

SCIENCE TEACHERS' TYPOLOGY OF CPD ACTIVITIES: A SOCIO-CONSTRUCTIVIST PERSPECTIVE

Received: 15 June 2013; Accepted: 12 March 2014

ABSTRACT. This study presents a typology of continuing professional development (CPD) activities and provides a discussion related to each. The typology includes 2 main themes, which investigate the various types of activities and the content presented in CPD programmes. The study used qualitative methods (open-ended questionnaires in addition to semi-structured interviews) with Saudi Arabian science teachers. The main theoretical framework for this study centres on the socio-constructivist theory of learning. Discussion of the findings leads to a depiction of what science teachers 'need' to learn and 'how' they want to learn. The aim of this study is to provide a framework for socio-constructivist science teacher professional development based on an attempt to understand how teachers learn effectively in CPD programmes and what science teachers need to learn.

KEY WORDS: continuing professional development (CPD), CPD activities, socio-constructivism, teacher learning

INTRODUCTION

Effective continuing professional development for in-service teachers is essential for creating effective schools, as it may promote the quality of teaching and learning in schools (Kennedy, 2005). After the emergence of the standards movement (AAAS, 1993; NRC, 1996; NCATE, 2001, 2002) and the low achievement of Saudi Arabian students in the 2003 TIMSS, the goals for science teacher education in Saudi Arabia have been reshaped. Teacher professional development is now widely recognised as a national priority in Saudi Arabia (Alshamrani, 2012). Nonetheless, science teachers in Saudi Arabia seem to be faced with continuing professional development (CPD) programmes that present content that does not reflect professional or scientific needs (Mansour, Alshamrani, Aldahmash & Alqudah, 2013). There are also cases where the types of activities that CPD providers utilise to deliver the content do not match the preferred type of learning by the science teachers in attendance (Mansour, EL-Deghaidy, Alshamrani, Aldahmash, 2014).

Such a mismatch between ready-made programmes and those that are based on needs, in addition to transmissive activities in contrast with constructivist activities, could be seen as major factors in ineffective CPD programmes (Dillon, Osborne, Fairbrother & Kurina, 2000). Therefore, the aim of this study