

### DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Master of Education

to

Barkatullah University, Bhopal

2004-2005

#### SUPERVISOR

Mr. Anand Valmiki
Lecturer in Education
& E. Bhopal (M.P.)

SCHOLAR

Miss Sonia Sthapak M.Ed. (Ele. Eduar

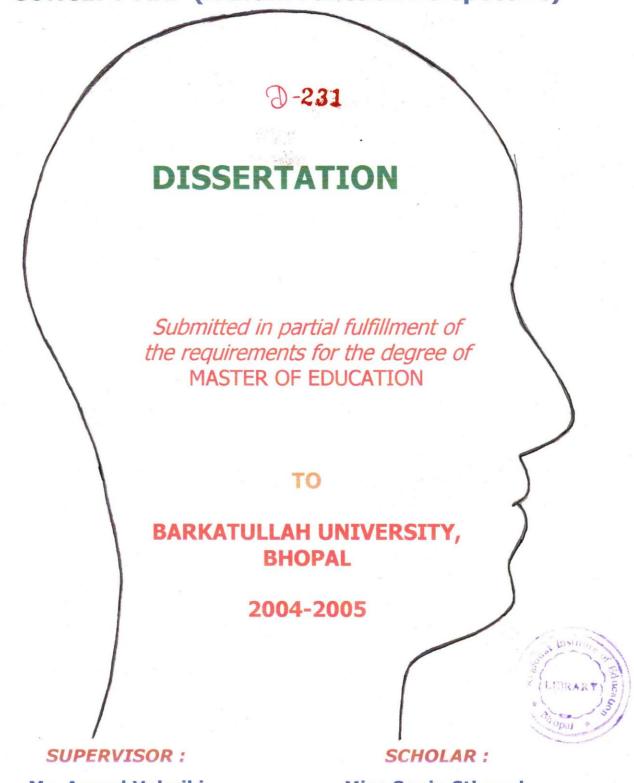
2 0 0

0



Regional Mistrute of Education PNECRT New Delhi] Shamla Hills, Bhapal-462012

# EI HTH RAJES C E IC ACHIEVE ENT N THEIR ABILITY TO CONSTRUCT A CROSS-DOMAIN CONCEPT MAP (A Brain Function Perspective)



Mr. Anand Valmiki Lecturer in Education, R.I.E., Bhopal (M.P.) Miss Sonia Sthapak M.Ed. (Ele. Edu.)

[N.C.E.R.T., NEW DELHI]
SHYAMLA HILLS, BHOPAL-462 013.

DECLARATIONS

I declare that the dissertation entitled "Eighth Graders Academic Achievement and Their Ability to Construct a Cross-domain Concept Map" (A Brain Function Perspective) is my own work conducted under the supervision of Mr. Anand Valmiki, Lecturer, Regional Institute of Education, Bhopal, for the award of the degree of Master in Education.

I further declare that to the best of my knowledge this dissertation has not been submitted earlier by me or by others for any degree either in the Barkatullah University or in any other University without any proper citation.

Place: Bhopal

1

Date : 04/4/05

( Miss Sonia Sthapak )

Scholar

## CERTIFICATE

This is to certify that the work entitled "Eighth Graders Academic Achievement and Their Ability to Construct A Cross-domain Concept Map" (A Brain Function Perspective) is a piece of study carried out by Miss Sonia Sthapak under my supervision for the degree of Master in Education.

To the best of my knowledge and belief the dissertation **@**mbodies the work of candidate herself, has been duly completed and fulfills the requirement of ordinance relating to the degree of Master in Education.

Place : Bhopal Date : 04년 10년 (Anand Valmiki) Lecturer in Education, R.I.E., Bhopal (M.P.)

## ACKNOWLEDGEMENTS

7

•

I owe much more than I can tell about certain people who played a significant role in my work.

Firstly I would like to express my heartiest gratitude towards my supervisor Mr. Anand Valmiki, Lecturer in Edu., R.I.É., Bhopal for his valuable guidance, helpful criticism and inspiring encouragement throughout the progress of this piece of investigation.

A deep sense of obligation rests in my heart for Prof. M. Sengupta, Principal, R.I.E., Bhopal for providing academic enrichment and facilities in the institute.

I am indebted to Dr. (Mrs.) A Grewal, Dean, Deptt. of Education, R.I.E., Bhopal for her affectionate care and timely suggestions.

I am eager to express my appreciation and heartful gratitude to Dr. U. Lakshmi Narayana, Reader, Deptt. of Education, R.I.E., Bhopal for his clarity of concepts and intellectual suggestions. His kind and positive attitude was a perennial source of inspiration to me.

My sincere moral gratitude is due to whole of the learned faculty of Deptt. of Edu. namely Bhaduri M'am, Babu Sir, Bharti M'am, Bhandage Sir, Gupta Sir, Khare Sir, Khare M'am, Patel M'am, Pandagale Sir, Patra M'am & Sharma Sir for their valuable suggestions & extensive help during the entire period.

I won't be doing justice if I don't mention the names of Mr. Jagtap & Mrs. Joseph (Office Assistants), Deptt. of Edu., R.I.E., Bhopal.

7

My sincere regards are due to Mr. Tripathi, Library Incharge & other staff members of library, R.I.E., Bhopal for providing access to the valuable resources of the library.

I am extremely thankful to Principals of Kendriya Vidyalaya No. 1 and Mithi Gobind Ram Public School and also towards the students who participated in this study.

I thank all my classmates for their much needed care & assistance.

Mr. Sanjay deserves a special thanks for bringing out the dissertation in the desired form.

Last but not the least, I express my deepest sentiments towards my family members for their extended cooperation & blessings showered on me.

(SONIA STHAPAK)



## CONTENTY

1. LIST OF TABLES

ů,

- 2. LIST OF FIGURES
- 3. LIST OF ABBREVIATIONS

CHAPTER	TITLE		PAGE
I	GENERAL INFORMATION		· · · · · · · · · · · · · · · · · · ·
	1.1	Background	01
	1.2	Need & Significance of the study	13
	1.3	Statement of the Problem	14
-M	1.4	Operational Definitions	14
4010000	1.5	Variables	15
	1.6	Research Questions	15
,	1.7	Objectives of the Study	16
	1.8	Hypotheses	16
	1.9	Delimitationsof the Study	17
	1.10	Chapterization	17
II.	REV	/IEW OF RELATED LITERATURE	
	2.1	Introduction	19
:	2.2	Studies dealing with related topics	19
	2.3	Conclusion	23
III.	PRO	CEDURE & METHODOLOGY	
	3.1	Introduction	24
	3.2	Participant Selection Procedure	24
	3.3	Data gathering device	25
	3.4	Data gathering procedure	26
	3.5	Scoring procedure	26
	3.6	Data Analysis	27

CHAPTER	TITLE		PAGE
IV	ANALYSIS & INTERPRETATION		
,	4.1	Introduction	29
***************************************	4.2	Results according to each finding &	29
		interpretation	
٧.	SUMMARY & CONCLUSION		
	5.1	Introduction	55
	5.2	Summary	55
ı		Statement of the Problem .	
		Sample/Participant Selection Procedure	56
		Tool/Data Gathering Device	56
		Research questions	57
		Objectives of the Study	57
		Hypotheses	58
	5.3	Major Findings	58
	5.4	Conclusion	59
	5.5	Educational Implications	60
	5.6	Suggestions for further study	61
VI	APPENDICES		
VII	REFERENCES		

. 1

1

ديّ



## LIST OF TABLES

ર્

D.

Table	Particulars	Page
No.		No.
1.	Significance of 'r' btwn a.a. & c.d.c.m.	30
2.	Significance of 'r' btwn a.a. & env. attitude	
3.	Intra correlation btwn different components of c.d.c.m.	
4.	Intra correlation btwn different components of a.a.	
5.	Inter relationship btwn the components of a.a. & c.d.c.m.	
6.	Significance of 't' btwn boys & girls in respect of c.d.c.m.	
7.	Values of 't' between boys & girls in respect of components of cdcm.	35
8.	Significance of 't' btwn boys & girls in respect of a.a.	35
9.	Values of 't' btwn boys & girls in respect of components of a.a.	36
10.	Significance of 't' btwn types of schools in respect to cdcm.	37
11.	Values of 't' btwn two types of schools in resp. to diff. components of c.d.c.m.	38
12.	Significance of 't' btwn two types of schools in respect of a.a.	38
13.	Values of 't' btwn two types of schools in respect to components of a.a.	39
14.	Significance of 't' btwn mother's occupation in respect to cdcm ability.	40
15.	Values of 't' btwn mother's occupation in respect to different components of cdcm.	40
16.	Significance of 't' btwn mother's occupation in respect to a.a.	41
17.	Values of 't' btwn mother's occupation in respect to different components of a.a.	41
18.	Significance of 'F' btwn categories of father's edu. in respect to cdcm.	43

Table	Particulars	Page
No.		No.
19.	Values of 'F' between categories of father's edu. in respect of	43
	components of cdcm.	
20.	Significance of 'F' btwn categories of f's edu. in respect of a.a.	44
21.	Values of 'F' btwn categories of father's edu. in respect of	44
	components of a.a.	
22.	Significance of 'F' between categories of m's edu. in respect of	46
1	cdcm.	
23.	Values of 'F' btwn categories of m's edu. in respect of	46
	components of cdcm.	
24.	Significance of 'F' btwn categories of m's edu. in respect of a.a.	47
25.	Values of 'F' btwn different categories of m's edu. in respect of	47
	components of a.a.	
26.	Significance of 'F' btwn categories of father's occu. in respect of	49
	cdcm.	
27.	Values of 'F' btwn categories of father's occu. in respect of	49
	components of cdcm.	
28.	Significance of 'F' btwn categories of f's occu. in respect of a.a.	50
29.	Values of 'F' btwn categories of father's occu. in respect of	50
	components of a.a.	
30.	Multiple regression on dependent variable a.a variables	51
	entered in step-1 : Culture	
31.	Multiple regression on dependent variable a.a.; variables	52
	entered in step-2 : Culture & Concept map.	
32.	Multiple regression on dependent variable a.a. : Variables	53
	entered in step-3 : Culture, concept map & language.	

:

-X

## LIST OF FIGURES

Fig. No.	Particulars	Page No.
Fig.1	Scatter diagram btwn a.a. & c.d.c.m.	·30
Fig.2	Scatter diagram btwn a.a. & env. att.	31
Fig.3	Comparison of means btwn boys & girls.	36
Fig.4	Comparison of means btwn types of schools.	39
Fig.5	Comparison of means btwn Mother's Occu.	42
Fig.6	Comparison of means btwn Father's Edu.	45
Fig.7	Comparison of means btwn Mother's Edu.	48
Fig.8	Comparison of means btwn Father's Occu.	51

ď

!

# LIST OF ABBREVIATIONS

S.No.	Abbreviations	Full Form
1.	a.a.	Academic Achievement/ Scholastic
		Achievement
2.	c.d.c,m.	cross domain concept mapping
3.	btwn	between
4.	S.St.	Social Studies '
5.	cdcm <sup>ng</sup>	cross-domain concept mapping
6.	K.V. No.1	Kendriya Vidyalaya No. 1
7.	M.G.P.S.	Mithi-Gobind Ram Public School
8.	no.	number
9.	Sci.	Science
10.	cul.	culture
11.	lang.	language
12.	f's	father's
13.	m's	mother's
14.	Env.Att.	environmental attitude

45

"The secret of our cultural development has been research, pushing back the areas of ignorance by discovering new truths, which in twin, lead to better ways of doing thing and better products"

64

John W. Best

