



Our national team

# Annual report Stellenbosch region 2011



Proudly Stellenbosch !- Khumbulani Ntshidi and Abongile Hlaleleni won Eskom's Best Development Prize at the regional and national competitions

## **Introduction**

2011 was our 12<sup>th</sup> year of existence and as far as Expo is concerned it was to a large extent business as usual. The majority of projects that were entered at the regional competition upheld a high standard and the voluntary corps of regional judges worked tirelessly to identify projects for medals and special prizes.

The year was different in the sense that the national Exposition was held at the Birchwood Centre in Boksburg and that all participants were accommodated on site.

## **Sponsorship**

It is always impossible to offer an event without the necessary financial support, and the regional competition was no exception. The donors and funders that were involved deserve our heartfelt thanks. They were the Albert Wessels Trust, the Het Jan Marais National Fund, Exxaro, Eskom via the Expo national office and Eskom in the Western Cape.

At Stellenbosch University the faculties of AgriSciences, Arts and Social Sciences, Education, Engineering, Health Sciences and Sciences contributed to Expo by providing cash prizes for Expo category winners. The Centre for Invasive Biology, the South African Association for Food Science and Technology, and South Africa's National Energy Research Institute also contributed.

## **Workshops**

Combined teacher–learner workshops were held on four Saturdays. In total these sessions were attended by 19 educators and 255 learners.

All 20 projects chosen to represent Stellenbosch region at the national competition were visited to offer advice for expansion of the research and a few refining guidelines to the learners.

## **Regional Expo**

On 25 and 26 August 2011 343 participants from 30 schools exhibited 224 projects at Paul Roos Gymnasium in Stellenbosch. 105 were individual projects whereas 119 were group projects.

As the whole Stellenbosch region is a rural/semi-rural area, there were no urban schools that participated. 18 generically black rural schools, 10 peri-urban schools and 2 peri-urban black schools participated. Two peri-urban schools and 1 peri-urban black school participated for the first time.

As usual in the Stellenbosch region the girls were in the majority – 63.3% of the participants were female learners whereas 36.7% were males.

93 Judges judged the projects and after a thorough assessment process 22 projects were rewarded with gold medals, 49 with silver and 66 with bronze medals. 32 special prizes were also awarded to deserving projects.

Nicky Gericke from Wittedrift High School received the Eskom prize for the best project by a girl participant. She investigated if having a particular and strong mind-set can relieve the symptoms of fibromyalgia, as compared with medication.

Khumbulani Ntshidi and Abongile Hlaleleni from Kayamandi High School was Eskom's best development project winner. They researched the link between the life span of various batteries and its costs.

Eskom's award for the best alternative energy project went to Rachel Weber from Bridge House School. She compared the amount of biogas produced from cattle dung with that of household waste as a future energy source.

Riki van Niekerk of Rhenish Girls High School was Eskom's best energy efficiency project winner. Her project was on the biomass kettle as a cheap sustainable method with a small carbon footprint.

Like in the past it was a pity that we had a limited quota and that so many good projects had to be left home.

## National Finals

Twenty projects from 13 schools were selected to represent the region at the national competition on 6 to 8 October 2011. 16 projects were completed by individuals and 4 were done in pairs.

Before departing for OR Tambo Airport and the national competition, the participants were taken on an educational tour. IThemba laboratories near Stellenbosch were first on the list. Ithemba is a working facility used for accelerator based research, radiotherapy, radionuclide production, etc. Our next stop was the Iziko museum where a guided tour through the museum and a visit to the planetarium awaited us. It was then time to leave for the airport. Most of the finalists were very excited (and a bit nervous) as this was their first time to fly!

The Birchwood Centre was a good venue in the sense that all the facilities were close together. This worked well in the sense that it was a safe environment in which learners could move freely and were relative independently. The exhibition space itself had limited space to move between projects, with too narrow isles and too many chairs.

For the first time a Teacher Academy was offered. The majority of people that attended the session experienced it positively as having more pros than cons, and appreciated the information dispersed, especially on ethical issues.

Expo national finals being held over three days created challenges. The first was the very short notice given for the change in duration from two to three days – when we received this notice, our plain tickets were already booked and the pre-national educational tour arranged. At the national competition itself most learners sat bored and idle for long periods of time waiting for judges or members of the public to possibly come by.

Like in the past each project was only judged twice and like in the past this was a weakness and limitation in the assessment process – the heart of Expo!

Detail of the national participants is as follows:

Name	Surname	Gr	School	Project title	Award/s
Andries	Smit	10	Vanrhyns Dorp HS	Kruisskakel – oplossing vir balgewrig ongelukke	Gold medal Category winner Kelvin special prize
Simonne	van Eeden	12	Hoër Meisieskool Bloemhof	Die plant van koring in die Overberg lewer beter opbrengste as die saai van koring	Gold medal Category winner

Ananja	van der Westhuizen	10	Rhenish GHS	Don't drop another drop	Gold medal Through to 2 <sup>nd</sup> round for international participation
Khumbulani Abongile	Ntshidi Hlaleleni	11 11	Kayamandi HS	Expensiveness determines quality	Gold medal Eskom's best development project
Timothy	Juries	11	Atlantis SS	CO <sub>2</sub> caught in the act.	Gold medal
Zoë	Snyman	10	Rhenish GHS	BA + NA <sup>2</sup> = BANANA	Gold medal
Willem	Walters	9	Graafwater HS	<i>Muscidifurax raptor</i> maai onder huisvlieg	Gold medal
Madrie	Nesenberend	11	Bredasdorp HS	Die lewe-gewer	Gold medal
Muriel Anthea	Phillips Boks	10	Diazville HS	Kan urine die ding doen?	Silver medal UP Botany Dep. award
Nikki	Gericke	11	Wittedrift HS	Can your mind cure chronic pain?	Silver medal Kelvin special prize
Gabby	Manuel	9	Vredenburg HS	"Vrek koud" (Promession)	Silver medal
Danielle	Mugal	7	Saldanha PS	Rooigety en mossels	Silver medal
Caleigh	Snyman	10	Rhenish GHS	Algal bloom – green pest	Silver medal
André	Lewis	10	Stellenbosch HS	Magnetiese levitasie en skokbrekers	Silver medal
Axola	Dlephu	7	Saldanha PS	What type of materials block out sound?	Silver medal
Hazeli	Rabe	9	Vredenburg HS	Kompos kos mos niks	Silver medal
Desren	Jacobs	9	Atlantis SS	TXT-graph	Bronze medal
Tiana	Schultz	12	Bloemhof GHS	Neem jou medikasie 3 keer per dag	Bronze medal
André Albert	de Jong de Vries	11 11	Bellville HS	Suiker soet –, 'n vuurpyl se moed	
Jamie Dimitra	Moses Appollis	11	Diazville HS	Marine sanitation for toilet complication	

## Marketing

CD's to invite schools to participate at the regional competition were sent out.

The Expo guide books and resource packs supplied by Head office were used and distributed at training workshops.

Big banners with details were put up in Stellenbosch to invite visitors to the regional competition.

Local newspapers in the various districts of the Stellenbosch region published dates of the regional expo and prompted learners and teachers to become involved. After the regional and national competitions pictures of achievers were placed again.

Magna Carta put up banners at the venue where the regional competition was held. They also conducted and recorded some interviews at the regional competition.

## International participation

Henco Botha represented South Africa at the ESI 2011 in Bratislava, Slovakia on 18th – 23th July 2011. It was an enriching, life changing experience for him and he appreciated and enjoyed it tremendously!

At Expo 2011 Ananja van der Westhuizen was selected and reached the second round of possible international participation.

## General

My sincere thanks go to Priscilla and Rancia for everything that they have done for Expo in 2011. Their care and support made a big difference at regional and national level!



9 December 2011

Regional Science Fair director, Stellenbosch



IThemba labs



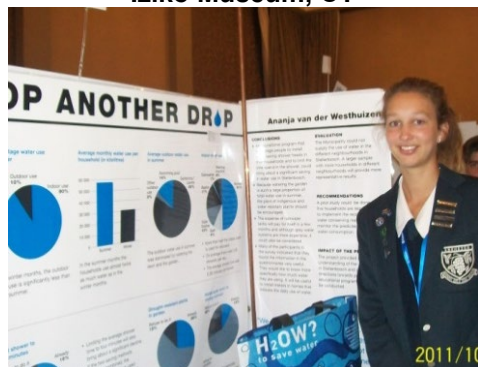
IThemba labs



Iziko Museum, CT



Flying for the first time!



Ananja vd Westhuizen – through to 2<sup>nd</sup> round for international participation



Andries Smit who won three awards