Views of distance education science students on the social responsibility of scientists

Dürten Röhm, Nthabiseng A Ogude and Marissa Rollnick

Scientific developments such as genetic engineering and the human genome project can have far reaching ethical, social and political implications for human society. The HIV/AIDS controversy in South Africa reveals basic, and as yet unanswered, questions pertaining to the role and influence of scientific knowledge in society. The investigations by the Truth and Reconciliation Commission into South Africa’s Chemical and Biological Warfare Programme of the 1980's and early 1990's have cast doubt on the integrity of scientists and concern on how society views its scientists.

Against this background a study was undertaken to monitor the views of distance education science students on the social responsibility of scientists. A Views-on-Science-Technology-Society instrument, based on interviews, open format and fixed format questionnaires was designed with the purpose of establishing attitude profiles of students towards a variety of aspects of the social responsibility of scientists.

Research results are discussed in terms of topics such as the communication between scientists and the public, education, decision making on the implementation of scientific discoveries, objectives and consequences of scientific activity, whistle blowing, values and codes of practice, cultural and gender issues.

By virtue of their highly specialized knowledge, the social responsibility of scientists extends beyond that of other citizens. Consequently, the teaching of scientific theory cannot be separated from addressing social and ethical problems. This study provides an insight into the views and attitudes of South Africa’s future scientists on social aspects of science, which could be used in the design of teaching materials.