



7.18 Annexure 4A: Report by HC Swart

<div style="text-align: center;">  <p>UNIVERSITY OF KWAZULU-NATAL</p> </div> <p style="text-align: center;">School of Mathematics, Scottsville 10 March 2009.</p> <p style="text-align: center;">REPORT ON DR SEMON MUKWEMBI AS A TEACHER</p> <p>I have known Dr Mukwembi since 2002, when he registered as a doctoral student, with Prof De la Haye as supervisor and myself as co-supervisor. In 2005 he joined our School as a lecturer and we continued our close collaboration in research, while I also acted as a tutor in the courses which he offered on the Westville campus, namely Operations Research and Discrete Mathematics. We frequently discuss problems and often related to teaching and assessment, and I interact with his students every week. I have also heard him lecture on many occasions, first in the weekly meetings where he explained the progress made in his doctoral research to us, his supervisors, then in seminars, national and international conferences and also in some of his lectures to first and second year students. I therefore believe that I can give an accurate assessment of his abilities as a lecturer.</p> <p>Let me state at the outset that, in my forty-seven years in the Mathematics department at the University of Natal and KwaZulu-Natal, I have known no colleague who was a better lecturer than Dr Mukwembi. He is truly outstanding in every aspect of his work.</p> <p>He has the ability to explain intricate or abstract concepts so clearly, it is rare to find good examples, that his lectures are easy to follow. I describe his talks through knowledge of and insight into the subject matter he presents, as he is an excellent discrete mathematician.</p> <p>Dr Mukwembi is an experienced lecturer who has the gift of holding the attention of a class by making his courses interesting and often exciting. In particular his students are eager to solve the problems he sets, and to discuss them in detail with him. This is rare in my experience, as a rule the mathematical abstraction is very low. They are currently so intrigued by the Cryptography section of his course that some of them are bringing to class new ciphers, when communicating with Dr Mukwembi via email, using permutation ciphers. One third year student told me that he was taking the second year Discrete</p>	<p>Mathematics course as an extra subject, although he did not need to, and he said he had been told that it was the most relevant and interesting course offered by our School, and, he assured me, he was not disappointed.</p> <p>In Operations Research, student registration has increased significantly since Dr Mukwembi took over the course, not because it is a "soft option", but because of his gift of presenting Mathematics so that even the weaker students can follow his explanations and see the relevance of the material to real-life situations.</p> <p>He has re-designed and improved both courses. For instance, after discussions with our computer scientists he revised the Graph Theory section of Operations Research. It suits their needs, while still retaining the mathematical rigour of the section. He has fully permeated colleagues in our Department by using to great effect to revise the Discrete Mathematics course which is now more up to date and exposes students to more aspects of the subject.</p> <p>In both of these courses the pass rates have increased significantly, although there has been a drop in standards. Test questions and examinations are well designed to test real understanding. Dr Mukwembi demands solid knowledge, not merely regurgitation of memorised work. These courses enough of the tests written by his students to know how well he designs his questions.</p> <p>Dr Mukwembi deals well with large classes. Perhaps it is his friendly attitude that creates an atmosphere in class that stimulates students to try harder and to co-operate. They ask and answer questions, are cooperative, and are treated with kindness and good humour. Making discipline is no problem to him. He has an open-door policy; students know that they can approach him for help and receive a courteous attention.</p> <p>At the start of each course, Dr Mukwembi provides students with a bound set of printed notes containing the material to be covered. He then uses the overhead projector in class, providing more examples and explanations, often offering a different way to solve problems. These overhead sheets are placed on the Net, so are his outside and outside solutions. Hence students concentrate and focus in his classes (instead of merely trying to take notes). He has made good use of the facilities offered by the university and is most skilful at providing material needed by his students.</p> <p>Dr Mukwembi is an outstandingly good lecturer or excellent mathematician who communicates well and teaches imaginatively. I have no hesitation in recommending that he be promoted to the rank of Senior Lecturer at the University of KwaZulu-Natal.</p> <p style="text-align: right;">  Henda C. Swart Professor Emeritus </p>
---	---