# ARE TEACHERS SPECIALISTS?

This is one of the main questions posed in research in the Faculty in recent and current programmes of inquiry. How much content knowledge does a mathematics teacher need in order to be able to practice as a good teacher of mathematics? How much knowledge and competence does a language teacher need in order to be able to practice as a competent teacher of the language? Can science teachers be effective without state of the art knowledge of science and the know-how of teaching it? Can a physics teacher set readable and fair questions in a physics paper if she or he struggles to encode the problems clearly in language? And, can a grade one teacher really teach reading and writing without having a clear conception of what literacy is and how it dovetails with learning and with language and vocabulary? What should a teacher of history do when the textbooks her school supplies are biased and simplistic? How will she or he know this? How does a teacher act as an agent of social justice in education?

With a cohort of PhD students and collaborators from institutions in South Africa and elsewhere, researchers in the Faculty are grappling with large volumes of data that have been gathered recently and that address these questions. For the last four years data have been forthcoming from projects in the various programmes, such as the GDE-commissioned inquiries into teacher practice, with 18 staff members and seven PhD students in six projects - investigating what teachers know and do. One of the early findings of one of these projects is that the readability of physics papers for the final school examination poses a serious problem. Papers were analyzed in conjunction with the exam scripts and it was evident that the papers need to

be encoded in a more coherent way. Dr Umesh Ramnarain, a lecturer in science education at UJ, suggests that the exam paper should be conceptualized as a cohesive unit, instead of presenting it as discrete items with non-related themes in problems.

In a textbook inquiry of a Research Niche Area research project in a NRF programme at UJ, Ms Katalin Morgan, a PhD student, studied 10 grade 11 history textbook chapters. The topic was "the impact of pseudo-scientific race theories in the early 20th century". She found that these textbooks can subvert the intellectual project of history education because of their nonnarrative stance and often one-sided, simplistic positioning with regard to the topic. She has published three articles from her thesis so far. The findings of this study have implications for teachers, many of whom are almost wholly dependent on the textbooks as the "living curriculum."

In another of the GDE projects Ms Gadija Petker, a lecturer and PhD student in the Foundation Phase programme, has found that novice or new teachers do not believe that their university education has prepared them sufficiently for early career practice. She asks how it is possible for higher education to translate students' pre-service education into practice - how to address the ageold question of the amalgamation of practice and theory - and she concludes that, in a neo-Vygotskian position, the two domains need not be separated epistemologically and can develop reciprocally in pre-service education, but also in on-going teacher development.

In another RNA project the findings of eight researchers in schools show that teaching of life sciences has not changed much in 10 years. One of them, Mr Neal Peterson, concludes in his study in the "Teacher development in ecologies of practice" project that the classrooms that he investigated are all still examples of "chalk and talk."

2010

The data coming from the research projects about teacher knowledge thus far show that effective teachers are professional specialists who have to have a good grip on subject knowledge. Our research is also affirming what has been described amply in the literature about teacher practice - every subject requires its own form of teaching. "The work of teachers", according to Deborah Ball, who is a leading mathematics education specialist, requires "pedagogical content knowledge" too.

In the different programmes of research, including the new projects in the UJ Institute for Childhood Education, the UJ researchers are now shifting their gaze to interventionist inquiries. The design of new projects will include more programme evaluation research and also longitudinal studies as panel research. The time has come when all the disconcerting descriptive findings about teachers as specialists should be channeled into intervention programmes that can be investigated to see what works best for teachers. One such programme is the Science Education "A-Team" project on the Soweto campus (news item in this issue of edubrief@uj).



RETHINK EDUCATION. REINVENT YOURSELF.

# UJ STUDENTS TEACHING IN CINCINNATI SCHOOLS

Earlier this year the Faculty of Education signed an agreement with the Department of Teacher Education, of Miami University (Ohio) in USA, which includes a student exchange programme. In September 2010 the first five UJ students visited Miami University. Life Sciences students Ms Corine van Vreden, Ms Cherine Pretorius, Ms Courtney Armstrong, Ms Laura-Jane White and Ms Kira Watson spent two weeks at Miami University and a few inner-city schools in Cincinnati. Here are some of their comments on this experience:

Cherine: The American school experience was a wonderful opportunity to grow as a teacher. American teachers are highly motivated, but the students in American schools are very different. South Africans (that I have seen in schools) show more respect for the teachers and the schooling environment. I think the school uniforms we wear also makes a difference. It was enlightening to see inclusive education in pracitce as it is only a concept being introduced in South African schools.

Corine: I realized in the USA how important it is to challenge students cognitively. I attended the so-called "Advanced Placement" classes, where the students follow a curriculum that is almost comparable to first year university coursework. And they rise to the challenge!

This exchange programme will continue next year. The students fund their own travel and stay with Miami University staff while in the US. Funding plans for a broader-based participation in this venture are under way.



Ms Cherine Pretorius, Ms Laura-Jane White, Ms Corine van Vreden, Dr Josef de Beer, Ms Kira Watson, and Ms Courtney Armstrong

#### THE SCIENCE EDUCATION "A-TEAM"

During September – October 2010 the Faculty of Education launched a new programme in Soweto, called Excelling in Science Education. It is a professional development venture to assist 28 science teachers from the larger Soweto region who wish to advance their professional knowledge. The aim of this project is also to nurture communities of practice in a systemic way, over three years, involving school leaders as well as teachers. Because the teachers are working towards becoming excellent or "master" science teachers, we named the project The Science Education A-Team.

Over the next three years, the teachers will be participating on EdulinkNextGen as an online community of practice. In this cyber discussion space they will support one another in-between workshops. Their discussions and reflections will be monitored by two mentors - Prof George Dawson, retired from Florida State University, Tallahassee, USA, and Dr Joel Dawson, a retired science teacher and ex-principal.

The project will be housed in the Centre for Education Practice Research (CEPR), on the UJ Soweto campus, from where it will also be researched. Dr Josef de Beer is the project leader and explains how this intervention is one of the outcomes of the Research Niche Area work in teacher development, an NRF project of which he is also the leader.



The A-Team with mentors Prof George Dawson Dr Joel Dawson

# FOUR NEW PARTNER SCHOOLS

The Faculty of Education signed a memorandum of understanding with four new partner schools. These schools and the existing 11, serve as sites for UJ students' service learning. The new members of this dynamic partnership system are Coronationville Secondary School, Lee Matthews Trauma Centre, Elandspark Primary School LSEN, and Westbury Secondary School.

The aim of partnering with these schools is to establish a mutually beneficial relationship. The students benefit by building collaborative networks with schools and by gaining experience in practice that goes beyond the customary school experience requirement for an Education degree. Students offer approximately 90 hours of service for one year to each school. The Faculty staff also offers these schools development workshops in, for example, school discipline, shoestring science teaching and inclusive education.



Community Engagement: Faculty of Education and partner schools representatives Prof Sarah Gravett (Executive Dean) and Dr Nadine Petersen (UJ Service Learning expert) are seated in the front row.

### AN ALUMNUS TO | PRINCIPAL BE PROUD OF – **DR STEVEN** WHITELAW

Dr Steven Whitelaw graduated with a D Ed in 2008, supervised by Dr Josef De Beer. The focus of his thesis was exploring connection between novice teachers' experiences and the unacceptably high attrition rate found in this vulnerable group. Dr Whitelaw is of the view that hierarchical structures within many school staff bodies have the effect of marginalizing new teachers. The problem is exacerbated by the lack of a culture of meaningful induction practices in most cases. Dr Whitelaw has published an article in the internationally ISI-accredited journal Education as Change with the title "New Teachers in a Pseudocommunity of Practitioners" (Vol. 12, number 2, December 2008)

Dr Whitelaw currently teaches History at St. Dunstan's College in Benoni. In addition, he offers free afternoon teacher development courses to all novice teachers in the area. Over the last three years almost 200 teachers have taken advantage of these courses. For this Dr Whitellaw was recently recognized by a local community organization. He has addressed school principals' organizations both in Gauteng and the Western Cape on the establishment of regional induction centres



Dr Steven Whitelaw

# **NETWORK** TO IMPROVE LEADERSHIP IN SCHOOLS

The UJ collaborative programme with Harvard University is well under way. It will be formalized publicly with the launch of the Education Leadership Institute (ELI) on 23 November 2010. As part of the ELI the UJ Principal Network serves to bring education leaders together in discussion and collaboration. The Network had its fourth conversation with guest speaker Ms Palesa Tyobeka, Deputy Director General for Teachers, Education Human Resources Development and Institutional Development at the National Department of Basic Education, who addressed the participants. The focus of her presentation was the changes in the curriculum, which has caused some concern and uncertainty among school leaders. Mr G. Meyers from the Suid Afrikaanse Onderwysers Unie (SAOU) was also part of the panel, as was Mr. R. Somnath, from the South African Democratic Teachers Union (SADTU).

A website is being developed for ELI with the aim of providing a vital, interactive communication forum for all stakeholders involved. This website will offer the benefits of attracting new principals and others interested in educational leadership. who can interact with each other. There will be Facebook and YouTube links as well. For example, there is already a commentary on the existing Facebook page by a Pretoria school principal about the accountability of district officials, and this is expected to spark some discussion and debate



Mr. R Somnath, Mr. G. Meyers and Ms. P. Tvobeka

# PAPER PRAYERS IN **DIVERSITY WEEK**

Diversity Week at UJ aims to establish an enabling institutional environment for optimal cultural integration. The Faculty of Education contributed to Diversity Week through its Department of Educational Psychology. During this week, BEd Honours students participated in a Paper Prayers workshop. This workshop uses arts-based methods for teaching HIV AIDS awareness in schools.

Prof Kim Berman, from the Visual Art Department in FADA and Ms Shannin Antonopaulo, from the Artist Proof Studio in Newtown, assisted the students. The concept of Paper Prayers originates from the Japanese custom of making a small art work which can be used as a gift of healing or well being. The Honours students, many of whom work with special needs children in schools, were shown the skills of printmaking from various textures. They were invited to design an art work for somebody who is ill as a gift of healing.



Students displaying their finished project

#### UNDER-GRADUATE STUDENTS DOING RESEARCH IN LIFE ORIENTATION

Life Orientation students embarked on a research project during their school experience recently. The topics that they selected ranged from child abuse, child trafficking and children's rights. Dr Dinah Magano, their lecturer, together with all the lecturers in the department of Educational Psychology, assessed their posters. Students also presented their research to the department. The students found that teachers focus mostly on what is in the textbooks. From the various projects' findings it was clear that few teachers knew the procedures for reporting abuse cases. The students commented that this first field research had alerted them to what educational inquiries can mean for a better understanding of the many problems that schools and teachers face.



Students embarking on a research project in Life Orientation

For more news and events, please visit the news link on the Faculty's website:

http://www.uj.ac.za/ EN/Faculties/edu/ newsandevents/Pages/ home.aspx

# ECONOMICS TEACHING METHODS WORKSHOP

The Gauteng branch the South African Foundation for Economic and Financial Education (SAFEFE) recently presented a workshop for pre-service teachers. Ms Jackie Ramdhani from the Dept of Curriculum and Instruction at UJ coordinated the workshop.

Pre-service teachers from both UJ and Wits were invited to attend. For two days the participants grappled with ways to teach topics such as scarcity and choice, productivity, demand and supply, market structures, property rights, and role of governments. Facilitators utilized simulations, demonstrations of collaborative learning events, the place of direct instruction in economics teaching, modeling, and many conventional as well as innovative methods and techniques. In addition to Ms J. Ramdhani, Mr A. Wentzel, Ms M. Biyase and Ms L Greyling from the Faculty of Economics and Econometrics at UJ, and Ms J. Mashilo from the GDE assisted in this developmental workshop.



Students doing a string activity in a demonstration of a cooperative learning event in a lesson

# SENIOR PROFESSOR OF LINGUISTICS OF THE CEPR

Prof Elizabeth Henning, who works in the UJICE (University of Johannesburg Institute for Childhood Education) and also runs the CEPR (Centre for Education Practice Research) at UJ, has been asked to serve as adviser in a project of the Science Research Institute (SRI), which was founded at Stanford University. The project will be supported by the National Science Foundation in the US. She will assist in developing a language of description and patterns of classroom communication in science classrooms in a three-year inquiry, working with colleagues from a number of US institutions.

She has also been appointed as board member of the "International Journal of Childhood Education".

#### WHAT GREAT FUN! ESCAPE THE ORDINARY - 702 WALK THE TALK

The early hours on a cold July Sunday morning beckoned the Faculty of Education's tutors to start walking. Our team consisted of seven tutors in the branded UJ Orange T-shirt. We stood out and felt proud. The Walk the Talk was a socially enriching experience. Our team walked the 5km briskly, accompanied by laughing and talking about all sorts of things - academic and social. Participating in this event not only proved to be a fitness challenge for most of us (and surprisingly we were fairly healthy) but also provided a casual platform to mingle with students from other institutions. This was evident with all thousands of walkers and experiencing the acceptance of people from different cultures, religions and social backgrounds was a highlight for all of us. We walked, ate fruit (all part of the do-health campaign), and danced with pineapples!

-The Tutor Team



Tutor team on the 702 Walk the Talk - team members: Ms Shafe'ah Orrie, Mr Wessel Sonnekus, Mr Shepherd Chimbetete, Mr Amiel Mavugara, Ms Siphesihle Hadebe, Ms Elaine Steyn, and Ms Mretha Laubscher



Dr Nazreen Dasoo



Dr Nkosi Sishi

#### PhD students graduate -Dr Nkhosi Sishi and Dr Nazreen Dasoo

Two PhD candidates, supervised by Prof Elizabeth Henning and Vice Dean Prof Coert Loock, graduated in May this year. Dr Dasoo's research, co-supervised by Prof T Uys, was motivated by her strong conviction of the important role values play in education in building a moral and just society. She researched 144 teachers in an Advanced Certificate Programme in Values Education. A main conclusion of the study was that social justice in education requires that teachers value education itself. Dr Dasoo is currently a senior lecturer in the Faculty in the Department of Curriculum and Instruction.

Dr Nkhosi Sishi's research, supervised by Prof C Loock and co-supervised by Dr P du Plessis and Prof B Smit, focussed on the role of subjectivities in school assessment policy implementation at the classroom level. He used the theoretical lens of Michel Foucault while looking at power, discourse, subjectivity and interpretation of existing knowledge. The findings of the study show that teachers were frustrated by the invisible role and inadequate leadership on the part of education management. Recommendations included that synergy be created between educational change, the capacity of employees to deal with change and the resources and support provided for policy implementation and change management. Dr Sishi is currently the Chief Director: Measurement, Assessment and Examinations at the Department of Basic Education.

#### NAMIBIAN PRINCIPALS IN UJ ADVANCED CERTIFICATE IN EDUCATION (ACE) PROGRAMME

This UJ programme in Namibia is sponsored by the FNB-Foundation, the Anglo Skorpion Foundation, the Rössing Foundation and the Pupkewitz Foundation in Namibia, showing how the leading private sector companies value leadership in education in the country.

Namibian school leaders, like their counterparts in sub-Saharan Africa, face huge challenges. They all have to manage schools where HIV/AIDS is rampant. They have to assure quality education and establish patterns of conduct in schools where children and youth are feeling the effect of societal strain and where school discipline is becoming a major problem.

A few of the principals who participated in the course reflect:

"I am of the opinion that the moral and physical support has been vital in making a success story of this course."

"It provided a platform of communication where we as principals could interact with each other to find out that we face the same challenges and that our common goal is to serve our country to the best of our abilities".

"On the question of whether this course is suitable for Namibian school leadership, I would say that it surpassed my expectations and I would recommend it to all who aspire to become principals or head of departments at schools."

This year fifty two candidates received the Advanced Certificate in Education ACE (School Leadership and Management). The graduates included principals in the Karas area as well as those from Swakopmund. Part of the procession at the graduation ceremony were Mr J. Ellis (Ministry of Education), Ms E. Kirchner (Rector of the Windhoek Teachers College), Prof Aoula (Dean of the Education Faculty at UNAM), Prof S. Gravett (Dean, Faculty of Education UJ), Prof C. Loock (Vice Dean Faculty of Education UJ), Mr S. Saayman (Director of the Obip Training Centre), members of the Faculty of Education at UNAM, and members of the of Faculty of Education at UJ.



Top student Mr Shangange, with the Vice Dean of the Faculty of Education,UJ, Prof Loock and the rector of Windhoek College of Education, Ms Emma Kirchner, at the graduation ceremony held at Windhoek on 21 August 2010



Ms Jackie Gallagher

#### EDUCATIONAL ENTREPRENEUR IN UJ PARTNER SCHOOLS WINS WOMAN OF THE YEAR AWARD

One of the partners in the UJ community engagement programme is the Sparrow Schools Educational Trust, which includes Sparrow Combined School and Sparrow Foundation School. Ms Jackie Gallagher is the founder and general manager of the schools and this year she was selected to receive the Woman of the Year Award for Education in the Shoprite Checkers annual awards. This award commemorates the anniversary of the biggest massgathering of women in South Africa on 9 August 1956.

Ms Gallagher is a remarkable woman. Twenty years ago she placed a small newspaper advertisement that resulted in her teaching 4 learners every Saturday in a church hall in Joubert Park in Johannesburg. Today her initiative has grown to a well-respected educational organisation that has helped thousands of children prejudiced by the educational policies of the apartheid government to improve their education for a brighter future. The Faculty applauds her entrepreneurship and passion for education.

#### LAUNCH OF SA | UNIFORM DAY | JOURNAL OF **CHILDHOOD EDUCATION**

The Faculty of Education recently launched the SA Journal of Childhood Education (SAJCE). The founding editor of the journal Dr Pinky Makoe addressed the audience, together with Prof Catherine Snow from Harvard University and Dr Dianne Parker form the Department of Higher Education and Training (DHET).

The editorship is at the University of Johannesburg in the Centre for Education Practice Research (CEPR). The general scope of the journal is on language and literacy, numeracy, initial science education, learning and cognitive development, all of which are critical issues in early childhood education. It will aim to advance the status of foundation phase teachers and their education by showcasing articles of a very high standard of scholarship. In the "voices from the field", it will tell the stories of practising teachers to stimulate exchange of ideas and experiences, as well as possible collaborations with researchers. The first issue will be published in February 2011.



Prof Sarah Gravett, Dr Dianne Parker, Dr Pinky Makoe, Prof Catherine Snow and Prof Elizabeth Henning

# AT THE FUNDA **UJABULE (FU)** SCHOOL

In October the first cohort of parents and caregivers of the Grade R children at FU assembled at the school. This all-important meeting highlighted the role of the school as a training and as a research site. It showed the parents how the school functions as a joint UJ-GDE venture to give their children a good chance for a solid educational foundation.

The children received book packages for home reading from the EACHSA Trust in the UK (www.eachsa.org. uk). This Trust provides educational materials for children in Southern Africa. The project was initiated by Prof Max Bergman, who is a visiting professor in the Faculty of Education.

The research in the school is well under way, with the longitudinal study on children's cognitive development and four other projects entering their second year in 2011.



Grade R Learners of the Funda UJabule school proudly wearing the new school uniform

#### HARVARD LITERACY **EDUCATION** SPECIALIST PROF CATHERINE SNOW AT UJ

In her public lecture on literacy, Prof Catherine Snow from the Harvard Graduate School of Education, highlighted the importance of learning vocabulary prior to learning to read and write. Her lecture, with the title, "Preparations for Literacy: the Early Years," appealed to the large audience of teacher educators, researchers and colleagues from the Department of Higher Education and Training (DHET) and the Gauteng Department of Education (GDE).

She emphasised the importance of learning words, distinguishing sounds, and using language before being introduced to its written form. One bit of statistical information that elicited much discussion afterwards was a study of 12 000 kindergarten (Grade R) children's achievement in end-of-year tests in the 1980s and their employment and related income 30 years later. There was a strong correlation between their early performance and their income levels as adults. Another point she made was that reading is not only for pleasure, for learning, for employment, and for global communication, but also for citizenship. To be critical in a democracy requires (alphabetical) literacy.



Attentive audience at Prof Catherine Snow's guest lecture

### FROM THE EDITOR

Edubrief@UJ is the biannual newsletter of the Faculty of Education, UJ. The editor wishes to thank the editorial committee and all the various contributors. The committee comprises Prof Sarah Gravett, Dr Dirk Postma, Dr Dinah Magano, Mrs Petro van Rooyen and Mr George Makubalo. The editor would also like to thank Ms Tshepiso Kekae for her contribution to this edition. If you would like to make any comments, please contact us via e-mail: kmorgan@uj.ac.za and visit our website for more news and information: www.uj.ac.za/education.

#### DIVERSITY ORIENTED TRANSFORMATION FOR TEACHING AND LEARNING

In her public lecture Prof Teboho Moja, a professor in Higher Education from New York University, emphasised that UJ has become an example of diversity in student population. She said that transforming institutions is an ongoing challenge and a process that is supported and embraced by some, but surprisingly still resisted and rejected by others.

Promoting and ensuring that there is diversity within an institution is but one of the components of transformation. The other is making sure that the commitment to equity and diversity translates into quality teaching and learning. Prof Moja said that she was glad to see that some of our institutions have taken the initiative to actually design programmes and appoint officers who are charged with the responsibility to promote diversity as a core value within their institutions.

Prof Moja will return to UJ in 2011 to advise the Faculty of Education on the issue of learning communities in student residences and off campus digs. Based on the framework she uses in the USA, Dr Nadine Petersen, with the support of Dr Helen Dunbar-Krige and Dr Josef de Beer, will apply some of the principles to UJ first year students' living and learning communities on campus in a new research project.



Prof Ihron Rensburg, Prof Teboho Moja and Prof Sarah Gravett



Prof Ian Moll from Wits University giving a guest lecture on the Soweto campus



#### LANGUAGE AND LITERACY CONVERSATION WITH PROF PATRICIA EDWARDS

Dr Leila Kajee and Dr Pinky Makoe were privileged to host Prof Patricia Edwards, a distinguished professor at Michigan State University, USA. They did this on behalf of the Dean, Prof Sarah Gravett and Professor of Linguistics, Prof Elizabeth Henning. Prof Edwards is also the president of the International Reading Association (IRA) and she brought with her a delegation of 33 American academics and educational practitioners to the Faculty of Education in August. The delegation of professionals with expertise, experience and interest in language and literacy education were selected to exchange ideas and address common issues with their professional counterparts in South Africa, under the auspices of People to People Ambassador Programmes. Included among the subjects of particular interest to the delegation were: The education of girls in South Africa, family literacy, historical and cultural literacy, and resilience as a key to literacy success, to name but a few.

#### PROF IAN MOLL AS GUEST LECTURER IN THE FOUNDATION PHASE EDUCATION PROGRAMME

Prof Ian Moll from the Wits School of Education gave a talk about education issues in South Africa, with a particular focus on teaching and learning in the early years of formal schooling. He addressed this lecture to a class of foundation phase students as well as lecturers in that programme on the Soweto campus.

As a result of having worked with Woz'obona, an early childhood organisation that has a communityinvestment approach, Prof Moll opposes the view that rural schools cannot have the best educational prospects. He provided an example of the Montessori system which has been successfully used in Italy in the cognitive development of children in poorer areas. He stressed that a good school is mostly the result of a good principal who understands the process of teaching and learning, and is also the result of teachers who have good content knowledge of their subjects.