



Original Article

To achieve practically useful learning outcomes by linking topographic maps with area studies for students of geography at the higher secondary level

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Abstract

Topographic maps have been included in the geography curriculum for classes XI and XII. However, the large size of the maps, the symbolic list of natural and human elements in them, etc., pose difficulties for students. Taking note of this in the last few years, if it is taught to the students in a simple manner and by linking it to the students' area, their interest can increase and the difficulties faced in it can be removed, resulting in a practical quality curriculum. With the help of computers, the progress of cartography is happening rapidly today. However, if it is linked to area studies, the practical knowledge of the students can be added to. I also believe that it will be useful to provide map knowledge to the students in simple language. The students were asked to prepare a map of their local area and use symbolic symbols in it. This helped the students to reduce their difficulties in using the geodetic map. The students also showed an increased interest in map reading.

Keywords: Topographic Maps, Cartography, Area Study, Geography Education, Geodesic Map, Map Reading Skills, Experiential Learning

Introduction

In the study of geography, more emphasis is placed on observation and experiment. Geography is basically the science of observation and experiment. Field study is useful for making observations and experiments. Field work is an effective and useful method of study in geography. Thus, various concepts can be presented in a tangible form. Field study creates a certain perspective in the teaching of geography. Field study conducted in different places makes it easy to generalize various ideas, theories, concepts, and rules in geography. The biggest advantage of field study is that it helps the learner to further increase his knowledge of geography. In the initial stage of field study, it is done in a limited area of the local area. Therefore, it is easy to understand the nature of the region, its various components, and problems. In such a limited area study, the student can collect accurate information by comprehensively studying the environment of that region and asking specific questions about the environment. Rather than reading the concepts and problems of geography in a book, an accurate understanding of the environment is achieved through the collection of such first-hand information.

Indian Topographical Maps are prepared by the Survey of India. Its head office is at Dehradun. This series of maps prepared in the 18th century using British measurement is called the 'India and the Surrounding Countries' series. The scale of the maps on this was in inches per mile and contour lines per foot. After 1950, the Survey of India started adopting the metric system in these maps. The importance of this cartography is unique in today's times. Local Area Map An accurate and standard map of the area to be studied is the primary requirement. Any of these maps can meet this requirement, be it a village map, a map of a city or town, a map prepared by the Survey of India, an aerial photograph of the area or a satellite image of the area if available. If a map of the local area is not available, a plan of the area is prepared. While doing this, the relative positions of the main rivers, buildings, and mountain ranges in the local area are shown.

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With the help of computers, cartography is progressing rapidly today. However, if it is combined with area studies, it can add to the practical knowledge of the students. I also believe that it will be useful to give the students' knowledge of maps in simple language.

Need and Importance:

The main source of geography study is known as map. Map includes political and natural maps. While reading this map, direction, symbolic symbols and landmarks and proportions are included. Many times, students may face difficulties in map reading and this may reduce the interest of students in map reading. If students are taught map reading in the right way and in a proper sequence, their interest can increase. Geographical coordinates maps have been included in the geography demonstration for class XI and XII. However, the large size of the maps, the symbolic list of natural and human elements in them, etc., create difficulties for students. Taking note of this in the last few years and teaching it to the students in a simple manner and by linking it to the students' surroundings, their interest can increase and the difficulties in it can be removed and a practical quality demonstration can be made. This innovation has been made with this in mind.

1. With the aim of emphasizing the students' prior knowledge and as part of the way to strengthen the student's foundation
2. To make more efforts to achieve the desired future learning outcomes so that the students can complete them.
3. Through this initiative, they try to express their knowledge with interest by removing the difficulties they face while reading the geodesic map in the subject of geography in a simple way and by linking it with daily life and their surroundings.
4. Their concepts related to maps become clear. This innovation was decided to be done as it can be useful for the students to reach the learning outcomes.

Objectives:

1. To develop various skills by linking the students' village/area plan with geodesic maps.
2. To create interest in the students' village/area plan and the use of symbolic symbols and to remove the difficulties in reading geodesic maps from it.
3. To acquire knowledge in a pleasant way through map reading in the classroom.

Methodology:

Observing the elements of the environment in conjunction with the subject of environment. Along with the natural and human elements of geography, subjects such as area studies, painting etc. will be studied. Also, understanding rural and urban land use.

Analysis of data

The average percentage difference in the student's editing is seen due to the students' actions by linking their area plan. This difference is 36.1%. From this it is seen that, by linking the geodetic map with the area plan and providing education through action, practical knowledge can be added and it remains in the memory permanently.

Success of the initiative

1. The said map has been linked to the area study. Due to this, the observation power of the area study has increased.

2. Practical knowledge has been added due to the adoption of the action-based learning method.
3. The symbols in the georeferenced map and its use began to be used for studying the area.
4. Reading the georeferenced map became easier as the area plan prepared by the students and the symbols in it could be used.
5. The ability to create self-study began to increase among the students.
6. The ability to understand any subject from various aspects was created among the students.
7. Universality and imagination were awakened among the students.
8. The talents of the students were developed.
9. Self-study created interest in the students' studies.
10. The learning process began to take place spontaneously.

Conclusion

For the past many years, it was believed that students of Geography in 11th and 12th standard face many difficulties while reading the geodetic map. First of all, by selecting some students as a sample selection, they were asked to prepare a plan of their local area in addition to the geodetic map and use symbolic symbols in it. This reduced the difficulties faced by the students in geodetic maps. Also, the students' interest in map reading increased and it became easier for them to read aerial maps, natural and political maps like geodetic maps. By combining geography with the subject of area studies, environmental education and painting, interest in the study was created.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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