

**EFFECTIVENESS OF MAP READING SKILL PROGRAMS
DEVELOPED FOR THE PROBLEMS FACED BY D. T. ED STUDENT TEACHERS**

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Introduction

In the 21st century the aim of education is to acquire complete development of the citizens. The responsibility of the education is to prepare capable citizens of India. Country progresses if only there is progress in the field of education. Capable teachers need to be prepared for developing education. Elementary education is the foundation of education. Teachers at the primary level and D.T. Ed colleges are trying to strengthen the foundation of education. It is necessary to have complete comprehensive development of D.T.Ed student teachers. Therefore Maharashtra State Education of Research and Training Council, Pune with the directives of National Council of teacher education prepared the syllabus for D. T. Ed student teachers

Geography subject is a society oriented, life oriented subject and it develops intellectual, emotional and physical development of the students. Eography subject is a society oriented, life oriented subject and it develops intellectual, emotional and physical development of the students.

At the primary level syllabus of geography subject gives importance to regional Geography, because it is important to understand the concepts of our district state, country, Asia and world. For understanding these concepts student teachers have to use map reading skills with the help of map reading skills he will be able to understand the various concepts clearly and see its relationships among each other.

If the students have not achieved map reading skills, the objectives of geography subject will not be achieved. Therefore for Primary teachers understanding map reading skills is of great importance.

Need of the Study

While reviewing the related literature it was observed that very few researches on map reading skills have been carried out in India and the studies those are done mainly deals with, map reading skills of primary and secondary level students. The studies related to various components of map reading skills like, titles, subtitles, measurement, projection, signs and symbol, directions, Index, High lighting mount are not carried out.

Diagrams, Pictures and concept related studies have been done but using experimental method map reading skills related studies were not found. Even reviewing the related literature abroad few studies related to map reading skills at Primary and secondary level were found While reviewing these studies the researcher thought why do students find difficulty in map reading? Should teacher educators at the D. T. Ed College handle map reading skills?

Also Researcher being a teacher educator himself for last seven years in a D. T. Ed College observed that the students always find difficulty in map reading. More over during practice teaching student teachers find problem to locate on the map a particular country. These questions stirred the mind of the researcher and hence the need of the present study arose.

Statement of the Problem:-

“Effectiveness of map reading skill programs developed for the problems faced by D. T. Ed student teachers”

Operational Definitions:-

1. **Map Reading Skills.** Map reading skills means to understand the following aspects Title, Scale, Projection, Type, Direction, Sign & Symbols, Index, High lighting mount for a particular land region for world and read a map, fill a Map & interpret a map.

2. **Programs:-**

Researcher prepared games, power point presentations, educational visits, group discussion through which the student teachers will interact.

3. **Effectiveness:-**

Difference in the scores gained by the student teachers in pretest and posttest.

4. **Colleges of Education:-**

According to directives of NCTE Maharashtra State Educational Research and training council, Pune, colleges of Education at Mumbai (D. T. Ed) For the present study 2nd year D. T. Ed student teachers are considered.

Objectives of the study

1. To study the problems faced by student teachers in map reading skills in the following components

- | | | | |
|-------------------|--------------|---------------|------------------------|
| a) Title | b) Scale | c) Projection | d) Type |
| e) Sing & Symbols | f) Direction | g) Index | h) High lighting mount |

2. To compare the problems faced by student teachers in map reading skills on the basis of
a) Gender b) Types of Institutions c) Faculty
3. To compare the pretest scores of student teachers of Experimental and control group of aided Institutions for map reading skills
4. To compare the post test scores of student teachers of Experimental and control group of aided Institutions for map reading skills

Hypothesis

Following null hypotheses were formulated for the study

1. There is no significant difference in the components of map reading skills of student teachers on the basis of
a) Gender b) Types of Institutions c) Faculty
2. There is no significant difference in the pretest scores of map reading skills of student teachers of experimental and control group of aided institution.
3. There is no significant difference in the post test scores of map reading skills of student teachers of experimental and control group of aided institution.

Scope and Limitations

For the present study D. T. Ed Colleges of marathi medium located in greatest Mumbai are included South, North, and West zones of Educational departments of Greatest Mumbai. And chosen 2nd year's Boys and Girls of D. T. Ed colleges are included in the sample. In the study programs are developed on the basis of their problems. Map reading components like Title, Scale, Projection, Type, Direction, Sign & Symbols, Index, High lighting mount are included. The map reading skills are studied in 3 steps i.e., reading the map, filling the map and interpreting the map.

Research Method

For the present study descriptive survey method used at the first level and at the second level Experimental method was used. Since present study is related to present situation of student teachers D. T. Ed colleges. Therefore for studying the problems faced by them in map reading skills descriptive survey method was used.

Since at the second level programs related to the problems in map reading skills were developed and their effectiveness was studied, Experimented method was used. Quasi Experimental design of non-equivalent Pretest posttest design was used.

Group	Pre test	Treatment	Post test
E	O ₁	X	O ₃
C	O ₂		O ₄

Sample:- Size & Nature

For the present study, researcher used three stages random probability sampling.

In the first stage three educational zone of greater Mumbai we selected i.e. South, North and West. In the second stage from every zone marathi medium D. T. Ed colleges were selected by random sampling.

S.N.	Zone	Gender	Sample	%
1	South	M	84	35.89%
		F	150	64.11%
2	North	M	86	30.60%
		F	195	69.40%
3	West	M	64	53.33%
		F	56	64.67%
4	Total	M	234	36.85%
		F	401	63.50%
			635	100%

For Implementation of programs 80 student teachers form aided colleges were chosen.

Tools of the Research

Researcher made tools are used for the present study

- i) Rating Scale for problems faced by student teachers in map reading skills
- ii) Map reading skills test used for study the effectiveness of map reading skills.

Inferential Analysis of Data

Hypothesis

- 1) There is no significant difference in the components of map reading skills on the basis
 - a) Gender

For testing this hypothesis t-test used. In the table 1 student teacher gender wise components of map reading skills are shown

Table No. 1
Significant difference of mean & S. D. in map
reading skills gender wise

S. No.	Components of M. R. S.	Gender	Sample	Mean	S.D.	t Value	Significant Level
1	Title	Male	238	12.38	2.73	3.28	S
		Female	397	11.69	2.66		
2	Scale	Male	238	13.46	2.99	3.27	S
		Female	379	12.74	3.02		
3	Projection	Male	238	17.48	4.05	3.93	S
		Female	379	16.17	4.16		
4	Type	Male	238	10.54	2.31	4.43	S
		Female	379	9.71	2.28		
5	Sign & Symbols	Male	238	16.44	3.69	3.59	S
		Female	379	15.35	3.78		
6	Direction	Male	238	11.36	2.88	5.13	S
		Female	379	10.19	2.70		
7	Index	Male	238	9.30	2.14	1.68	NS
		Female	379	9.03	1.98		
8	Highlighting Mount	Male	238	16.38	4.43	2.27	S
		Female	379	15.55	4.48		
9	Total	Male	238	107.57	18.73	4.62	S
		Female	379	100.45	19.06		

Sample: 635

df :- 633

t- Table Value: 0.01 Level = 2.57

0.05 Level = 1.96

Interpretation

The obtained value of t was 4.62 it is more than table value 1.96 at 0.05 level and 2.57 at 0.01 Level of significance that means it is significant therefore the Null hypothesis is rejected.

Conclusion

Male student teachers are better than female student teachers in map reading skills.

Hypothesis

There is no significant difference of map reading skills of student teachers on the basis of

C) Faculty

Testing this hypothesis ANOVA is used. In the table 2 student teachers faculty wise components of map reading skills are shown.

Table 1.2
Analysis of Variance of map reading skills of Faculty
wise Student Teachers

Source of Variance	D.F.	Sum of Squares	Mean of Square	F	Table Value	Significances
V.B.	2643.16	02	1321.58	3.60	3.00	Significant
V.W.	231982.77	632	367.06			
Total	234625.93	634				

Interpretation

The obtained F value for the group was 3.60 which is more than the table value 3.00 at 0.05 level of significance. Therefore Null hypothesis is rejected.

Conclusion

There is significant difference of map reading skills of Arts, commerce, Science students teachers.

Hypothesis

There is no significant difference in the map reading skills scores of post tests of control group and Experimented group aided D.

T. Ed. college student teachers.

t- test is used for testing the hypothesis. In the table 3 student teacher group wise components of map reading skills are shown.

Table 1.3
Significant difference of mean & S.D. In map reading Skills of student teacher
related to post achievement exp. & control group

Student Group	Sample	Mean	S.D.	t-Value	Table Value	Significances
Experimental	40	64.66	10.64	23.57	1.97	S
Control	40	19.87	5.69			

Interpretation

The obtained value of t 23.57 is more than table value 1.97 at 0.05 level of significance that means it is significant therefore the Null hypothesis is rejected.

Conclusion

Experimental group student teachers are better than Control group student teachers in map reading skills.

Findings

1. Map reading skills of male student teachers were found to be greater than female student teachers with aspect to Title, Scale, Projection, type of maps, Sign & symbols, Direction, Highlighting mount.
2. Map reading skills of male & female student teachers were found to be Similar. respect to Index.
3. Map Reading skills of aided college student Teachers with respect to Title, Scale, Projection, type of maps, Sign & symbols, Direction, Index, Highlighting mount was better.
4. Map reading skills of student Teachers art, com. & sci, faculty wise were found to be similar with respect to Title, Scale, Type of maps, Direction & Index.
5. Map reading skills in the Projection, Sign & symbol, Highlighting mount Aspects of arts student Teachers were found to be more than com & that more than sci student teachers. But sci & Arts student teachers had similar.
6. Map reading skills of aided D. T. Ed college student teachers related pre test score control & experimental group is similar.
7. Map reading skills of Aided D. T. Ed. college, experimental group student teachers is more than control group student teachers.

Significance of the study

The findings of this study will be beneficial to student teacher principals, teacher educators, school teachers, Text book preparation Bureau on Maharashtra State educational Research and training council pune also.

Student teachers have to do practical work based on map reading skills in geography subject. while doing this practical work for solution of problem, student teacher will be benefitted by this research. As pay of the D. T. Ed degree course student teachers need to take practice lessons for the teaching geography subject method during lesson they will get information about internal part, location and its scope.

Getting practical work done like map, map reading skills, components of map, steps of map reading etc., teacher educators will systematically study the components & get practical work completed.

School teachers can do the report of the study as a reference material. Teachers may use the developed programmes while teachers in the class room.

Teachers can develop in the student the habit of observation, eliciting conclusions logically by the observation. Teacher also may develop the positive attitude towards research.

Text book preparation Bureau & Maharashtra State educational Research and training council pune can use the developed programmes for the inservice training programme. They can develop C. D. and disseminate to D. T. Ed Colleges and also could upload on their website.

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