

A Reflection on the Professional Development Journey of Science Educators

Authors : M. Shaheed Hartley

Abstract : Science and mathematics are regarded as gateway subjects in South Africa as they are the perceived route to careers in science, engineering, technology and mathematics (STEM). One of the biggest challenges that the country faces is the poor achievement of learners in these two learning areas in the external high school exit examination. To compound the problem many national and international benchmark tests paint a bleak picture of the state of science and mathematics in the country. In an attempt to address this challenge, the education department of the Eastern Cape Province invited the Science Learning Centre of the University of the Western Cape to provide training to their science teachers in the form of a structured course conducted on a part-time basis in 2010 and 2011. The course was directed at improving teachers' content knowledge, pedagogical strategies and practical and experimental skills. A total of 41 of the original 50 science teachers completed the course and received their certificates in 2012. As part of their continuous professional development, 31 science teachers enrolled for BEd Hons in science education in 2013 and 28 of them completed the course in 2014. These students graduated in 2015. Of the 28 BEd Hons students who completed the course 23 registered in 2015 for Masters in Science Education and were joined by an additional 3 students. This paper provides a reflection by science educators on the training, supervision and mentorship provided to them as students of science education. The growth and development of students through their own reflection and understanding as well as through the eyes of the lecturers and supervisors that took part in the training provide the evaluation of the professional development process over the past few years. This study attempts to identify the merits, challenges and limitations of this project and the lessons to be learnt on such projects. It also documents some of the useful performance indicators with a view to developing a framework for good practice for such programmes.

Keywords : reflection, science education, professional development, rural schools

Conference Title : ICERI 2016 : International Conference on Education, Research and Innovation

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : August 18-19, 2016