# AN EVALUATION OF ENVIRONMENTAL LITERACY AMONG GRADE 12 LEARNERS IN SCHOOLS IN GA-MOLEPO TOWARDS A MORE COMPLIANT YOUTH

by

### Munhedzi Winnie Mtshiza

Submitted in fulfillment of the requirements for the degree of

**MASTER OF PHILOSOPHY** 

in

**Environmental Law and Management** 

in the

FACULTY OF MANAGEMENT AND LAW (School of Law)

at the

**UNIVERSITY OF LIMPOPO** 

**SUPERVISOR: Prof. T. Scheepers** 

2010

## Declaration

I declare that the mini-dissertation hereby submitted to the University of Limpopo for the degree of Masters of Philosophy in Environmental Law and Management has not been previously submitted by me for a degree at this or any other university; that is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Initials & Surname (Title)	Date
Student Number:	

## **Dedications**

This dissertation is dedicated to my husband Zipho and my son Mpumi, my Dad Solly and Mom Johanna, my late father-in-law Tata, brother Mpho and sister Morongoa and the entire Hlabiwa and Mtshiza family for their support.

#### **ACKNOWLEDGEMENTS**

I am grateful for the opportunity that I was given by the University of Limpopo, and a word of appreciation goes to my Supervisor Prof T. Scheepers who greatly assisted me in the preparation and refinement of the ideas expressed in this study.

To my sister, Salome who helped me in data gathering and analysis, and all my friends who gave me support, I would like to say thank you very much.

To Ga-Molepo High Schools, I am overwhelmed by the support you gave in this project. Thank you very much for being of great assistance to me. To all the principals and geography educators who gave me the opportunity and to all the learners who participated I would like to thank and hope that you continue to support future projects like this one.

I would like to thank the Department of Education, which granted me the opportunity to go and conduct research at schools in Ga-Molepo.

Finally, I appreciate the love of God my creator and His overflowing mercy and blessings upon me.

#### **ABSTRACT**

Environmental Education in schools is one of the vital means through which learners can acquire environmental literacy, which is vital for the protection of the environment. The purpose of this study is to determine the level of environmental literacy among Grade 12 learners based on selected issues namely: Acid rain, soil erosion and global warming. There is a need to encourage active participation in resolving environmental issues. This will in turn ensure compliance with laws of the country.

Environmental Education is the process of recognizing values and clarifying concepts in order to develop skills and attitude necessary to understand and appreciate the interrelatedness or interrelationships among people, their culture and their biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality (IUCN World Conservation Union 1971).

This research was conducted in five schools located in Ga-Molepo area. The Grade 12 geography learners were tested to determine their level on environmental literacy. This knowledge was tested by means of a questionnaire, which contained questions that tested the learners' environmental literacy level. The level of literacy was compared between males and females. Their understandings of legal implications were also tested. Anderson & Arsenault (1990:170-179) states that questionnaires need no introduction. The advantage of questionnaire is that if properly designed, it provides a collection of reliable and reasonably valid data in a simple manner. Yet constracting a good questionnaire is a challenge and requires thorough thought, piloting, revision and reformatting.

85% of learners from all the schools indicated that they are aware of the causes and effects of soil erosion. 42% of learners understand what acid rain is and only 20% of them understand what global warming is. Learners must be educated on environmental issues in relation to environmental protection

and improvement. Legal obligations and accountability under laws as well as the need to comply with law must be part of all environmental education.

Hammond et al (1999:42) explains Coefficient of Variation (CV) as a normalized measure of dispersion of a probability distribution. The Coefficient of Variation was used where Tshebela high school got 33%, which indicated that the learners level of understanding did not indicate variability. In the other 3 schools (Mamokgari, Mamodikeleng and Mmapadi) their level of understanding did not indicate a high level of variation. The last school, Mokwatedi indicated that the learner's level of understanding indicated a high level of variation which shows that their level of understanding is not good.

When coming to what the law requires of them it is clear that only 40% of them understand the legal implications but the rest may harm the environment as they use natural resources for their own benefit such as chopping trees while not considering environmental sustainability and the people around them. It is, therefore, concluded at the end of the research that environmental laws need to be integrated into the learner's knowledge as their opinions on environmental laws shows clearly that they do not have knowledge and understanding of the environmental legal implications.

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#### **ABBREVIATIONS**

ANC African National Congress

APPA Atmospheric Conservation Act

ARCPS Action Research Community Problem

CFCS Chlorofluorocarbons

DEAT Department of Environmental Affairs and Tourism

DOE Department of Education

DWAF Department of Water Affairs and Forestry

ECA Environmental Conservation Act

EE Environmental Educations

EE&A Environmental Education & Awareness

EEASA Environmental Education Association of South Africa

FPA Fire Protection Association

LEMA Limpopo Environmental Management Act

NEMA National Environmental Management Act

NGO Non-Governmental Organizations

NQF National Qualifications Framework

NWA National Water Act

RDP Reconstruction and Development Programme

SADC Southern Africa Development Communities

SCA Soil Conservation Act

SGB School Governing Body

SOE State of the Environment

SOER State of Environment Report

UNEP United Nations Environment Programme

UNESCO United Nations Educational Scientific and Cultural Organization

WESSA Wildlife and Environment Society of South Africa

WSSD World Summit on Sustainable Development

WWF World Wildlife Fund