

MCSE report 2018

Teaching and Learning

The MCSE cluster is made up of 13 academic staff members and one administrative staff member. In terms of teaching the team continues to work hard and use innovative teaching methods in their lectures. Mr Mkhwanazi was awarded the Innovative assessment practices award. He presented some of his ideas at the First Higher Education Assessment practices seminar held in February 2019 at the School of Education.



Mr Mkhwanazi Presenting at the Higher Education seminar series

The cluster has offered some extra curricular support in the form of geometry workshops that were offered to third and fourth year Mathematics students who had not studied geometry at school. These workshops were held over five 3- hour sessions in September 2018 and was run by a Masters student Izuchukwu Okoye-Ogbalu. Prof Mudaly, Dr Mthethwa, Dr Ndlovu and Mrs Goba were involved in providing Masters cohort as well as doctoral support workshops for students in the cluster and school.

The cluster is grateful for the assistance of our senior students who take on the task of tutoring junior students. It is this contribution made by these tutors, that make such a difference to the results of our students. We usually present the profiles of each tutor on the notice board as a gesture of appreciation for the work that they do. Below are profiles of two of our tutors.

Meet the Maths Tutors



Melusi Mazibuko

Melusi Mazibuko is a second year BEd student majoring in Mathematics and Physical science. He loves Maths and tutors in the following modules like Maths 210 and Maths 110.

His motto is a quote from Gordon B. Hinckley:
“Believe in yourself. Believe in your capacity to do great and good things. Believe that no mountain is so high that you cannot climb it. Believe that no storm is so great that you cannot weather it.”

Tutor Profile for Melusi Mazibuko

Tamia Simone Swartz



Tamia is a second year BEd student majoring in Mathematics and Physical Science.

She is a tutor for Math 210 and is highly passionate about her influence on other students. She believes that making a difference on a small scale is significant enough to change a nation.

Her favourite quote is by Galileo Galilei: "Mathematics is the key and door to the Sciences"

Tutor Profile for Tamia Swartz

Research and Scholarship

All the members of the cluster are engaged in research with five members currently working on their Ph.Ds. Many others have been busy presenting papers at conferences, submitting or publishing papers. The cluster members collectively published 17 journal articles. In terms of conference presentations, cluster members presented 5 papers at various international conferences and 13 conference papers at national conferences.



Prof Bansil with her three doctoral students who presented their work at the Rasch measurement conference in Perth



Mr Ben Shongwe posing questions about proving in mathematics at the AMESA regional KZN conference



Dr Zanele Ndlovu presenting her work on error analysis at the KZN AMESA regional conference.

Many people have successfully obtained research funding awards, with a total of over a million rand in funding from external sources. In addition, four staff members (Busi Goba, Ben Shongwe, Eshara Dowlath and Justin Molebale) received funding from UCDP, The Dean of Education and the DVC of Humanities towards their doctoral research.

Overall in the cluster we had 9 doctoral and 9 masters graduations in the cluster.

Cluster members have fruitful collaborations with academics from Universities of North-West, Johannesburg, Witwatersrand, CPU, DUT as well as MUT. International collaborations are in place with University of Stockholm (Sweden), Universiteit da Coruna (Spain) as well as the Institut für Mathematik und Informatik (Germany). Prof Carlos Soniera from the University da Coruna spent time in March/ April this year and presented seminars on Duval's theories of semiotic mediation as well as research about the reversal error in algebra. He also ran workshops with the honours students as well.

Community Engagement

The cluster has been very active in community engagement projects, which has ranged from workshops for learners and teachers as well as food projects. Many of the recipients were very grateful for the donations.

Dear Prof Mudaly

Thank you so much for the support , food parcels and taking your time ensuring that the needy students receive help. Edgewood students appreciate food parcels as they last for days. Words may not be enough , we appreciate your help.

Kind regards

Lindi Ngubane

Student counsellor/Psychologist

Letter of appreciation to Prof Mudaly for donations of food for hungry students



Learners from Ukusasalentsha High attending a workshop in geometry at Edgewood

Awards

Many cluster members received awards at the School Award Day and the College of Humanities Awards Day. These were:

Dr Zanele Ndlovu: SoE Excellence in Projects School Award; COH Early career award.

Mr Thokozani Mkhwanazi: SoE Innovative Assessments award

Mr Ben Shongwe: SoE Early Career Award

Prof Vimolan Mudaly: Long service award (15 years); Top 30 researcher in COH

Prof Sarah Bansilal: Top 30 researcher in COH; Top 10 published women in COH