

Scientists and Science Clubs

Our context as a country

Our country generally suffers from low levels of scientific literacy, increasingly declining numbers of learners doing mathematics and science on a higher grade and hence very low numbers of learners taking up science, engineering and technology studies at tertiary education level. There is also a great need to increase the number of quality, inspired and qualified science educators. Those educators already in service are faced with larger classes, teaching overload, adapting to the curriculum change, learner discipline problems and extra mural activities. They have limited opportunities to focus on deepening and broadening the science they teach.

Our strengths

The existence of science centers, science museums, observatories, planetaria and aquaria serve to ignite the spark of the beauty, utility and power of science. However this is left to the individual learners, educators and parents to transform the initial excitement to a solid interest in science. Science clubs can alleviate the challenges we face!

Science clubs

Science Clubs can provide opportunities for learners to explore science and can enhance positive experiences that learners have with science. They can help learners develop problem-solving skills, confidence and communication skills. Science clubs can challenge gifted and talented learners while appealing and motivating the struggling learners. They can also create links between schools and industry, schools and universities and also between schools and research institutes and councils. The science, engineering and technology professional in the various above-mentioned bodies can play a crucial role in supporting the science clubs.

Role of scientists

Scientists can help supporting the clubs in various ways and at various levels depending on their preferred way. The following have proved successful in the past

- **Speakers:** Scientists can provide talk to clubs drawing from their own studies or a topic selected by a club, which falls within the field of study of the scientist.
- **Demonstrations:** Demonstrations are always exciting and good ones are unforgettable. Scientists can demonstrate certain concepts to the clubs
- **Career info:** Scientists can help provide career guidance to the clubs and this can be done via research institutes as well through faculty offices
- **Debate and Panel Discussion:** Scientists can form part of debates organized by clubs. They can participate as speakers from the floor and as experts after motion against and for have been pronounced

- Science Expo and Investigations: The school curriculum provides opportunities for learners to conduct investigations. Scientists can act as advisers to learners participating in expo and projects. Further, scientist can involve learners in their own research projects
- Science writing and communication: Scientists can write articles for school science clubs' newsletters. Be available to be consulted over queries over telephone or email
- **Evaluation /Advice**: Scientists can help initiate project intended to improve science education at a particular school through science clubs. They can then act as independent evaluators and continuous adviser for the clubs.

The most powerful model currently possible in US and Europe is where a scientist has a small group of learners that he/she works with throughout the year.

We will reach those levels!!!!

If you are interested in supporting science clubs in your area in any way. Please contact : **Sivuyile Manxoyi**

South African Astronomical Observatory PO BOX 9 Observatory 7935 Tel: 021 447 0025 Fax: 021 447 3639 Cell: 072 738 9133