A STUDY ON THE USE OF TEACHING AIDS IN GEOGRAPHY AT SECONDARY SCHOOL LEVEL IN WEST BENGAL

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Abstract

Geography is an important school subject at secondary school level in West Bengal. Geography as a field of study integrates diverse concepts and skills which demands availability of a variety of resources for effective learning. The scope of the subject Geography demands use of teaching aids to supplement verbal instruction. The purpose of this study is to investigate the use of teaching aids in Geography at secondary school level in West Bengal. Primary data for the study were sourced from seven secondary schools using a questionnaire, The sample included 210 secondary students of class nine in West Bengal. The study used a survey type research design. The findings from this study revealed that there is limited use of teaching aids in Geography at secondary school level. It is also found that a variety of teaching aids are used in Geography class though the usage of teaching aids is not uniform. Teaching aids like pictures, diagrams, globe, physical and political maps are used more in class for teaching Geography compared to other teaching aids.

Keywords: Geography, Teaching aids, Secondary school level.

Introduction

Geography is an important school subject at secondary school level. Therefore, quality of Geography education is of great concern for the stakeholders in education. Geography as a field of study integrates diverse concepts and skills which demands availability of a variety of resources for effective learning. The quality of Geography education in secondary schools is affected by a number of factors like quality of teachers, teaching methods, use of teaching materials, quality of students, management of the school, geography laboratory for students to mention a few.

Teaching is an art which helps to transmit information, ideas, values and concepts to the students to bring about positive changes in the behavioural pattern of the learners. According to Damar (2004) teaching is an act of organising curricular and other resources to enhance
Teaching aid is one important resource which supplements teaching to make it more effective. According to Ibeneme (2000) teaching aids or instructional materials are those materials used in the classrooms or workshops for instruction or demonstration purposes by students and teachers. Froese (1972) saw them as actual equipment used as a “hands-on” process by learners in order to develop the degree of skills sought by the course requirements. Rays and Thomas (1973) recommended manipulative materials as teaching aids i.e. the objects or things the children are able to feel, touch, handle, and move. Cunningsworth(1984) found that the most important consideration for the use teaching aids is whether the materials meet the needs of the students.

Hinchliff (1992) suggested that learning resources can be used in providing a variety in teaching and learning, retention, comprehension and capturing attention of the students. Mkandla (1996) states that, teaching/learning resources facilitate learning and fulfill educational needs of the pupils. Mangal (2004) highlights that most pupils who are in the concrete stage learns quite well through the use of concrete objects. Ibeh et al. (2013) indicated the importance of teaching aids in improving attitude and performance of the secondary students. According to Meremikwu and Enukoha (2010), no meaningful learning can take place without the use of instructional materials. Apart from enhancing the quality of teaching and learning (Ojeifo, 2013), teaching aids also influence students’ academic performance (Akinfe et al., 2006, Oguzor, 2011). To highlight the importance of teaching aids Onasote et al. (2011) referred it as a panacea for effective learning. According to Oyesola (1991) one of the professional responsibilities of Geography teacher at any level of educational system is to bring about new dimensions in understanding through the effective use of visual materials. Okunrotifa (1970) was of the opinion that the students were made to learn Geography concept in the abstract form and were subjected to too much imagination of Geography features instead of learning through practical observations.

Oyesola (1991) cited the following importance of teaching learning materials for teaching of Geography:

1) These help to visualise the phenomena with which geography deals.
2) These help the students to learn the kind of facts about geographical phenomena.
3) These help the students to analyse the facts from geographical point of view.
4) These help the students to make generalisation from the field of Geography and interpret the world events. The mental stimulation and three dimensional images of the teaching aids are important for teaching. Therefore the immense learning values of these aids for the students cannot be overlooked.
Different teaching aids are used in the teaching and learning of geography in secondary schools. This paper studies the use of teaching aids like models, pictures, diagrams, climatic charts, globe, barometer, flash cards, radio, video, climatic maps, political maps, physical maps, thermometers, specimen, overhead projectors, power point presentation, television, tape recorder, internet and films.

1.2 Need for the Study
Geography is the study of places on Earth and their relationship with each other. Geography provides information about how people interact with the environment and with each other. Geography is rich in material that relates to international understanding, multi-cultural concerns, and environmental education (National Council for Geographic Education, 1994). The scope of the subject Geography demands use of teaching aids to supplement verbal instruction. With a view to investigate the use of teaching aids in Geography at secondary school level the present study has been undertaken.

1.3 Statement of the Problem
This study investigates the use of teaching aids in Geography at secondary school level in West Bengal. The study would help the educators and policy makers to understand the use of teaching aids in Geography and create an awareness about it.

1.4 Research Question
What is the usage of teaching aids in teaching Geography at secondary school level in West Bengal?

1.5 Objectives of the Study
The proposed study seeks to find out the use of teaching aids in teaching Geography at secondary school level in West Bengal.

2. Delimitation of the Study
The study was limited to 210 students of class 9 from 7 secondary schools of West Bengal.

3. Methodology
The present study was a descriptive research based on survey. A complete list of students of the given schools was collected which has been used as the sampling scheme. 210 students were then selected randomly from 7 schools of West Bengal using Simple Random Sampling Without Replacement Sampling scheme. This has ensured that the sampled students represent the population under consideration faithfully. A questionnaire consisting of 20 questions were developed by the researcher. The questionnaire consisted of three options i.e. agree, undecided and disagree. The content validity was ensured by the incorporation of
suggestions of professors in Education, Geography teachers in schools and in training colleges. The reliability of the tool was calculated by using test-retest method, which was found 0.74 with 15 days gap. The data was analysed by using percentage and qualitative description.

3.1 Analysis and interpretation

The objective of the study is to find out the use of teaching aids in Geography at secondary school level in West Bengal. For this, the investigator collected data from students by using questionnaire on use of teaching aids in Geography. The responses of students are presented in the following tables.

**Table 1 shows the responses of students on the use of teaching aids in Geography.**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Statement</th>
<th>Responses of the students (In Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree</td>
<td>Undecided</td>
</tr>
<tr>
<td>1</td>
<td>Models are used in Physical Geography class.</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Pictures of physical features are shown in Physical Geography class.</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Diagrams are drawn on the board to explain Physical Geography</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>Climatic charts are shown to teach Climate.</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Globe is used to teach Physical Geography.</td>
<td>60</td>
</tr>
<tr>
<td>6</td>
<td>Barometer is used to teach climate.</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Flash cards are shown in Human Geography class.</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Radio is used in Geography class.</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Video presentations are shown to teach formation of physical features.</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Climatic maps are shown to teach</td>
<td>15</td>
</tr>
</tbody>
</table>
weather and climate.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Political maps are shown in Economic Geography classes.</td>
<td>60</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>12</td>
<td>Physical maps are shown in Physical Geography classes.</td>
<td>65</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>13</td>
<td>Thermometer is used in Geography class.</td>
<td>10</td>
<td>5</td>
<td>85</td>
</tr>
<tr>
<td>14</td>
<td>Specimen are shown in Geography class.</td>
<td>30</td>
<td>5</td>
<td>65</td>
</tr>
<tr>
<td>15</td>
<td>Overhead projectors are used in Geography class.</td>
<td>5</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>16</td>
<td>Power point is used to teach Physical Geography.</td>
<td>10</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>17</td>
<td>Television programmes are shown to teach in Geography class.</td>
<td>2</td>
<td>0</td>
<td>98</td>
</tr>
<tr>
<td>18</td>
<td>Tape recorders are used in Geography class.</td>
<td>12</td>
<td>0</td>
<td>88</td>
</tr>
<tr>
<td>19</td>
<td>Internet is used in Geography class.</td>
<td>1</td>
<td>0</td>
<td>99</td>
</tr>
<tr>
<td>20</td>
<td>Films on Geographical phenomena are shown in Geography class.</td>
<td>2</td>
<td>0</td>
<td>98</td>
</tr>
</tbody>
</table>

Table 1 shows that the type of teaching aids used in the class to teach Geography varies. 25% students out of 210 students reported that models were used in Physical Geography class whereas 73% students disagreed to that,55% students found that pictures of physical features were shown in Physical Geography class but 45% students were not shown any picture,50% students observed that diagrams were drawn on the board to explain Physical Geography though 45% students did not observe that,climatic charts were shown to 15% students against 80% students who did not share the same opinion,60% students evidenced use of globe in Physical Geography class in contrast to 33% students,18% students experienced Geography classes where barometer was used to teach climate but 79% students denied
having any such experience in Geography class. Flash cards were shown to 10% students but 85% students disapproved that. 5% students reported that radio programmes were aired during their Geography classes although 95% students disagreed to that. Video presentation was shown to 7% students but 93% students were never shown any video presentation in Geography class. 15% students were taught weather and climate with the help of climatic maps whereas 75% students contradicted that. Economic Geography was taught with the help of political maps to 60% students against 30% students who were not taught in the same way. 65% students evidenced Physical Geography classes where physical maps were used but 35% students did not evidence that. Thermometer was used in the classes of 10% students whereas 85% students did not have any such experience. 30% students were shown specimen in Geography class though 65% never got any opportunity to observe those. Overhead projectors were used to teach 5% students but 95% students disapproved that. 10% students were taught by powerpoint presentations despite the fact that 80% students were not taught in that manner. 2% students were shown television programmes in the class with a view to teach Geography while television was not used for 98% students. Use of tape recorders was reported by 12% students against 88% students who disagreed to that. 1% student experienced use of internet in the class against 99% students who did not experience that. 2% students have seen films on Geography but 98% students denied having any such experience.

4. Major Findings:

- There is limited use of teaching aids in Geography at secondary school level.
- A variety of teaching aids are used in Geography class though the usage of teaching aids is not uniform.
- Usage of teaching aids like pictures, diagrams, globe, physical and political maps varies between 60% to 75% which is more compared to other aids.
- Usage of technological aids like radio, video, overhead projectors, power point presentation, television, tape recorder, internet and film show varies between 1% to 15%.
- Usage of meteorological instruments varies between 15% to 22%.
- Usage of other aids like models, climatic charts, flash cards, climatic maps and specimen varies between 15% to 35%.

5. Educational Implications and Conclusion:

The present study has educational implications for teachers, teacher educators and policy makers.

The present study reveals that use of teaching aids in Geography at secondary school level is limited. Of all the aids studied, physical and political maps are mostly used by the teachers.
followed by globe, pictures and diagrams. Use of models, climatic charts, barometer, flash cards, climatic maps, thermometers and specimen comes next. Use of electronic aids seems to be least for teaching Geography.

It is a well known fact that the usage of teaching aids help the learners to learn easily. The use of A.V aids in teaching learning process has multifarious values (Mohanty, 2001). They appeal to the mind through the visual auditory senses (Jain, 2004). According to Kishore (2003) audio-visual aids stimulated thinking and understanding. In the words of Kunari (2006) audio-visual aids in teaching is one way to enhance lesson plans and give students additional ways to process subject information. It is therefore suggested that, keeping in mind the immense advantages of teaching aids, the teachers should increase their uses in teaching Geography. With a view to motivate and enlighten the teachers about the uses of various teaching aids in the class special sessions could be arranged for them. This is expected to result in better learning and performance of the students.

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