



A Note On the Status of Geography Teachers in Indian Schools

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Geography should be taught in schools and colleges by trained specialist teachers. Teachers are the most valuable resource in education. Because of this and because of the complexity of geography studies, well trained, specialist teachers are essential.

(Haubrich, 1992, p.13)

Abstract

Pervasiveness of illiteracy has remained a foremost social and developmental challenge for India. This has prompted successive central and state governments to remain obsessed with increasing enrolments and decreasing dropout of children. However, these efforts are not accompanied by policies and programs for improving the quality of education. A pertinent issue in this context is the widespread incidence of underqualified teachers in Indian schools. The problem of underqualification of geography teachers is much more complex than in other subjects due to the distinct nature of geography. This paper looks into the problem of underqualification of geography teachers in Indian schools, its causes and implications.

Keywords: geography teachers, secondary schools, social sciences, teacher training, geography education

Introduction

Geography education in Indian schools is experiencing a teaching-learning crisis. A recent empirical study shows that there is a general lack of understanding of fundamental geographical concepts discipline and basic knowledge of world geography among geography students who have just completed their school (Alam, 2014, p. 35). Some scholars have tried to relate problems of teaching-learning crisis in school geography to school curriculum and textbooks (Misra, 1983; Sunny, 2006; Alam, 2010) and teachers (Brar,

2004; Banerjee, 2006) and the weak linkage between school and university teachers (Basu, Pawson, Akhter, Palmer, & Mervine, 2014). However, the specific problems related to teaching-learning of geography in Indian schools cannot be properly understood without analysing the general problems of school education in India.

As per the estimates released by UNESCO (2014, p. 71), India currently has the largest population of illiterate adults in the world (287 million). This is 37 per cent of the total illiterate population of the world. Even though the primary school net enrolment rate of 88.08 percent (2013–2014) is relatively impressive (Ministry of Human Resource Development, Government of India, 2013, p. 30), over 40% of children leave schools before finishing 8th grade despite a recent law designed to provide free and compulsory elementary education for all (Human Rights Watch, 2014) without learning the basic skills of reading and writing (Ramachandran, 2005, p. 2141). In fact, the pervasiveness of illiteracy has remained a big social and developmental challenge of India for a long time. This is, to an extent, also responsible for the poor image of the country in the international arena. The low level of literacy has significant bearing on educational policies and programs of the central and the state governments. The successive central and state governments have remained obsessed with quantitative expansion in literacy rate. Not surprisingly, most of these governments have a fascination with data and targets pertaining to enrolment, attendance, midday meal distribution, retention, etc (Ramachandran, 2005, p. 2141). However, these efforts have not been accompanied by suitable policies and programs for improving the quality of education at primary and secondary schools. It is, in this context, that UNESCO, 2014, p. 19) questions the quality of education in schools of India. The report places India among the 21 countries facing an extensive learning crisis. The report reveals that less than half of the population of children learns the

basics in these countries. India features in this list along with 17 countries from the sub-Saharan Africa, Mauritania, Morocco and Pakistan. It is widely known that the quality of education in schools has a direct bearing on higher education. However, this point is not visible in government policies and programs in India. Moreover, “the notion of quality in education is directed to post-graduate education, and to the IITs [Indian Institutes of Technology], IIMs [Indian Institutes of Management] and institutions of higher learning like them. There is a general observation that the foundation of primary and secondary schools has still to be established and nurtured” (Thapar, 2009, p. 1). No doubt, a large number of expensive private schools, mostly located in metropolitan centres, attempt to provide quality education. However, these schools are by and large accessible to children of upper middle class and elite families only. On the other hand, a large number of both government and lower-end private schools are ill-equipped to impart quality education. One most important reason for the lack of quality education in these schools is the presence of large numbers of underqualified teachers.

The issues of what constitutes poor quality of education in the context of geography and the relationship between the student outcome and the academic qualification of geography teachers have been cogently argued by Banerjee (2006, p. 287).

A survey done in the end nineties showed that in many cases the teachers did not study geography after their own secondary stage. This had created a serious problem in geographical understanding. In the absence of adequate knowledge, the teachers, in most cases, refrained from explaining the concept part or the diagrams. A common practice was to switch over to the descriptive part and ‘complete’ the syllabus. Practical skill development was largely out of reach. This practice over the years has created a kind of fear/avoid psychosis among pupils about geography, maps and map reading. The lack of clarity about the concepts of geography was partially responsible for a certain degree of unpopularity of geography among the pupils.

In a similar vein, Tiwari (2012, p. 25) has examined linkages between a teacher’s competency to teach geography and the quality of geography teaching. He points out that in India geography is taught as a part of social sciences and usually, there is only one teacher to teach all the social science subjects. If the teacher of social science happens to come from a discipline other than geography, and has no training in

geography, he/she finds it difficult to teach the subject, and skips over the geography portion of the syllabus. In view of these, the present paper purports to ascertain the academic qualifications of teachers of geography in secondary schools of India. It also aims to look into the problem of underqualification among them, its causes and implications.

Methodology of The Study

This is an empirical study based on data collected for a University Grants Commission (UGC) funded research project of this author. Data have been obtained from a questionnaire-based survey of geography teachers of 170 secondary schools. These schools are affiliated to 21 different school boards of India. The survey was conducted during the years 2013 and 2014. These schools were purposely selected mainly from the urban centres located in different geographical regions across several states in India. The aim of the survey was to ascertain the status of geography teaching across different school boards of India.

Geography Teaching and Teachers

Geography is taught in schools affiliated to all the school boards of India. Nearly every Indian state has its own school board. These school boards have jurisdiction over schools located within the administrative boundaries of these states. However, two school boards – the Central Board of Secondary Education (CBSE) and the Indian Council of Secondary Education (ICSE) – have jurisdiction over schools across India. Primarily, these school boards provide affiliations to schools for conducting examinations, grant qualifying certificates to successful candidates of the affiliated schools, prescribe courses of study and many other academic activities for affiliated schools.

At the primary stage, geography is taught as an independent subject only in schools affiliated to a few school boards. In others, some geographical topics are taught as part of Environmental Studies (EVS). On the other hand, geography is a compulsory subject in all the secondary schools affiliated to the school boards. But it is taught mostly as a part of a composite social science subject. Although in the higher secondary schools affiliated to all the school boards geography is offered as an optional paper, in the majority of schools the subject is not offered.

The school boards have prescribed essential education qualifications for appointment of school teachers at different stages. For primary schools, the prescribed minimum educational qualification is generally intermediate with two years Basic Training Certificate (BTC). Subject

specific teachers are not appointed at the primary stage. That means even though some elements of geography are taught with EVS the schools do not find it necessary to appoint geography specialists as teachers. The essential educational qualifications for the appointment as a teacher of a subject are graduation in that subject with two years degree in Bachelor of Education (B. Ed.). However, the minimum basic educational qualification for appointing a geography teacher to secondary school is not uniform across various school boards. For example, a candidate must be a graduate in geography (for content/subject competence) with a two-year degree in the bachelor of education (for teaching skills competence) to be appointed as secondary school teacher of geography in the CBSE affiliated schools. On the other hand, for being appointed as a geography teacher in secondary schools affiliated to secondary school boards of Odisha, Uttarakhand and Andhra Pradesh states, the minimum basic qualification is graduation degree with a B. Ed. It is interesting to note that these school boards do not specify subjects studied by candidates for their graduation degree. A candidate may have only a graduate degree in any subjects of social sciences (history, geography, political science, economics, sociology, psychology and anthropology) with B. Ed. degree. This means that the common practice in these and many other school boards is to appoint social science teachers who are assigned to teach all the subjects coming under social science. For higher secondary stage, the essential qualification of a geography teacher is post graduate degree in geography with B. Ed. However, in some school boards, B. Ed. degree is not mandatory.

Geography Teaching in India: Challenges and Implications

Improvement in the quality, efficiency, and equity of education, to a considerable extent, depends on the nexus of teaching and learning, which is, in turn, influenced by the quality of teachers (Pandey, 2006, p. 319). The Secondary Education Commission, also known as the Kothari Commission, (1966, p. 125) has also identified the teacher as the single most important factor influencing the quality of education. According to the Commission, the most important qualities of a teacher are his personal qualities, his educational qualifications, his professional training, his experience and the place he occupies in the school as well as in the community. All the Indian school boards, without exception, consider particularly two qualities – the knowledge of the subject (reflected through a bachelor's degree) and the teacher's professional training in teaching skills (reflected through B. Ed. degree) as the minimum basic qualifications for appointment

as a school teacher. The eligibility criteria are based on the assumptions that a teacher with good knowledge of a subject (e.g. geography) may not be able to properly communicate his/her geographical knowledge in the classrooms due to lack of professional training in teaching skills. Similarly, a teacher even with a good grasp of teaching skills may fail to deliver in classrooms due to lack of subject knowledge.

The role of geography teachers in promoting geography in schools seems far more important than any other subject on account of two facts. First, geography is an inclusive subject. It draws heavily from sister subjects of natural sciences (e.g. geology, botany, etc.) and social sciences (history, sociology, economics, political science, etc.). Therefore, to be a good geography teacher, it is prerequisite for one to possess not only a reasonable knowledge of fundamental facts and concepts of sister subjects but also the ability to connect these facts and concepts with the discipline of geography. Second, being an integrating subject, a good teacher of geography must cross boundaries of sister disciplines to indicate the interrelationship between the human and the physical to develop a holistic understanding of the earth. These skills are not at all easy to acquire.

In view of these facts, the quality of geography teachers merits as the single most important factor in influencing the quality of geography teaching in schools. Despite this, the incidence of underqualified teachers of geography in secondary schools of India is widespread. This is clearly evident from the survey of 170 secondary school teachers teaching geography. The survey indicates that, in many government schools, geography is taught by teachers who are a graduate in history, political science, economics or sociology. Most of them have studied geography only up to matriculation or intermediate stage mostly taught by non-geography teachers.

As mentioned above, geography in India is taught as a part of social sciences in secondary schools. It is taught in combination with history, political science, economics, sociology and anthropology (National Council for Educational Research and Training, 2005, p.50). Ideally, there should be a separate specialist teacher for each of these subjects in every secondary school. However, it is a common practice in most of the school boards to appoint social science teachers. The social science teacher may have studied (for B.A. or M.A.) in only one or two subjects out of history, geography, economics, political science, sociology and psychology (George and Madan, 2009, p. 80). This clearly indicates that many of them may not have studied geography at

undergraduate level. It was found in the survey that an overwhelming majority of social science secondary school teachers was trained in subjects of social sciences other than geography. The survey informs that only 39.41 percent of 170 teachers had studied geography either as the main subject (35.29%) or a subsidiary subject (4.11%) in B.A. or B. Sc.

It was also found in the survey that in a large number of schools a single teacher is assigned to teach geography in combination with history, civics, and economics. In many cases, teachers lacking minimum qualifications in geography teach the subject. Of 170 teachers, only 45.30 percent reported that they were appointed to teach social science (of which geography is also a part). Crucially, not all of them had studied geography at undergraduate level. Only less than one fifth of the total teachers (i.e. 18.80 percent) were appointed to exclusively teach geography. Interestingly, 3.60 per cent of teachers reported that they were appointed to teach geography along with an Indian language. Thus, remaining teachers (32.30 percent) teach geography even though they were not appointed to teach geography or even social sciences. In India, it is not uncommon to find even language teachers (trained only to teach languages) teaching social sciences. It is particularly true in middle schools (6th to 8th classes) and some private high schools (9th and 10th classes) affiliated to the Central Board of Secondary Education (George and Madan, 2009, p. 76). One can easily infer that teachers teaching geography, without possessing essential educational qualifications, may lack in their knowledge of even basic concepts and purpose of geography. This has been revealed in a study of geography teachers of secondary school in the Indian state of Punjab. Brar (2004, p. 9) observes that a majority of geography teachers are not even aware of the aims and objectives of teaching geography in schools.

Another issue is the large scale appointment of untrained teachers (i.e. without B. Ed. degree) to teach geography. The survey indicates that nearly one fifth (19.40 percent) of teachers are without a B. Ed. degree. The problem is further compounded when the quality of teacher training is taken into consideration. George and Madan, (2009, p. 32) note: "Even the situation of trained teachers is not encouraging. In India, teacher training or college education do not sufficiently equip students (that is, teachers of the future) to assess children's needs or imagine how a curriculum should be designed". The situation in the majority of the second-rate private schools affiliated to CBSE and other school boards is worse. In most of these schools, geography is taught by untrained geography graduates or by trained non-geography graduates.

The problem of teaching of geography in schools of India is further compounded by the fact that social science subjects in schools are taken very lightly by students, parents as well as by school administrators. This attitude in society and the government is perhaps based on the implicit assumptions that social science subjects are less rewarding in terms of careers and financial benefits to students. Further, unlike degrees in science and commerce subjects, rewards in social sciences do not come instantly and are not tangible. Therefore, there is an attitude among school administrators and government officials that a person trained in any subject of social science or humanities can easily *handle* geography. In other words, they presume that even a non-geography graduate is capable to *teach geography*.

As one does not expect a teacher to teach physics, chemistry or mathematics without a degree in these subjects, why is a teacher without minimum qualification in geography assigned to teach geography? Alam (2010, p. 246) notes that:

It is important to note that the teaching of geography requires some specialized skills like the construction of a scale, drawing, reading and interpretation of maps, and conducting fieldwork, among others. In the absence of trained geography teachers, practical geography would be further marginalised in school curricula.

Consequently, in the prevailing situation, more than any other subject of integrated social sciences, geography is the worst affected one.

Some geographers argue that compared to human geography, physical geography is marginalised in Indian universities (Mukerji, 1991, pp. 222–233; Schwartzberg, 1983, p. 239). The main reasons of the marginalisation of physical geography could be the practice of teaching geography as a social science subject in schools and the teaching of geography by social science teachers. It is worth noting that only 4 out of 170 teachers surveyed had training in science subjects like geology, chemistry, physics and mathematics at undergraduate level. The teaching of geography by a teacher trained to teach social science subjects implies that the already neglected physical geography may be further marginalised. One can expect a social science teacher with training in history, political science or economics to be relatively more comfortable with human aspects of geography. However, as a teacher he/she may not be able to do justice to physical geography. For giving a holistic understanding of the earth to students, which is the main object of teaching geography in schools, a teacher should strike a balance between *the earth as a physical*

entity and the world as a human habitat as well as strive to see relations between these two. As Aschmann (1962, p. 284) observes:

An awareness of the intricate relationships between man and his environment is a major realm of scholarly investigation and informed concern on the part of all men who profess to be educated. A heightened understanding of such relationships can be gained only through a disciplined investigation of both sides of the fence, the natural environment, physical and biotic; and the human or cultural one. As a discipline geography endeavors to maintain this perspective.

It also needs to be emphasised that geology is not taught as a separate subject in Indian secondary schools. The elementary lessons on subject matters of geology (e.g. internal structure of the earth, movements in the earth crust, agents of erosion and deposition; sub-surface and surface features of earth, rocks and minerals) are taught in physical geography textbooks. Similarly, some of basic facts and concepts of astronomy (e.g. universe, solar system, stars, planets and satellites) are given in physical geography textbooks. But, when geography is taught by a teacher who is not qualified to teach the subject, the real losers are not only the students and the discipline of geography but also geology and astronomy. Thus, the assumption that any teacher can pick up some lessons of geography to teach the subject will not result in the kind of geography that “honors or best represents our science, or prepares our students to face the challenges of an increasingly diverse, troubled, and complex world” (Gritzner, 2004, p. 44).

Conclusion and Recommendations

In summary, we observe that there is a widespread incidence of underqualified teachers of various subjects in Indian secondary schools. The root of this problem can be traced to the prevailing structure and attitudes of the Indian society and the state. As the paper clearly shows, the problem of pervasiveness of underqualified teachers is particularly acute in the case of geography. A large number of teachers with little background in geography and inadequate teaching competence in the subject are found teaching geography in secondary schools in India. These teachers have educational background in subjects of social sciences and languages. It appears that if good teachers are scarce resources in India then good teachers of geography could be regarded as the scarcest resource. The problem caused by the teaching of geography by unqualified teachers in the secondary schools is quite serious. The most grievous consequence

has been the marginalisation of geography in schools. As a direct consequence of this state of affairs, undergraduate and graduate geography education is suffering badly in India (Solem and Balachandran, 2014, p. 10). In particular, the teaching of geography as a social science subject has resulted in the marginalisation of physical geography in higher education in India.

What could be the solution! Currently, central and state governments and education planners are trying to solve this problem by designing textbooks of social sciences in such a way that even a non-specialist can teach the subject. Another approach has been to provide refresher/ orientation courses of the subject to non-specialist teachers. But these approaches are short term and partial solution to the problem. In the long term, the substitution of specialist teachers with non-specialists will eventually lead to the further marginalisation of social sciences and geography in schools.

Geography teachers are crucial to reform the teaching of geography in schools. It has been observed that many students develop likings for a particular subject because of good teachers. A good teacher takes his students beyond the four walls of classrooms and images of textbooks. In the process, students' thinking and imagining powers of seeing the world through a particular disciplinary perspective improve. Yerawadekar (2009, p. 612) observes that:

It has been found that students do like geography when the teacher takes the topic beyond the books. Though many schools [in India] are now coming up with innovative ways like projects, presentations, group activity, etc., the conditions still need to be improved.

Therefore, the first step should be to appoint suitably qualified teachers to teach geography. A qualified teacher should mean a *geography teacher* not a *teacher of geography*. By geography teacher we mean that *teachers with formal geography training be appointed for teaching geography*. A geography teacher should not only possess an in-depth knowledge of his/her subject but should also have abilities and skills to transfer that knowledge, and enthusiasm for transmitting that knowledge among students in an interesting and innovative manner. The geography teacher has the responsibility of making the subject of geography real and of making it an intellectual discipline (Marchant, 1968, p. 135).

A teacher of geography, on the other hand, can be any teacher who, without adequate education and training of geography, picks up some knowledge of geography on his own to teach geography when asked by the school administration. The

survey informs that over 60% of teachers teach geography without having studied geography at undergraduate level. Generally, school teachers relish teaching a particular subject and develop a relationship to it if they are educated and trained in that subject. But when teachers are asked to teach a subject which they have not previously studied, they may not have same feelings for the subject. In view of these arguments, the present practice of appointing a teacher without training in geography to teach geography should be stopped in the interest of both the students and the discipline.

Second, it is generally observed that sometimes even trained geography teachers degrade into a weak teacher over time due to lack of opportunities to upgrade his/her knowledge and skills. It may be due to the fact that “all their initial education and training may not remain relevant and effective because of the present rate of change in the content and pedagogy in the national and world scenario” (National Curriculum Framework for School Education, 2000, p.) Therefore, school boards should provide opportunities for teachers to engage in ongoing professional learning. Keeping this fact in mind, in-service education programs were initiated as early as the 1960s. These programs aimed to train untrained in-service teachers and also prepare to teach such compartments of the curriculum which they may not have studied during their own schooling and training (Rajput, 2002, p. 209). In subsequent decades, emphases were placed on in-service training of teachers as well as trainers of teachers (known as key persons or resource persons). However, since 1994, in-service training of teachers has been accorded high priority to improve their knowledge levels as well as skills. However, in most cases these are neither planned well nor cater to teachers’ needs; and therefore become a burden and ritual (Ramachandran, 2005, p. 2143). In this context, Thapar (2009, p. 1) observes that:

There is a need to put much more into training teachers. In today’s world, a teacher has to be technically proficient in the subject. Gone are the days when broad based liberal education sufficed. Subjects have become specialised. Teachers have to know how to handle this new knowledge.

These suggestions given for teachers of every subject taught in the school, apply most aptly to geography teachers as well. As a step in this direction, school boards may subscribe online access to important publications for school geography such as *Journal of Geography*, *Primary Geography*, *Teaching Geography*, *The Geography Teacher*, *Geographical Education* and *Geography and You*.

Third, field-based teaching is a highly neglected component of school geography. In most schools, field visits are hardly organised for geography students. Geography teachers are also poorly trained to undertake field-based teaching of geography. As a result, school children fail to develop a taste for geography. Therefore, field-based learning and teaching should be made an integral part of school curriculum because they will really enthuse the young minds, generate awareness towards the earth and its environs, and develop understanding of the nature (and culture) and natural (and cultural) phenomena (Kaur and Chaudhri, 2003, p. 619). The training of geography teachers in skills of field-based teaching should be made mandatory.

Finally, access of geography teachers to teaching resources, aids and supporting teaching materials is a major problem in India. A teacher in even a big city, let alone other places, cannot equip herself/himself with good child-friendly materials for their classes (George and Madan, 2009, p. 32). Therefore, school boards should ensure that geography classrooms are equipped with teaching facilities, resources and aids including information communication technologies. A well-equipped geography classroom should be equipped with at least up-to-date globes, atlases, samples of minerals, and wall maps (preferably raised relief map) of India and different regions of the world. Further, a computer with internet connection could help geography teachers to access freely accessible geography education-related websites such as NASA’s World Wind, Wikimapia, Google Earth and geographyabout.com, Bhuvan (web-based GIS tool of Indian Space Research Organization, Bengaluru). The school libraries should have good quality geography textbooks. The availability of these facilities may help not only in upgrading teachers’ knowledge and skills of the subject but also in motivating teachers of lesser abilities to improve their performance.

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