A Study of Teachers' Awareness About Assistive Devices Used in Inclusive Settings

A Dissertation Report Submitted to

Barkatullah University

for the Partial Fulfilment of the Award of the Degree of

Master of Education (RIE)

Session (2022-2024)

D-729

Supervisor

Prof. I. B. ChughtaiDepartment of Education,
Regional Institute of Education
Bhopal, M. P.

Research Scholar

Mradul Dubey M. Ed. (RIE) IV Sem Roll No. -2306600015



Regional Institute of Education

(A Constituent unit of NCERT, New Delhi)

(NAAC Accredited A⁺⁺ Grade Institution and Approved by NCTE) Shyamala Hills, Bhopal - 460003, Madhya Pradesh, India

Declaration

I hereby declare that the dissertation titled "A Study of Teachers' Awareness

About Assistive Devices Used in Inclusive Settings" has been conducted by

me during the academic year 2022-2024 under the guidance of **Prof. I. B.**

Chughtai, Department of Education, Regional Institute of Education, Bhopal,

Madhya Pradesh.

I confirm that this research work is original and authentic, and it does not

include any part of work that has been submitted for the award of any degree at

Barkatullah University or any other university, except where due citation has

been provided.

Place: Bhopal

Date:

Mradul Dubey

M.Ed. (RIE) IV Sem

Certificate

This is to certify that the dissertation work entitled "A Study of Teachers'

Awareness About Assistive Devices Used in Inclusive Settings" is a research

project conducted by Mradul Dubey under my supervision for the partial

fulfilment of the degree of Two year Master of Education (RIE) from

Barkatullah University, Bhopal, Madhya Pradesh, India.

Place: Bhopal

Date:

Prof. I. B. Chughtai

Department of Education,

Regional Institute of Education,

Bhopal

Acknowledgement

I take this opportunity to express my deepest gratitude to my supervisor, Prof. I. B. Chughtai,

Professor, Department of Education, Regional Institute of Education (RIE), Bhopal, for his

invaluable guidance, critical advice, and steadfast support throughout the course of this

dissertation. This work would not have been possible without his insightful suggestions and

unwavering encouragement.

I am sincerely thankful to Prof. Jaydip Mandal, Principal, RIE, Bhopal, for providing the

essential facilities and support necessary for the completion of my dissertation.

My heartfelt appreciation goes to the esteemed faculty of the Department of Education, RIE,

Bhopal, including Prof. B. Ramesh Babu (HOD, Education), Prof. Ratnamala Arya, Dr. N. C.

Ojha, Dr. Sanjay Kumar Pandagale, and Dr. Saurabh Kumar, for their invaluable suggestions,

encouragement, and kind support throughout this journey.

I extend my sincere gratitude to Dr. P. K. Tripathy, Librarian, for his unwavering support

during my dissertation work, and to the staff of the Library (Learning Resource Center), RIE,

Bhopal, for their assistance.

I also wish to thank the heads of the schools for their cooperation, valuable information, and

support during the data collection process.

Lastly, my heartfelt thanks to the non-teaching staff, my classmates, research scholars, and all

those who supported me in completing this work.

Place: Bhopal

Mradul Dubey

Date

M.Ed (RIE) IV Sem

I

List of Tables

Table No.	Table Description	Page No.
3.1.1	Awareness of Low-Tech Assistive Devices among Teachers in Government and Private Schools	24
3.1.2	Awareness of Low-Tech Assistive Devices among Teachers of Rural and Urban Schools	25
3.2.1	Awareness of Mid-Tech Assistive Devices among Teachers in Government and Private Schools	26
3.2.2	Awareness of Mid-Tech Assistive Devices among Teachers in Rural and Urban Schools	26
3.3.1	Awareness of High-Tech Assistive Devices among Teachers in Government and Private Schools	27
3.3.2	Awareness of High-Tech Assistive Devices among Teachers in Rural and Urban Schools	27
3.4	Awareness Level of Assistive Devices among teachers of Government and Private schools and Teachers of rural and urban schools	29
3.5	Types of Assistive Devices Used in Government and Private Schools, and in Rural and Urban Schools	32
3.6	Challenges in Integrating Assistive Devices	35
3.7	Perceived Effectiveness of Assistive Devices among teachers of Government and private schools and Teachers of urban and rural areas	37

List of Figures

Diagram	Diagram Description	Page
No.		No.
3.1	Bar graph comparing the awareness levels between teachers of Government and Private Schools	29
3.2	Bar graph comparing the awareness levels between teachers of Rural and Urban areas	30
3.3	Bar graph comparing the types of assistive devices used by teachers in Government and Private Schools	32
3.4	Bar graph comparing the types of assistive devices used by teachers in Rural and Urban areas	33
3.5	Perceived Effectiveness of Assistive Devices among teachers of Government and Private schools	37
3.6	Perceived Effectiveness of Assistive Devices among teachers of rural and urban areas	38

List of Abbreviations used

Abbreviation	Full Form
AD	Assistive Device
Art.	Article
AT	Assistive Technology
CWSN	Children With Special Needs
DAISY	Digital Accessible Information System
DIET	District Institute of Education and Training
EFA	Education for All
IEDSS	Inclusive Education of the Disabled at Secondary Stage
NCERT	National Council of Education Research and Training
NEP	National Education Policy
NPE	National Policy on Education
NVDA	NonVisual Desktop Access
POA	Programme Of Action
PWD	Persons With Disabilities
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPWD	Rights of Persons with Disabilities
RTE	Right to Education
S.	Section
SS	Samagra Shiksha
SSA	Sarva Shiksha Abhiyan
TTY/TTD	Telecommunication Device for the Deaf
UDISE	Unified District Information System for Education
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization

Contents	Page	
Acknowledgements	I	
List of Tables	II	
List of figures	III	
List of Abbreviations Used.	IV	
Chapter 1: Introduction	1–19	
1.1 Introduction	1	
1.2 Common types of assistive device.	3	
1.3 Assistive devices and applications developed in India	8	
1.4 Selection of Assistive Devices.	11	
1.5 Use of assistive devices.	12	
1.6 Statement of the Problem.	17	
1.7 Need and Significance of the Study	17	
1.8 Objectives of the Present Study	18	
1.9 Delimitations of the Present Study	19	
Chapter 2: Research Methodology	20-22	
2.1 Introduction	20	
2.2 Research Method	20	
2.3 Research Design	20	
2.4 Population	20	
2.5 Sample	21	
2.6 Tools Used	21	
2.7 Data Collection.	21	
2.8 Data Analysis	21	

Chapter 3 : Description Of The Data, Analysis And Interpretation	23-38
3.1 Introduction.	23
3.2. Description of data and Data Analysis	.23
3.2.1 Awareness of Low-Tech, mid tech, high tech Assistive	
Devices among Teachers in government and private	
School, and in Rural and Urban area	24
3.2.2 Overall Awareness Level of Assistive Devices	29
3.2.3 Types of Assistive Devices Used in Government and	
Private Schools, and in Rural and Urban Schools3	31
3.2.4 Challenges in Integrating Assistive Devices	5
3.2.5 Perceived Effectiveness of Assistive Devices among	
different types of schools	7
Chapter 4: Summary, Findings And Conclusion	39-42
4.1 Introduction	39
4.2 Summary of the Study	39
4.3 Findings of the Study	39
4.4 Conclusion	41
4.5 Suggestions	41
4.6 Suggestions for Further Research	42
Bibliography	43-45
Appendices	46-49