

Way above standard

Standardisation is an increasingly important discipline in the modern world. A third-year student from the School of Engineering at the University of Pretoria received an award in the 2009 South African Bureau of Standards (SABS) Essay Competition for her thoughts on this intricate topic.

Standardisation in many technical fields is part and parcel of the knowledge that young professionals have to master. The SABS launched the SABS Essay Competition for undergraduate and postgraduate students to promote standardisation as a topic of investigation in tertiary academic institutions.

Ruanne van der Walt, a third-year student in electronic engineering, received a Highly Commended certificate as runner-up of the SABS Essay Competition. The theme of the competition was: *The utilisation of standards towards improving safety*. The winner of the competition, Paco Mendes of the University of the Witwatersrand, received a prize of R15 000 and R5 000 for the academic institution. The two runners-up, Ruanne and Yaacov Steinhauer of the University of Johannesburg, each received a cash prize of R5 000.

According to the judges, Ruanne gave an incisive overview of many of the key topics and issues related to safety and standards.

Ruanne's winning essay indicates how standards can increase safety in the workplace and at home.

According to Ruanne's essay, "Standards are the unsung heroes of South Africa. They fight for the people, preventing people from drowning, electrocution, head injuries and seafood poisoning."

The SABS defines a standard as a published document that lists established specifications and procedures to ensure that a material, product, method or service is fit for its purpose and performs in the manner for which it was designed and developed. The Compact Oxford English Dictionary defines safety



→ Ruanne van der Walt (centre), a third-year student from the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria was awarded the second place for her essay on the utilisation of standards to improve safety. With her are Geraldine Monareng (executive corporate services of the SABS) and Vanida Lennon (standards executive of the SABS).

as the state of being protected from danger, risk or injury. How do standards promote and improve safety?

According to Ruanne, the first idea that comes to mind is that standards prevent a consumer from being electrocuted in his or her pyjamas while making toast and touching the electrical plug by accident. The SABS standard sheet, 164 – 1:1992, plugs and socket outlets for households and similar purposes, ensures that the plugs of appliances do not give people a nasty early-morning shock or a shock at any time, provided the appliance is used correctly. However, appliance standards are not the only standards that exist for the protection of users. Standards exist for everything: from traffic cones to concrete floors, motorcycle helmets, lamp holders, personal floatation aids, air quality, child restraints in motor vehicles, and smoked snoek and prawns.

Manufacturers, designers and service providers can use standards as a resource. They should see standards as a tool with which they can improve their service or product instead of seeing them as a barrier to success.

The SABS website lists the benefits of standards. Standards ensure that people have easier access to and a greater choice of goods and services. They promote improved quality and reliability. Standards lower installation and start-up costs and ensure trust in one's business. Standards can create a competitive advantage by improving

the quality of goods and services. They can also attract new customers.

Why then, asks Ruanne, if we have these great crusaders of public safety and business development, do we so seldom hear from them? How can one expect standards to be used to improve safety if their purpose and benefits are not clearly understood? Ruanne feels that a portion of the school curriculum should be allocated to inform learners of standards and the role of the SABS in this country.

The current National Curriculum Statement (NCS) for the Further Education and Training (FET) phase in schools includes a subject called Business Studies. In this subject, learners learn about various topics related to understanding and running a business. One of these topics involves steps in writing a business plan and how to establish a business.

“Learners will benefit from learning about standards as part of this topic because standards may have a substantial influence on product development and the use of standards can set one business apart from many others,” says Ruanne.

The NCS includes other subjects, such as Design, and Engineering Graphics and Design, where standards may be introduced to learners. “Being in a technology and design field and only now realising how standards can be utilised to improve safety and promote technological advancement, I will be able to use standards to design new systems or to improve existing products and systems.” says Ruanne.

Standards can be used to directly protect the public from danger, risk or potential harm. Business development, together with improving safety, is possible if standards are implemented and used as tools for advancement. However, none of the numerous business and safety advantages of standards can be utilised if standards are not well marketed in awareness campaigns in the near future. 📌

