and the Internet is a relatively simple task, but learning how to integrate ICT into teaching in order to improve learning is not.

Teacher Education Institutions are often enthused with the concept of e-Education and recognise its value, yet they may fall short of adapting and upgrading their respective existing curricula and of bringing their teacher qualifications in line with the demands of

21st Century learning. Therefore, The Commonwealth of Learning, in collaboration with Intel, Microsoft and SchoolNet SA agreed to host a seminar for Deans of Education with the theme of: '**Transforming Teacher Education – ICT for Teaching and Learning**'

On the question of relevance, Professor Denise Zinn from Nelson Mandela Metropolitan University in Port Elizabeth mentioned that upon receiving the seminar invitation she was ready to send an IT person to represent her. The fact that the invitation stipulated that the seminar was only open to Deans drove the point home that it was meant for the decision makers to play an active role in influencing the integration of ICT within the teacher education curricula of their institutions.

Specific Aims of the Seminar

These were to:

- Build understanding of what ICT integration in teaching and learning means and acknowledge it as a legitimate and essential component of Teacher Education
- Stimulate discussion about Teacher ICT Competencies and their impact on teacher development
- Give practical examples of where ICT has been integrated into Teacher Education Programmes.

Seminar Programme

Parthy Chetty from Intel Corporation opened the seminar and welcomed all delegates while expressing gratitude for their attendance.



Parthy Chetty, Prof. Thidziambi Tshivhase-Phendla, Prof. Peggy Siyakwazi and Prof. Rehabeam Auala

Sir John Daniel, President and CEO of the Commonwealth of Learning delivered the opening address. This was entitled, "**International Perspective: ICT in Teacher Education – Global Trends**". Sir John explained that he was giving an overview of the use of ICT In education as opposed to the details of how this should be done and that much of the content of his address could be found in his latest book, "**Mega-Schools, Technology and Teachers: Achieving Education for All**". The thrust of Sir John's message was to emphasise why ICT will play a much greater role in the mode of delivery of teacher education in the future and the reason being that there has to be an increase in the use of open schooling as a strategy to partially solve the worldwide shortage of teachers. This shortage is due to what Sir John called a "massive surge towards secondary education" as a result of the successes of countries striving towards the Millennium Development Goal of UNP (Universal Primary Education). The scale of the problem could be appreciated if one were to consider that there were 400 million children between 12 and 17 who were currently not receiving secondary education.

Sir John proposed that teacher education institutions reverse the conventional approach to pre-service and in-service education. He cited effective in-service teacher education programmes that train motivated but untrained graduates while they are already teaching in the classroom. To substantiate this proposal Sir John referred to studies by Professors Keith Lewinⁱ, Bob Moon and Jenny Leachⁱⁱ who each had emphasised the value of situated and experiential learning in the real context of the classroom.

Ms Stamenka Uvalic-Trumbic and Ms Zeynep Varoglu from UNESCO's Division of Higher Education and more specifically the Section of Reform, Innovation and Quality Assurance presented jointly on global trends in higher education in general and the importance of quality assurance particularly in the area of e-learning. They cited the world conference on Higher Education held in 2009 which had produced a communiqué on teacher education which stated,

"Higher education must scale up teacher education, both pre-service and in-service, with curricula that equip teachers to provide individuals with the knowledge and skills they need in the twenty-first century. This will require new approaches, including open and distance learning (ODL) and information and communications technologies (ICTs). (Article 11)"



Ms Stamenka Uvalic-Trumbic and Ms Zeynep Varoglu presenting

Mr Gerald Roos, ICT Education Consultant, shared two aspects with the delegates, the first being the UNESCO ICT Competency Framework for Teachers. This was related to the integration of content, pedagogy and technology and developing holistic expert educators. The second was an outline of a learning pathway through a range of professional development courses, including Intel® Teach and Microsoft Partners in Learning courses, which covers the national policy requirements with respect to teacher education competences.



Mr Dominic Savage is the Director-General of the British Educational Suppliers Association. His presentation was entitled ***Harnessing Educational Suppliers as stakeholders in ICT education***. His presentation related to the topic of educational uses of ICT; it was humorous and very well received by the delegates. One of the most valuable items of advice was for government departments to consider the conditions of hardware distribution carefully and to ensure that professional development accompanies roll out.

Professor Duan van der Westhuizen, from the University of Johannesburg, shared his views on the way ICT should be integrated and has been integrated into teacher education qualifications at the University of Johannesburg. He proposed that ICT should not be taught as a subject where an end product is the purpose of the course but rather as a mediating tool with the focus on social constructivism and authenticity. Duan stressed the need for a shift to 21st Century teaching and a firm focus on higher order thinking; he explained that information is not knowledge and that providing information is not teaching. He mentioned several research instances as well as the fact that further research is still required.



Ms Saretjie Musgrave from the University of the Free State's ICTISE unit (ICT in Schools Education) shared the unit's focus of the innovative use of ICT in order to bring about more effective teaching and learning. Her presentation was aimed at highlighting the importance of teacher development at pre-service and in-service teachers. A pilot study is being conducted by the University of the Free State with the Free State Department of Education, which involves the best student teachers who have been exposed to e-learning, being placed in under-performing schools as a fulfilment of their teaching practice requirement. The pilot study is being

implemented in four phases and is currently in the second phase. It serves to highlight that by having student teachers fully trained and well equipped they will eventually reach a large number of learners. Ms Musgrave also mentioned two other projects that

ICTISE is involved in: The Mangaung Young Action Research Group and Sotho-Students Project.



Prof. Rudi Laugksch, Prof. Maureen Robinson, Prof. R K Auala, Dr Richard Tabulawa, Prof. Gawie du Toit, Dr Whitfield Green

Mr Roos' second presentation explained the background to the development of the Commonwealth Certificate in Teacher ICT Integration (CCTI). The certificate is made up of 4 core and 10 elective modules and also integrates the use of Web 2.0 collaborative tools. The Commonwealth of Learning aims for this fully distance qualification to be flexibly adopted and adapted at universities in Commonwealth countries.

The second round of presentations was concluded with a question-and-answer platform facilitated by Janet Thomson. This gave delegates an opportunity to raise questions and make comments about the presentations and discuss concepts presented.



The last speaker for the day was **Ms Angela Schaerer** who is the Microsoft Academic Programme Manager. In her presentation she introduced a toolkit for teacher education institutions that had recently been developed by Microsoft and its respective partners in the Asia-Pacific region. This toolkit is aimed at assisting the senior management in Higher Education Institutions in mapping how well ICT has been integrated into the culture of teaching and learning in their respective faculties and providing strategies for improvement.

Angela Schaerer, Academic Programmes Manager, Microsoft SA

A number of delegates mentioned that they appreciated the opportunity to collaborate with colleagues who were decision-makers from other teacher education institutions but also with other experts in the field.

Conclusions and recommendations

As part of the conclusion for the seminar, the delegates were given an opportunity to discuss and determine success factors for the implementation of ICT integration at their represented institutions.

Salient points were tabled by Deans and Heads of schools, summarised as follows:

1. **Improve** levels of positive interaction between B Ed and PGCE (in-service, CPTD and pre-service, IPET) programmes.
2. **Promote** institutional buy-in resulting in improved infrastructure and the fostering of innovation.
3. **Address** capacity building in the integration of pedagogy, technology and content. These should be synergised rather than compartmentalised.
4. **Model** good practice - this may require a paradigm shift for teacher educators. Institutions to recognise that we are working with digital students – institutions could even use the strategy of a student adopting a lecturer.
5. **Institute** policies at institutional and national level in which all stakeholders feel ownership. An effort to support change is required. Deans and Heads of school may have to become the champions of change and workshop ICT goals within faculties.
6. **Improve** relationships with schools in proximity to the university to build communities of practice.
7. **Share** research findings particularly around the impact of ICT integration into teaching and learning.
8. **Investigate** the untapped potential that corporate social investment can offer to HEI.



Muavia Gallie, Rudi Laugksch, Maureen Robinson, Prof Auala, Witty Green, Richard Tabulawa, Gawie duToit

Delegates felt that this seminar had highlighted pedagogical considerations for ICT use in teaching and learning and that it had effectively brought together the key stakeholders and decision makers in the field of teacher education in SADC countries. It also provided a unique opportunity for participants to gain significant insight from other stakeholders and experts in the field of ICT integration in teaching and learning. Overall, both delegates and organisers felt that the seminar had met its objectives to a great extent.

In conclusion, it was noted that the onus was on representatives to take the initiative forward at their respective institutions. A flash drive with all presentations was distributed to all delegates. SchoolNet SA and COL were to set up an environment for collaboration and sharing of further documents. Although it would be a long journey, it was hoped that it would be a rewarding one.

ⁱ Lewin, Keith M (2002). The costs of supply and demand for teacher education: Dilemmas for development, *International Journal of Educational Development*, 22 (3-4), 221-242.

Lewin, Keith M (2008). *Strategies for Sustainable Financing of Secondary Education in Sub-Saharan Africa*, World Bank Working Paper No. 136. Washington, DC: World Bank..

ⁱⁱ Leach, Jenny & Moon, Bob (2000) *Changing Paradigms in Teacher Education: A Case Study of Innovation and Change*, in Scott, Alan & Freeman-Moir, John (eds) *Tomorrow's Teachers: International and Critical Perspectives on Teacher Education*, Canterbury University Press, Canterbury, New Zealand pp. 106-122

ACRONYMS USED

B Ed	Bachelor of Education
CCTI	Commonwealth Certificate for Teacher ICT Integration
COL	Commonwealth of Learning
CPTD	Continuing Professional Teacher Development
HEI	Higher Education Institutions
ICT	information and communications technologies
ICTISE	Unit for ICT in Schools Education
IPET	Initial Professional Education of Teachers
MDG	Millennium Development Goals
PGCE	Postgraduate Certificate in Education
SADC	Southern African Development Community
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNP	Universal Primary Education