

ABSTRACT

An Investigation into the Philosophy of Science Held by a Sample of Science Teachers in Secondary Schools in Port of Spain and Environs

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The effectiveness of a secondary school science teacher in providing her students with an authentic view of science rests on an explicit philosophy of science and an awareness of the controversies inherent in science.

In this thesis, methodology based on qualitative and quantitative frameworks was utilised to ascertain the philosophy of science held by secondary school science teachers and its effect on their classroom practice.

The analysis of the findings suggest that teachers support a dubious form of empiricism and are largely uncertain of current issues in the philosophy of science. They are inconsistent in their beliefs about scientific, aims, change and methodology. Their reasons for teaching science are not consistent with their beliefs about science but are centered on assisting as many students as possible to pass the relevant examinations.

There is need to address science education in a wide context in an effort to reverse the inconsistency and general uncertainty evident in the philosophy of science held by teachers, action is required in syllabus revision, undergraduate science education and professional development programmes.

Keywords: Philosophy of Science, Secondary School Science Teaching,
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