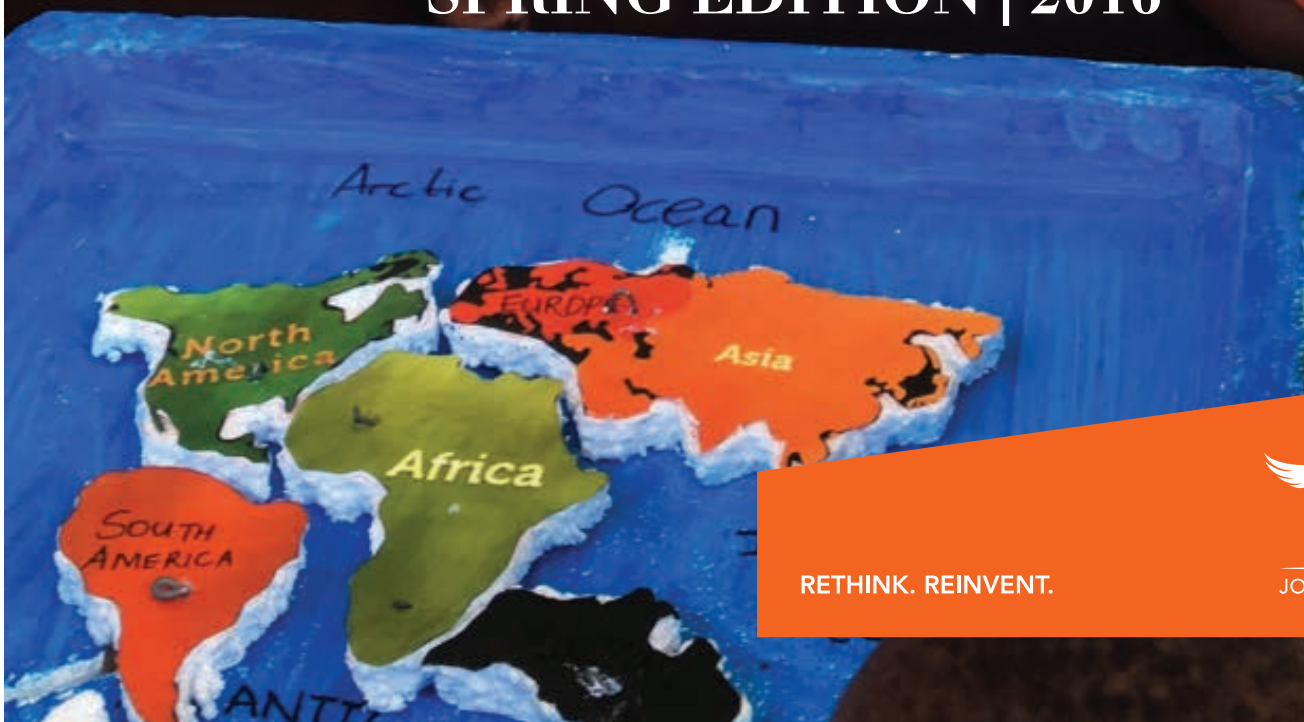




Edu-Brief

NEWSLETTER

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RETHINK. REINVENT.



World Federation of Associations for Teacher Education meeting and Conference



In the picture: Dr Whitty Green, Acting Chief Director Teaching and Learning Development (Department of Higher Education and Training) and Prof Sarah Gravett

Prof Sarah Gravett, Dean of Education, was invited in her capacity as chair of the (South African) Education Deans’ Forum to attend a meeting of the World Federation of Associations for Teacher Education in Barcelona in April 2016. Thereafter she delivered an invited paper at the Fourth Biennial International Conference of the Federation. The theme of the conference was “Innovation in Teacher Education within a Global Context”.

A panel discussion on teacher education in Africa

Prof. Sarah Gravett, the Dean of the Faculty of Education was invited to participate in a panel discussion on teacher education in Africa at a meeting of the African Deans of Education Forum in Addis Ababa, 23-24 June 2016. The theme of the panel discussion was: Sharing “best practices” in teacher education in Africa. Prof Gravett focused in her presentation on the school-university partnership for the education of primary school teachers at the UJ Soweto campus. This work is well summarized in an article that was published in the Mail & Guardian article: <http://mg.co.za/article/2016-06-15-00-good-teacher-graduates-emerge-when-their-studies-combine-theory-and-reality>





Research on MiniChess and its influence on mathematics knowledge acquisition and cognitive development among foundation phase learners

Research by Professor Kakoma Luneta (UJ), Dr P. Giannakopoulos (UNISA), Mrs S. Coetsee (UJ) and Mr G. Cheva (UJ)

The Department of Childhood Education in the Faculty of Education of the University of Johannesburg in collaboration with Tsogo Sun, Moves for Life and MiniChess undertook to investigate the effects of chess on mathematical acquisition at foundation phase (Grades R-3). The study involved 10 primary schools and 4568 learners. Of the 10 schools 6 were experimental (Chess playing schools) and 4 were control schools (non-chess playing schools). They were all from the same social and economic settings. It is currently the largest study involving foundation phase learners, chess and mathematics in the world. In January 2014 the learners in the grades R-3 wrote pre-tests in mathematics developed by the Department of Basic Education. Soon after the tests were written the learners at the experimental schools embarked on learning to play chess. The experimental schools had 1 hour of chess every week. After one year of learning and playing chess, in January of 2015 the learners were again tested.



Over the one year period the control grades had a very little shift in mathematics attainment, an average of 0.25%, while the experimental group had an average mathematical knowledge acquisition shift of 7.89%. The Grade 2 experimental group had the highest shift of 13%.

The experimental learners were much calmer and spent time thinking about the mathematical problems before they answered. The control group were quick to respond and guess the answers. When asked to explain what the problem meant, the learners in the experimental group had several alternatives to the meaning of the question.

It can be concluded from the above statements that the different levels of analysis between the learners playing chess and those that were not playing chess was quite marked. Those playing chess were more analytical and seemed to engage with the tasks at a relatively higher cognitive level than the learners that were not playing chess.

This study is ongoing and there is still one more year of data collection and analysis.

Intermediate phase students build models for science teaching

Francois Naude

The third year B.Ed Intermediate Phase students built interactive models to assist them in teaching science concepts. The project entailed the creation of a 3D model that learners would be able to interact with to aid in the learning of difficult science concepts. An exhibition was held on 28 April 2016 at Funda UJabule Primary school to put these models to the test. Five groups of students presented their models to 80 grade 5 learners and their teachers. The learners interacted with the models and asked questions. The students spent 10 weeks designing and building their models and their hard work paid off. The student teachers were astonished to see the interest that the models invoked as the learners were extremely excited that they were allowed to interact with the models and the teachers in a less formal manner.





The five 3-minute thesis participants: The five participants in the 2016 competition were, from left to right: Peter Kriel (Thesis title: *Hospitality management in the SA higher education sector*), Roger Looyen (*Moral leadership: An imperative to learner attainment*), Mampaine Maphuta (*School principals' perceptions of the role of communities of practice in their professional development*), Graeme Edwards (*Female leadership in disadvantaged communities*), and Peter Ayuk (*Institutional culture and effectiveness of a private higher education institution in South Africa*) on the far right.

Faculty's 2nd annual 3-minute thesis competition winner announced

The idea of a 3-Minute Thesis (3MT) Competition was developed by the University of Queensland in Australia, in order to develop PhD candidates' abilities to communicate their research in maximum three minutes to a wider audience. On the 10th of June, the Faculty of Education hosted its 2nd annual 3-minute thesis competition. All doctoral students in the Faculty, who were in their last year of study in 2016, were eligible to participate in the event. This was quite a challenge to participants, because besides the 3 minute time limit, they were allowed to use just one PowerPoint slide to introduce the rationale underlying their studies, their research methodologies, their main findings and the potential implication of their inquiries.

Mr **Peter Ayuk**, who is a member of staff at Milpark Education was eventually crowned as the 2016 winner. Peter will be completing his doctoral studies at the end of 2016, under the supervision of Prof Gerrie



Prizegiving: Peter receives the winner's prize from Dr Joseph Divala, the chair of the adjudicators.

Jacobs, based on a thesis entitled: *Institutional culture and effectiveness of a private higher education institution in South Africa*. He will now progress to the University's 3 min-thesis competition, where all Faculty winners will be competing for institutional glory.

A Miracle Master's

By Jean Fourie and Mariëtte Loubser



In 2012 Mariëtte Loubser started reading for her Master's in Inclusive Education. She was enthusiastic and made considerable and excellent progress with her research on learners with special needs. Being an outstanding all-rounder as well, she began skydiving the following year. Unfortunately, disaster struck during her second static line jump at 3600 feet when her parachute failed to open completely. After an uncontrollable plummet, she landed on a pile of building rubble and sustained serious injuries. She suffered fractures of eight ribs (with penetration of her left lung), her pelvis and both hips, some vertebrae, and her left tibia. She also sustained traumatic brain injury and facial damage. She spent a month in intensive care, followed by three months in rehabilitation during which she had to learn to communicate and walk again. Because of the head trauma she could not remember much of her studies before the accident. However, in spite of the severe obstacles posed by an impaired working memory and continual pain, she refamiliarised herself with her research and resumed it with focused determination. Her courage and persistence won dedicated support from her family, supervisor, work colleagues, therapists and editor. She graduated in June 2016 with a Master's focusing on avoidance of learning responsibility among learners with special needs. In assuming self-driven responsibility for one's learning in spite of any other impediments, Mariëtte herself has set a shining example for all learners and students.



English in Education Seminar

The Department of Education and Curriculum Studies continues to host the English in Education Seminar Series chaired by Dr David Robinson. The first seminar of 2016 was presented by Gordon Froud of the Faculty of Art, Design and Architecture. The topic of the seminar was *Alice and the Illustrators*, and it addressed the many ways in which Lewis Carroll's *Alice's Adventures in Wonderland* has been envisaged by illustrators over a period of time. The range of illustrators included the original images by Lewis Carroll himself, the most famous images of John Tenniel, and more recent re-imaginings by a range of artists including Gordon Froud himself. A vast number of images were presented with commentary, and the appreciative audience became aware of the significance of Alice in academic environments as well as in popular culture. The audience included academics and teachers from a range of schools, as well as school students.

The seminar was based on an academic paper originally presented at a conference, the focus of which was Lewis Carroll's novel, at Cambridge University, in 2015 – the 150th anniversary of the publication of *Alice's Adventures in Wonderland*.

Editorial

There are several articles that indicate that the faculty of Education is engaged in significant work relating to teaching and learning, and there is evidence of a strong engagement with the community.

Prof Sarah Gravett has made a strong contribution to the discussion about education in her presence and presentations of papers in settings that involve continental issues relating to education. It is of value that UJ's Faculty of Education has a notable profile at events such as those mentioned in the articles.

The importance of mathematics education, and its link to chess, is reported in an article that reflects academic commitment to learning and the community. South Africa's numeracy rate is of national concern and this research therefore has significance.

The Funda Ujabule School is regularly featured in EduBrief, and it is worth repeating that this school is unique in that it is a functioning school linked to a university Faculty of Education. Teaching and learning therefore take place in an authentic environment. The science education models mentioned in the article provide evidence of the creative and innovative thinking that underpins this learning.

Academic work is often known for its comprehensive, detailed and thorough engagements with ideas and thinking processes. The three minute thesis competition flies in the face of this, because it requires researchers to present their work in a concise and yet complete manner. The value of the succinct statement, and clarity of thinking, is emphasised.

A Master's degree is challenging enough, but one of the students in the faculty overcame great difficulty in her studies after experiencing an accident while sky-diving. Mariette Loubser showed great personal courage and commitment in pursuing her studies after the accident. Her determination to complete her studies is something from which all students can learn.

The English in Education seminar series run by the Department of Education and Curriculum Studies is ongoing. The report on the seminar presented by Gordon Froud indicates that English is a multi-modal communication space, and that illustrations interact with, and enhance, the meaning of the written word.

The range of activities – in areas of research, teaching and learning, and community engagement – are well-represented in this issue of EduBrief. There is a sense of a Faculty that is healthy and ever-evolving.



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