

Understanding of Nature of Geography: An Uncontested Objective of Teaching Geography

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Abstract

It is generally observed that many of the Senior Secondary students face a number of problems in understanding the concepts of geography. The reason lies within its own nature of discourse characterised by frameworks of physical-human dualism which is very complicated to understand not only for students but teachers also. Proper learning experiences can overcome these challenges and help the students to understand the dichotomy of geography (i.e. science or art). That is why a test is developed and validated by the experts for measuring understanding of nature of geography. This test consisted of 31 multiple-choice items related to five dimensions of nature of geography, namely geographical methods, nature and personality of geographers, dual nature of geography, nature of geographical facts, laws and theories and area of study in geography. Reliability of the test was determined by split-half method which was found to be 0.81 while content validity of the test was established on the basis of opinion of experts. Exploratory factor analysis was used, items loading above

0.5 were selected and items loading below 0.5 were rejected. Data were collected from a sample of 180 senior secondary geography students from Government and Private schools in Delhi with the use of a test developed specifically for this study. The implications of the study revealed many inadequacies and misconceptions regarding the nature of geography prevailing among the students. To overcome these inadequacies and misconceptions teacher educators should thoughtfully engage themselves in pedagogy and they must foster understanding of nature of geography and should provide opportunities for thinking critically and reflectively-about what it means to be a teacher and to the student. The research paper also discusses the feedback obtained from the participants regarding their experience with the test on understanding of nature of geography.

Keywords: *Dual Nature of Geography, Physical-Human Dualism, Teaching Geography, Understanding of Nature of Geography*

Introduction

“The fact that the social and political history of our own time appears to foreshadow great changes in the constitution and social relations of scientific work, geographers will need to understand the role of their own subject within the system of sciences and its relation to social life through spatial planning. To do that they must clarify their concepts of the philosophical and methodological basis of geography.”(Geography, vol.26, 1941, p.99.)

Geography has played a pre-dominant role not only in the advancement of civilization in general but also in the development of physical as well as social sciences and has now wider applications in other disciplines too. It has been an inseparable part of school curriculum ever since the beginning of formal education and it continues to be so. The geography curriculum has undergone various changes from time to time in accordance with the changing needs of the society. Geographers studies, physical, natural and biological environments, human societies and their interactions across space and time, utilizing both natural science and social science perspectives. Geography is an integrating subject between the natural sciences and social sciences, which has its consequence in objective-subjective duality resulting in human intellectual shortcoming in understanding of nature of Geography as a discipline pervading two boundaries and as a curriculum subject with dual characteristics. As in the domain of purely natural science subjects like biology, chemistry and physics, geography also includes the same scientific rigour as manifested in areas of subject-specific knowledge, methodology, communication and evaluation. Furthermore, building on these four areas of scientific competence, geography includes action as a separate area of social competence. This area can also be found in other social science subjects but, a unique characteristic of geography is its subject specific speciality in the form of “areal differentiation”. This creates dichotomy about its nature whether it is a science or an art. The geography as a subject contribute a lot in understanding and mastering the great amount of information in our time. More dualistic knowledge motivates and stimulates the ability to analyse critically and understand comprehensively. This can give the pupils a good basis for participating in the development of society in a constructive way. An important objective of the geography subject is also to develop the pupils’ ability to be tolerant and understand their global co-responsibilities. Geography is a subject that teaches the interaction of man with his physical environment. It is essentially the study of “the relationship between human

activity and the environment, describing and explaining the significance of location, distance, direction, spread, and spatial succession” (Cohen, 1988, p. 248). It is useful as a school subject which helps a potential student of any institution to pursue both professional as well as an academic discipline. A number of professional field and professionals emerge from the discipline of Geography. It requires active participation and pro-activeness of the teachers and learners. In other words, an attempt has been made to examine those ways in which Geography, as a field, can contribute in developing better understanding about the nature of geography.

Significance of the Study

Existing *NCERT Syllabus for Secondary and Higher Secondary Classes Volume-II (NCF-2005)* on geography education at senior secondary level suggests that there seems to be a lesser focus on understanding of nature of geography as a core objective. Although the present curriculum of geography education at senior secondary level emphasize on objectives of understanding of nature of geography is prerequisite already known among teachers and students such as concepts and principles of geography; geographical knowledge and methods of enquiry and geographical skills. But these objectives can never be fully accomplished without the consideration for core objective of understanding of nature of geography. Hence the present research attempts to study the understanding of nature of geography among students of senior secondary level. So for the knowledge of present researcher there is no objective, reliable and valid test available to measure the understanding of nature of geography keeping, this in view the present researcher have decided to develop a test that can measure objectively, the understanding of students of geography about their understanding of its nature.

Objectives of the Study

1. To identify and validate the theme for understanding the nature of geography.
2. To develop a test for measuring understanding of nature of geography.
3. To establish the reliability and validity of the above test.
4. To study the level of understanding of senior secondary students about the nature of geography.

Sample

All the senior secondary geography students studying in Government and Private schools of Delhi comprised population for the present study. The sample for the present study was selected from three private and three government sectors schools of Delhi.

Tools

The Test Understanding of Nature of Geography developed by the investigator himself has been used to measure the Understanding of Nature of Geography and its utility for studying understanding of senior secondary geography students.

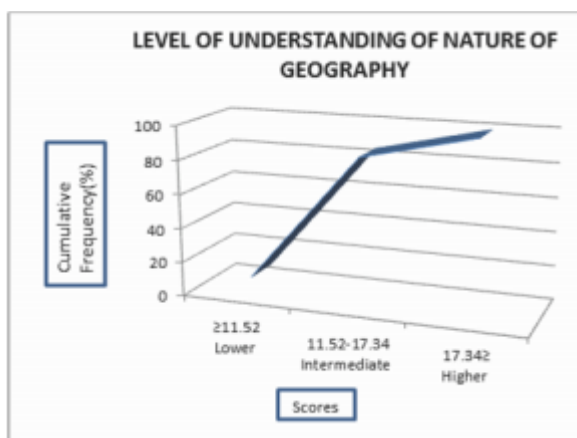
Result and Discussion

Keeping in view the importance of analysis of subject theme in the construction of Test on Understanding of Nature of Geography, the investigator at first reviewed the text books like-The Making of Geography, Geographical Thought-A Contextual History of Ideas, The Art and Science of Geography, Nature of Geography: A Critical Survey of Current Thought in the Light of the Past, Geography: History & concepts, Evolution of Geographical Thought, All Possible World: A History of Geographical Ideas, The future of geography: The debate continues Geography, The Changing Nature of Geography, Geography in the Twentieth Century, Fundamental of Physical Geography, Class-XI, articles and journals related to geography. The subject matter included in these text books, articles and journals were analyzed thoroughly and an outline of the theme was prepared. Keeping in view the nature and purpose of the present study, the theme of geography has been developed by the investigator covering the 26 sub-dimensions which were further divided into the following five dimensions for the construction of the test: (i) Geographical methods, (ii) Nature and personality of geographers (iii) Dual nature of geography (Science/Arts)(iv) Nature of geographical facts, laws and theories (v) Area of study in geography. Test on understanding of nature of geography was administered on total 180 class XII students of six schools (3 Government and 3 Private) of Delhi.30 students were taken from each school. The maximum score of the understanding of nature of geography test was 31. The mean score and Standard Deviation (SD) of 180 students of class XII are given below in table 1:

Table 1: Mean Scores and S.D of Understanding of Nature of Geography

Sr. No.	Level of Understanding	Mean±SD
1	Higher Level	≤ 17.34 (8.88%)
2	Intermediate Level	11.52-17.34 (76.12%)
3	Lower Level	≥ 11.52 (15%)

It is observed from the above table that the average performance of sampled class XII students in the understanding of nature of geography test is 14.43 with SD 2.91. For different levels of understanding of nature of geography it varies from 76.12% (Intermediate Level) to 8.88% (Higher Level). It shows that class XII geography students have satisfactory to good understanding of nature of geography. Among the three categories of level of understanding of nature of geography students of Intermediate Level scored (76.12%) highest in understanding of nature of geography whereas, students of Higher Level scored (8.88%) least in understanding of nature of geography. While, on the other hand, 15% students came in the category of Lower Level. The above data can be shown graphically as under:

**Figure 1: Level of Understanding of Nature of Geography**

The level of understanding of senior secondary students about the nature of geography has three categories, namely, 'higher level', 'intermediate level' 'lower level' and the above graph shows the percentage of students of senior secondary school, in each of these categories. It can be seen from the above

graph that the number of students in the category of 'intermediate level' is more (76.12%) than other two categories i.e. higher level and lower level respectively. Thus, the understanding of senior secondary students about the nature of geography is better lies in the intermediate level as compared to other two categories i.e. higher level and lower level. Intermediate level showing that senior secondary students are more sensitive understanding about the nature of geography.

Implication of the Study

This study will be helpful to:

- zz The present study has revealed many inadequacies and misconceptions regarding nature of geography prevailing among the students. To overcome this problem some serious efforts should be made to include life history of geographers and some basic philosophy of geography that are appropriate for the mental level of the students.
- zz The development of geography curriculum programme should be so designed that understanding of nature of geography is given due space as it is prerequisite for the better understanding and performance of students in geography as a school subject.
- zz Senior secondary geography curriculum should be so designed that they are helpful in enhancing the positive attitude of the students towards understanding of nature of geography.
- zz Teacher educators should thoughtfully engage themselves in pedagogy and they must foster understanding of nature of geography and should provide opportunities for thinking critically and reflectively-about what it means to be a teacher and to the student.

Suggestions

The present study has focused on the most important element of the geographical education system i.e. understanding of nature of geography. In spite of advance planning and careful implementation of study the present study has certain limitations. In the light of these limitations suggestions for further research are briefly outlined below:

- zz The present study was confined to the study of eight schools (Government and Private) situated in Delhi. For more generalizations in results, the study needs to be extended to the other schools and colleges in National Capital Territory of Delhi, to other states.

- zz Some tests to measure understanding the nature of geography of students at various stages should be developed and standardized in Indian situation.
- zz Some in-depth studies are required to identify the causes of lack of valid understanding of the nature of geography among the students at various levels.

Conclusion

Geography deals with an enormous range of phenomena, ranging from physical, biotic to human. The four spheres, namely lithosphere, atmosphere, hydrosphere and biosphere constitute the geographic environment. This makes geography highly interdisciplinary, drawing upon and contributing to numerous other fields of knowledge. As the reason lies within its own nature of discourse characterised by frameworks of physical-human dualism which is very complicated to understand not only for students but teachers also. Proper learning experiences can overcome these challenges and help the students to understand the dichotomy of geography (i.e. science or art). The performance of class XII students in the understanding of nature of geography test is 14.43 with SD 2.91. For different levels of understanding of nature of geography it varies from 76.12% (Intermediate Level) to 8.88% (Higher Level). It shows that class XII geography students have satisfactory to good understanding of nature of geography. If nature of geography becomes increase at senior secondary level of students then performance in geography will increase. One of the crucial factors is teacher itself. Unless the teachers do not have valid and good understanding of the nature of geography, we cannot expect to develop a good understanding of nature of geography among learners. It is generally presumed that geography occupies puzzling position within the traditional organizations of knowledge that's why nature of geography is essential for learning geography but unfortunately this area of geography is ignored by the teacher educators. So there is urgent and foremost need that we should focus of this area for better understanding of nature of geography for learning geography. This entails the researcher to put forth the following suggestive arguments to resolve the dichotomy for better understanding of nature of geography. The development of geography curriculum programme should be so designed that understanding of nature of geography is given due space as it is prerequisite for the better understanding and performance of students in geography as a school subject. Teacher educators should thoughtfully engage themselves in pedagogy and they must foster understanding of nature of geography and should provide opportunities

for thinking critically and reflectively-about what it means to be a teacher and to the student.

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