

RICHARDS BAY MINERALS' CAREER-CENTRED, TECHNICAL EDUCATION PROGRAMME

RBM has undertaken a number of initiatives over the past decade to help improve the quality of career-centred, technical education in greater Richards Bay.

Establishing technical high schools

The company's biggest investment in technical education was the construction of Tisand Technical High School in the neighbouring township of Esikhawini in 1988 at a cost of R8,2 million.

The school has fully-equipped workshops for electronics, metal work, motor mechanics and electrical training. It also has technical drawing rooms, chemistry and physics laboratories, a library complete with video section, a state-of-the-art computer centre and a fully-equipped indoor sports centre. The 600 pupils study four core academic subjects and a set number of subjects with either a commercial, scientific or technical orientation, according to their aptitude.



A class in progress at Tisand Technical High School.

Tisand is recognised as a centre of excellence and a role model for other schools in the region, producing consistently superior results in technical and commercial fields, as well as in maritime studies. The 2000 school-leavers achieved a 100% pass rate and 65 distinctions, 11 of which were for mathematics. Graduates leave the school with a good grounding in maths, science and other career-centred skills, suitably qualified both for further study and for entry into the local workforce.

RBM is planning to establish a second technical high school in the rural area of Mbonambi at Makhayideni High School which was built by the company in phases for 1000 learners.

Funding tertiary institutions

RBM is the major funder of Richtek College for Vocational Education in Richards Bay. The company's most recent donation amounted to R1,5 million which enabled the college to double its classroom capacity. This has improved the prospects for Tisand matriculants and other Zululand school leavers to further their technical education without leaving the area, and paved the way for them to make a contribution to local industry.

The University of Zululand is an institution which has benefited from RBM's commitment to technical education for many years. RBM has consistently supported computerised education there since it established the R1 million PLATO computerised learning centre in 1987 which provided maths, science and language tuition for students. The focus has now moved towards

being a general facility for both staff and students, with RBM donating a further R300 000 to transform the computer centre into a 100-terminal multi-purpose facility catering for all the needs of the university.

Primary science project

Thousands of primary school learners in rural Mbonambi are learning to love science as a result of a programme initiated by RBM in 2000 which trains science teachers to plan fun, practical lessons with as much involvement from the learners as possible. It was introduced because many teachers view science as difficult and many learners fear the subject. The primary science programme helps them overcome these concerns and enjoy the subject.

The project involves 32 teachers in eight Mbonambi schools and benefits more than 2 800 learners from Grades 4 to 7 every year. It is run by entrepreneur and teacher, Ruth Vilakazi of Practical Primary Science, who organises regular workshops for the science teachers, then follows up on the application of what they have learned by mentoring them in the classroom.

For example, Ms Vilakazi workshops a concept like the weather with a group of teachers and discusses with them how it could be taught using practical, learner-centred methods. The teachers can then decide that the learners should build an instrument to show wind direction, allowing them to choose the model they wish to make, for example a weather cock, a wind vane or a wind sock. The students are also asked to bring the materials to make the objects from home so they are totally involved from the start. RBM has also sponsored a science kit for each school.

Science-in-Industry programme

An initiative which has gained momentum over the years is the annual science-in-industry project which was originally developed by the University of Zululand's Derek Fish and RBM's John Crossland and Richard O'Brien.

Every year a group of 30 teachers from disadvantaged Zululand schools tours several of the large industries in Richards Bay during the July holidays to see first-hand how scientific processes are applied in each industry. This improves their understanding of the concepts, and gives them a better idea of what industry requires, so they can offer pupils a more practical, career-centred education.

Among the sights viewed by the teachers are the electrolysis cells at Billiton Aluminium, the sulphur-burning process at Indian Ocean Fertilizer and mineral separation at RBM.



Without the basics in physics, chemistry and mathematics, operating the high-tech robotlab at RBM is virtually impossible. Philani Dube of RBM (seated) explains how it operates to science teachers Musawenkosi Ndwandwe from Jozini, Njabulo Gumede of Mtubatuba, and Bongokuphiwe Khumalo of Hluhluwe during the annual science-in-industry week

English language programme

RBM has been running an English language programme in nine Mbonambi primary schools since 1996 in the belief that good communication skills are crucial to career development. Thirty-five teachers are currently being trained in the classroom and at regular workshops incorporating OBE (Outcomes Based Education) principles for the benefit of 3120 learners.