

ESKOM EXPO FOR YOUNG SCIENTISTS

ANNUAL REPORT 2017

STELLENBOSCH REGION

EXECUTIVE SUMMARY

The importance of Science education and the role that Eskom Expo for Young Scientists can play are acknowledged and appreciated more and more. Expo is recognised as having a significant role to play within schools, being integrated and aligned with the CAPS research assignments for different subjects and grades, or being run as a Science club at various schools.

The 18th year of Expo for Young Scientists in the Stellenbosch region has in general been a successful year. Twenty-two schools diligently selected 299 outstanding learners to exhibit their projects at the regional competition, while 88 knowledgeable and dedicated judges spend time and energy to assess the scientists-to-be's research work.

Our ISF participants put in a lot of dedicated effort and did us proud by being awarded with two gold, three silver and six bronze medals, as well as two special prizes and an international participation.

SPONSORSHIP AND FINANCIALS

Donors who share Expo's passion for science and the youth helped to make a regional expo of a high standard and fruitful participation at ISF possible. Our region's heartfelt thanks goes to the following organisations and institutions who contributed in various ways:

Organization	Purpose of funding
Eskom	Regional subsidy, stationery, pins and tablecloths
Western Cape Education Department (WCED)	Particular regional and ISF expenses
Electromagnetic Software and Systems (EMSS)	Supporting workshops for teachers and learners
Stellenbosch University	Special prizes for the regional competition
South African Weather Service	Special prizes for the regional competition
Department of Water and Sanitation	Special prizes for the regional competition
Eskom (Transmission)	Back packs for ISF participants
Bloemhof Hoër Meisieskool	Regional expo venue
Stellenbosch University Centre for Pedagogy (SUNCEP)	Human resources Infrastructure
Het Jan Marais National Fund	Human resources

WORKSHOPS

Focus group	Number	Attendees
Teachers	3	13
Learners	4	197
Judges	1	35
Mentors	1	7
Upgrades	1 collective plus more than one additional personal follow-up with every learner via phone and email	1 + >17

REGIONAL EXPO STATS

DESCRIPTION	NUMBER	COMMENTS
Projects	245	More single projects than previously
Participants	299	
Females	186	62.2% of participants
Males	113	
Primary participants	7	
Secondary participants	297	
TOTAL number of schools	22	Every year new schools join but the challenge is to keep them interested
Quintile 1	3	Getting schools in previously disadvantaged areas on board remains the biggest challenge.
Quintile 2	1	
Quintile 3	1	
Quintile 4	0	
Quintile 5	15	
Private	2	
TOTAL number of district + school expos	3 + 11	District expo's were held in Paarl, Kraaifontein and Strand areas.
Number of schools	6 + 11	
Number of projects	1209	
Number of learners	1333	

HIGHLIGHTS

- The goodwill and financial help of the Western Cape Education Department with certain aspects of regional and ISF participation.
- A regional expo of high standard.
- A number of younger judges judged at the regional competition.
- Having more PDI learners participating at the regional competition.
- Being able to meet the ISF criteria regarding PDI participation.
- Stellenbosch University afforded bursaries of R50 000 each to 15 students at ISF.

LOWLIGHTS

- Finding suitable, persevering mentors to work in schools. Some mentors dropped out along the way due to a lack of cooperation from the school.
- Reluctance of PDI schools to get involved.
- A disregard of some schools for deadlines.
- Poor attendance of district workshops.

INTERNATIONAL SCIENCE FAIR (ISF)

Before departing for ISF the learners were taken on an educational tour to the Cape Town Heart Museum and the Iziko museum. More than one learner commented that it was their first time ever to be in a museum!

Fifteen projects from 14 schools were selected to attend ISF. Every single participant did us proud with impeccable conduct and by presenting an upgraded, interesting, well-polished projects with no ethical problems.

The results are summarized as follows:

Projects at ISF	Number of learners	Gold medals	Silver medals	Bronze medals	Highly commended	Number of category winners	Number of special prizes	International participation
15	17	2	3	6	3	2	2	2

MARKETING/MEDIA

- 347 schools received regular emails with Expo news, workshop opportunities and relevant, just-in-time information.
- The above emails were also sent to the Life, Physical and Natural Sciences Curriculum Advisors of the WCED to keep them informed and so that they can support and motivate the teachers they visit.
- Business Report online covered the regional expo story.
- Stellenbosch University's website published an article on the bursaries that 15 learners received at ISF.
- Facebook, Twitter and YouTube reported on different aspects of expo in the Stellenbosch region.

INTERNATIONAL PARTICIPATION

Initially two learners were selected to attend interviews for possible international participation. The learner who were successful was Albert Ottesen:

Name of learner	Category	Project title	More info about project
Albert Ottesen	Innovation and Technology	Mixed reality	The aim of the project was to illustrate the concept of mixed reality with a working prototype. Focus was on how 3D scanning works, how gravity can be simulated and how the human brain can be tricked into thinking that you observe something while in real life it is not there.

CONCLUSION

In 2017 Expo for Young Scientists has once again been built on the efforts of many people. It is therefore important to thank and acknowledge everyone's contribution – learners who really put in a lot of effort, teachers and parents who supported them and the judges who diligently judged the projects. The smooth running of the regional event was ensured by a team of committed committee members who worked with devotion and focus. Staff members at the national office are also thanked for their hard work and commitment to ensure that the ISF event was one that we were proud to be part of! A big thank you goes to the sponsors, big and small, for their contributions – without your support we could not have done it! A special word of thanks go to SUNCEP at Stellenbosch University under which auspices Expo takes place every year.

The focus for 2018 will be get more schools on board, to increase PDI participation at regional level, to increase our performance at ISF, and to remember between all of this, that Science should be fun!

Erika Hoffman
RSFD Stellenbosch
12 January 2018

PHOTOS



Hands-on learner workshop



Stellenbosch regional exposition



At the Heart museum in Cape Town



Fossil tour at Iziko museum, Cape Town



Stellenbosch region's ISF 2017
ambassadors



Albert Ottesen - chosen for international
participation