

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

# THE EFFECTS OF TEACHER ATTENDING AND RESPONDING BEHAVIOURS ON PUPIL ACHIEVEMENT.

A thesis presented in partial fulfilment of the requirements for the degree of Master of Philosophy in Education at Massey University.

> Stephen Frederick Steffens 1978

### 81040.87

#### ABSTRACT

This thesis reports a field experiment of teachers' non-verbal attending and verbal responding behaviours and their relation to pupil achievement. It was expected that teachers who used higher level nonverbal and verbal skills would have children who achieved at a higher level.

A group of fifteen teachers, five in three different schools, were video-taped at the beginning of the school year. Because all of the teachers were functioning at low levels on scales of attending and responding, one group of teachers was given ten hours of training in these skills. One other group of five teachers was given a placebo treatment and the remaining group received no treatment. All of these teachers were video-taped at the end of the school year.

All of the children were tested at the beginning and the end of the school year on standardized achievement measures.

Analysis of the data revealed that ten hours of training given one hour at a time at intervals of one week was not sufficient to establish average classroom conditions that were significantly different from the other experimental treatments. The trained teachers did improve in the expected direction more than the other teachers.

The students of the two teachers who responded at the highest levels were compared to the students of the two teachers who responded at the lowest level. The results supported the hypothesis.

From this sample of teachers those who were female, who responded to feelings, who had students from a higher socio-economic status, who were just beginning to teach, and who attended and responded appropriately had students with higher results.

#### ACKNOWLEDGEMENTS

Any such undertaking as this that directly involves fifteen teachers and more than four hundred primary and intermediate pupils can only be successful with cooperation and support from many individuals. To all of these many individuals I wish to give my sincere appreciation:

the three headmasters, fifteen teachers, and more than four hundred pupils for their efforts, curiosity, and openness. I am only sorry that some of these outstanding people must here remain annonymous,

Selwyn Cathcart for technical brilliance and good natured tolerance and alertness to one who threatened to dismantle expensive equipment unknowingly,

Professor C.G.N. Hill and several of the Education Faculty who gave support to this project in many ways,

Selwyn Moore, Senior Inspector for the Wellington Education District, who gave official approval and showed personal interest in the progress of this project,

Marriane Wheatley and Graham Woolford for long hours viewing video-tapes and making hundreds of decisions while they coded, Cathy Smith and Nola Simpson of the Computer Unit who ironed out bugs in version six of S.P.S.S. and then searched with me to find what was not a bug,

Jennifer Darby for reading a draft copy and smoothing out communication links with the reader,

Hazel Hayward for transforming the manuscript into a final, very presentable unit.

To these following few I have special gratitude:

Dr. A.C. Webster who lives by and as a model, available at many levels to respond to the needs felt and unfelt, known and only faintly imagined, with respect and care, with an excitement and optimism that good can be done,

Lis, Kevin, and Erik who have reminded me frequently of the valuable priorities available in life and encouraging us to live what is important.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS			
LIST OF	TABLES	5	vi
CHAPTER	Ι	THE PROBLEM AND ITS ANTECEDENTS	1.
		Education for Learning	1
		Motivation and Learning	2
		Self-Concept and Performance	2
		Weaknesses of Research Linking Self-Concept	
		with Achievement	6
		Carkhuff and the Operationalization of Helping	7
CHAPTER	II	THE HYPOTHESES	10
CHAPTER	III	RESEARCH DESIGN	13
CHAPTER	IV	INSTRUMENTATION	17
		Scale for Attending	1.7
		Scale for Teacher Responding and Initiating	20
		Measures of Pupil Achievement	26
		Measure of Pupil Attitude	27
CHAPTER	V	TRAINING PROCEDURES	29
		Experimental School	29
		Placebo School	31
CHAPTER	VI	PROCEDURE	42
CHAPTER	VII	DATA ANALYSIS	47
		Attending - Reliability	47
		Teacher Attending Behaviour	49
		Responding - Reliability	52
		Teacher Responding Behaviour	53.
CHAPTER	VIII	DISCUSSION AND CONCLUSIONS	67
BIBLIOGRAPHY			

## LIST OF TABLES

Table		Page
1	The Research Design	14
2	Pupil-Teacher Communication	17
3	Scale for Teacher Attending	19
4	An Adaptation of the Carkhuff Scale for Effective	
	Helping for use in Classroom Observation	22
5	The Teacher-Pupil Question Inventory	34
6	The Florida Taxonomy of Cognitive Behaviour	37
7	Product Moment Coefficients of Teacher Attending Scores	48
8	Analysis of Variance: Teachers Attending Pre-test	'49
9	Analysis of Variance: Teachers Attending Post-test	50
10	Increases in Attending by Teacher Sex	51
11	Analysis of Variance: Teacher Responding Pre-test	53
12	Analysis of Variance: Teacher Responding Post-test	54
13	Average Gain in Responding	55
14	Lower Primary Teachers' Average Scores	56
15	Analysis of Covariance: High Teacher vs. Low Teacher -	
	Reading Comprehension	57
16	Analysis of Covariance: High Teacher vs. Low Teacher -	
	Vocabulary	57
17	Analysis of Covariance: High Teacher vs. Low Teacher -	
	Mathematics	58
18	Correlation Matrix	60
19	Multiple Regression onto Average Student Gain	61
20	Rank Ordering of Teachers According to Average Pupil Gain	63
21	Students' Parents' Socio-Economic Status	64
22	Pupil Attitude of Teacher	66