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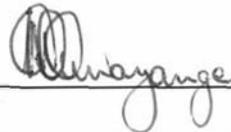
**FACTORS AFFECTING FOURTH FORM  
GIRLS' PARTICIPATION AND  
ACHIEVEMENT IN DESIGN AND  
TECHNOLOGY SUBJECTS  
IN SELECTED SECONDARY SCHOOLS  
OF ZIMBABWE: A CASE STUDY  
EXPLORATION**

A thesis presented in partial fulfillment of the requirements  
for the degree of  
Doctor of Philosophy  
in Education  
at Massey University,  
Palmerston North, New Zealand

Christopher Crispen Chimwayange  
2005

# DECLARATION

I declare that this study is my own account of my research and contains as its main content, work that has not previously been submitted for a degree at any tertiary institution.



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Christopher Crispen Chimwayange

## ABSTRACT

National calls for equality of opportunity have not been matched by reciprocal responses by girls to participate and achieve in design and technology subjects in Zimbabwean secondary and high schools. Current levels of girls' participation and achievement are of national concern. The study found that fourth form girls' low design and technology subjects enrolment and limited success have ensured a near all-male environment resulting in personal career progression limitations for girls and a gender segregated national socio-economic society.

It is acknowledged that outside Zimbabwe, models of student subject participation and achievement have been studied in the past resulting in the implementation of various motivational and retention strategies. Whilst accepting that girls' decisions concerning participation and achievement-related choices for or against design and technology subjects are individual and complex, some complex and interrelated contributory factors are explored. These are carried out in the context of Zimbabwe in this case study research which involved eight secondary schools of four different types targeting 321 fourth form girls, 26 design and technology subject teachers, eight principals, eight families and two education officers. The eclectic data collection approach chosen for the study relied on multiple sources of information being collected using a variety of techniques such as the student questionnaire, focus group interviews, in-depth interviews, lesson observations, and document and content analysis.

The effects of various overt and covert forms of home and school processes of difference, inequality and oppression were explored in the data and how these have affected fourth form girls' design and technology subjects participation and achievement-related decisions. In particular, the effects of home and school contextual and climatic factors have been found to largely militate against girls' 'fit' with design and technology subjects culture, staff and workshop environment. A model involving the student and school contextual and climatic dimensions, to explain girls' participation and achievement perspectives is suggested and explained encompassing sociological, psychological and gender perspectives. Findings in this study contribute to an understanding of girls' participation and achievement processes in design and technology subjects in the African context, a dimension that has been largely missing from mainstream debates on the subject.

## ACKNOWLEDGEMENTS

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I would like to dedicate this research to my mother, Margaret Rosina Mugwagwa Chimwayange who is not here to witness the triumph of its completion, but shares in it anyway.

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