# EFFECTIVENESS OF TEACHING THROUGH WEB 2.0 TOOLS ON LEARNING ACHIEVEMENT OF STUDENTS OF CLASS IX II PHYSICS

A DISSERTATION

Submitted to

Barkataullah University, Bhopal

In partial fulfilment for the requirement

Of the Degree of

Master of Education (RIE)

2013-14

Prof. H.K Senapaty
Principal
RIE Bhopal

Researcher Vandana Thakur M. Ed (2013-14)



REGIONAL INSTITUTE OF EDUCATION

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

SHYAMALA HILLS, BHOPAL - 462013

# EFFECTIVENESS OF TEACHING THROUGH WEB 2.0 TOOLS ON LEARNING ACHIEVEMENT OF STUDENTS OF CLASS IX IN PHYSICS

A DISSERTATION

Submitted to

Barkataullah University, Bhopal

In partial fulfilment for the requirement

Of the Degree of

Master of Education (RIE)

2013-14

**Supervisor** 

Prof. H.K Senapaty

Principal

RIE Bhopal

9-431



विद्यया S मृतमञ्जूते



REGIONAL INSTITUTE OF EDUCATION

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

SHYAMALA HILLS, BHOPAL - 462013

Researcher

Vandana Thakur

M. Ed (2013-14)

# **DECLARATION**

I hereby declare that the dissertation titled EFFECTIVENESS OF TEACHING THROUGH WEB 2.0 TOOLS ON LEARNING ACHIEVEMENT OF STUDENTS OF CLASS IX IN PHYSICS has been carried out by me during the academic year 2013-14 in partial fulfilment of the requirement for the degree of Masters of Education of Barkataullah University, Bhopal, Madhya Pradesh.

I have completed this study under the able guidance of **Prof. H.K.**Senapaty, Principal, Regional Institute of Education, Bhopal.

I further declare that this dissertation has not been submitted earlier by me or others for any degree either in Barkataullah University or any other university.



060

Place: BHDPAL

Date: 19 MAY '14

Vandana Thakur

M. Ed. RIE Bhopal

Prof. H.K.Senapaty

Regional

Institute

of

Education

Shyamala Hills

Pin: 462013

Principal

R.I.E Bhopal

# **CERTIFICATE**

This is to certify that Ms. VANDANA THAKUR, a student of M.Ed course in the year 2013-14 of Regional Institute of Education, Bhopal has worked under my guidance and supervision for the dissertation EFFECTIVENESS OF TEACHING THROUGH WEB 2.0 TOOLS ON LEARNING ACHIEVEMENT OF STUDENTS OF CLASS IX IN PHYSICS. I further certify that this work is original and worthy of submission in fulfilment of the requirement of degree of Masters of Education of Barkataullah University, Bhopal, Madhya Pradesh.

Prof. H.K.Senapaty

Principal

RIE Bhopal

Place:

Date: 19-5-211



# **ACKNOWLEDGEMENTS**

I take this opportunity to express my gratitude to my guide Prof. H.K.Senapaty, Principal, RIE Bhopal, who helped me in the execution of this study. I thank him for his valuable advice, continuous help, inspiring guidance and encouragement in the completion of this study. I owe him gratitude and regards for his generosity.

I am indebted to Prof. Reeta Sharma, Dean of Instructions, RIE Bhopal, and Dr. Ramesh Babu, Head DE, for their perennial cooperation and for providing enough learning facilities and a healthy educational environment in the campus.

I am thankful to Dr. K.K.Khare, Head DEE, Dr. NC Ojha, Dr Ratnamala Arya, Mr. Sanjay Kumar Pandagale, Mr. Anand Valmiki and all other member of Education Department for their valuable suggestions in research seminar and continuous guidance for research.

I am thankful to Dr.Yasmin Ghani Khan and all the other knowledgeable ad hoc lecturers for their indispensible guidance up to date advice.

I am also thankful to Mr. P.K.Tripathi, Librarian and all other library staff for extending excellent library facilities and helping in locating reference material.

I am heartily thankful to the Mr. Harish Kumar, Headmaster, DMS Bhopal, for their cooperation and support during data collection and to the students of class IX of DMS Bhopal for maintaining discipline and extending full cooperation during my classes.

A special note of thanks to my batch mates for providing a very co-operative and helpful atmosphere, especially to my dear friends Ms. Kamla Chahali and Ms. Anupreeti Yadav.

Lastly, I dedicate this work to my parents Mrs Gauri Thakur, and Mr. R.B. Thakur, my sister Ms. Archana Thakur and my husband Mr. Chandan Thakur for providing me all the emotional and material support and for being the perennial source of inspiration to me.

Date:	Vandana	Thakur

Place:

# **INDEX**

NAM	PAGE NO.			
Decla	i			
Certificate				
Acknowledgements iii				
List o	of tables and figures	iν		
<u>C</u> HA	PTER'I INTRODUCTION			
1.0	Introduction	1		
1.1	What is Web 2.0?	4		
1.1.1	The emerging field of web science	4		
1.2	Rationale of the Study	5		
1.3	Statement of the Problem	7		
1.4	Operational Definition of the Terms	7		
1.5	Objectives of the Study	8		
1.6	Hypothesis of the Study	8		
1.7	Delimitations	8		
e si	PHER DIVE TREVIEW OF REEATED THE RAVIURE			
2.0	Introduction	·10		
2.1	Studies Related to Web 2.0 and Teaching	10		
2.2	Critical Appraisal	13		
CHARMER CLEAN CHARMODOLOGY COMPANY COM				
3.0	Introduction	18		
3.1	Design of the Study	18		

3.2	Variables of the Study	
3.2.1	Independent variable	19
3.2.2	Dependent variable	19
3.3	Sample of the Study	19
3.4	Tools of the Study	20
3.4.1	Awareness Questionnaire	20
3.4.2	Achievement Test	20
3 <b>.</b> 5	Procedure for Data Collection	21
3.6	Administration of the Tool	22
3.7	Statistical Techniques Used	22
CHA	PTER 4" RESULT AND DISCUSSIONS	23
4.0	Introduction	23
4.1	Objective 1	23
4.1.1	Findings	24
4.2	Objective 2	26
4.2.1	Findings	28
4.3	Discussions	28
	TETER 5 SUMMARY AND IMPLICATIONS SOLVER 5	a en
5.0	Introduction	31
5.1	Justification of the Study	31
5.2	Statement of the Problem	32
5.3	Objectives of the Study	32
5.4	Hypothesis of the Study	32
5.5	Delimitations of the Study	32
5.6	Sample	33
5.7	Variables	33

5.8	Tools and Techniques	33		
5.9	Findings of the Study	33		
5.10	Implications of the Findings	34		
5.10.1	Implications for the Learners	34		
5.10.2	Implications for Teachers	35		
5.10.3	Implications for Curriculum Developers	36		
5.10.4	Implications for Parents	36		
5.11	Suggestions for Further Study	37		
BIBLIOGRAPHY				
APPENDICES				

## APPENDIX I

LESSON PLANS USING WEB 2.0 TOOLS

## APPENDIX II

ACHIEVEMENT TEST

# APPENDIX III

AWARENES TEST

# LIST OF TABLES AND FIGURES

Table /Figure	Name of the Table/ Figure	Page
No.		No.
Table 3.1	Group-wise and Gender-wise Distribution of Sample	19
Table 3.2	Tool Description (Achievement Test of Work and Energy)	20
Table 3.3	Weightage to the Objective of Achievement Test (Work and Energy)	21
Table 4.1	Summary of Awareness Test about Web 2.0 Tools of the Sample	23
Table 4.2	Summary of ANCOVA for Achievement in Physics	26
Table 4.3	Mean and SD of the Experimental and Control Groups for Achievement in Physics	26
Graph 4.1	Graph showing the comparison of means of Pretest and Post test	27