

Teachers and their understanding about the nature of geography: An empirical study

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Abstract

There is no doubt that geography is one of the important disciplines in the education system, which has long been incumbent for promoting awareness, understanding and curiosity of the diversity of the world's phenomena, people and places with reference to man-environment relationship. For teaching diversified phenomena in relation to spatial-temporal aspects of the society it is very essential for teachers (both pre-service and in-service) to have sound understanding of the nature of geography. A sample of 40 teachers (25 pre-service and 15 in-service teachers) was purposively selected. Descriptive method of research was employed and data was collected through TOUNG. Mean, Std. D and t- test was done through SPSS 22. Result reported that 72.12% of the pre-service and 74% of in-service teachers have average understanding of the nature of geography. Significant difference was not found between pre-service and in-service teachers' understanding of the nature of geography. Paper concluded that in view of teachers' (both pre-service and in-service) inadequate understanding of the nature of geography, a number of research have to be focused for improving the understanding of both pre-service and in-service teachers of geography. Improvement of teachers understanding of the nature of geography would bring about positive improvement to those students of geography.

Keywords: geography, nature of geography, understanding, pre-service teachers, in-service teachers

Introduction

Understanding of the nature of subject has a very crucial role to play because quality of teaching rests on the teachers understanding of the nature of subject. Teachers are teaching, knowing and understanding the structure and sequencing of concepts, terms and developing factual knowledge and understanding that is essential to understand the nature of the subject. 'When there is a lack of understanding and expertise of the nature of subject among the teachers, the quality of teaching-learning process and students' exam results are at risk' (Smithers & Robinson, 2005). A well-developed foundation of understanding of the nature of subject knowledge is an essential prerequisite to teach a subject like geography effectively and successfully. "Pupils cannot be taught simply to think. They have to have something to think about," is what Lambert expresses his viewpoint on the subject matter (Lambert, 2009b, p.1). In the context of curriculum of geography, teachers' lack of subject knowledge and understanding sometime have been identified as problematic in the United Kingdom, Netherlands and in many other developing and underdeveloped countries of the world including India as well. No doubt that understanding of content knowledge, pedagogical knowledge and pedagogical content knowledge is of tremendous importance for the teachers' for effectively transacting the unique nature of geography.

Significance of the Study

There is no doubt that geography is one of the important discipline in the education system, which has long been incumbent for promoting awareness, understanding and curiosity of the diversity of the world's phenomena, people

and places. Geography 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). For teaching diversified phenomena with reference to man and environment it is very essential for both types of teachers i.e. pre-service and in-service to have sound understanding of the nature of geography. It has been observed that inadequate understanding of the nature of geography of the teachers considered as a great barrier to students' learning of geography. Teachers' understandings of nature of geography play crucial role for their students. If the teachers understand the concepts properly only then they can inculcate the interest greatly among the students. To increase the vicinity and scope and its relations with other disciplines, both teachers and students need proper understanding of the nature of geography.

Objectives of the Study

1. To study the level of understanding of pre-service teachers about the nature of geography.
2. To study the level of understanding of in-service teachers about the nature of geography.
3. To find out the differences between the level of understanding of the two groups of teachers.

Sample

The samples for the present investigation were randomly drawn from different Schools of Delhi-NCR. A total of 40 teachers (25 pre-service and 15 in-service teachers) teaching geography constituted the sample for the present study.

Tool

Test on Understanding of the Nature of Geography (TOUNG) developed by Ansar Ahmad and Prof. Aejaz Masih (2014) was adapted to gather the relevant information from the selected sample.

Result and Discussion

Before the administration of the test, the nature and the purpose of research were discussed with the sample population. Then the test was administered by the researcher himself in all the schools selected in the sample. After the administration of the test to the selected samples the test booklets were scored with the help of answer key prepared beforehand. In order to find out the level of understanding of nature of geography, of pre-service and in-service teachers, the mean and S.D was used while t-test was used to find out the differences between the levels of understanding of the two groups of teachers. The objective wise details of analysis and interpretation are given below:

1. To study the level of understanding of pre-service teachers about the nature of geography

It is observed from the table that the average performance of the pre-service teachers understanding of the nature of geography test is 14.63 with S.D 2.93. For different levels of understanding of nature of geography it varies from 72.12% (Average Level) to 10.88% (Higher Level). It shows that pre-service geography teachers have satisfactory to good understanding of the nature of geography. Among the three categories of level of understanding of nature of geography teachers of Average Level scored (72.12%) highest in understanding of nature of geography whereas, teachers of Higher Level scored (10.88%) least in understanding of nature of geography. While, on the other hand, 17% teachers came in the category of Lower Level. The above data can be shown graphically as under:

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

Sr. No.	Level of Understanding	Mean ± SD
1	Higher Level	≤ 17.56 (10.88%)
2	Average Level	11.70-17.56 (72.12%)
3	Lower Level	≥ 11.70 (17%)

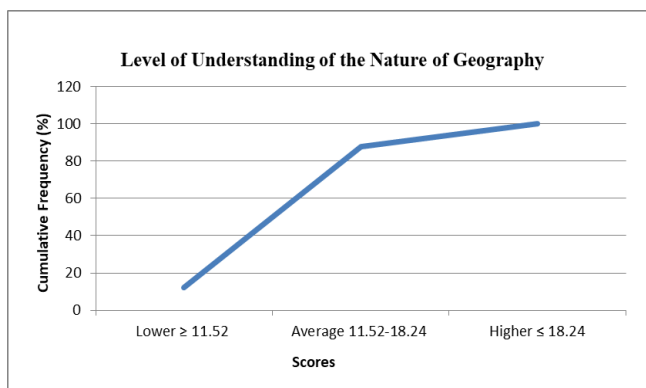


Fig 1: Level of Understanding of Nature of Geography

The level of understanding of pre-service teachers about the nature of geography has three categories, namely, ‘higher level’, ‘average level’ ‘lower level’ and the above graph shows the percentage of pre-service teachers in each of

these three categories. It can be seen from the above graph that the number of pre-service teachers in the category of ‘average level’ is more (72.12%) than other two categories i.e. higher and lower level respectively. Thus, the understanding of pre-service teachers about the nature of geography lies in the average level as compared to other two categories i.e. higher and lower levels. Average level showed that pre-service teachers have good understanding about the nature of geography.

2. To study the level of understanding of in-service teachers about the nature of geography

It is observed from the table that the average performance of in-service teachers in the understanding of nature of geography test is 14.88 with SD 3.36. For different levels of understanding of the nature of geography it varies from 74% (Average Level) to 13.66% (Higher Level). It shows that in-service teachers have satisfactorily good understanding of the nature of geography. Among the three categories of level of understanding of the nature of geography in-service teachers of Average Level scored (74%) highest in understanding of the nature of geography whereas, teachers of Higher Level scored (13.66%) least in understanding of the nature of geography. While, on the other hand, 12.13% in-service teachers came in the category of Lower Level. The above data can be shown graphically as under:

Table 2: Mean Scores and S.D of Understanding of the Nature of Geography

Sr. No.	Categories of Level of Understanding	Mean±SD
1	Higher Level	≤ 18.24 (13.66%)
2	Average Level	11.52 to 18.24(74%)
3	Lower Level	≥ 11.52 (12.33%)

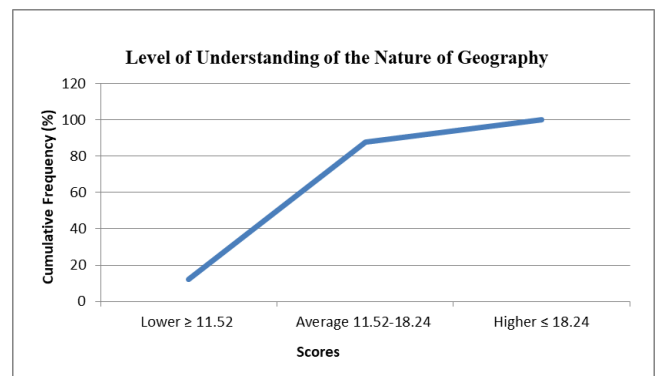


Fig 2: Level of Understanding of Nature of Geography

The level of understanding of in-service teachers about the nature of geography has three categories, namely, ‘higher level’, ‘average level’ ‘lower level’ and the above graph shows the percentage of in-service teachers in each of these three categories. It can be seen from the above graph that the number of in-service teachers in the category of ‘average level’ is more (74%) than other two categories i.e. higher level and lower level respectively. Thus, the understanding of in-service teachers about the nature of geography lies in the average level as compared to other two categories i.e. higher and lower levels. Average level category showed that in-service teachers have good understanding about the nature of geography.

3. To find out the differences between the level of

understanding of the two groups of teachers.

From the table-3, it is evident that the mean scores of Pre-service and In-service teachers are found to be 14.63 and 14.88 with S.Ds 2.93 and 3.36 respectively. The obtained 't' value between two groups come out to be 0.93 which is less than the table value i.e. 2.57 at 0.01 level and also less than

the table value i.e. 1.96 at 0.05 level of significance. Hence, there is no significant difference between pre-service and in-service teachers about the understanding of the nature of geography and it is accepted at both the levels i.e. at 0.05 and 0.01 level.

Table 3: Mean Scores, S.D. and 't' value of Understanding of the nature of geography

Group	N	Mean	Std. Deviation	't' value	Remarks	T 0.05	T 0.01
Pre-Service Teachers	25	14.63	2.93	0.93	Not Significant	1.96	2.57
In-Service Teachers	15	14.88	3.36				

Conclusion

Although both pre-service and in-service teachers' have an average understanding of the nature of geography at the same time they both had many misconceptions and inadequacies regarding the nature of geography. It has been observed that inadequate understanding of the nature of geography of the teachers considered as a great barrier to students' learning of geography. In view of the teachers' (both pre-service and in-service) inadequate understanding of the nature of geography a number of research have to be focused for improving their understanding about the nature of geography. Teachers' understandings of the nature of geography played pivotal role for their students learning. If the teachers understand the concepts properly only then they can inculcate the interest greatly among the students. To increase the vicinity and scope and its relations with other disciplines for that a teacher as well as a student needs proper understanding of the nature of geography. A sound understanding of content knowledge of geography is essential prerequisite for the teachers to teach a subject such as geography effectively and successfully. Improvement of teachers understanding of the nature of geography would bring about positive improvement to those students of geography.

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