



STUDENT-TEACHERS' VIEWS OF DIFFICULT AREAS IN ELEMENTARY TEACHER EDUCATION SOCIAL SCIENCE CURRICULUM

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ABSTRACT

This study employed the mixed-research design with both quantitative and qualitative approaches. The quantitative approach was employed to investigate student-teachers' views of difficult topics in elementary teacher education first year social science curriculum. Besides, qualitative approach was employed to discover the major reasons for perceiving a particular topic as difficult by majority of the student-teachers. The study was guided by two research questions and the sample for the study was 218 second year student-teachers from five District Institutes of Education and Training (DIET) in Tamil Nadu. The "Difficult Area Identification Checklist in Social Science" (DAICSS) was used as an instrument for the collection of both quantitative and qualitative data. The quantitative data obtained were analysed by using frequencies and percentages whereas the qualitative data were analysed using content analysis technique to discover the major reasons for perceiving a particular topic as difficult by the student-teachers. The results of the study revealed that the topic "Reading the Globe, Maps and Atlas" is the difficult topic than all other topics in the elementary teacher education first year social science curriculum. The reasons for perceiving this topic as difficult by the student-teachers were also discovered. Further, the recommendations to the social science lecturers on how to tackle student-teachers' difficulty in learning the topic "Reading the Globe, Maps and Atlas" were also given based on the results of the study. The study has also come up with some useful implications to all the stakeholders of education.



KEY WORD: Student-teachers; Difficult topic; Elementary teacher education; Social Science curriculum.

INTRODUCTION

The goal of social science education is to prepare young people to be good citizens in a world that is becoming increasingly complex. In the Indian context, the inclusion of social science in the school curriculum right from primary to secondary classes signifies the importance of the subject and the role it plays in a student's life. Social science perspective and knowledge are indispensable to building the knowledge base for a just and peaceful society (NCF, 2005). It aims at understanding all aspects of society as well as finding solutions to deal with social problems.

The National Focus Group Position Paper on Teaching of Social Sciences, 2006 states that "Social sciences encompass diverse concerns of society and include a wide range of content drawn from the disciplines of history, geography, political science, economics, and sociology". In India, the social science subject is generally perceived as easy among the school subjects, probably because they deal with issues and processes that surround us all the time. However, the social science curriculum of the 'Diploma in Elementary Education' (two year elementary level teacher education programme) in Tamil Nadu is a big exception to this general perception.

In Tamil Nadu, the elementary teacher education social science curriculum is divided into two sections such as content areas and teaching methodology areas. The first researcher of this research paper has taught social science to the elementary level student-teachers for four years at the District Institute of Education and Training, Uthamapalayam, Theni District in Tamil Nadu. It was observed that the student-teachers were encounter difficulty to learn the topics under the section of teaching methodology in the first year social science curriculum. Further, there was a notable number of first year student-teachers were failed in the subject “Teaching of Social Science” in the recent ‘Diploma in Elementary Education’ examinations conducted by the Government of Tamil Nadu.

This motivates the researchers to take up a study to identify the topics/areas which the student-teachers find difficult to learn in the elementary teacher education first year social science curriculum. An attempt was also made to discover the reasons to perceive a particular topic which is considered as difficult by majority of the student-teachers.

REVIEW OF RELATED STUDIES

Researchers around the world have examined perceived difficult topics/concepts among the students at the primary, secondary and tertiary levels of education. Akani (2017) conducted a study to identify the areas of students’ difficulty in chemistry curriculum at the secondary school level. The results obtained indicated that eight topics out of 18 topics listed in the chemistry curriculum are difficult for the students. Ali (2012) conducted a case study of the common difficulties experienced by high school students in chemistry classroom and found that the main hurdle lies in students’ inability to demonstrate a good understanding of very basic concepts of the subject.

Gafoor and Kurukkan (2015) conducted a study and found that 88 % of the students do not like Mathematics. The major reasons to dislike Mathematics are related to difficulty in understanding the subject-matter and teacher or instructional related factors. A study by Adegun and Adegun (2013) reveal that both teachers and students have the same views of difficult areas in teaching and learning of Mathematics in the secondary schools. Obafemi and Onwioduokit (2013) reported that 50 % of the concepts in senior secondary school two physics curriculum are considered difficult by the students while 44 % of the concepts are considered difficult by the teachers.

Tekkaya, Ozkan and Sungur (2001) conducted a study to find out the biology difficult topics as perceived by high school students. The results reveal that hormones, genes, and chromosomes, mitosis and meiosis, nervous system, and Mendelian genetics were found to be difficult concepts for the students to learn. Ogunkola and Samuel (2011) conducted a study to explore science teachers’ and students’ perceived difficult topics in the integrated science curriculum of lower secondary schools. The results show that most students generally found the highest levels of difficulty in physics and chemistry concepts than biology concepts.

When reviewing the related studies, the researchers observed that empirical studies on the perception of difficult topics/concepts at the primary, secondary and tertiary levels are mainly focussed on physics, chemistry, biology, integrated science and mathematics curriculum. But, hardly any research work related to identification of the difficult topics/concepts in social science was found. It is further significant to mention that to date no study has been conducted to determine elementary level student-teachers’ perceived difficulty in learning social science in Indian context.

PURPOSE OF THE STUDY

The main purpose of this study was to identify the areas/topics in the elementary teacher education first year social science curriculum which the student-teachers consider difficult. For the present study, the topics/areas under the section ‘teaching methodology’ only have been considered. The difficult topic/areas has been identified through student-teachers’ views. Further, the study also ascertains the reasons to perceive a particular topic which is considered as difficult by majority of the student-teachers.

RESEARCH QUESTIONS

The following research questions guided the study:

1. What topics in the elementary teacher education first year social science curriculum do the student-teachers perceive difficult?
2. What are the reasons to perceive a particular topic in the elementary teacher education first year social science curriculum as difficult by majority of the student-teachers?

METHODOLOGY

The study adopted mixed research design with following both quantitative and qualitative approaches. The descriptive survey method was employed to collect quantitative data regarding the student-teachers' views of difficult topics in the elementary teacher education first year social science curriculum. After finding the topic which is considered difficult by majority of the student-teachers, the qualitative approach was employed to discover the major reasons to perceive that topic as difficult by majority of the student-teachers.

Sample

The sample consisted of 218 second year student-teachers pursuing 'Diploma in Elementary Education' from five 'District Institutes of Education and Training' (DIET) located at Erode, Tiruppur, Dindigul, Theni and Madurai districts in Tamil Nadu, India. The samples were selected through convenience sampling technique. The sample includes 200 female and 18 male student-teachers. The data for the present study has been collected from the second year student-teachers during September, 2016. During that time, the first year student-teachers were in initial stage of their teacher education programme and they do not have a clear idea about the nature of the content in the first year social science curriculum. So, the researchers have decided to collect data from the second year student-teachers regarding difficult topics in the elementary teacher education first year social science curriculum as they have already studied the first year social science topics.

Research Instrument

"Difficult Area Identification Checklist in Social Science" (DAICSS) was used to collect both quantitative and qualitative data. The purpose of this checklist was to find out the difficult topics in the elementary teacher education first year social science curriculum as perceived by the student-teachers. In addition, it was also intended to discover the reasons for perceiving a particular topic as difficult by majority of the student-teachers.

The checklist was researcher constructed and made up of two sections, A and B. Section-A deals with the personal information about student-teachers such as name of the District Institute of Education and Training (DIET), name of the student-teacher, gender and academic group studied in higher secondary course. Section-B contained all the six topics of teaching methodology section obtained from elementary teacher education first year social science curriculum. Sufficient space has been given in the checklist to facilitate the student-teachers to write their reason for perceiving a particular topic as difficult.

The checklist was directly administered by the researcher to the student-teachers to collect data. The student-teachers were asked to select any one difficult topic from the list of topics in the checklist which they consider difficult. The student-teachers were also asked to write down a reason for perceiving that topic as difficult in the space provided in the checklist. No separate research instrument was used to collect qualitative data.

RESULTS

The results of the data analysis were placed in tables according to the research questions.

Research Question 1: What topics in the elementary teacher education first year social science curriculum do the student-teachers perceive difficult?

To provide answer to this question, the responses of student-teachers were analysed using frequency and percentages.

Table 1: Frequency Table showing the Student-teachers' Views of Difficult Areas in Elementary Teacher Education First Year Social Science Curriculum

S.No	Topics/Areas	N	%
1	Meaning, Scope and Objectives of Social Science Teaching	27	12
2	Project	9	4
3	Reading the Globe, Maps and Atlas	149	69
4	Seminar	20	9
5	Field Trip	3	1
6	Activity Based Learning	10	5
	Total	218	100

The table 1 shows the difficult areas/topics in elementary teacher education first year social science curriculum as perceived by the student-teachers. Out of 218 student-teachers, 149 student-teachers (69 %) considered the topic "Reading the Globe, Maps and Atlas" as difficult with compare to other topics.

The topic "Meaning, Scope and Objectives of Social Science Teaching" felt difficult by notable percent of student-teachers (12%). Also, 20 student-teachers (9%) perceive the topic "Seminar" as difficult. The other topics in the first year social science curriculum were felt difficult by considerably less percent of student-teachers. The topics "Activity Based Learning", "Project", and "Field Trip" were considered difficult by only 5%, 4% and 1% of the student-teachers respectively.

The results reveal that the topic "Reading the Globe, Maps and Atlas" is most difficult topic to learn in the elementary teacher education first year social science curriculum as 69 % of the student-teachers considered this topic as difficult. Hence, it is inferred that the topic "Reading the Globe, Maps and Atlas" is the most difficult topic in elementary teacher education first year social science curriculum.

Research Question 2: What are the reasons to perceive a particular topic in the elementary teacher education first year social science curriculum as difficult by majority of the student-teachers?

The answer to research question-1 reveals that the topic "Reading the Globe, Maps and Atlas" is the most difficult topic in the elementary teacher education first year social science curriculum. The researchers wanted to find out the reasons for the student-teachers' difficulty in learning the topic "Reading the Globe, Maps and Atlas". The reasons for perceiving a particular topic as difficult has been collected from the student-teachers during the administration of checklist itself. Out of 218 student-teachers, 149 student-teachers considered the topic "Reading the Globe, Maps and Atlas" difficult. Those 149 checklists were taken separately for the purpose of qualitative data analysis. A 'content analysis technique' was used to analyse the collected qualitative data (the reasons given by the student-teachers) in order to ascertain the major reasons for perceiving the topic "Reading the Globe, Maps and Atlas" as difficult topic by the student-teachers. Content analysis is a process of discovering the themes, patterns and categories present in the collected data. The outcome of the qualitative data analysis is presented in the table 2 below:

Table 2: Major Reasons for the Student-teachers' Difficulty in Learning the Topic "Reading the Globe, Maps and Atlas"

S.No	Reasons	N	%
1	It is a new topic for us, so we are not able to understand.	20	9
2	The content given in the 'Teaching of Social Science' sourcebook is not clear and need to	83	38

	explain the concepts in simple manner.		
3	The lesson contains heavy content. Huge amount of facts and information about the maps is given in the lesson. So, it is difficult to understand.	54	25
4	The Social Science lecturer taught this topic without using the maps, globe and atlas.	39	18
5	Not interested to learn this topic.	22	10
	Total	218	100

From the table 2, it can be inferred that majority of the student-teachers (38 %) perceived the topic “Reading the Globe, Maps and Atlas” difficult due to vague presentation of the content in the ‘Teaching of Social Science’ sourcebook. It can be seen that 25 % of the student-teachers perceived this topic difficult due to heavy content load in the lesson. A good number of the student-teachers (18 %) reported that the Social Science lecturers taught this topic without using the globe, maps and atlas because of this reason they were not able to understand this topic. It was also observed that notable number of the student-teachers (10 %) was not interested to learn this topic so, they were considered this topic difficult. Further, some of the student-teachers (9 %) submitted that it is a new topic, so we have encounter difficulty in learning this topic.

DISCUSSION OF THE RESULTS

The majority of the student-teachers perceived the topic “Reading the Globe, Maps and Atlas” as difficult topic in elementary teacher education first year social science curriculum. About 69 % of the student-teachers reported this topic as difficult topic with compare to all other topics. An attempt was also made to discover the major reasons for perceiving this topic as difficult by the student-teachers.

Majority of the student-teachers (38 %) reported that *“the content given in the Teaching of Social Science sourcebook is not clear and need to explain the concepts in simple manner”*. Actually it is true. The contents given in this lesson is not only difficult for the student-teachers to learn, but also difficult for the social science lecturers, particularly for non-geography major lecturers, working in the elementary level teacher education institutions. Because, the contents given in the social science sourcebook is really not clear and needs to explain the concepts clearly in simple manner through designing relevant map related activities.

A good number of the student-teachers (25 %) reported that *“the lesson contains heavy content. Huge amount of facts and information about maps is given in the lesson. So, it is difficult to understand”*. It is the valuable reason for the student-teachers’ difficulty in learning this topic. The lesson “Reading the Globe, Maps and Atlas” really contains heavy content which spread over to around 30 pages. It is also difficult for the social science lecturers to teach all the contents given in the lesson and make the student-teachers to understand in two or three teaching periods. Hence, the volume of the contents may be reduced in the lesson without compromising quality of the lesson to facilitate easy teaching-learning process.

In the study, 18 % of the student-teachers reported that *“Our Social Science Lecturer taught this topic without using the maps, globe and atlas”*. This is the most important reason pointed out by the student-teachers for their difficulty in learning this topic. The topic “Reading the Globe, Maps and Atlas” is not a pure theoretical topic like other topics in elementary teacher education first year social science curriculum. This topic include the concepts such as latitude and longitude, map scale, map directions, map symbols, map colours etc. There are many map skills can be developed among the student-teachers by understanding these concepts. The map skills include locating places on the map, calculating the time of different regions on the earth surface, measuring the distance between two places on the earth, inferring the information given in the map through map symbols and colours etc. The social science lecturers have to involve the student-teachers in map related activities to make them to understand the concepts and to develop map skills.

But, the student-teachers’ difficulty in learning this topic indicate that they did not understand the map related concepts clearly. It confirms the student-teachers’ view that the social science lecturers are not

using the globe, maps and atlas while teaching the topic “Reading the Globe, Maps and Atlas”. The National Curriculum Framework, 2005 stressed the importance of using maps in social science teaching-learning process (p.54). But, why some of the social science lecturers in the elementary level teacher education institutions are not using the globe, maps and atlas while teaching the topic about the globe, maps and atlas? There is a valid reason for it.

The subject “Social Science” in the elementary level teacher education institutions is taught by a lecturer whose major subject of study may or may not be geography. A social science lecturer working in the elementary level teacher education institution may have studied M.A (History) or M.Sc (Geography) with M.Ed degree. In situation of a non-geography lecturer teaching the subject, they may be not equipped to effectively teach map related concepts given in the topic “Reading the Globe, Maps and Atlas”. Hence, there is a possibility of getting difficulty in learning this topic in the part of students. However, the globe, map and atlas are the three most important social science teaching-learning resources. So, the social science lecturers in the elementary level teacher education institutions need to use them not only to teach about maps, but wherever necessary. The usage of these teaching-learning resources facilitates easy understanding of social science concepts among the student-teachers.

When the student-teachers were asked about their difficulty in learning the topic “Reading the Globe, Maps and Atlas” notable number of them (10 %) informed that *“we are not interested to learn this lesson”*. The study found this reason as the most important reason to perceive this topic as difficult by the student-teachers. Without interest one cannot able to learn anything in the world. But, why the student-teachers are not interested to learn this topic? It is further researchable. However, the first researcher, based on his working experience as Social Science Lecturer in the elementary level teacher education institution for four years, can able to point out few reasons.

Majority of the student-teachers studying in the elementary teacher education institutions have studied science subjects in their higher secondary course. In this study also, 130 student-teachers ($N = 218$) are from science background. These student-teachers have studied social science during their upper primary and secondary school education stages. So, it is natural for them to gain interest in science and to lost interest in social science. In this scenario, the role of the social science lecturers is vital.

The social science lecturers have to generate interest among the student-teachers coming from science background in learning social science in general and the topic “Reading the Globe, Maps and Atlas in particular. They have to follow activity based teaching methods and other innovative teaching methodologies by using different kinds of teaching-learning resources including the globe, map and atlas to achieve this purpose. Most importantly, the social science lecturers in the elementary level teacher education institutions have to initiate necessary efforts to develop positive attitude towards learning social science among the student-teachers coming from science background.

Some of the student-teachers (9 %) reported that *“It is a new topic for us, so we are not able to understand”*. However, the student-teachers were studied about the basics of the globe, maps and atlas during their upper primary school education. So, the topic is actually not a new topic for them. Possibly, the student-teachers might forget the concepts related to maps which they learnt during their schooling. Further, the student-teachers were also studied the lesson “Reading the Globe, Maps and Atlas” in their first year social science curriculum. However, they still found this topic difficult.

From the discussion, it is clear that majority of the student-teachers perceived the topic “Reading the Globe, Maps and Atlas” difficult than other topics in the elementary teacher education first year social science curriculum and there are valid reasons for it.

CONCLUSION AND IMPLICATIONS

The study was an attempt to find out the student-teachers' views of difficult areas in the elementary teacher education first year social science curriculum. The study found that majority of the student-teachers perceived the topic “Reading the Globe, Maps and Atlas” as difficult topic. In addition, the study also discovered the major reasons to perceive this topic as difficult by the student-teachers. Some of the student-

teachers perceive this topic as a new topic. Some others pointed out that their social science lecturers taught this topic without using the globe, maps and atlas. Further, notable number of student-teachers informed that the 'Teaching of Social Science' sourcebook contains heavy content and the contents given are not clear. Most importantly, some of the student-teachers are not interested to learn this topic.

The results of this study are significant to the students, student-teachers, social science teachers, social science teacher educators, social science textbook writers and curriculum planners. With the discovery of the topics which the student-teachers find difficult in the elementary teacher education first year social science curriculum, the social science lecturers would improve on their teaching methodology while teaching social science concepts in general and the topic "Reading the Globe, Maps and Atlas" in particular. This would increase the performance of the student-teachers.

The findings of this study can motivate the social science lecturers to go for conferences, seminars and training programmes on the identified topics which the student-teachers consider difficult in general and the topic "Reading the Globe, Maps and Atlas" in particular. This will not only enrich the knowledge and competence of the social science lecturers but also help them to teach their student-teachers effectively. Based on the findings of this study, the government/the management of elementary level teacher education institutions can organise training programmes for the social science lectures to develop their knowledge and skills on the identified difficult topics. The findings would also be useful to student-teachers in creating early awareness of careful study and allocation of quality time on such difficult topics in social science.

Curriculum developers and planners may also derived immense benefits from the findings of the study in the sense that, it would enable them to possess knowledge and disposition to develop methods and activities that would promote student-teachers' inquiry that can enhance their understanding of social science topics. Also, textbook writers would benefit from the study because they may see the need to shift emphasis from teacher-centred activities to student-centred activities.

The study would further assist the authorities of elementary level teacher education institutions in allocation of quality time to social science topics which the student-teachers consider difficult. The findings may help educational researchers in the domain of social science education by providing useful information upon which further research studies in the area of levels of difficulty of social science topics can be based.

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