

IV

**CONTENTS**

CHAPTER	TOPICS	PAGE NO.
	CERTIFICATE	i
	ACKNOWLEDGEMENT	ii
	LIST OF THE TABLES	vii
	LIST OF THE GRAPHS	ix
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	
	SECTION - I	
	Science and Technology	1
	SECTION - II	
	Cognitive Development	8
	SECTION - III	
	Cognitive Development and teaching profession	18
	SECTION - IV	
	About the Study	26
	Statement of the Problem	27
	Significance of the Study	27
	Objectives of the Study	29
	Hypothesis	29
	Limitations of the Study	30
	About the Dissertation	30

<b>CHAPTER II</b>	<b>REVIEW OF THE RELATED LITERATURE AND RESEARCH</b>	
	<b>SECTION - I</b>	
	Studies on Cognitive Development.	32
	<b>SECTION - II</b>	
	Research Studies indirectly and directly related to the problem.	38
<b>CHAPTER III</b>	<b>PLAN AND PROCEDURE</b>	
	Introduction	46
	Research Design	47
	Sample Profile	47
	Tools used for study	50
	Procedure	65
	Method of Analysis of data	65
<b>CHAPTER IV</b>	<b>ANALYSIS AND INTERPRETATION OF DATA</b>	
	<b>SECTION - I</b>	
	Formal Operational Thinking Ability	67
	<b>SECTION II</b>	
	Stating of hypothesis	69
	Hypothesis stated by student-teachers	70
	Scoring	77

Observation and Interpretation	79
<b>SECTION - III</b>	
Testing of hypothesis	87
Scoring	92
Observation and Interpretation of data	95
Hypothesis tested by student-teachers	100
<b>SECTION - IV</b>	
Presentation of data and Interpretation of 't' test.	117
<b>CHAPTER V</b>	<b>SUMMARY AND CONCLUSIONS</b>
Introduction	124
Statement of the problem	128
Significance of the study	128
Limitations of the study	129
Objectives of the study	129
Research Hypotheses	130
Research Design of the study	130
Sample	131
Data gathering tools	132
Collection of Data	132
Techniques used for the Analysis of Data	132
Findings of the study	132
Conclusions of the study	135
Educational Implications	136
Suggestions for further Research	137
References	138
Appendices	145