

**BOTSWANA STUDENT TEACHERS' VIEWS ON THE
NATURE OF SCIENCE AND SCIENTIFIC METHOD:
A CRITICAL REFLECTION**

by

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DECLARATION

I, Aparna Kadiyala, declare that **BOTSWANA STUDENT TEACHERS' VIEWS ON THE NATURE OF SCIENCE AND THE SCIENTIFIC METHOD: A CRITICAL REFLECTION** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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(MRS A KADIYALA)

ABSTRACT

The assumption of the present study is that teachers should possess an adequate understanding of the nature of science and scientific method and hence this aspect was investigated. The empirical research carried out with Secondary School teacher trainees at Botswana colleges of education showed the following:

Subjects possess an adequate understanding of some aspects of the nature of science and several aspects of the scientific method. They however do not have an adequate understanding on certain aspects of the nature of science. An association was found between the nature of science, type of educational institution attended, years of study and majoring in science. A positive association was found between scientific method and years spent studying. The present study recommended the inclusion of history, philosophy and sociology of science in the curriculum of teacher education.

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Aparna Kadiyala

KEY WORDS

Student teachers, pre-service teachers, pre-service teacher education, nature of science, scientific method, scientific knowledge, scientific observations, scientific theories, scientific laws, scientific models, scientists' work, gender, type of educational institution, years spent in study, science major / minor teaching subject and post –positivist views /non-traditional views.

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