

Sowing the seeds, bracing for quakes

Youngsters' inventions prove they're ready for the big challenges

BY THEMBSILE MAKGALEMELE

Talented pupils from all over the world this week showcased their inventions at the 23rd annual Eskom Expo for Young Scientists, held at the University of Pretoria's Sports Centre.

The expo is an Eskom initiative whose mission is to contribute to the development of critical skills required to meet the demands of the 21st century.

More than 700 scholars selected from 27 regional expos competed in the national finals this year, with more than 450 inventions chosen as the best science and technology projects.

The *Saturday Star* spoke to three youngsters from Johannesburg who walked away with gold medals, and revealed the great potential this country has.

The invention of Claire Reid (16), of Rosebank Mercy Convent, was inspired by her concern about rising food prices. Reid wanted to help the country produce more vegetables at a lower price.

Reid designed a Reel Gardening concept to help subsistence farmers produce crops from a pre-fertilised seed strip.

The strip is made of paper which is folded and pasted together. Inside the paper is a small amount of fertiliser, seeds and nu-

trients.

She has already planted various vegetables using both the strip and conventional gardening methods.

"I saw the difference in plants where I had used the strip. They grew much faster than those planted in a conventional way."

Explaining how the strip works, Reid said: "It is easy to use.



"All one needs is a strip of any kind of plant they wish to grow, dig a furrow and plant the strip. It does not even take a minute."

"When I conceptualised this project, I wanted to help solve the main problem in the country - Aids and poverty.

"But I am not about to come up with an Aids vaccine," she said.

Two boys from St Stithian's College, Duncan McKeen and Kevin Ross proved at the expo that earthquakes do not kill, but rather the collapsing buildings that do the

killing and maiming.

McKeen and Ross have come up with Brace Isolation - steel fused in concrete for the construction of buildings.

"We now know that if a person uses Brace Isolation, it allows that building to move freely on the ground, and this causes minimal effects on the building if there is an earthquake.

"We also proved that buildings with moment-resistant frames help them to stay stable," said Ross.

The youngsters were among numerous international entries from various countries including Hong Kong, Zambia, Swaziland, Namibia, Reunion and Ghana.

Some will represent South Africa at exhibitions in Moscow, Taiwan, Sweden, Hong Kong and Cleveland.

Joe Matsau, Eskom's corporate division MD, said:

"Education, specifically in the fields of science and technology, is of paramount importance to attain our vision for Africa. I would like to encourage you to continue to explore the wonders of science, maths and technology as these truly are the tools that can literally change the world.

"So open your minds, believe in the impossible and maybe one of you will be the first person to invent a cure for cancer or to walk on Mars."



REEL'S THE THING:
 Claire Reid (16) of
 Rosebank Mercy
 Convent
 developed a
 paper strip
 containing seeds
 and fertiliser to
 make planting
 easy, quick and
 efficient
Photograph:
 ANTON HAMMERL

f became
 d by acci
 reams dic
 he way it
 jock from
 a another
 ut to join
 to put his
 with some
 ments, is
 ard to be-
 own age.
 out being
 show.
 from 702
 portunity
 of those
 nd right,"
 ilm of 702
 r the past
 the 7pm-
 is of "go-
 to cause
 ne. I used
 ldays and
 e. The sta-
 edge and
 ng able to
 to ignore
 um. "I re