

SCIENCE SPAZA SPACE



Knowledge is Neah!

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Water is the essence of life

Nelani Mbokazi
edited by Matthew Del Grande

National Water Week, 14-22 March, and World Water Day, 22 March, are arguably the most important dates not only in South Africa, but globally. These days are dedicated to increasing awareness of the importance of water. Water is essential for life on our planet. There isn't a life form on Earth that is not dependent on water at some level. It acts as the medium in which different organic compounds mix with one another.



The fact that about 65% of our bodies are made of water, and that it is involved in all body functions, signifies the importance of this substance! Besides water being essential for our health and well-being, we also use water for various functions that improve life such as cooking, growing crops, cleaning, transporting waste and washing ourselves! About 70% of our planet is covered with water, where it exists in three phases: liquid, solid and gas. Only about

2.5% of that water is fresh and usable, the rest is in oceans and is too salty to use for most of the life-sustaining purposes that we need fresh water for. Furthermore, of that 2.5% of fresh water, only 1% is accessible to us in its liquid form. The rest is trapped as ice in glaciers and in the ice caps around the North and South Poles.

But today, this precious resource is under a lot of stress. Water is being polluted by toxins and other impurities. Freshwater

sources are now drying up at an increasing rate. Population growth, climatic change and heavy industrialisation are also putting a lot of pressure on the availability of water. Scientist are suggesting that the rate at which we use water is higher than the rate at which the supply of fresh water is replenished! This has great implications for millions of people, especially those who are less privileged. A report from the World Health Organisation of the United Nations revealed that every day around the world thousands of young children die from diseases associated with a shortage of clean water!

So it is up to us to take full responsibility for saving and conserving water. By doing so we will not only serve those who are less privileged, but we will contribute to a more sustainable environment and help to ensure that this precious resource will still be accessible to future generations.

Science Spaza Hip Hop Health Initiative

Nelani Mbokazi, edited by Matthew Del Grande

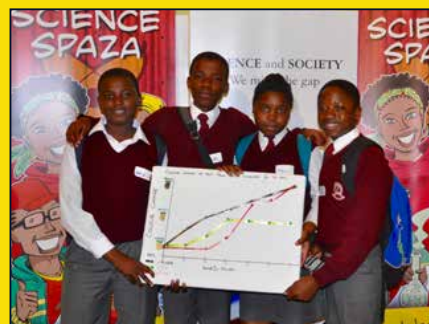
In 2015, three Science Spaza Clubs from KwaZulu-Natal took part in a pilot research project. This year the project will be entering another phase and will integrate all of the Science Spaza clubs around the country.

The Science Spaza Hip Hop Health Research Project seeks to empower young people to take the initiative and help solve critical water and health issues affecting their communities! The project is funded by the Wellcome Trust foundation and it is focused at increasing awareness about water and water related illnesses, so that we can find ways of solving these problems.

The clubs who participated in the pilot project were from three schools, namely Sobantu High School, Mehlokazulu Senior Secondary and Emzawweni High School. They were the first schools in South Africa

ever to have participated. Learners applied approved fundamental principles of conducting research in science. These include observing the problem, learning more about it and finding ways of solving it. A fun twist was added to the programme: The learners used Hip Hop to communicate their findings to the local community and other interested people.

Science and Hip Hop have a lot in common. As you go through this newspaper you will learn more about the similarities between the two. The rap songs which were created by learners, with the purpose of educating



Mehlokazulu Senior Secondary School learners presenting their findings from their research

their communities about water and water related illness, were professionally recorded on to CD! These will be distributed to all registered Science Spaza clubs across the country. The actual research which was conducted by learners, including the Hip Hop part, will also be broadcast on SABC 2 Hectic Nine-9 during the National Water Week.