

Purpose and Structure of Tests in Secondary School Chemistry: The Teachers' Response.

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Abstract

Much time and resources are invested in frequent testing of students at secondary school level. This is done with an understanding that testing brings improved learning and therefore better performance. This perceived link between testing and performance seems to be the driving force in the testing process. This is much so in the subjects which have traditionally been perceived as difficult and these include mathematics and sciences. This paper discusses some aspects of testing in secondary schools and particularly focuses on one of the science subject which is chemistry. The impetus to focus on chemistry is drawn from consistence posting of poor results at the end of the course in the national examinations. It was envisaged that some views from the teachers would reveal possible weaknesses and strengths that could be shared with other partners with the aim of bringing higher gains in the performance of chemistry and possibly other science subjects. The data discussed in this paper was generated from a survey study which was conducted among a cluster of teachers of secondary schools near Nairobi in Kenya. A total of thirty four (34) teachers from fifteen (15) schools were involved in the study which used mainly questionnaires, interviews and document analysis to collect data. The results indicate that teachers of chemistry take testing as an important process that can bring improvement in learning. Teachers also recognize that only quality tests and proper administration can bring desired effects. Frequency in testing stood out as a feature which emphasized the notion that 'frequency in testing is proportional to improvement in learning'. Theory test papers were dominant and tested a range of content in the science domains. Chemistry teachers also recognized that skills are important and these were accommodated by practical tests especially in higher classes. Results from tests can be very important to a chemistry teacher or any other teacher in providing 'feedback for improved instruction'. Results can also be used to compare with other subjects in the school, local schools in the same subjects and can also be used for prediction in the National Examinations. Despite government's emphasis on improved performance in science, it has no firm guiding policy on test management in schools.

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