

# EFFECTIVENESS OF ICT BASED TEACHING METHOD FOR VISUALLY IMPAIRED LEARNERS

### Dr. Atul Arun Gaikwad

Principal – IRA Institute's College of Education Arvi.

Abstract

Knowledge of ICT definitely useful to understand learning material for normal as well as abnormal students. Researcher conduct a research on Visually Impaired students who are learning in 11 th standard commerce. Researcher give them achievement test as pre test related to preparation of Journal then teach them to prepare journal through computer i.e. jourgh soft- ware. For such software researcher prepared a Audio Material having content a lot of infor- mation and a small questions based on similar contain then knowledge about steps for prepara- tion Journal. After preparation of Course Material, it was validated by experts then it was im- plement on 11 th standared visually impaired students and provide post test then find out differ- ence between pre test and post test. Afterexperiment researcher conduct a survey with interview scale on 11 th standard Visually Impaired students. That survey was conducted for finding problems among such students while using ICT based material for learning Accountancy sub- ject.

Keywords: Effectiveness of ICT, teaching method, Visually Impaired Learners.



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

- 1 Introduction -- ICT is definitely useful to understand learning material (Chauhan, R. 2010). It is useful to both normal as well as abnormal students. E.g. Visually Impaired student. Researcher develop a teaching method based on ICT, to teach preparation of journal from Ac- countancy subject and test its effectiveness through experimental method. For evaluate depend- ent variable researcher prepare a Achievement test. This study also involve survey related to problems faced by Visually Impaired learners while learning Accountancy through ICT.
- 2 Need & Significance of the Study -- This study is related to ICT based teaching method for Visually Impaired students. They have always problems to understand the learningmaterial. 11 th V.I. students also have problems in learning Accountancy Subject, specially learning Journal. This ICT based teaching method makes their learning easier. This teaching method also be use to teach another subject for V.I. students. Student can handle easily everywhere this au- dio material and computer software. They can learn as their convenience.

Copyright © 2018, Scholarly Research Journal for Interdisciplinary Studies

3 **Title of the study** -- Effectiveness of ICT based teaching method for Visually Im- paired Learners. Definitions of key words --

## 4 Definitions of key words --

- (i) ICT based teaching method The teaching method involve Audio Material containing information and small questions related to Journal and computer software for preparation Journal.
- (ii) Visually Impaired Learners -- The Partially blind or totally blind learner who qualify 10 th standard and learning in 11 standard commerce.
- (iii) Effectiveness Effectiveness menace find significance difference between pre test and post test.

## 5 Objective of this study –

- (i) To prepare ICT based teaching method to teach Accountancy subject for 11 thstandard Visually Impaired learner.
- (ii) To test effectiveness of ICT based teaching method.
- (iii) To find problems faced by 11 th Standard Visually Impaired learner while learningAccountancy through ICT based teaching method.

## 6 Scope of the study

- (i) This study is related to 11 th standard commerce learner.
- (ii) This study is related to teachers who teach accountancy subject for 11 th standard

## 6.1 Delimitations of the study –

- (i) This study is limited to ten, 11 th standard commerce learners.
- (ii) This study is limited to ICT based teaching method..

## 6.2 Limitations of the study –

- (i) Physically aspect like orthopedically variable is beyond control of the researcher.
- (ii) Educational aspect like private coaching , market material is beyond control of the

## 6.3 Assumption of the study –

(i) 11 th standard Visually Impaired learners have problems in learning Journal from Ac- countancy subject.

## 6.4 Hypothesis of the study –

- Research Hypothesis H1 There is Significant difference between mean score of pretest and post test.of this study.
- Null Hypothesis H0 There is no difference between mean score of pre test and posttest of this study.

Copyright © 2018, Scholarly Research Journal for Interdisciplinary Studies

#### 7 Psychological Base for this study –

7.1 Bruner's Knowledge based theory. – As per this theory Learning of new concept is based on previous knowledge of the concept. In this study ICT based teaching method also related to previous knowledge i.e. computer operating.

7.2 Thorndike's Trial and error Theory of Learning - [n this theory Thorndike ex- plain Law of practice. ICT based teaching method from this study, involved practice for prepar- ing Journal from Accountancy subject.

**8** Methodology of the study -- For this study researcher select 10 Visually Impaired 11 th standard commerce learner by purposive sampling method from Niwant Andh Mukta Vidyalaya Pune. Provide them pre test belongs to 15 marks and 30 minutes. Then teach them preparation of journal through ICT based teaching method for seven days , two hours per day. Then provide them post test as same and evaluate significance between them. Researcher prepared Audio Material related to preparation of Journal and applied it as teaching method researcher also provide knowledge about preparation of journal through computer. In Audio Mate- rial information of journal give with step by step and also ask small questions based on it. Re- searcher used single group design for this experiment.

### 9 Data Analysis -

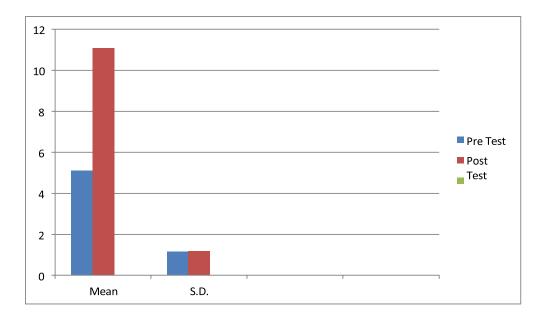
Table No. 1 Pre test Post-test Mar
------------------------------------

Student	1	2	3	4	5	6	7	8	9	10
Pretest	5	4	3	5	6	7	6	5	4	6
marks										
Posttest	11	12	11	12	13	10	11	12	9	10
marks										

	Mean	S.D.	SEM	Correlation Coefficient		df	iificance level	Tablet InterpretationValue
Pre test	5.1	1.15	0.36	0.07	12	9	0.05	Difference is significant
Post test	11.1	1.20	0.38				0.01	

#### Copyright © 2018, Scholarly Research Journal for Interdisciplinary Studies

## 9.1 Graphical Presentation



**9.2 Hypothesis Testing** – Calculated t Value is greater than table t value hence Null hy-pothesis must be rejected and research hypothesis should be accepted on both levels.

### 10 Findings

10.1 Finding as per Objective 1-- Audio Material and Computer software is the way to teach Accountancy subject to 11 th standard Visually Impaired learners.

10.2 Finding as per Objective 2 – ICT based teaching method is useful to teach Accountancy subject for Visually Impaired learners.

#### 10.3 Findings as per Objective 3 --

S.N.	Problems faced by V.I. Learners	No of Respondents	Percentage ofre- spondents
1	Preparation of column	6	60%
2	Filling information in column	7	70%
3	Filling Amount in specific column	5	50%
4	Casting of Journal	7	70%

Table 3 Problems faced by 11 th V.I. Learners

**Conclusion** – This paper is based on research study i.e. experiment conducted by a researcher . In this study researcher prepared a ICT based teaching method to teach Accountancy subject for Visually Impaired learners. This ICT based teaching method contains Audio Material and Computer software both things are found effective to teach V.I. learners.

#### 7 References

- Agarwal, A.(2010), Alienation of the Disabled: Causative Factors, Mechanisms, and Paterns of Reaction Responses. Journal of Indian Education: 35:4: 25-33.
- Arora, S.(2003), Personality make up of congenitally Visually Impaired and
- Adventitiously impaired children: A comparative study. Indian Educational Review. Vol. (39). 97-104.
- Butterfield P. H. (1977), The First Training Colleges for Teachers of the Blind; British Journal of Educational Studies, Vol. 25(3) 268-283.
- Chauhan, R. (2010), A Study of relationship between Self-Concept and adjustment of Visually Impaired adolescents studying in Inclusive and Special schools: New Delhi: Faculty of Educa- tion, Jamia Millia Islamia..
- Durre I.(2002), Success for Blind Students in Mathematics and Science, NOAA National Cli- matic Data Centre, USA,

Mangal S.K. (2002): Statistics in Psychology and Education, New Delhi. P.H.I.Learning Publication.

- Mitchell S., Maxine S., & Stephen G. (2007), Low Vision Rehabilitation: A Practical Guide for Occupational Therapists.
- Sharma,V.S. (2008), A Study of Braille Reading Behaviours of Children with Visu- al Impairment. Chitrakoot, Department of Special Education: Jagadguru Rambh adracharya Handicapped University.
- http://www.newschool.edu/student-services/student-disability-services/subpage.aspx http://www.adcet.edu.au/Cats/Specific\_Impairments/Vision\_Impairment\_and\_Blindness.chpx.