



Reimagining Education 2016



Education is the most powerful weapon
with which you can change the world.

– Nelson Mandela



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Reimagining Education



...through educational development and research



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South Africa is a country of challenges, and none more so than when it comes to the education of its children, young people and also its adults. Ours is a country of poor literacy levels, pass rates and of poor performance according to international indexes that rate the quality of our schooling. South Africa is, however, also a country of opportunity, hope and potential. Many of our country's learners do develop into well-rounded and versatile young people, while our students excel on an international level and our researchers make ground-breaking discoveries.

It is in this light that the Faculty of Education at Stellenbosch University endeavours to reimagine an education system that can help all of South Africa's people live up to their full academic potential. Central to the Faculty's vision is a commitment to engage head-on with South Africa's educational challenges, and to reimagine a broader system within which the children, students and adults of our country can flourish. This is done by integrating and synergising quality research efforts with opportunities for institutional development, practical teaching and learning endeavours, as well as community interaction projects. The ideal is to develop a knowledge base that builds on research being done in the fields of education, sport and educationally based development practices. It also extends the practice of educator development to enhance teaching in schools as well as adult, vocational and higher education institutions.

The Faculty is acknowledged and respected as a leading and engaged research-driven education faculty in South Africa. Its research efforts focus on relevant and strategically important themes in education and human movement science in South Africa and internationally. It seeks solutions that go beyond the school and also address current matters concerning higher, further and adult education, policy, sport and educational psychology.

Through its research endeavours the Faculty of Education also strives to strengthen the capacity of its young academic professionals and postgraduate students, to enhance its research focus areas and to increase the research output of staff through among others the publication of more scientific papers or books.

Reimagining Education

...through our ongoing research projects



Through various research-driven endeavours faculty members are reconsidering the system of education in South Africa, and how it is being provided during the primary school phase, in high schools or at higher education institutions throughout the country. Within various interest groups experts from our different disciplines and fields of research combine forces to, among others, strategize around the teaching of mathematics, science and technology, languages and social sciences. The issue of citizenship is one of the sociological themes also being tackled. Curriculum development and aspects of teaching and learning form a core component of the work being done.

The descriptions below give a flavour of some of the registered or funded research projects in the Faculty in 2015. However, the research activities of the staff go even beyond these projects; the full extent of the Faculty's research interests are listed at the end of this document.

Reimagining how high school students learn

Access to basic education is closely related to development. A recent SU study concluded that sustained access to meaningful learning that has value is critical to long-term improvements in productivity, the reduction of inter-generational cycles of poverty, demographic transition, preventative health care and the empowerment of women. As part of this focus on high school learners, a recent PhD study looked at the learning practices of high school learners from a working class neighbourhood, while another investigated how Cape Town youth learn through dialogue in different places.



Current project in this field

Student learning and teacher pedagogy in selected urban sites

This study takes place in five Cape Town high schools. It takes into account how students' living conditions, home life and the school they go to influence their attitudes towards schooling and their literacy levels. This is of specific interest in a diverse country such as South Africa, where a one-size-fits-all approach to schooling cannot be taken. The study will provide recommended practices about how teachers should go about within specific schools and classrooms.

The NRF funds this project until 2017.

Study leader: Prof Aslam Fataar afataar@sun.ac.za

This theme could be extended to also include

Setting up and expanding a current network of professional learning communities (PLCs) in selected community spaces or on campus. These could provide teachers with the reflexive or dialogical materials and opportunity for adaptive conversations to enhance their teaching.

↪ Reimagining how we provide pre-service teacher education

Excellent education, as provided by outstanding teachers, is a fundamental principle in striving to attain first-rate academic results in all South African schools. Therefore it is all-important to nurture and guide students to be well-rounded teachers. In support of this endeavour, for instance, a recent PhD study focused on understanding how Foundation Phase student teachers learn to teach and communicate in the class.



↕ Current research projects focusing on teacher education include

Teaching and learning together: The establishment of Professional Practice Schools in South Africa

Professional Practice schools (PPSs) have as their goal to provide an excellent school experience to students studying education. Student teachers are given the chance to observe other teachers in action. They are also placed in front of a real class to put into practice what they learn at university. All the while they are guided by experienced mentors to prepare lessons, teach and ultimately reflect on a day's work. Nine universities, five primary schools and thirteen high schools in five provinces formed part of a study into the conditions that would underpin the successful implementation of PP schools. International trends were analysed, and policy and strategy recommendations made. Aspects such as leadership and vision, professionalism, functionality, good teaching and learning, and resilience will make some schools more suitable to be used as a PPS than others.

This research report was finalised in 2015 and was funded by the Department of Higher Education and Training.

Project leader: Prof Maureen Robinson
mrobinson@sun.ac.za

From graduate to employee: examining the factors that determine the professional success of graduates from disadvantaged backgrounds

Many students from disadvantaged backgrounds gain access to higher education opportunities but struggle to succeed

due to various challenges. On the other hand, against all odds, many of these students graduate successfully and continue to attain professional success. This qualitative study investigated the factors that help such graduates to rise above their circumstances and to be ultimately successful in the workplace. In-depth qualitative interviews were conducted with a sample of 30 graduates and with the employers of ten of these graduates. It follows on a study commissioned by Cape Higher Education Consortium (CHEC) in 2011 and 2012. The report, published in 2013, determined levels of graduate employment and unemployment of the 2010 cohort of graduates from the four Western Cape universities.

This project is funded by the Cape Higher Education Consortium (CHEC) until 2015.

Project leaders: Elza Lourens and Prof Magda Fourie-Malherbe
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The perceptions of school stakeholders about Graduate Teacher Attributes: Expanding the conversation

This research helps to develop a broader inclusive definition of the attributes of teacher/education graduates at Stellenbosch University. This helps to uncover the attributes and characteristics that potential employers value. It draws on the perspectives and insights of school stakeholders, and more specifically principals and heads of department.

This is a FINLO funded project.

Project leader: Prof Arend Carl aec2@sun.ac.za

⇒ Future research in this field could answer questions such as

- ▶ Action research into mentor programmes that enable sustained dialogues between universities and schools about how to support student teachers on Teaching Practice. This would influence teacher professional development, as well as the ability of universities to respond to the needs of teachers in their specific contexts
- ▶ Research into professional success
- ▶ Finding ways to bridge the gap between higher education and the world of work more effectively
- ▶ Studying the effect of students' out-of-class experiences on employability and professional success
- ▶ Researching ways to combining the in-class and out-of-class environments in the university more effectively to promote graduates' professional expertise.

↪ Reimagining how we provide in-service training to current teachers

In-service training is at the core of many professions, such as education and medicine. To gain the necessary results, this has to be conducted as professionally and efficiently as possible. A recent SU study for instance looked at the value of a professional learning community and how it can help to create a culture of social justice within the classroom. Through this endeavour, a university lecturer and a tutor teamed up to support a number of practicing teachers. A recent PhD also focused on the value to be had on mentoring and developing educators in South Africa's technical and vocational education. Prof Yusef Waghid also concluded a NRF-funded three-year project through which a short course for in-service teachers was developed. It focused on ways to integrate local practices into a liberal citizenship education framework.



↕ Current research projects focusing on in-service education include

An analysis of practice-based learning in a case study involving teachers and

This SUNCEP study investigates the implementation processes and the impact of a teacher-learner intervention model in a Cape Town school district. Current models of teacher-learner interventions are studied, and in particular the design of those that are implemented in the Atlantis area of the Metropole North District. It investigates the impact that these models have on learning gains among mathematics and science teachers as well as students, and their likely to be sustainable beyond the intervention period. A mixed methods approach is used to gain multiple perspectives about the attitude of teachers and learners towards the intervention, and if these have an influence on learners' performance in the Annual National Assessments (ANA).

This project is funded by SUNCEP

Project leader: Andrew Fair afair@sun.ac.za

Teacher self-reflection and mentor observation as flip sides of a practice-based, professional learning and mentoring coin

A practice-based approach for continuous professional learning activities of in-service teachers is followed. Professional learning, rather than professional development

implies a process where teachers are involved in the creation of their own professional knowledge. This study aims to develop, test and validate an online instrument that teachers and their allocated mentors can use to jointly and formatively assess teaching practice as part of a process of professional learning and growth.

This project is funded by SUNCEP.

Project Leader: Erika Hoffman ehoff@sun.ac.za

Exploring the experiences of students during projected-based learning

This study compares how the academic experiences of students in a bridging programme who live in a main campus residential facility differ from those who commute to campus. It investigates whether these students benefit to the same extent from project-based learning that requires them to work collaboratively on a research project. Lessons from this research project have implications, not only for foundation programmes, but also for pre- and in-service teacher education.

This project is funded by SUNCEP.

Project Leader: Nokwanda Siyengo noksiy@sun.ac.za

↪ Reimagining postgraduate and PhD studies

One of the aims of higher education in South Africa is to ensure a higher throughput of PhD candidates in the system, and to have more citizens graduating as specialists in their fields.



↕ Current research projects that focus on this aspect include

Education research for quality PhD study curriculum-making: a South African meta-study
Stellenbosch University faculty members have combined forces with other South African experts to generate information about the current quality assurance processes being used locally to assess PhD studies in Education. It also scrutinises the quality and way in which current PhD curricula are drafted. These issues are being weighed up against international trends. Curriculum strategies will be developed to increase the quality of the PhD studies in Education, by among others focusing on proposal writing and assessment.

The NRF funds this project until 2016.

Study participant at SU: Prof Eli Bitzer emb2@sun.ac.za

The role of doctoral education in early career academic development

This study compares the context within which doctoral students are trained in South Africa versus the context in Sweden. The study involves five researchers from two South African and two Swedish universities who are all members of the South African-Nordic Centre (SANORD). It takes into account the increased mobility of students and early career academics and the different funding and programmes that are to be found in the two countries. It focuses on the role that doctoral education can play in the development of young academics.

This project is funded by the South African-Nordic Centre (SANORD) for 2015.

Study leader: Prof Liezel Frick blf@sun.ac.za

Postgraduate study in South Africa: surviving and succeeding

The editorial team of this joint book project is combining the insights of current and recently graduated students into the aspects that helped them complete their studies successfully. The book will not only consider current research on the topic, but also serve as a guide to future students.

This project is funded by the SU Vice-rector: Research & Innovation

Project leader: Prof Liezel Frick blf@sun.ac.za

PhD by publication: implications for doctoral becoming, pedagogy and format

The traditional monograph is no longer the only means to write a thesis. Most notably, the PhD by publication is becoming more common in South African institutions. Many institutions are considering formalising this format as a way to curb the real ills of high doctoral dropout rates, low and slow doctoral throughput rates, and the academic isolation that doctoral candidates may experience. Very little is however known about this practice within the South African context, even though it is often used within certain disciplines. The project aims to compare current PhD production formats at South African research-intensive universities by means of an analysis of publicly available research repositories (institutional analysis focused on format implications). It explores doctoral pedagogical practices of experienced and productive doctoral supervisors in various disciplines who specialize in supervising within this format. It also investigates the experience of doctoral students who work on a PhD by publication.

This project is funded by Stellenbosch University Subcommittee A

Project leader: Prof Liezel Frick blf@sun.ac.za

Aligning postgraduate support: identifying discrepancies in student supervisor perceptions of student research

With credential inflation and the increased focus on appropriate skills development for the current knowledge economy, many students embark on postgraduate studies. They may however lack a primary interest in research and thus find it hard to complete this component of the course. An interactive qualitative analysis research design was applied in a business school setting. Four focus groups were used to collect data from students as well as supervisors to identify challenges that stand in the way of completing research. A conceptual framework was designed based on the findings. These could provide guidelines to align student and supervisor support in an effort to successfully complete the research component of postgraduate studies.

This is a FINLO funded project.

Project leader: Dr Ruth Albertyn rma@sun.ac.za



Knowledge Fields Education Research in South Africa

This study explores patterns of curriculum practices and content as well as the disciplinary traditions in selected fields of study across institutional sites. These fields include psychology, occupational therapy and architecture across institutional sites. The study investigates how these patterns relate to professional programme admission practices, students' learning experiences and throughput trends in relation to various variables such as race. In addition it will explore the extent to which curriculum practices and content respond to national priorities and public interest. There are various collaborators.

A principal researcher grant was obtained from the National Research Foundation for four years along with five other South African universities. The project will be completed by the end of 2015.

Principal Researcher: Prof Ronelle Carolissen rlc2@sun.ac.za

Participatory parity and transformative pedagogies for qualitative outcomes in higher education

This project examines how students' experiences relate to participatory parity in achieving qualitative outcomes. It takes note of the experiences of higher educators in using transformative pedagogies to make it possible for students to achieve these outcomes. Participatory parity refers to the ability to interact on an equal footing in particular circumstances. It among others includes students from the same disciplines across differently placed higher education institutions (HEIs) who are in a position to achieve similar qualitative outcomes. This project focuses on particular disciplines and professions at various Higher Education Institutions (HEIs). It investigates how various enablements and constraints typical of specific different professions and HEIs influences students' ability to participate as peers to achieve qualitative outcomes in education. It also takes note of how transformative pedagogical practices can enable students to achieve these qualitative outcomes. Students and lecturers in various disciplines across HEIs are interviewed and have the opportunity to present their stories digitally in specifically designed online spaces. A survey of participating institutions will establish how institutional policies, practices and reputations affect students' participatory parity in achieving qualitative outcomes. This project includes more than 20 co-investigators at various South African institutions.

This project is funded by the National Research Foundation until 2016.

Co-investigator: Prof Ronelle Carolissen rlc2@sun.ac.za

Belonging among students in higher education

There has been a proliferation of research about the history and experiences of black, female and poor students who have accessed higher education opportunities. It wittingly or unwittingly invoked essentialist, fixed categories of identity. While these studies are necessary to monitor equity based on historical disadvantage in the South African higher education context, they may encourage margin-centred binaries when examining questions of belonging and citizenship in higher education. Research is lacking about the complexities of belonging (or not belonging) in students' everyday experiences of higher education. Little is known about how they for instance experience identities and belonging within local and transnational contexts. This qualitative study therefore aims to account for the dynamics of belonging and citizenship that is evident on higher education campuses in South Africa. It includes youth across various boundaries of differences. It looks at how they go through the motions of working, living and negotiating belonging within campus communities. Findings from the study could inform an understanding of notions of community, belonging and citizenship among youth at South African higher education institutions.

This project is funded by Stellenbosch University's vice rector: Research and Innovation.

Principal Researcher: Prof Ronelle Carolissen

On the (un)importance of theory to education

Postgraduate students and academics are often asked about the theoretical framework in which they conduct their research. This research project firstly explores just how important, and necessary, theory is. It also delves into how educational theory shapes and impacts upon our understanding of knowledge. It investigates how supervisors come to know and act without educational theory, and how it can be used to advance better educational encounters during the supervision process. The study also looks at the possible repercussions should supervisors aim to dismiss educational theory.

This project is funded till 2017 by the National Research Foundation.

Study leader: Prof Yusef Waghid yw@sun.ac.za



⇒ Future projects could include

- ▶ A study into the professional doctorate as an alternative option to the research doctorate
- ▶ Investigating PhD examination reports in the Faculty of Education to determine the quality of examiner feedback
- ▶ Studying how examiners could be better informed about their examination task to enhance the quality of examination reports, through different angles of data interrogation
- ▶ The role that doctoral education can play in the development of young academics
- ▶ A study into the necessity and importance (or not) of educational theory to ensure educational change.
- ▶ An investigation as to how educational theory specifically guides and impacts our understanding of knowledge.
- ▶ An exploration as to how supervisors of postgraduate students come to know and act with and without educational theory.

↪ Reimagining adult education, literacy and learning

All South Africans do not necessarily receive the opportunity to complete their scholastic careers while they are still young. Many only learn to read and write once they are adults. Some only pass Grade 10 or Grade 12 years after leaving school. Others, while already in employment, pursue further diplomas or certificate training, among others, to further their careers. A recent PhD study in the Faculty for instance investigated the value of adult education for senior managers in a rural management setting.



↕ Current research projects focusing on in-service education include

Investigating efficacy in adult learning centres: a multi-case study

This study takes a look at exemplary adult education centres in KwaZulu-Natal, Gauteng, Limpopo and the Western Cape, in an effort to understand why some work and others are simply not effective. Matters such as governance, teaching and learning and a centre's wider

relationship with its community and other institutions are taken into account. The lessons learnt from this endeavour will inform the development and implementation of new policy, as part of a process to reconceptualise and renew South Africa's adult education system. The research team includes academics from the University of KwaZulu-Natal, Stellenbosch University, UNISA and Umalusi.

This project is funded by Umalusi.

Primary investigator for the Western Cape: Prof Doria Daniels doria@sun.ac.za

↪ Reimagining intersections between psychology, communities and education

Schools have been subjected to numerous changes since 1994. One of these innovations, namely the implementation of inclusive education, is outlined in the Education White Paper 6 – Special Needs Education (Department of Education, 2001). This policy acknowledges that all pupils can learn and need support, and that learning is both formal and informal, occurring also in the home and community. It recognises and respects diversity in pupils, whether due to age, gender, ethnicity, language, social class, disability, HIV status or other chronic illnesses. Furthermore, inclusive education is about maximising the participation of all pupils in the culture and curricula of educational institutions and identifying and minimising barriers to learning. According to the White Paper 6, this is achieved by changing attitudes, behaviour, teaching methodologies, curricula and the environment to meet the needs of all pupils. In essence, inclusion is about support.





Current projects focusing on intersections between psychology, communities and education

Educational support practices:

Building communities of care and support

A major challenge of education is to develop the capacity to recognise and address the diverse needs of the entire learner population and promote effective learning for all. Policies related to quality education for all pupils in the mainstream of education presuppose knowledge, skills, competencies and in some instances role adaptations of teachers. The White Paper 6 regards individual teachers as the primary resource for achieving the goal of inclusive education and has also been seen as central to the success of inclusion. Teacher learning (pre-service and in-service) and how pupils can be supported in schools and communities are important focus areas in the work of the Department of Educational Psychology. Projects focus on both prevention and intervention.

Project leader: Prof Estelle Swart estelle@sun.ac.za

Literacy development and cognitive linguistic processing in L1 and L2 learners

This project focuses on the literacy development of first language and second language learners, and the role that cognitive linguistic processing plays in this. The leader of the project is Dr Annalene van Staden of the University of the Free State (vanstadena@ufs.ac.za).

This NRF project is funded until 2016.

SU collaborator: Prof Estelle Swart estelle@sun.ac.za

Knowledge fields education research in South Africa

The question is being asked how certain aspects of the curriculum helps to ensure social inclusion and also social exclusion in some cases. This study includes researchers from five other South African universities and will have as an outcome policy or practice guidelines.

This NRF-funded project concludes in 2015.

Study participant at SU: Prof Ronelle Carolissen rlc2@sun.ac.za



Reimagining school leadership

Strong school leadership provides the cornerstone for the success of many a school. In this regard, recent projects conducted by SU academics focused among others on the strong symbolic status of principals in rural towns, and also how headmasters should respond to the violence experienced in post-apartheid schools. To this end, recent PhD studies for instance focused on developing the leaders of technical and vocational education and training colleges, and analysing the school-governing body practices of some religious schools in South Africa.



Current research projects include

Female principals and the ACE: In pursuit of the feminine in leadership

The Advanced Certificate in Education (ACE): School Management and Leadership motivates school principals to upgrade their qualifications and to improve their leadership and management skills. The question is whether this training, which is among others provided by Stellenbosch University, is a help to female school principals in particular. This study explores the form and style of feminine leadership at schools, how it differs to that of men. Recommendations on how the ACE could better address the needs and challenges of women educators in leadership positions will be made.

This study is funded by the NRF Thuthuka until 2016.

Study leader: Dr Nuraan Davids nur@sun.ac.za

Strengthening school leadership-teacher-parent relationships to achieve positive education outcomes for learners

This research project focuses on finding ways to strengthen the relationship between school leadership, teachers and parents. This is done in order to transform teaching and learning so that it has a positive impact on learners.

This will be a FirstRand Foundation and FirstRand Empowerment Foundation funded project at SUNCEP.

Project Leader: Prof Mdu Ndlovu mcn@sun.ac.za



↪ Reimagining language and literacy education

The Faculty of Education places a strong focus on matters relating to multilingualism. In this regard, a recent PhD study conducted focused on teaching Afrikaans as a First Additional Language in selected Grade 4 to 6 classes in the Western Cape.



↕ Current projects that have language issues at the core include

Bilingualism as an intermediate stage

Bilingual education in the Western Cape seems to be only a brief stop on the way to monolingual education. This study investigates the nature of bilingualism and bilingual education from the perspective of policy, the sociolinguistic context and the status of English. The emergence of World Englishes as a consequence of these factors will also be touched on.

Study leader: Prof Christa van der Walt cvdwalt@sun.ac.za

Enhancing reading comprehension

This project develops a support tool for language teachers in the intermediate phase. It provides them with support when teaching isiXhosa mother tongue speakers who find

themselves in Afrikaans medium classes.

This is a FINLO funded project.

Study leader: Dr Michael le Cordeur mlecorde@sun.ac.za

Dictionary-integrated teaching and language learning

The Schoollex project focuses on dictionaries in the classroom. Dictionaries are very important containers of linguistic knowledge and are instruments to be used in teaching and learning. Researchers from South Africa and Namibia focus their research on school and subject dictionaries, within the framework of lexicography theory and practice.

Project leader: Dr Michele van der Merwe michelevdm@sun.ac.za

↪ Reimagining education in a diverse South Africa

South Africa's diverse education context deeply influences how schools differ in the quality of the education they provide and on the so-called "learning positioning" of their students. By this is meant the ways in which students are positioned and approach their learning, as well as the learning identities with which they enter their school and classroom. It is also influenced by how the dynamics of a classroom receive and position them as particular types of learners in a school. Recent projects within the Faculty for instance focused on ways to cultivate democratic citizenship education and cosmopolitanism within the school system, as well as reimagining citizen education.



↕ Current projects exploring aspects of diversity in South African schools include

Immigrant parents role in the educational development of their children

The demography of South African schools is constantly shifting as children of foreign nationals enrol into the education system. Cultural, ethnic and linguistic difference influence the ways in which the parents of such learners can participate in their children's education and schools. This brings about certain challenges. The parents and other significant adults might have different views and interests about their children's educational worlds than is currently the local norm. A better understanding of such parents' intentions and abilities with regards to the education of their children could help them participate more fully in the schooling of their offspring.

This study is funded by the NRF until 2016.

Study leader: Prof Doria Daniels doria@sun.ac.za

Pedagogic possibilities of cosmopolitanism: a comparative and international exploration

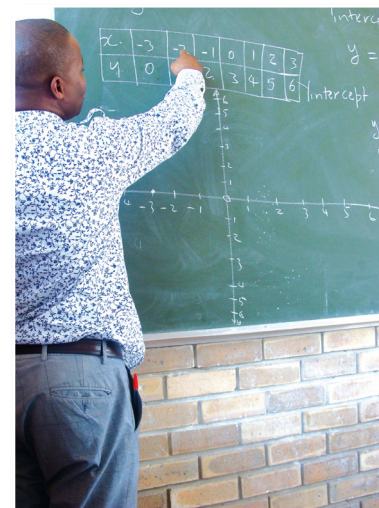
This international project includes academics from Australia, Finland, South Africa, Canada and Greece. It is led by Melbourne University. It contrasts historical, political and cultural conditions that shape how concepts of cosmopolitanism are and can be taught at school, to include a much broader, interconnected approach than just a national orientation.

This study is funded until 2017 by the Australian Research Council.

Co-investigator: Prof Aslam Fataar afataar@sun.ac.za

↪ Reimagining maths and science teaching

Because South Africa's maths and literacy rates are notoriously poor, much effort goes into understanding how best to teach this important learning area. Through one such study didactic practices in primary school mathematics teachers were developed through modelling, while another unpacked teachers' pedagogical content knowledge and skills to develop learners' problem-solving skills in mathematics. Another recent PhD study investigated how Excel spreadsheets can be used to teach and learn Grade 9 algebra learners in Lesotho. Yet another analysed learning characteristics, processes and representations in mathematical modelling in middle school learners with special needs.



↕ Current research projects being pursued include

New models of professional practice for teaching mathematical problem solving

This project aims to improve the teaching and learning of mathematical problem solving and modelling through Lesson Study. It also investigates new models of professional practice through which to teach problem solving that can be established and sustained from initial to in-service teacher education.

This project is supported through a Newton Grant from the British Academy until 2016.

Project leader: Dr Helena Wessels hwessels@sun.ac.za

Understanding the problem-based learning approach in a foundation programme at a South African university

This concurrent mixed methods research study helps to construct the applicability of the problem-based approach in a foundation programme, being the Science and Mathematics bridging programme at Stellenbosch University (SciMathUS). In the process the strengths and constraints of implementing this constructivist learning environment approach to mathematics teaching are interrogated. SciMathUS gives historically disadvantaged learners a second chance to improve their matric results in mathematics and physical sciences so that they can be admitted to Science, Technology, Engineering and Mathematics (STEM) and Accounting oriented undergraduate programmes. A model of best practice that similar programmes in the country could follow is being drafted, because there are many lessons for mathematics

education, pre-service and in-service teacher professional learning to be learnt from SciMathUS.

This is a FINLO funded project.

Project leader: Prof Mdu Ndlovu mcn@sun.ac.za

Case studies for successful participation in the Expo for Young Scientists science fairs

This study investigates the factors that contribute to successful student participation in the Expo for Young Scientists. A qualitative approach is used to collect and analyse data from a purposeful sample of seven best practice schools that have consistently participated



successfully in regional expos over the past five years. It looks at what motivates learners to participate, the support or mentoring that is provided by schools and how and why stakeholders such as school management teams and parents buy in and provide support. It also investigates how participation in the Expo is aligned to the curriculum to inspire relevance and enhance experiences of inquiry-based learning.

This project is funded by SUNCEP.

Project Leaders: Andrew Fair afair@sun.ac.za and Erika Hoffman ehoff@sun.ac.za

↪ Reimagining how to use technology in the classroom

The growing popularity of technology such as tablet devices for social and communications purposes has prompted educational institutions across the world to investigate whether tablet devices can be instrumental in reimagining education, and to provide productive and worthwhile avenues for teaching a range of subjects.



↕ Current projects being conducted at SU include

Compilation of a multilingual subject dictionary for Education students on a cell phone (MobiLex)

A trilingual Language for Specific Purposes (LSP) dictionary is compiled to support concept literacy, especially for students for whom Afrikaans and English is not their native language. This project fits into the framework of multilingualism at a university where Afrikaans and English have equal status, and isiXhosa as an academic language need to be developed. The project draws insights from well-known lexicographical theories such as Wiegand's General Theory of Lexicography, as well as the Theory of Lexicographical Functions. The Project has spread across faculties, with the inclusion of the glossary project of the SU Faculty of Theology.

This project is funded through a Teaching Development Grant for 2016.

Study leader: Dr Michele van der Merwe
michelevdm@sun.ac.za

Using technology for the development of multimedia resources for the teaching of Mathematics in Foundation Phase

This study investigates how tablet devices and related multimedia resources can be used to develop mathematical thinking in Grade R to Grade 3 learners. School practices other than the wiki currently used will also be considered.

This project is funded through a Teaching Development Grant for 2015.

Study leader: Dr Helena Wessels hwessels@sun.ac.za

University of Stellenbosch iPad in Education Project (iUS education project)

This pilot study investigates how the use of tablet devices influences teaching and learning activities in the Faculty of Education. This will equip student teachers to use mobile

technologies when they work in schools. Through the project, the technology is used in daily activities focusing on literacy, science and maths teaching and learning. Mobile iPad labs provide students access to the necessary hardware. Student-centred learning allows students to develop, discuss and publish peer-created e-learning materials. Each lecturer on the project also receives an iPad to develop and teach course content, and to record how the use of iPads impacted on their style of lecturing and their interaction with their students. The data will be used for research and dissemination purposes. The project includes a research component that investigates how the use of technology changes teaching and learning at the University and the impact this has on lecturers' and students' motivation, engagement and ability to use tablet devices for teaching.

This study is funded until 2016 by TDG, Apple Core Group and the iSchool Africa Project.

Study leader: Dr Renée Nathanson rnn@sun.ac.za

Digital storytelling for students critical engagement with a workplace assignment

Digital storytelling is a way by which people use digital tools to tell their "story" through compelling, emotionally engaging and interactive formats. Within the university setting, digital storytelling can be used to introduce students to the value of thinking critically and creatively. This can enhance their learning experience, and also that of the learners they come in contact with. This feeds into the overarching aim of professional training programs to deliver competent graduates who are able to critically reflect as a process of continuous learning. Reflection within the context of teacher professional development focuses on the content and processes involved while teaching. Students in a postgraduate program will take photographs (ensuring ethical conduct) of the content and processes involved while they execute the compulsory practical assignment for

the Learning Support module. They will then compose a short video clip that depicts the processes they engaged in. It will culminate in a reflective summary of the value of digital storytelling as a tool for reflection as well as the impact it had on these developing professionals.

This is a FINLO funded project.

Project leader: Dr Lorna Dreyer lornadreyer@sun.ac.za

Posthumanism, the Affective Turn and Socially Just Critical Higher Education Pedagogies

This project is led by the University of the Western Cape. Researchers from Stellenbosch University are among the more than 20 academics involved in it. It brings together academic experts in critical, poststructural and sociomaterial studies from both humanities and social sciences, as well as those involved in other scientific disciplines. They investigate how a new theoretical framework that is grounded in the ideas incorporated in critical posthumanism and the affective turn could help renew critical pedagogical practices in higher education. The renewal of pedagogical practices refers to the development of new technologically-mediated pedagogies that promote critical emotional reflexivity, relationality, social justice, postcolonialism and anti-racism. The project builds on two previous research projects. The first focused on Information and Communication Technologies (ICTs) to improve teaching and learning, while the second used inter-institutional curricula to address social inclusion. The current project uses data from previous projects as well as virtual and auto-ethnography of team members. Colloquia,

writing workshops, social media efforts such as blogs and synchronous virtual meeting spaces are used between team members to collaborate and share ideas.

This project is funded by the National Research Foundation until 2016, and includes 8 co-investigators and more than 20 academics.

Co-investigator: Prof Ronelle Carolissen rlc2@sun.ac.za

Initial reflections on the use of tablets in a SUNCEP Teacher Professional Learning (TPL) programme

This major e-learning initiative strengthens professional learning initiatives for teachers. The modes of delivery of courses, as defined by the Stellenbosch University Institutional Intent and Strategy, are blended and virtual learning models. Both UNESCO and South Africa's National Development Plan highlight the need for teachers to be e-skilled so that e-learning initiatives can succeed. The Western Cape Education Department's e-Education vision in turn calls for the use of mobile devices in all classrooms by 2020. In the light of this, a blended model TPL initiative incorporating Windows PC tablets was developed and is being piloted by the Stellenbosch University Centre for Pedagogy (SUNCEP). Initial challenges and successes in the design, development and implementation of the TPL initiative are addressed in this research project.

This project is funded by SUNCEP.

Project leaders: Ramesh Jeram ramesh@sun.ac.za and Pauline Hanekom pwh@sun.ac.za

⇒ Future projects and initiatives could include

- ▶ Further funding for postgraduate students as well as support to continue and expand current research* Hardware such as tablets, televisions and data projectors.
- ▶ Expanding the pilot project to include more lecturers who are interested in researching the use of mobile devices in their lectures
- ▶ Adding more Professional Development Schools (PDSs) to bridge the practice-research interface
- ▶ Developing more e-learning venues in the Faculty to support the use of mobile devices by lecturers and students
- ▶ Investigating and piloting the use of assistive technologies for learners with special educational needs.





More about the Faculty of Education at Stellenbosch University



- ▶ It is the only Faculty at a university in the Western Cape to offer dedicated training to educational psychologists.
 - ▶ Many students benefit from the Department of Higher Education and Training's Funza Lushaka bursaries. These are available to students who major in designated subjects in which there is a particular shortage of teachers.
 - ▶ Four in every five academic staff members hold a doctorate.
 - ▶ Compared with other faculties at the University, it enjoys the second highest pass rate of its undergraduate and postgraduate students.
 - ▶ Number of rated researchers: 14
 - ▶ Its staff and academics have served on numerous international and national advice and planning committees and boards. These include among others Umalusi, the Higher Education Quality Committee, the South African Education Research Association, the Education Deans' Forum, the Health Professions Council of South Africa, the World Education Research Association, UNESCO's Country Commission on educational development in Southern Africa and the UNESCO Global City Network initiative.
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- ▶▶ **Four accredited journals are edited in the Faculty. They are:**
 - ▶ *Southern African Review of Education:*
Prof Aslam Fataar as editor-in-chief
 - ▶ *South African Journal of Higher Education:*
Prof Yusef Waghid as editor-in-chief
 - ▶ *Per Linguam:* Prof Christa van der Walt as editor-in-chief
 - ▶ *South African Journal for Research in Sport, Physical Education and Recreation:*
Prof Floris van der Merwe as editor-in-chief
 - ▶▶ **Our academics published a number of books recently. These include:**
 - ▶ *African Philosophy of Education Reconsidered: On Being Human* – Yusef Waghid
 - ▶ *Citizenship, Education and Violence: On Disrupted Potentialities and Becoming* – Yusef Waghid and Nuraan Davids
 - ▶ *Curriculum Studies: Visions and Imaginations* – Petro du Preez and Chris Reddy (eds)
 - ▶ *Dancing with Doctoral Encounters: Democratic education in motion* – Yusef Waghid



- ▶ *Education Policy in the South African Democratic Transition* – Aslam Fataar
- ▶ *Engaging Schooling Subjectivities across Post-Apartheid Urban Spaces* – Aslam Fataar
- ▶ *Debating Thesis Supervision*, Aslam Fataar (ed)
- ▶ *Expressing Post-Secular Citizenship: A Madrasa, An Ethic and A Comprehensive Doctrine* – Zaraah McDonald
- ▶ *In Enemy Hands: South Africa's POWs in World War II* – Karen Horn
- ▶ *Multilingual Universities in South Africa: Reflecting Society in Higher Education* – Liesel Hibbert and Christa van der Walt (eds)
- ▶ *Pedagogy Out of Bounds: Untamed Variations of Democratic Education* – Yusef Waghid
- ▶ *Women, Cosmopolitanism and Islamic Education: On the Virtues of Engagement and Belonging* – Nuraan Davids
- ▶ *Candidates, supervisors and institutions: Pushing postgraduate boundaries.* – Eli Bitzer, Ruth Albertyn, Liezel Frick, B Grant & F Kelly (eds)
- ▶ *Engaging Higher Education Curricula: A Critical Education Citizenship Perspective* – Elmarie Costandius and Eli Bitzer.

▶▶ The Faculty in numbers

- ▶ 49 academic staff
- ▶ 1800 students
- ▶ Two out of every five students are postgraduates
- ▶ 154 potential primary school teachers received their BEd degrees in 2015, while 115 Postgraduate Certificates in Education were awarded to trained high school teachers
- ▶ Around 60 Masters and PhD students graduated in 2014

▶▶ Our departments

- ▶ Curriculum Studies
- ▶ Education Policy Studies
- ▶ Educational Psychology
- ▶ Sport Science

▶▶ Our research units

The development of human potential in a diverse community is central to most of the applied research being done in the faculty's four departments. Various Units and Centres within these departments further strengthen endeavours by not only working in practice within schools and academia but also by doing research about the outcomes of specific interventions.

▶ The Centre for Higher and Adult Education

The Centre provides a professional research, training, development and consulting service in the fields of higher and adult education to institutions and organisations. Among the research topics being focused on are:

- ▶ Postgraduate education
- ▶ postgraduate supervision
- ▶ curriculum in higher education
- ▶ quality in higher and further education
- ▶ aspects related to teaching and learning, such as how to facilitate and assess learning
- ▶ staff development and capacity development
- ▶ the strategic use of diversity in higher and further education to ensure quality and equity
- ▶ leadership and management issues (especially at a faculty/department and programme level)
- ▶ staff appraisal and the enhancement of scholarship in higher education
- ▶ out-of-class learning in higher education
- ▶ creativity in higher education.

⇒ Future projects could research methods and ways by which to strengthen the student output of higher and adult education institutions

▶ Stellenbosch University Centre for Pedagogy (SUNCEP)

The Centre uses research as a tool by which to share the insights and innovations in mathematics and science teaching it is involved in with practising teachers. Its work also focuses strongly on teachers' ongoing professional learning, as well as school interventions to enhance the capacity of both teachers and learners. Its programme for matriculants, Hope@Maties, and the bridging programme SciMathUS both help to prepare young people for university.

⇒ Future projects could focus on research that quantifies and evaluates the input made by SUNCEP into the lives of the teachers and learners they work with.

▶ The Research Unit for Mathematics Education (RUMEUS)

The Unit focuses on understanding and analysing the way in which learners think about mathematics and understand its concepts, such as algebra and division.



Results from its research have been incorporated into the primary school curriculum in South Africa, and have helped to stimulate innovative classroom practice.

⇒ Future projects could help to rethink strategy and practice about how mathematics is taught and understood in South African schools.

► **The Environmental Education Programme (EEPUS)**

EEPUS undertakes practice-driven development and training projects for students within the faculty. Resource material for environmental education purposes is developed based on research being done on the topic.

⇒ Future projects could help shape how learners engage with the environment not only when they are younger but also when they grow into adults.

►► **The research interests of our staff**

CURRICULUM STUDIES

Dr Carina America

Social sciences; education for sustainable development; corporate social responsibility; Economic and Management Sciences education/Business Education; curriculum design; teaching practice

Prof Eli Bitzer

Improving quality in higher education; professional development within higher education; higher education curriculums; postgraduate supervision and the scholarship of teaching and learning.

Dr Louise Botha

Mathematics, science and technology; evolution in Life Sciences Curriculum, Professional Practice Schools

Prof Arend Carl

Curriculum development; teachers as curriculum agents

Nazeem Edwards

Mathematics, science and technology; assessment of science teaching; training of science teachers

Dr Omar Esau

Curriculum studies; diversity and inclusivity, Life Orientation, Religious Studies; assessment and research

Prof Liezel Frick

Higher and Adult Education; doctoral education; postgraduate supervision; creativity; continuing professional development in higher education; Assessment and Recognition of Prior Learning (ARPL); leadership development in vocational education

Dr Faaiz Gierdien

Mathematics, science and technology; training of teachers in mathematics; innovation in mathematics teaching; history and philosophy of teaching mathematics; curriculum development

Dr Karen Horn

Social sciences; teaching of history; South African prisoners-of-war during World War II; history teaching

Phumla Kese

Language education and language in education; teaching non-indigenous speakers of isiXhosa

Dr Erna Lampen

Mathematics education; curriculum design for mathematics teacher education; classroom discourse and teacher talk aimed at mathematical and statistical reasoning

Prof Lesley le Grange

Science and environmental education; research methodology; curriculum development

Dr Michael le Cordeur

Language education and language in education; support of learners with reading problems; language policy and mother tongue tuition; curriculum development in Afrikaans education

Dr Reneé Nathanson

Language education and language in education; methods to teach English as a first and an additional language; language and literacy development; learners with Special Educational Needs (LSEN)

Prof Magda Fourie-Malherbe

Higher Education studies, governance and management, teaching and learning; quality assurance; programme planning and evaluation; academic development

Prof Chris Reddy

Curriculum enquiry; mathematics, science and technology; environmental education; pre and in-service teacher education

Prof Maureen Robinson

Teacher education; educational change; action research; professional development

John Ruiters

Language education and language in education; class attendance; teacher education; curriculum theory; adult education; quality teachers within Higher Education

Dr Linda Rutgers

Language education and language in education; literacy development; curriculum studies for the foundation phase; education policy studies; education management and governance

Dr Michele van der Merwe

Language education and language in education; lexicography, Afrikaans language studies; Afrikaans within the context of education; subject dictionaries

Prof Christa van der Walt

Language education and language in education; teaching and the use of English in multilingual contexts; developing multilingual education systems; World Englishes; bi- or multilingualism in learning and teaching; language planning, policy and politics

Dr Helena Wessels

Mathematics, science and technology; music education; education of mathematics; Grade R to Grade 9 mathematics and statistics teacher education; curriculum development

EDUCATION POLICY STUDIES

Dr Nuraan Davids

Democratic citizenship education; cosmopolitanism; Islamic education; gender issues; leadership and management inquiry

Prof Aslam Fataar

Education in an urban context; education policy; education and social subjectivities

Dr Jerome Joorst

Sociology of education; rural youth agency; educational governance; management and leadership; education law

Prof Berte van Wyk

Higher Education; African philosophy; institutional culture; philosophy of education

Prof Yusef Waghid

Philosophy of education; African philosophy of education; democratic citizenship education; moral education; cosmopolitan justice

EDUCATIONAL PSYCHOLOGY

Prof Ronelle Carolissen

Community, identities and social justice; social justice pedagogies; narratives of belonging and citizenship in schools, after school and in higher education settings

Lynette Collair

Professional issues in psychology in high school contexts; teacher-child relationships with an emphasis on student engagement or disengagement

Karliën Conradie

Aesthetical ways of creating meaning in professional development in both psychotherapy research and curriculum design

Dr Lynne Damons

Diversity and minorities; learning environments as spaces in which young people navigate marginalisation

Prof Doria Daniels

Access to education and support through community development; marginalisation, both in respect of schooling and marginalised groups such as immigrant populations, women and girls and learners with disabilities

Dr Lorna Dreyer

The disjuncture between policy and practice in the areas of reading and language, especially in the context of second language (additional language) learners; teacher professional development using blended learning methodologies to develop reflective practitioners

Carla Feenstra

The scholarship of teaching and learning with a specific focus on educating registered counsellors and educational psychologists; career pathing in educational psychology among registered counsellors and educational psychologists

Carmelita Jacobs (MERC research fellow)

Family-school partnerships, especially during the adolescent development phase; ways in which notions of the family are constructed in society and how this may impact on systemic understandings of family support.

Prof Rona Newmark

Service learning; life skills education; integrative wellness; measuring quality of life; wellbeing within a social, physical and emotional context

Mariechen Perold

The learning process in counselling and psychotherapy training with particular emphasis on transformation of professional and personal identities and how this plays out in diverse applied settings.



Prof Estelle Swart

Participation, support and learning in two specific areas, namely professional learning with a specific emphasis on teacher development for inclusive education, and how learners with disabilities negotiate schools in their quest to learn.

SPORT SCIENCE

Dr Eileen Africa

Life orientation and movement education; dance; health and fitness

Dr Francois Cleophas

Sport history

Kasha Dickie

Biokinetics; health promotion through physical activity; assessment and rehabilitation of sports-related injuries

Dr Heinrich Grobbelaar

Sport psychology

Dr Wilbur Kraak

Coaching specialisation; rugby coaching, sport management and performance analysis

Dr Suzanne Ferreira

Sport for persons with disabilities

Shaundré Jacobs

Strength and conditioning; fitness; athletics coaching

Prof Elmarie Terblanche

Sport and exercise physiology; biostatistics

Henrietta Rose-Innes

Hockey and tennis coaching

Prof Kallie van Deventer

Movement education; values and ethics in sport

Prof Ranel Venter

Biomechanics; peak performance; recovery of team athletes

Dr Karen Welman

Motor learning and control; introductory statistics; recovery of endurance athletes

STELLENBOSCH UNIVERSITY CENTRE FOR PEDAGOGY (SUNCEP)

Andrew Fair

Science education; science teacher education; school-based interventions

Pauline Hanekom

Blended learning; online learning; science education; in-service science teacher education



Erika Hoffman

In-service science teacher education; inquiry-based learning; mentoring; teacher professional learning

Ramesh Jeram

Practice-based teacher professional learning

Elza Lourens

Student experience in higher education; graduate employability

Dr Sharon Malan

Problem-based learning; minding the gap between school and university; blended learning; flipped classrooms

Anneke Muller

Student access to higher education; bridging the gap between school and university

Prof Mdu Ndlovu

Mathematics education; geometry and calculus education; technology integration in mathematics education; in-service mathematics and science teacher education; problem-based learning; blended learning; university-school partnerships for social justice; minding the gap between school and university

Cerenus Pfeiffer

Integrating technology in mathematics education

Christa Philander

Professional development of Natural Sciences teachers

Nokwanda Siyengo

University preparation programmes (UPP); the gap between school and university

Danelda van Graan

Inquiry-based education; science teacher professional learning

Dr Trevor van Louw

Educational leadership and management; mentoring; teacher professional learning



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