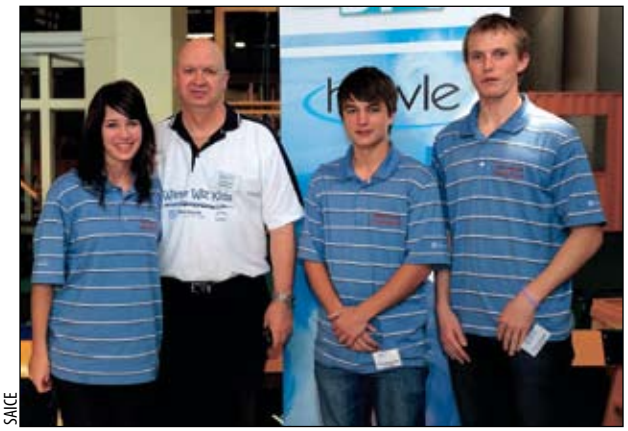
WATER Kidz


SAICE

CT School Sets New Record in Water Competition

The team from Cape Town's Brackenfell High School set a new record at the 2008 South African Institution of Civil Engineering (SAICE)-DFC Water 'Centenary Schools Water Competition' held at the Sci-Bono Discovery Centre in Newtown, towards the end of last year.

The competition, which was designed by students from the University of Johannesburg and launched in 2003 as part of the centenary celebrations of SAICE and Rand Water, boasted a new main sponsor this year, namely valve firm DFC Water. Teams are tasked to design a model water distribution network to distribute three litres of water equally between three points on a grid using two different diameter pipes and connection pieces. They are then judged on how well they execute the task – working on a penalty points system. Teams are allowed three tries within an hour.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Brian Holford, MD of DFC Water, official sponsor, with the winning team from Brackenfell High School.

The Brackenfell team nabbed first place with only 30 penalty points, the best result since the start of the competition. The team from Lofentse Girls High School in Soweto won second place with 260 points followed by the Cape Academy of Maths, Science and Technology with 280 penalty points. The prize-money for the winning teams, their schools and teachers amounted to R23 000.

Regional competitions were held throughout the year. Winners of the regional competitions came to Johannesburg from as far afield as Bloemfontein, Cape Town, Richards Bay and Upington to battle the local winners for top honours. For many learners this was the first time outside their home towns. The competition exposes learners to the practical application of processes that influences their daily lives, which is how water gets to their homes. They are made aware of the intricacies involved in the design of water distribution networks and the actual water delivery to households.

As part of the competition the water cycle is explained to the learners. Issues such as why we have to pay for water, explaining the building of dams, distribution of water through water boards to municipalities and then to users, as well as the conservation of our water resources are discussed.

"The competition creates awareness regarding the issues surrounding water in South Africa. It spreads the message that water is a precious commodity, which should be conserved, recycled and re-used," said SAICE in a statement. "Existing infrastructure should be properly maintained while new infrastructure should be created to provide potable water to those without access to water services."

According to SAICE, this competition strengthens government's initiatives aimed at encouraging learners to take mathematics and science at school and follow a career as a science

or civil engineering professional, a skill that is currently sorely lacking in South Africa.

For many learners it is an experience they will never forget as demonstrated by this SMS received by Makume Mamooka, a Grade 12 learner from Lofentse Girls High School: "I just really want to thank you. The experience I had is priceless and I feel very honoured to have been part of the competition." Makume shared her intention of following a career in electrical engineering. Another student from a previously disadvantaged background is currently studying civil engineering at the University of Cape Town as a direct result of taking part in the competition the previous year.

For more information on the competition contact Marie Ashpole from SAICE at Tel: (011) 805-5947; Fax: (011) 805-5971; or E-mail: mashpole@saice.org.za

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Above: *The Lofentse Girls High School team from Soweto came second in the competition. Left to right is Makume Mamooka, Erccah Maja and Siphesihle Ngwendu.*

Right: *Luyanda Maome from SABC 1 interviewing the CBC Bloemfontein team.*

WHY IS CIVIL ENGINEERING IMPORTANT?

Civil Engineering is the practice of developing, improving and maintaining the built and natural environment so that people can live and work efficiently. Civil engineers design, plan and supervise the construction of structures such as water supply systems (including dams, pipelines and treatment plants), transportation systems (roads, railways, bridges, airports and harbours) and buildings (sport stadia, office blocks, shopping centres and convention centres). The field requires people who are mathematically inclined, can make decisions, delegate, control assignments, think logically and work systematically. If you are interested in becoming a civil engineer it is very important that you take mathematics and science at school.

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All the finalists of the Centenary Schools Water Competition with their educators. Finalists were flown in from across the country to take part in the competition.

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