

MATHEMATICS LESSONS

a smorgasbord of emotions

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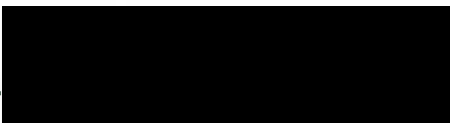
"A thesis submitted in partial fulfilment of the requirements of the degree
of Master of Education (Hons) of the University of New England"

March 1996

I certify that the substance of this thesis has not already been submitted for any degree and is not being currently submitted for any other degrees.

I certify to the best of my knowledge any help received in preparing this thesis, and all sources used, have been acknowledged in this thesis.

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Elizabeth Joan Reddy

ACKNOWLEDGMENTS

I would like to thank Dr Ted Redden and Associate Professor Peter Anderson for their assistance as my supervisors for this thesis. Their comments and suggestions were most appreciated.

I would also like to thank my family for their support during the year that it took to prepare this document - especially my husband for his help with the computer and the printing of the thesis.

DEDICATION

This thesis is dedicated to the children who were in 3/4 at Queanbeyan East Public School during 1994, for without their willing co-operation I would never have gained such an insight into the impact of testing on children. Special mention must be made of Sara, Kara and Brad for the honesty of their statements.

I would also like to dedicate my thesis to my cat Scruffy who kept me company through many long, cold Canberra nights.

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ABSTRACT

The research set out to investigate the emotional states that children experience when they participate in Mathematics lessons.

A review of the relevant Mathematics Education literature and literature from the affective domain was carried out to provide background to the study. A six month qualitative investigation of an intact class of nine and ten year olds in a NSW state primary school was then commenced. Multiple data collection sources and triangulation were the main strategies used to provide valid and reliable written, verbal and visual data for the study.

The research found that during Mathematics lessons children experience many emotions. The emotions range from the extreme positive to the extreme negative. From this finding a model of emotional states was developed.

The model contains three main states that are able to be hierarchically arranged. Each state is found to have its own descriptors and indicators. The amount of enjoyment experienced during Mathematics lessons and the difficulty level and type of task being completed, were found to be the conditions that determined children's emotional states.

Data from the research suggested that the emotional states of children are able to be identified by specific non-verbal actions, and that this is especially true for the experiencing of worry and elation. This finding necessitated a review of the literature on 'body language' and non-verbal behaviour and the commencement of three case studies. Analysis of the data from the case studies supported the assumption about non-verbal behaviour.

The research concludes by discussing the implications the study has for educators, and the need for future research to investigate the issues raised in the study of emotions.