Effectiveness of Maps & Globes in Social Studies’ Teaching

By

1Shakeela Yousaf, 1Shamsa Aziz and 2Hamid Hassan
1International Islamic University, Islamabad. phd_edu@yahoo.com
2Federal College of Education, Islamabad, education101@hotmail.com

Abstract

This study compared the achievement of students taught social studies with and without maps. It was an experimental research which was carried out on two sections of grade six of Federal Government Secondary School number 21, G-9/1, Islamabad. There were 26 students in control and 28 in experimental group. Both the groups were equal in achievement at initial level. Experimental group was taught by one of the researchers with the help of maps and related activities and control group was taught by their class teacher the same content at the same time in the traditional way. Both the groups were tested soon after the experiment and same test was repeated after the gap of two weeks. Throughout the experiment students behavior was observed by the researcher. Analysis of data was carried out by applying t test. Analysis of data showed that the achievement level of the students of experimental group at knowledge, comprehension and application level of the cognitive domain was better than control group. The results of this study showed that the use of maps not only improved the achievement level of students but also improved the class participation, class attendance, behavior and home work abilities. It is recommended that teachers should use maps, globes and related material for better performance of students. Teachers should be trained to use maps and related material through pre-service and in-service trainings.

Keywords: Social Studies, Maps, Globes, Geography, Teaching of Geography

1. Introduction

Social studies as a school subject was developed in USA during World War I (Barcan, 1971). According to the detail discussion about the course content in National Council For Social Studies (NCSS is a US-based association devoted to supporting social studies education), Eleven disciplines put forward the course content foundations for secondary school social studies programs but six most usually associated disciplines with this level are History, Geography, Economics, Anthropology, Political science and Sociology (Kohli, 1996). Its starting point in sub-continent was the year of 1937 with the formulation of basic system of education. (Khasnavis, 1983; Shamsi, 2006)

The multi disciplinary nature of social studies enables the pupils to become good citizens as it offers great awareness of their civic duties. Furthermore it develops the sense of national identity to young pupils as well as the good judgment of decision making in big issues. Teaching of social studies is necessary for the brighter future of any society as it introduced the ethical and moral values to the students.

The discipline of Geography is an essential and rich dimension of social studies as it helps an individual to familiar with the natural as well as human surroundings of environment. It provides a broader horizon of every day changing world. Geography develops more understanding national and international citizens. It gives the answers of unique questions including where, what, how and why. Geography in social studies not only provide a concrete base of knowledge and skills related to real world for students but also make available the ability to meet the growing demands of modern life. The study of Geography offers a lifelong applicable and useful knowledge of world which is essential for critical attitude to world problems.
“Social Studies” is an international expression but when we discuss it in the special perspective of Pakistan it is known as Pakistan studies (Sadiqi, 2008). So in elementary classes it is taught with the name of Social Studies (Muasharati–Uloom) but in secondary and higher secondary classes it is taught with the name of Pakistan Studies (Mutala-e-Pakistan).

The world is shrinking day by day because of the progressively improving means of communication and transportation. So good knowledge of our mother planet Earth is more essential than ever before for students, which is not possible without the understanding of maps and globes. Maps are tools of Geography. They are alternate of spoken words and provide facts in special code words. Humans use maps from centuries as the oldest accepted maps were Babylonian Clay tablets date back to about 2300 B.C (Drewett, 1999). Maps provide spatial images and tools of geography. Maps are obligatory tool in teaching and learning of the numerous topics of social studies mainly related to geography. Maps provide a broad horizon for special thinking and become more common in everyday lives of people to a greater extent. Developments in all fields of knowledge especially in the field of cartography permit and facilitate more people to use maps. Maps are becoming a common expression of print and electronic media. Map offers a very quick viewpoint of detailed text.

Globe is the best representation of earth. It provides the correct concept of distance, direction, Rotation, revolution, size area, etc on earth. The proper use of maps and globes is a shortcut of learning process as it economizes time and effort. It provides firsthand experience to students. The basic concepts and skills required for map and globe reading at secondary level are location, directions, map scales and map symbols.

In Pakistan the use of maps and globes in public sector schools is very unsatisfactory. According to Baqir (2003) 42% schools do not have required instruction materials for Social Studies at elementary level; from the available material 67% teachers do not use these materials. But in International scenario the situation is far more different. In developed nations ICT (Information Communications Technology) is used to teach geography.

The aim of the present study was to compare the achievement of students taught social studies with and without maps. The study intended to explore the effectiveness of the usage of maps in teaching social studies.

2. Methodology

The population of the study was all the students at elementary level in Islamabad. 54 students of class 6th of Federal Government Girls Secondary School number 21, G-9/1 Islamabad were included in the study. An experimental research was carried out. Post test only control group design was used. Two sections of 6th class were taken randomly through basket method for the study. One was selected as control group while the other was the Experimental group. The results of previous final examination were used to check the initial level of students, by applying t test, which was same. Experimental group was taught social studies for three weeks by one of the researchers. In first week required vocabulary, concepts and map skills were developed through different activities. Required vocabulary includes Earth rotation and revolution, seasons, names of continents and oceans, earth’s spheres, types of water bodies, hemispheres, primary and secondary directions, poles, longitude lines, latitude lines, earth’s physical features and map related terms.

In last two weeks of research experimental group was taught social studies with the help of maps and globe. The researcher taught the lesson “SOUTH ASIA AT A GLANCE”. Number of students in this group was 28. The outline of chapter was Introduction of South Asia, Boundaries of South Asia, and Physical features of South Asia and SAARC countries.
Control group was also taught same content without maps and globes at the same time by their class teacher. Number of students in this group was 26. Although both the classes were taught by different teachers, but both the teachers were masters with professional degree of B.Ed and had same teaching experience as well. The post test 1 was given soon after the completion of research and post test 2 was given after a gap of two weeks to check the achievement of students at knowledge, comprehension and application level of the cognitive domain. Researchers also observed the students attendance, class participation, interest and motivation level of both the groups throughout the experiment.

3. Data Analysis

<table>
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The t values and corresponding p values given in the above table indicates that there is no significant difference in the initial level of control group and experimental group. There is a significant difference between control group and experimental group on post test 1 (total) Mean score of experimental group (21.63) is higher than control group (14.39). There is a significant difference between control group and experimental group on post test 2 (total). Mean score of experimental group (27.88) is higher than control group (14.92). There is no significant difference between control group and experimental group on post test 1 (knowledge level). There is a significant difference between control group and experimental group on post test 2 (knowledge level). Mean score of experimental group (15.71) and control group (14.08).
There is a significant difference between control group and experimental group on post test 1 (comprehension level). Mean score of experimental group (2.95) is higher than control group (0.15).

There is a significant difference between control group and experimental group on post test 2 (comprehension level). Mean score of experimental group (3.09) is higher than control group (0.25)

There is a significant difference between control group and experimental group on post test 1 (application level). Mean score of experimental group (6.09) is higher than control group (0.58).

There is a significant difference between control group and experimental group on post test 2 (application level). Mean score of experimental group (9.2) is higher than control group (0.94).

Observation of the Researchers
The students of experimental group who were taught with maps and globes improved in their studies and class performance. In class attendance, class participation and homework there was a lot of change. There was no change in control group. There was also a positive change in some very irregular students of the experimental group but the behavior of same kind of students in control group was same. The students of experimental group also show much interest in class activities and their results show positive change from initial scores

4. Findings

Followings were the main findings of the study:
1. At initial stage there was no difference in the achievement level of experimental and control group and both the groups were same.
2. There was a significance difference in the achievement level between experimental and control group on post test 1. Experimental group’s performance on post-test 1 was better than the control group
3. There was a significance difference in the achievement level between experimental and control group on post test 2. Experimental group’s performance on post-test 2 was better than the control group
4. The performance of experimental group was positively increased from post-test 1 to post-test 2 but in the case of control group it was almost the same
5. There is no significance difference in the achievement on knowledge level of cognitive domain in post test 1 between experimental and control group
6. There is a significance difference in the achievement on knowledge level of cognitive domain in post test 2 between experimental and control group. Experimental group’s performance on post-test 1 was better than the control group
7. The performance of experimental group at achievement on knowledge level of cognitive domain was positively increased from post-test 1 to post-test 2 but in the case of control group it was almost the same
8. There is a significance difference in the achievement on comprehension level of cognitive domain in post test 1 between experimental and control group Experimental group’s performance was better than the control group
9. There is a significance difference in the achievement on comprehension level of cognitive domain in post test 2 between experimental and control group. Experimental group’s performance was better than the control group
10. The performance of experimental group at achievement on comprehension level of cognitive domain was positively increased from post-test 1 to post-test 2 but in the case of control group it was almost the same.
11. There is a significance difference in the achievement on application level of cognitive domain in post test 1 between experimental and control group. Experimental group’s performance was better than the control group
12. There is a significance difference in the achievement on application level of cognitive domain in post test 2 between experimental and control group Experimental group’s performance was better than the control group
13. The performance of experimental group at achievement on application level of cognitive domain was positively increased from post-test 1 to post-test but in the case of control group it was almost the same.

14. Experimental group showed more interest in class participation as compared to control group.

15. Experimental group was more regular in class as compared to control group.

16. Experimental group showed more interest in home work as compared to control group.

17. Experimental group showed more interest in classroom study as compared to control group.

18. Experimental group was more confident about their studies as compared to control group.

5. Conclusions
On the bases of findings of the study following conclusions were drawn:

1. It was concluded on the basis of the results of the study that maps are very much important in teaching of social studies and helps in the improvement of student’s behavior, class participation, class attendance, home work and confidence.

2. It was also concluded on the basis of the results that the use of maps in teaching of social studies helps in the improvement of student’s achievement of knowledge, comprehension and application levels of the cognitive domain.

6. Recommendations
1. Students may develop map skills as a hobby.
2. Teachers of social studies should use maps and globes as audio visual aids for better performance of students.
3. Teachers of social studies may develop lesson plans based on maps and globes.
4. Teachers of social studies should try to develop and increased map and globe skills.
5. Teachers of social studies may grant extra marks for students who draw maps to explain answers.
6. Teachers should relate and motivate students to use maps in daily life for example during in the city and out of city travelling.
7. Administrators should try to organize and support the school system for the teachers of social studies to teach the subject with the help of maps and globes.
8. Administrators should provide the related equipment required for better teaching and learning of social studies.
9. Administrators may organize map based activities competitions on class as well as school level.
10. Administrators may organize in service teacher training programs for social studies teachers.
11. Parents may develop map skills as a hobby in children and may also provide guidance at home for the learning of social studies subject matter.
12. Teacher training institutes should train social studies subject specialist teachers with fully equipped with map skill to teach social studies and provide equal importance as being provided to science teachers.
13. Special in service teacher training programs for social studies teachers may also be introduced.

References
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