

NEWS

September 2014



Nelson Mandela
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Port Elizabeth & George



The Cofimvaba Rural Schools Fuel Cell Education Initiative

"Education is what remains after one has forgotten everything (s)he learned in school. -- Einstein"

It may be logical to assume that if many of your teachers are under qualified, un-qualified or even not present in the class that the education system has failed leaving you ill-equipped to compete in the modern knowledge economy. For many learners this is the reality in rural schools around the country but despite this their competence comes to the fore and they succeed against all odds.

The Cofimvaba Rural Schools Fuel Cell Education Initiative (<http://yesa.org.za/cofimvaschools/>) is focused on raising awareness of alternative fuels, especially Hydrogen Fuel Cell Technologies in a school environment as part of a human capital development program.

This initiative aims to promote energy sources especially in the areas of Science, Technology, Engineering, Mathematics and Innovation (STEMI) while supplementing the national curriculum. Customised educational content is being developed for delivery through the Android tablet initiative.

Funding was provided by Anglo American Platinum in partnership with Clean Energy Investments, Air Products and delivered by the Young Engineers and Scientists of Africa (YESA).

The project was launched on Tuesday 17th June 2014 on a day when President Zuma delivered the State of the Nation Address which focused on national energy security, especially renewable energies amongst other issues. This project lays the foundations for human capital development in STEMI by demystifying key elements of energy transformations, electrolysis of water and the use of Hydrogen as an energy source for Hydrogen Fuel Cell Technologies.



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Dr Ron Beyers the owner and MD of YESA completed the project by the end of August 2014 reaching just under 3000 learners in 20 different schools in the Cofimvaba district. He also exposed six NMMU students to the emotional roller-coaster ride of visiting these under-resourced schools to experience first-hand the quality of education in deep rural schools. Some of the most memorable demonstrations of solar, wind and hydrogen fuel cells were in the schools with no electricity. Many of these exciting sessions were conducted around a foldup table in the school courtyards to reinforce the importance of renewable energy. Educational equipment from Horizon Fuel Cell Technologies was imported specifically for the project.

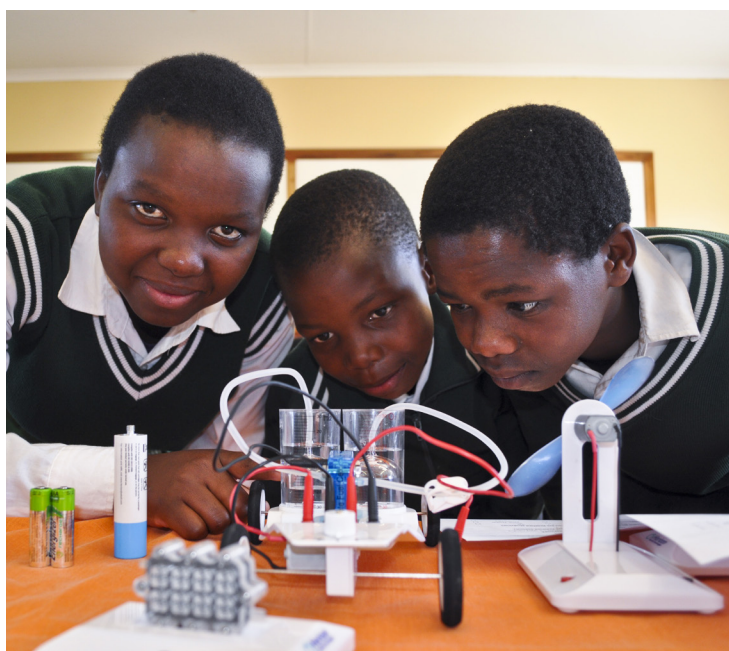
A key finding of the initiative was the presence of individuals with talent, primarily in Grade 6-9 despite the educational challenges, language and cultural differences. A model is currently being developed to tag these individuals for further development so that they can take their rightful place in society as engineers, doctors and scientists. As it turns out, Vuyolwethu Hafe, a student in the Information Technology module of Dr Beyers, comes from the Cofimvaba region. Where there is apparent despair we find hope and if students like Vuyolwethu can do it so can many others if they are given the chance of going further.

On a more personal level, the principal of Sidupipoort Senior Secondary reported that many of the learners had not seen a white person in their community before. Godwana Senior Secondary was another school which had the least of resources and yet they will be remembered for the true spirit of Ubuntu. It was a small gesture of an orange for the weary travellers had such an impact on our lives. The mud walled classrooms and tin shacks did little to dampen the spirit of the learners and the dedication of many teachers in the birth place of Chris Hani.

We look to the next phase to address issues of sustainability as the project expands to include more districts, reaching new regions, provinces and even going to a national level. A key component of this will be exposing NMMU students, especially in the Education Faculty to the realities of classroom life in rural communities as part of their Work in Learning Experience. Thanks to Anglo American Platinum for making a difference in the lives of the learners, including those of the 6 NMMU students and Dr Beyers.



Dr Ron Beyers





Cofimvaba as an un-paralleled experience

Students' experience of their trip to Cofimvaba



Students of Dr Beyers were offered the opportunity to accompany him on one of his excursions to schools within the Cofimvaba area. The purpose of these school visits was to present a lesson on alternative forms of energy in ways the children could relate to and understand. The experience was a meaningful one and one that will stay with me for the rest of my teaching career. Often, coming into a profession, one has assumptions and ideas about what it's all about; all of this was changed on that weekend. The outing taught me that teaching is so much more than teaching; it's about learning, experiencing others, being open to new ways of thinking and above all being present. Every interaction you have with a child is special and significant to them. You might deal with thousands of children every day, but each of them only interacts with one of you; make each interaction a positive and meaningful one. – **Jade Botha**

The experience in Cofimvaba ignited more of an urgency to teach. The exposure to schools with such limited resources magnifies the importance of my prospective profession. Learners who have almost nothing at their disposal have a hunger for knowledge and in the teaching profession I can see it being hugely rewarding to teach these types of students. The excursion to Cofimvaba definitely taught me that as teachers we need to be role models. Our interest in teaching and in the personal progression of the children feeds their energy. The lack of this enthusiasm from the teacher's perspective was rather evident when engaging with many of them at these rural schools. This experience definitely made me aware that we have a huge responsibility as teachers to pass down a love of learning to these children.

– **Lauren Petrie**



Cofimvaba was an un-parallel experience. We as students were taken from a milieu of familiarity into an environment so diverse from our own. That in itself was such an eye opener, however, more was to come. As I engaged with learners, their hunger and desire for more knowledge permeated through every spoken word. They were so eager to learn despite their great difficulties and challenges. It was in Cofimvaba that I realized the priceless value of education; and how we as a collective need to step up to the podium and make a change.

– **Bonny Maclachlan**

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Our trip to Cofimvaba was very eye opening for me... it made me realise that there is so much more to teaching than what I initially thought, so much more than the hustle and bustle lifestyle that we live in. The schools blew me away. We could clearly see which ones had good leadership and positive teachers. At those schools... the learners had hope and something to look forward to. They took pride in what they had... But one could clearly see the comparison with the schools that did not have good leadership. We could see the ones that the teachers felt nothing but to leave the profession. I cannot but wonder why people with wrong attitudes enter the profession. This was definitely a thought provoking and life changing experience

– Roxanne Appel



Most of the people I know, don't even know where Cofimvaba is. Cofimvaba is situated near Queenstown and Cathcart, in the Eastern Cape. It is a rural area with many poor schools. The trip we went on was to introduce alternative energy sources in their communities, and in return get a sense of the students' potential. Cofimvaba definitely made me see education in a different light that what I did before. I am now aware of the real problems teachers and students face with education today, and how poverty and a lack of resources play a role.

One of the moments I hold dear to my heart: On our last day of the trip, a girl approached me and asked if she could take a picture of me. I replied by asking with what is she going to take this picture. She said with your camera and I asked her if she knew how to work a camera, and she replied yes. I handed her the camera and she struggled taking the picture, but she did it. Afterwards, I heard how she told her friends that that was the first picture she ever took. And in that moment, it became clear why I wanted to become a teacher: to give opportunities to learners that they will never or could never get, to think of my learners first, rather than myself. Because that is what teachers do: they try to change the world for the better, by beginning from the bottom.

... - Esme Hoch

The greatest opportunity afforded from visiting Cofimvaba and the surrounding schools is to see the opportunity rural schools afford learners despite the sad surroundings. Although it is often stressed that schools in South Africa are not performing, this tour showed me that there are schools which have resources such as labs, auditoriums, tablets, computers and so much more, provided by the government (not enough schools). There is still worry as to if they are being used or its abilities for education unexplored, this shows how education is implemented or more so, not. In all the experience was invaluable to understanding a piece of south Africa's rural education system and I was overcome with pride when interacting with teachers who were passionate about education, pushed through many difficulties of salaries, housing, transport or commitment from all surroundings to educate south Africa's future. Schools visited were high quality infrastructure and enthusiasm to education by learners and educators but were also of a low quality with no appreciation or enthusiasm.

– Kimberly Rae



CONGRATULATIONS



Congratulations to our colleagues who recently received NMMU Research, Teaching and Engagement Awards. We are proud of them!



Dr Kathija Adam
NMMU Excellent Teacher of the Year Award



Dr Andre du Plessis
Distinguished Teacher Award



Ms Sanet Deysel
Faculty Emerging Excellent
Teacher of the Year Award



Prof Prakash Singh
Faculty Researcher of the Year Award
AND the Research Excellence Award



Prof Pat Bean
Faculty Excellent Teacher
of the Year Award

Also congratulations to Dr Chris Dali for receiving the Faculty Emerging Researcher of the Year Award



International teaching practice conference 26 – 28 August, Johannesburg



Recently, Drs Edley, Geduld, Jordaan, King, Ms Sathorar and Prof Delport an international conference on teaching practice in Africa, hosted by UNISA.

The conference was held at the prestigious Birchwoods conference centre in Johannesburg and hosted delegates from South African universities as well as Tanzania, Uganda, Ghana, Kenya, Zimbabwe, Zambia, Namibia, Swaziland and Botswana. They also presented four papers, which are now being refined for possible publication in accredited journals. The papers were well received and showed NMMU's progressive thinking on WIL.

The topics of the presentations were:

- From silo to splice: integrating theory and practice in a new B Ed curriculum
- Transforming teaching practice from 'within'
- Journeying from teaching practice to professional learning
- Professional Learning in a BEd FET Programme: Reflections on a pilot project

A significant highlight of the conference was the plenary key note address by well-known Michael Apple, Professor of Education at the University of Wisconsin, Madison, and a leading theorist of education who warned against a new hegemonic block threatening education. In this regard, he identified four groups of people:

The neo-liberals are driven by greed and convey the message that private is good and public is bad. Competition is good and we must continuously strive to do more with less. For them, teacher education is another forum where money can be made.

The neo-conservatives believe in a strong state and a common curriculum, enforcing one language and set of ideas and resisting external influences. For them, tests are key to success – with the "test tail" wagging the dog. This group practices what Bourdieu would call, 'symbolic violence'.

The third group represents Stuart Hall's authoritarian populace. They include the religious conservatives who often regard teachers as tools of the devil, hence resorting to home schooling and rampant nationalism.

The fourth group constitutes the professional and managerial middle class, concerned with measurement, and always requesting 'evidence' that schools are effective. They insist on accountability, success and measurement. But they are also in possession of the cultural capital that enables success. For them, the world is a large supermarket.

Apple warned against these groups who are undermining education by for example hijacking terms such as democracy changing it to financial freedom and equating it with the economy. This, according to Apple, can be seen as an epistemological attack. He thus urged all teacher educators to resist these forces and to reclaim the notion of democracy and social justice in education.

Prof Aletta Delport



An ICT learning-to-design heuristic to promote science learning:

Using PowerPoint in an “unintended” mode



Dr Andre du Plessis was invited as a plenary speaker to the University of Hradec Kralove in the Czech Republic in September 2014. He participated in the Science and Technology Education for the 21st Century conference theme with his paper titled, An ICT learning-to-design heuristic to promote science learning: Using PowerPoint in an “unintended” mode.

In the presentation, it was argued that the use of ICT (Information and Communication Technology) resources for teaching and learning in schools within the South African context, as well as in other countries, seems to be limited to utilising the data projector, traditional teacher created PowerPoint presentations and the occasional YouTube video or pictures from the web. When PowerPoint is used, it is in many instances merely used to replace the traditional chalkboard or white board. In this mode, the teacher or lecturer is still the main source of knowledge.

Hence, it allows for students or learners to become to constructors of knowledge and their understanding in a visual manner. In order to realise learner-student creation, the PR-PID heuristic (Planning, Requirements, Procedure, Implementation and Distribution) has been developed, a heuristic that affords opportunities for learners-students to use PowerPoint as an interactive tool to create movement, sound, voice narration recordings, character and to insert digital image to convey science concepts, principles and [or] science related knowledge in a movie format.

The paper presented the theoretical foundation for research to be conducted related to how learners-students perceive this approach, whether it has the potential to promote motivation and interest pertaining to learning, whether it could promote the critical outcomes of the South African Curriculum Assessment Policy Statement (CAPS) as well as 21st century learning outcomes, including whether it has potential to support comprehension, argumentation, thinking, language literacy and writing skills.

The presentation presented a heuristic or an approach to science learning – an approach that is adaptable to any other topic or subject - that incorporates the usage of PowerPoint in an alternative manner when learners or students become constructionist of a science related product or artefact by means of Learning-as-Design or Designing-to-Learn principles.

Hence, it allows for students or learners to become to constructors of knowledge and their understanding in a visual manner.



Dr Andre Du Plessis



GENDER WORK



"Nobody can go back and start a new beginning, but anyone can start today and make a new ending."

Maria Robinson

As we are on the other end of diversity month it is crucial that we are constantly engaged with issues we face in our society around diversity outside of designated months or days of remembrance. As teachers we play an influential role in the lives of the children we teach. We are in a position to challenge young minds and ultimately equip young children to face experiences of the world in which they live.



Within schools, the girl and boy child have experiences that perpetuate socially constructed gender expectations. These experiences often shape a child and set them on a predetermined pathway. The implications of socialization of gender differences are numerous: distress and low self-esteem for children who feel atypical of their gender, limitations of educational experiences thus resulting in limitations on career choice for both genders, emotional stress of not being able to meet the socially constructed expectations of their gender, and gender violence that occurs in schools to name a few.

Gender forms one of the topics of our first year PPEV module (Values and Education) in which the Foundation Phase (FP) students and I have currently been engaged in activities and discussions around gender and its influence on our lives. We started by exploring our understanding of gender and how society constructs gender roles. Using the Cycle of Socialization by Maurianne Adams we were able to consider all the possibilities of how a girl and boy child may form their gender identities.

To interrogate the implications of how a girl and boy child's gender identity is influenced we started by viewing and discussing the documentary 'Sext-Up Kids' (CBC Doc Zone).

The documentary explores how children and adolescence construct their gender (sexual) identity. The documentary portrays young girls interacting with toys like Barbie and Brats dolls as well as drawing attention to the clothes industry and the highly sexually suggestive nature of these toys and clothes that are being marketed to girls as young as 4 years of age. The film also suggests the negative impact on young boys and adolescent boys with regards to their expectations of girls. The film further discusses how toys, clothes and social media affect a young person's identity of self, namely self-esteem, self-image and perceptions of what is expected of a female and male.

It became clear that the FP students were well aware of the issues around gender differences and inequalities from personal experience or the experience of close friends. Returning back to Adams cycle of socialization we are currently investigating is our role as FP teachers to conscientize children about gender related issues and what we need to equip children with to navigate this highly gendered world.

In one of our discussions a student said that 'we all had to go through such things [like being called derogatory names] and we are ok' we challenged this statement and then students asked but 'how can we make a difference and fight against the huge influence of social media or control the toy industry.' Again we challenge each other to consider what we do have control over: firstly, ourselves, secondly, we do have some autonomy in our classrooms and possibly the ability to influence other colleagues at the schools in which we teach. We came to the conclusion that we need to ask ourselves the following questions: what does a child need to navigate issues of gender differences/inequality? , and how do we build these skills in our girl and boy child to help them face the realities of the world in which we live with special regard to gender? Concurrently we are exploring how gender plays out in a classroom and school setting through personal reflections and additional readings.



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The student dialogue

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One of the activities that the FP students have completed is their own personal views on gender through the medium of Visual Methods. Students were tasked to find pictures that depict what they think about their gender, explain why they picked the picture and then finally they were asked to reflect on the activity itself. Please find some of the students work on display in building 06.

Here is what some students had to say upon reflection of the assignment:

“What can truly be done to insure that little girls from a young age bridge the gap of stereotype and engage each other? Are we simply a gender that claims to know and be aware of our image in society, but we choose to not protest? Being kind, caring and compassionate is all fair but, can we say it create a greater valued gender?”

“I found this activity very inspiring. It made me think a lot deeper about who I am and what I deal with in everyday life...People are so quick to discriminate against each other. That is why we have to stand up for what we believe in and try to make a change whenever we can.”

“I felt empowered while doing this assignment. At first, I Googled ‘girls’ and was horrified with what came up in the search under images. Girls and women with barely any clothing and portrayed as items of sex. This made me more determined to find genuine and empowering pictures portraying women in a positive light....Media and society should be educated more to change the view of women and thus men seeing us in the a different light.”

“[This project] made me think of how society influences the way we think of ourselves as women.

I have become more aware of gender inequalities since starting university. ...it has made me aware not only of the injustices to women but also to men, as well as the stereotypes and labels we tend to place on individuals or groups of people.

[gender inequality] is an issue in the world and by exploring the topic and learning how to address such things in our classrooms, each of us as teachers can try to make a difference little by little.”



Robin Anne Notshulwana



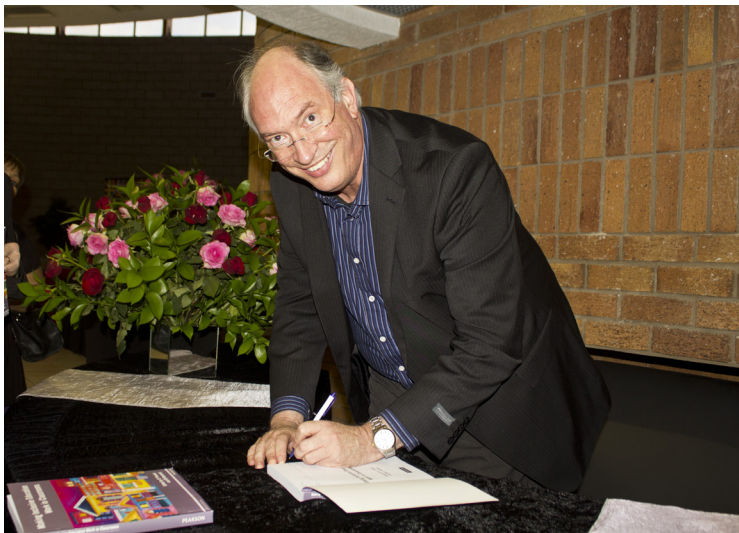
Making Inclusive Education Work in Classrooms

The disability unit hosted a three day conference on Inclusive Education. They approached Dr Christo Pienaar to present a workshop for lecturers on Inclusive Education in Higher Educational Institutions and to present a paper on Inclusive Education. Dr Pienaar then approached DR Eileen Raymond from Potsdam, New York to co – present at the conference via Skype.

Dr Andre Du Plessis also contributed to the occasion by presenting a paper on blended learning.

There after the book entitled “Making Inclusive Education Work in Classrooms” authored by Dr Pienaar and Dr Raymond was launched. This was a very grand affair with a jazz band playing, cocktails and book signing.

The Disability Unit carried all the costs. The entire day was dedicated to inclusive education through the presentations and book launch. The day was a very big success. The book, workshop and paper presentation were seen as ground breaking work for education in South Africa.



Dr Christo Pienaar

SA Psychology Congress

Dr D Swartz and Dr Christo Pienaar presented a paper at the 20th Anniversary of the South African Psychology Congress on the 16th – 19th September 2014. The function, held at the Inkosi Albert Luthuli International Convention Centre in Durban celebrated, 20 years of freedom as a time of celebration and critical reflection.

Their paper entitled “Perceptions of teachers who experience mild intellectual barriers within an inclusive education system in primary schools in the Nelson Mandela Metropole” was well received.



Oxford Exhibition

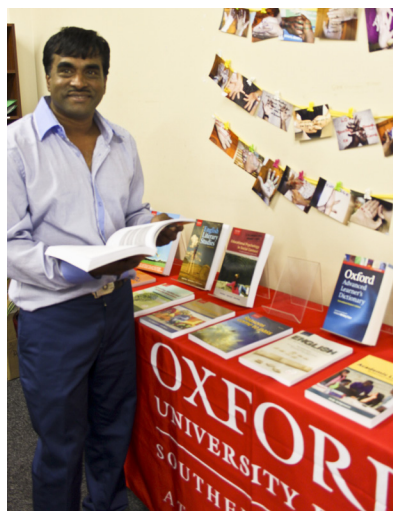
OXFORD
UNIVERSITY PRESS
SOUTHERN AFRICA

A Tradition of Excellence



Sefika
Academic Publisher 2014

On the 18th October the Oxford University Press presented a small exhibition of the latest educational books and materials for 2014. The exhibition was arranged to share information on Education Publishing Programmes for Higher Education and encouraged a question and answer session with the Oxford team. The function held in the building 6 staff room provided lecturers with a light lunch whilst perusing the books. All books exhibited on the day, were donated to the Resource Centre to be used by the students and staff in their teaching preparations.



WELLNESS



Thanks to the faculty for the kind donations. Mary-Anne Laufs finished the Urban Run and contributed toward raising R167739.70 which was handed over to the Eastern Cape Branch of Cheshire Homes.

Graduation December 2014

Diarise 9 December 2014 as the date of the graduation. Our Faculty will still have a graduation ceremony in April 2015 for all our students who were not part of the December graduation – this means that our December grad will NOT replace our April graduation.

No Chancellor's dinner will be arranged in December for Doctoral students who graduate in December; such students (with their partners and promoters) will be invited to the Chancellor's dinner in April 2015.

CONGRATULATIONS



Congratulations to Rifka Moosa on winning the position of Faculty of Education student representative in the 2014 SRC elections.

We wish her well in the new term of office.

