INFORMATION SYSTEMS

The year 2015 saw a number of milestones for the Department of Information Systems, including the promotion of staff members Dr Caroline Khene and Dr Kirstin Krauss to Associate Professor status.

Professor Khene was also presented with the Commerce Faculty's Researcher of the Year award based on her research contribution during the previous academic year, while Professor Krauss joined Professor Khene in achieving an National Research Foundation (NRF) Y2 rating.

Professors Foster, Krauss and Khene together with other academic staff, postgraduate students and distinguished visitors, contributed significantly to the number research publications and peer reviewed proceedings. Contributions from visiting academics are always greatly appreciated as they add richness to the research efforts in the Department.

Postgraduates/Graduations

Postgraduate registrations in Information Systems continued to grow in 2015, with a total of eight (8) PhD candidates, fourteen (14) Masters candidates, and a class of thirty-two (32) Honours students. In April 2015 we celebrated the graduation of three (3) Masters and twenty-one (21) Honours students.

Distinguished Visitors/International Visits

Distinguished visitors to the Department included Dr Adele Botha and Professor Marlien Herselman from the Meraka Institute, Professor Nic Hassan from the University of Minnesota, Professor Ojelanki Ngwenyama from Ryerson University, Professor Sue Conger from the University of Dallas, and previous Head of Department Professor Malcolm Sainsbury who returns every year to teach on the Honours programme. 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.
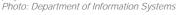
Significant Research Aligned Events

Students and staff from the Department once again participated in the Research Rumble, which is an annual event showcasing research initiatives being undertaken by members of the Information Technology (IT), Computer Science (CS) and Information Systems (IS) Departments of Rhodes University, Nelson Mandela Metropolitan University, Water Sisulu University and the University of Fort Hare.

The continuing MobiSAM project aims at improving local municipal service delivery, while the ICT4RED project aims to supply electronic textbooks to rural schools in the Cofimvaba district in the Eastern Cape. A new collaborative project with the University of Limerick focuses on stakeholder engagement in the field of ICT for Development.

Cofimvaba pupils using electronic textbooks supplied through the ICT4RED project.
Photo: Department of Information Systems

PhD students Hafeni Mthoko and Gugu Baduza attended the 7th International Conference on Information and Communication Technologies and Development 2015 (ICTD2015) in Singapore, together with fellow student Joshua Osah.
Photo: Department of Information Systems

In addition to presenting research papers at local and overseas conferences, IS Department staff contributed to their discipline as journal editors, conference reviewers and panel members, and external examiners for other academic institutions.

Mrs Lydia Palmer

Head of Department

Books/Chapters/Monographs

Conger, S.
Conger, S. (2015) Six Sigma and Business Process Management. In: vom Brocke, J. and Rosemann, M. (eds.). *Handbook on Business Process Management 1: Introduction, Methods and Information Systems*. 2nd Ed. Berlin Heidelberg: Springer. p.127-145. ISBN: 9783642450990.

Nkula, K.Z. and Krauss, K.E.M.
Nkula, K.Z. and **Krauss, K.E.M.** (2015) The Integration of ICTs in Marginalized Schools in South Africa: The integration of ICTs in marginalized Eastern Cape Schools: the perceptions of in-service teachers and understanding the role of training. In: Steyn, J. and Van Greunen, D. (eds.). *ICTs for Inclusive Communities in Developing Societies*. Newcastle on Thynne: Cambridge Scholars Publishing. p.320-343. ISBN: 9781443880817.

Concerts, Exhibitions, Performances, Workshops, Events

Khene, C., Mthoko, H., Osah, U.J. and Baduza, G.
Khene, C., **Mthoko, H.**, **Osah, U.J.** and **Baduza, G.** Workshop. Towards a shared understanding of the Comprehensive Nature of Evaluating ICT in Development: Trends in Current Practice. *Open Session of the International Conference on Information and Communication Technologies and Development (ICTD2015)*. Nanyang Technological University, Singapore. 15 May 2015.

Krauss, K.E.M.
Krauss, K.E.M. Invited speaker. Sense-making in ICT4D social situations: is critical hermeneutics the way to go or are there better, more ethical alternatives? *Southern African Chapter of the Association for Information Systems*. STIAS Wallenberg Centre, Stellenbosch. South Africa. 28 September 2015.

Mallinson, B.
Mallinson, B. Invited MOOC presentation. Exploring the Potential of Open Digital Badges. *Moodle MOOC6*. Online. 18 May 2015.

Mallinson, B. Invited MOOC developer and online facilitator. Module 3: How to use ICTs to Enhance your Teaching and Learning. In *Using ICT to Enrich Teaching and Learning*. African Virtual University and Commonwealth of Learning. March 2015.

Distinguished Visitors

Botha, A.
Dr A Botha. Council for Scientific and Industrial Research (CSIR), Meraka Institute, Pretoria, South Africa. *Research Workshop*. May 2015.

Hassan, N.
Professor N Hassan. University of Minnesota Duluth, Duluth, United States. *Research seminars: "Theorizing in IS"*. July 2015.

Herselman, M.
Professor M Herselman. CSIR Meraka Institute, Pretoria, South Africa. *Lecture series on research methodology*. May 2015.

Ngwenyama, O.
Professor O Ngwenyama. (Ryerson University), Toronto, Canada. *Workshop on the philosophy of social science and research*. March 2015.

Peer Reviewed Non-Subsidy-Earning Journal Research Publications

Khene, C.
Khene, C. (2015) Curriculum Development of an ICT4D Module in the South African Context. *Issues in Informing Science and Information Technology (IISIT)*. 12 (2015). p.111-140.

Mallinson, B.
Mallinson, B. and Krull, G.E. (2015) An OER online course remixing experience. *Open Praxis*. 7 (3). p.263-271.

Peer-reviewed Proceedings

Baduza, G. and Khene, C.
Baduza, G. and **Khene, C.** A Comprehensive Approach to Scalability Assessment of ICTD projects: An ICT4RED Case Development. *ICTD 2015*. Nanyang Technological University. Singapore. May 2015.

Conger, S., Krauss, K.E.M. and Simuja, C.
Conger, S., **Krauss, K.E.M.** and **Simuja, C.** Human Factors Issues in Developing Country Remote K-12 Education. *6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the Affiliated Conferences*. Caesar's Palace, Las Vegas. United States of America. July 2015.

Khene, C.
Khene, C. Curriculum Development of an ICT4D Module in the South African Context. *InSITE 2015: Informing Science and IT Education Conferences*. University of South Florida, Tampa, Florida. United States of America. June 2015.

Krauss, K.E.M.
Krauss, K.E.M. Discourse and Discourse collisions: understanding the experiences of Information Systems students at a South African university. *13th International Conference on Social Implications of Computers in Developing Countries (IFIP 9.4)*. Jetwing Blue, Negombo. Sri Lanka. May 2015.

Krauss, K.E.M., Simuja, C. and Conger, S.
Krauss, K.E.M., **Simuja, C.** and **Conger, S.** ICT education practices in marginalized rural schools in South Africa: considerations for adequate sensemaking and practical immersion. *8th Annual SIG GlobDev Pre-ICIS Workshop*. Fort Worth Convention Center, Fort Worth, Texas. United States of America. December 2015.

Mthoko, H. and Khene, C.
Mthoko, H. and **Khene, C.** Assessing Outcome and Impact: Towards a comprehensive evaluation approach in ICT4D. *ICTD 2015*. Nanyang Technological University, Singapore. May 2015.

Nash, J.M.
Nash, J.M. Using video podcasts to teach procedural skills to undergraduate students. *SACLA 2015: Renewing ICT teach and learning: Building on the past to create new energies*. University of the Witwatersrand (WITS) University, Johannesburg. South Africa. July 2015.

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

Dayisi, S. and Khene, C.
Dayisi, S. and **Khene, C.** The Influence of ICT programmes in Informing Secondary School Learners from Marginalised Schools of Advanced ICT Studies offered at Higher Education Institutions. *SAICSIT 2015: M&D Symposium*. Stellenbosch University, Stellenbosch. South Africa. September 2015.

Khene, C., Mthoko, H. and Osah, U.J.
Khene, C., **Mthoko, H.** and **Osah, U.J.** Towards a Design Science Approach in ICT4D Research and Community Engagement. *Community Engagement Learning Symposium*. Rhodes University, Grahamstown. South Africa. May 2015.

Mallinson, B.
Nihuka, K. and **Mallinson, B.** Towards OER Integration for Professional Development of Lecturers at OUT. *Distance Education and Teacher Education in Africa (DETA) Conference 2015*. Mauritius Institute of Education, Réduit. Mauritius. July 2015.

Mallinson, B. Moving from literacy to fluency: an academic approach. *8th eLearning Update Conference*. Emperor's Palace, Johannesburg. South Africa. August 2015.

Mallinson, B. Remixing OERs - Adapting for Purpose and Context. *Moodle Moot Virtual Conference 2015*. Online Conference. August 2015.

Mallinson, B. Evaluating an Online Learning Experience for Field-Based Child Protection in Emergencies Practitioners. *ICDE 2015*. Sun City, Pilanesberg. South Africa. October 2015.

Muganda, C. Samzugi, A. and **Mallinson, B.** Empirical-Based Analytical Insights on the Position, Challenges and Potential for Promoting OER in ODeL Institutions in Africa. *2nd African Virtual University (AVU) Conference*. Nairobi, Kenya. July 2015.

Mnjama, J.J. and Foster, G.G.
Mnjama, J.J. and **Foster, G.G.** Towards a security evaluation framework for the protection of personal health information in mobile health applications. *SAICSIT 2015: M&D Symposium*. Stellenbosch University, Stellenbosch. South Africa. September 2015.

Nash, J.M. and Krauss, K.E.M.
Nash, J.M. and **Krauss, K.E.M.** A method for aligning MCQ assessment with cognitive skills and learning objectives. *SACLA 2015*. University of the Witwatersrand (WITS), Johannesburg. South Africa. 2-3 July 2015.

Oridota, O.O. and Foster, G.G.
Oridota, O.O. and **Foster, G.G.** Towards a framework to guide the development of smartphone behavioural change mobile health applications. *SAICSIT 2015: M&D Symposium*. Stellenbosch University, Stellenbosch. South Africa. September 2015.

Osah, U.J. and Khene, C.
Osah, U.J. and **Khene, C.** A Systems-Thinking Approach to E-Government Strategy for Water Service Delivery in South African Local Municipalities. *4th South African Young Water Professionals Conference (YWP-ZA)*. CSIR, Pretoria. South Africa. November 2015.

Simuja, C. and Krauss, K.E.M.
Simuja, C. and **Krauss, K.E.M.** Transformative ICT education practices in rural high schools in the Eastern Cape: Providing knowledge relevant for developmental needs and Realities. *SAICSIT 2015: M&D Symposium*. STIAS Wallenberg Centre, Stellenbosch. South Africa. September 2015.

Simuja, C., Krauss, K.E.M. and Conger, S.
Simuja, C., **Krauss, K.E.M.** and **Conger, S.** Relevant utilisation of ICTs among teachers and rural high school learners in the Eastern Cape Province. *Community Engagement Learning Symposium*. Rhodes University, Grahamstown. South Africa. May 2015.

Thomson, C. and Nash, J.M.
Thomson, C. and **Nash, J.M.** A Framework for Evaluating the User Experience and Persuasive Design of Mobile Applications Promoting Physical Activity in Adults. *SAICSIT 2015: M&D Symposium*. Stellenbosch University, Stellenbosch. South Africa. September 2015.