DEPARTMENT OF INFORMATION SYSTEMS

Visiting Professor Sue Conger addressing learners at Alexandria High School, which is the site of an ongoing ICT for Education research project

INTRODUCTION

2014 saw the establishment of a new research group in Health Informatics led by **Professor Greg Foster**, which has attracted a number of Postgraduate students working in the fields of mobile e-health security, the use of ICTs in healthcare, and behavioural change applications.

A visit from **Professor Anthony Maeder**, Professor in Health Informatics at the University of Western Sydney, strengthened collaborative ties between our two departments.

The ICT for Development (ICT4D) research group led by **Dr Caroline Khene** and **Dr Kirstin Krauss** had an especially productive year, generating six (6) publications and a further five (5) conference presentations. Other research areas within the Department include cloud computing adoption, ICTs in education, e-government and strategy development, virtual collaboration, and the use of social media in business. Staff from the Department attended a number of local conferences held in Port Elizabeth, Cape Town and Pretoria, as well as international conferences in Belgium, Senegal and New Zealand.

A collaborative initiative between the Departments of Information Systems and Management at Rhodes University led to the introduction of a new Masters and Doctoral Research Methodology course in 2014.

Distinguished visiting academics **Professor Ojelanki Ngwenyama**, Professor and

Director of the Institute for Innovation and Technology Management at the Ted Rogers School of Management, Ryerson University, and **Professor Marlien Herselman**, Chief Researcher at the CSIR's Meraka Institute, contributed to the various research workshops. As a result of this initiative, the CSIR and Meraka Institute awarded bursaries worth R160,000.00 for three (3) Postgraduate students supervised by **Dr Caroline Khene** and **Dr Kirstin Krauss** to do ICT4D community engagement research at Cofimvaba in the Eastern Cape. In addition, a new community engagement project which involves the training of CAT teachers at Alexandria High School allowed a research team from the Department of Information Systems to explore the impact of different teaching methods on marginalised high school learners.

Postgraduates/Graduations

Postgraduate registrations in Information Systems showed substantial growth in 2014, with a total of six (6) PhD candidates, fourteen (14) Masters candidates, and a class of thirty-one (31) Honours students. In April 2014 we celebrated the graduation of three (3) Masters and twenty-nine (29) Honours students.

Distinguished Visitors/International Visits

Distinguished visitors to the Department included **Professor Ojelanki Ngwenyama** from Ryerson University, **Professor Marlien Herselman** from the Meraka Institute, **Professor Anthony Maeder** from the University of Western Sydney, **Professor Sue Conger** from the University of Dallas, and previous Head of Department **Professor Malcolm Sainsbury**. Research Associate **Ms Brenda Mallinson** continued to contribute to the research efforts of the Department, with a number of conference presentations in the field of eLearning.

Significant Research Aligned Events

In March 2014, students and staff from the Department participated in the Research Rumble, an annual event which showcases research initiatives

Local performers added colour to the ICIS 2014 conference
in Auckland NZ, which was attended by Dr Kirstin Krauss

Professor Greg Foster and Ms Jane Nash attended an
HOD colloquium held during the SACLA 2014 conference

being undertaken by members of the IT, CS and IS
Departments of Rhodes University, Nelson Mandela
Metropolitan University, Water Sisulu University and the
University of Fort Hare. Five (5) of our Masters and PhD
students were subsequently invited to present research
posters at the 2014 SAICSIT conference in Pretoria, where
Dr Kirstin Krauss was one of the review panellists. **Dr**

Caroline Khene joined distinguished researcher Professor
Geoff Walsham from Cambridge University as a panellist at
an international workshop hosted by the University of South
Africa.

Ms Jane Nash

Head of Department

PUBLICATIONS

Books/Chapters/Monographs

Conger, S.

Conger, S. and Probst, J. (2014) Knowledge management
in ITSM: Applying the DIKW model. In: Mora, M., Gomez, J.
and Perez, F.C. (eds.). *Engineering and Management of IT-
based Service Systems: An Intelligent Decision-Making
Support Systems Approach.* London: Springer-Verlag. p.1-18.
ISBN: 9783642399282.

Conger, S. (2014) Knowledge management for programs
on Information and Communications Technologies for
Development (ICT4D) in South Africa. In: Osei-Bryson, K.M.,
Mansingh, G. and Rao, L. (eds.). *Knowledge Management
for Development: Domains, Strategies and Technologies for
Developing Countries.* New York: Springer. p.223-258. ISBN:
9781489973917.

Conger, S. (2014) Management of IT services. *Wiley
Encyclopedia of Management: Volume 7.* 3rd Ed. America:
John Wiley & Sons. ISBN: 9781119972518.

Conger, S. (2014) Systems development. *Wiley Encyclopedia
of Management: Volume 7.* 3rd Ed. America: John Wiley & Sons.
ISBN: 9781119972518.

Concerts, Exhibitions, Performances, Workshops, Events

Conger, S.

Conger, S. Presentation. Perfecting the service desk. *AIS*

SIGSVC Workshop. Auckland. New Zealand. 14 December 2014.

Khene, C.J., Mthoko, H.T.W. and Osah, U.J.

Khene, C.J., **Mthoko, H.T.W.** and **Osah, U.J.** Workshop
presentation. The comprehensive nature of evaluation in
ICT4D research and practice. *8th International Development
Informatics Association Conference.* Boardwalk Conference
Centre, Port Elizabeth. South Africa. 4 November 2014.

Mallinson, B.

Mallinson, B. Pre-conference workshop. Learning
development in the open: Moving from course design to
development using FOSS. *eLearning Africa 9th Annual
International Conference.* Munyonyo, Kampala. Uganda. 28 May
2014.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Conger, S.

Conger, S. and Miller, R. (2014) Problem-based learning
applied to student consulting in a lean production course.
Journal of Higher Education Theory and Practice. 14 (1). p.81-
94.

Khene, C.J.

Khene, C.J. (2014) Supporting a humanizing pedagogy in
the supervision relationship and process: A reflection in a
developing country. *The International Journal of Doctoral
Studies.* 9 (0). p.73-83.

Peer Reviewed Subsidy-Earning Journal Research Publications

Krauss, K.E.M.
Van Der Schyff, K.I. and *Krauss, K.E.M.* (2014) Higher education cloud computing in South Africa: Towards understanding trust and adoption issues. *South African Computer Journal.* 55 (2014). p.40-55.

Osah, U.J., Khene, C.J. and Foster, G.G.
Osah, U.J., **Khene, C.J.** and **Foster, G.G.** (2014) Critical themes of process assessment in rural ICT4D projects: An analysis of assessment approaches. *Electronic Journal of Information Systems in Developing Countries.* 60 (4). p.1-22.

Peer Reviewed Proceedings

Alistoun, G. and Upfold, C.T.
Alistoun, G. and **Upfold, C.T.** Towards a culture of engagement: Leveraging the enterprise social network. *Proceedings of the 8th European Conference on IS Management and Evaluation.* University of Antwerp, Ghent. Belgium. September 2014.

Foster, G.G.
Foster, G.G. Students' response to the use of QR codes to encourage participation in an introductory programming module. *2014 Proceedings of the 43rd Conference of the Southern African Lecturers' Association (SACLA): ICT Education in the Cyber World.* Nelson Mandela Metropolitan University, Port Elizabeth. South Africa. June 2014.

Gebregziabher, S. and Krauss, K.E.M.
Gebregziabher, S. and **Krauss, K.E.M.** The bi-directional influence of technology and society: How M-PESA is shaping and is being shaped by business in Kenya. *Proceedings of 4th International Conference on M4D Mobile Communication for Development.* University Cheikh Anta Diop, Dakar. Senegal. April 2014.

Khene, C.J.
Khene, C.J. Supporting a humanizing pedagogy in the supervision relationship and process: A reflection in a developing country. P*roceedings of the 2014 e-Skills for Knowledge Production and Innovation Conference.* University of Cape Town, Cape Town. South Africa. November 2014.

Nash, J.M.
Nash, J.M. Using blended learning to increase student engagement in a large undergraduate class. *2014 Proceedings of the 43rd Conference of the Southern African Lecturers' Association (SACLA): ICT Education in the Cyber World.* Nelson Mandela Metropolitan University, Port Elizabeth. South Africa. June 2014.

Nkula, K.Z. and Krauss, K.E.M.
Nkula, K.Z. and **Krauss, K.E.M.** The integration of ICTs in marginalized schools in South Africa: Considerations for understanding the perceptions of in-service teachers and the role of training. *Proceedings of the 8th International Development Informatics Association Conference.* Boardwalk Conference Centre, Port Elizabeth. South Africa. November 2014.

Research Papers Presented at Academic/Scientific Conferences (Non-peer reviewed Proceedings)

Baduza, G.Q. and Khene, C.J.
Baduza, G.Q. and **Khene, C.J.** A comprehensive approach to scalability assessment of ICTD projects in South Africa. *SAICSIT 2014 (M&D Symposium).* Leriba Lodge, Centurion, Gauteng. South Africa. September 2014.

Dube, T.S.S., Nash, J.M. and Foster, G.G.
Dube, T.S.S., **Nash, J.M.** and **Foster, G.G.** Factors influencing the acceptance and adoption of e-health technologies by nursing staff at Eastern Cape clinics. *SAICSIT 2014 (M&D Symposium).* Leriba Lodge, Centurion, Gauteng. South Africa. September 2014.

Khene, C.J. and Osah, U.J.
Khene, C.J. and **Osah, U.J.** A systems-thinking approach to designing an e-government strategy for water service delivery in developing countries: A case of the Sundays River Valley Municipality. *SAICSIT 2014 (M&D Symposium).* Leriba Lodge, Centurion, Gauteng. South Africa. September 2014.

Krauss, K.E.M.
Krauss, K.E.M. A confessional account of the community entry phases of a critical ethnography: Doing emancipatory ICT4D work in a deep rural community in South Africa. *Annual Workshop of the AIS Special Interest Group for ICT in Global Development.* University of Auckland, Auckland. New Zealand. December 2014.

Mallinson, B.
Mallinson, B. and Krull, G. The rise of openness in higher education. *eLearning Update Conference.* Emperor's Palace, Gauteng. South Africa. July 2014.

Mallinson, B. Exploring the design science research process as an approach to addressing digital fluency for academic staff at Open University of Tanzania. *NADEOSA 2014.* University of Pretoria, Pretoria. South Africa. June 2014.

Mallinson, B. and Mays, T. Collating and modelling OERs to train teacher educators in quality ODeL on the African continent: The BERTA project. *4th ACDE Conference and General Assembly.* Elephant Hills Hotel, Victoria Falls. Zimbabwe. June 2014.

Mallinson, B. Using off-line solutions for online and blended learning. *eLearning Africa 9th Annual International Conference.* Munyonyo, Kampala. Uganda. May 2014.

Ncube, L.B.S. and Khene, C.J.
Ncube, L.B.S. and **Khene, C.J.** E-governance for local government: A case of the Sundays River Valley Municipality. *SAICSIT 2014 (M&D Symposium).* Leriba Lodge, Centurion, Gauteng. South Africa. September 2014.

Thomson, C.D., Foster, G.G. and Nash, J.M.
Thomson, C.D., **Foster, G.G.** and **Nash, J.M.** User interface guidelines for enhancing the user experience of electronic medical records in the practice of optometry. *SAICSIT 2014 (M&D Symposium).* Leriba Lodge, Centurion, Gauteng. South Africa. September 2014.