

THE SOUTH AFRICAN ENVIRONMENTAL OBSERVATION
NETWORK SCIENCE EDUCATION CAMPS AND SCIENCE
CAREER CHOICE: A 4-YEAR CASE STUDY AMONG GRADE 11
PHALABORWA LEARNERS

Ready Joe Sibiya

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ABSTRACT

Up to a short time ago in South Africa the focus of scientific education was mostly on the white minority as its area of relevance for future careers. On the other hand the black majority was excluded as a matter of policy in terms of financing and management of science during the apartheid era. As a result, many black students were not exposed to or aware of careers in science. As of consequence, this study is undertaken to investigate the effect of the South African Environmental Observation Network (SAEON) science education camps initiative aimed at encouraging science careers selection among the Grade 11 Phalaborwa learners. This study follows the Social Learning Theory of Career Selection (Krumboltz, 1976). The theory suggests that a choice of career is a process influenced by combination of a number of factors such as social and economic forces, learning experiences. This study lends itself to a mixed methods approach of data collection. For this reason, both quantitative and qualitative methods have been employed. Four focus questions are addressed:

1. What are the career choices of Grade 11 learners before participating in the SAEON science camp?
2. What careers do the former SAEON camp participants follow at tertiary institutions?
3. Do other factors influence SAEON science camp participants to follow science careers or not?
4. How do the SAEON science camps stimulate camp participants' scientific knowledge, skills and values?

Likert Scale-style of questionnaires was used to gather data from fifteen participants. Five participants were randomly selected on availability and interest to participate in formal face to face interviews to establish their career paths and to get an informed sense of the effect of the science camps regarding their career choice.

The results of this study revealed that the science camp is a valuable tool and has positively stimulated participants' scientific knowledge, skills and values, sparked love for science and has potential to encourage science career choice. The overall majority of participants; nine (n=9; 60%) of the fifteen (n=15) followed science related careers although not environmental in nature, compared to five (n=5; 40%) who chose other. To that effect combinations of a number of factors such as financial support, good matric results, job opportunities and surrounding environment had a great influence on the career choice and studies the study participants are following or have followed.

DECLARATION

I declare that this dissertation is my own unaided work. It is submitted for the degree of Master of Education in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

Ready Joe Sibiya



_____ day of _____ 2013

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