

DEMONSTRATIVE TEACHING STYLE AND ITS STUDY WITH RESPECT TO PERCEPTION OF SECONDARY SCHOOL STUDENTS IN GEOGRAPHY

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Abstract

Keywords:

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Globally, Geography is taught either as an independent subject or within an integrated framework. In the secondary school stage, geography is mainly taught as one of a group of subjects called social science or as part of earth science or natural science. It is an accepted fact that learning a subject depends to a great extent on the teachers' teaching style and their teaching strategies. The demonstration method is the one in which the teacher shows the pupils how something is done by actually doing it. Demonstrations are used to show procedures and to explain techniques. This is a comparative study on the perception of 350 secondary school students on Demonstrative Teaching Style in Geography in relation to location, board and gender. The questionnaire was prepared and the methodology adopted is two sample t-test. The urban students are relatively more proactive in perceptual outcomes followed by the students enrolled under CISCE as far as demonstrative teaching style is concerned. Hence this study justifies the significance of demonstrative teaching style.

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1. Introduction

Geography is considered as one of the important school subjects at secondary school level. Various political issues, economy and culture revolve around Geography. According to James Fairgrieve(1936), Geography is entrusted with the responsibility of training the future generations so that they can presume the geographical conditions of the world and reflect on the political as well as social challenges of the world. Concepts of Geography concerns knowledge, perceptions and practices of spatial actors, and the ways the actors produce, organise and alter a territory (Da Cunha, 2006).

Globally, geography is taught either as an independent subject or within an integrated framework. In the secondary school stage, geography is mainly taught as one of a group of subjects called social science or as part of earth science or natural science.

It is an accepted fact that learning a subject depends to a great extent on the teachers' teaching style and their teaching strategies. According to Conti(1989) "The overall traits and qualities that a teacher displays in the classroom and that are consistent for various situations can be described as teaching style". The researchers have established that teaching style of a teacher improves the achievement of the students. Zeeb(2004) found that aligning learning styles of students with teaching styles of instructors could lead to an improvement in academic performance.

Demonstrative Teaching Style

The demonstration method is the one in which the teacher shows the pupils how something is done by actually doing it (Mutasa and Wills 1995; Chikuni 2003). Demonstrations are used to show procedures and to explain techniques (Chamberlain and Kelly 1981). Demonstration method enhances translation of theory into practice (Gwarinda 1993). Thus, demonstration is a direct means of explaining things to the pupils. According to Child (1988), a child learns better through imitating. Therefore the demonstrations ought to be done correctly for pupils to copy the correct ways of doing things. Demonstration method gives pupils the opportunity to see and hear the details related being taught. These details include the necessary background knowledge, steps or procedures (McKeachie 1986). The demonstration gives pupils the opportunity to become proficient. In short, this method is recommended because it leaves nothing to chance. Various

demonstration techniques are used to impart skills to learners.

Types of Demonstration

It has been propounded by Chikuni (2003) that, there are two types of demonstrations, namely the step by step and the whole process demonstration. In the whole process demonstration, the teacher demonstrates the full process from the beginning to the end without interruption by learners' participation (Chikuni 2003). Soroka, Hoagland and Mohale (1977) assert that the whole process demonstration enables the pupils to have a clear view of the process. The step by step demonstration is done stage by stage with teacher explaining each action as the operation proceeds (Gwarinda 1993). On the other hand Chikuni (2003) pointed out that demonstration should be inter- spaced by learners' participation.

According to Chikuni (2003), the demonstration method should be prepared thoroughly to avoid any kind of error, as it may be difficult to correct. Gatawa (1994) suggests that when demonstrating, the teacher must explain the reason for the significance of each step. For the demonstration to be effective, the teacher must plan it prior to the lesson. This is to ensure that all necessary steps are sequentially arranged (Chamberlain and Kelly 1981). This is done to eradicate omission of necessary procedures in making a procedure. However, Kim and Kellough (1995) propose that the teacher should involve the pupils when demonstrating. Involvement can be through asking questions where there are not clear or through demonstrating figures which have been shown before (Kasambira 1993). Gwarinda (1993) suggest that, teachers need to re demonstrate where pupils are failing to reproduce the skills shown before. During demonstration, Gwarinda (1993) recommends the use of educational aids where necessary. Against this backdrop, this paper deals with the following issues discussed in the next section.

With a view to study the effect of Demonstrative teaching style the following literature were reviewed:

Gaudence,O., Too,J.K. and Nabwire,V.K. (2013) made an inquiry to investigate if video can enhance learning in Geography. The study adopted Experimental research design involving pre test-post test control group design. The target population was provincial schools in Homa Bay

district. The sample size was 194. The results of the study show that use of video in teaching enhanced learning achievement. It was established that video motivates, enhances understanding, retention and participation.

Schmidinger,H.,Molin,L. and Brandt,S.A. (2014) studied the review of literature on geography excursions and field studies and discussed their development over time, focusing on purpose, content, method, and execution. The scope was limited to Swedish and Anglo-Saxon literature, produced after the year 1900. The results show that excursion and field studies have been important methods of teaching different subjects in school including Geography since both these facilitate the learning process of pupils.

Singh, S.S.B.,Rathakrishnan,B., Sharif,S.,Talin,R. and Eboy,R.V.(2016) studied the effects of Geography Information System (GIS) Based Teaching on Underachieving Students' Mastery Goal and Achievement .This study applies a concurrent triangulation mixed method model to determine the effect of GIS based teaching on underachieving students' achievement and their motivation to learn Geography. The quantitative data were collected through a quasi-experimental design while the qualitative data were collected through students' interviews. The treatment groups included 44 students and control group with 40 students. The result revealed that GIS-based teaching had a more positive effect as compared to traditional teaching methods in enhancing participants' learning motivation and achievement in Geography.

This is a comparative study on the perception of 350 secondary school students on Demonstrative Teaching Style in Geography in relation to location,board and gender.The result of this study would help to create an awareness among the teachers about the perception of the students of secondary school level on Demonstrative teaching styles in Geography across location,board and gender. The educators would also be benefitted by the outcome of the study to assess the importance of Demonstrative teaching style in Geography across location,board and gender .

Research Question

Is there any difference in perception of the students on Demonstrative teaching style across

location,board and gender?

Objectives of the Study

The proposed study seeks to find out:

Whether perception of secondary school students on Demonstrative teaching style is significantly different across location,board and gender.

Research hypotheses

In order to understand the difference in the perception of Demonstrative teaching style across location,board and gender the following hypotheses are framed.

H₀: There is no significant difference in perception of the students on Demonstrative teaching style across location,board and gender.

H₁:There is a significant difference in perception of the students on Demonstrative teaching style across location.

H₂:There is a significant difference in perception of the students on Demonstrative teaching style across board.

H₃:There is a significant difference in perception of the students on Demonstrative teaching style across gender.

2. Research Method

The research design for this investigation was a survey type design. The independent variable was Demonstrative teaching style and the dependent variables were secondary school gender, boards and location. The population for this study was secondary school students. The sample consisted of three hundred and fifty (n=350) students. The data for the study were generated from a questionnaire on students' perception of Demonstrative teaching style in Geography. The questionnaire was prepared and the data is collected using survey method. The content validity of the questionnaire was ensured.

The methodology adopted can be discussed as follows.

The null hypothesis for the independent t-test is that the population means from the two unrelated groups are equal:

H₀: $\mu_1 = \mu_2$

In most cases, we look forward to see if the null hypothesis could be rejected and the alternative hypothesis could be accepted, which indicates that the population means are not equal:

$$H_A: u_1 \neq u_2$$

To do this, we need to set a significance level (also called alpha) that allows us to either reject or accept the alternative hypothesis. Most commonly, this value is set at 0.05.

This is done in case of unrelated groups, also called unpaired groups or independent groups, are groups in which the cases (e.g., participants) in each group are different. We investigate differences in individuals, which means that when comparing two groups, an individual in one group cannot also be a member of the other group and vice versa. An example would be gender - an individual would have to be classified as either male or female – not both.

3. Results and Analysis

Location wise Analysis of Perception of Demonstrative Teaching style

The testing of Hypothesis- 1 is addressed as below.

LOCATION WISE ANALYSIS

LOCATION	N	Mean	Std. Deviation	t-test statistic	p-value
Urban	10	20.60	2.59	-2.38	0.00
Semi-Urban	340	20.29	4.43		

Table showing Location wise analysis of Perception of Demonstrative teaching style scores

The perceptual scores of students in urban is higher than that of students in semi-urban as far as perception of demonstrative teaching styles is concerned. This is justified by the t-test statistic. The probability value attached with t-test statistic is 0.00(less than 0.05). This finding makes the t-test statistic highly significant at 5% level. This significance implies that the students segregated location-wise show differences in means of perception scores in demonstrative teaching style. Since the mean perceptual score is higher in case of urban students as against

semi-urban students, the difference in values becomes more pronounced. Hence the urban students are relatively more proactive in perceptual outcomes as far as demonstrative teaching style is concerned relative to semi-urban students. The null hypothesis is rejected at 5% level.

Board wise Analysis of Perception of Demonstrative Teaching style

The testing of Hypothesis- 2 is addressed as below.

BOARD WISE ANALYSIS

BOARD	N	Mean	Std. Deviation	t-test statistic	p-value
TOTAL	350	20.45	3.24		
CISCE	170	23.75	3.60	-2.43	0.00
WBBSE	180	17.14	2.84		

Table showing Board wise analysis of Perception of Demonstrative teaching style scores

The demonstrative teaching style has more perceptual effect on students under CISCE relative to WB. This is attributed to the high mean value of CISCE(23.75) as against WBBSE(17.14). The t-test statistic examines whether the differences in perceptual scores across boards are significant or not. The result shows that t-test is highly significant (p-value=0.00 less than 0.05). This high value of t-test statistic is largely due to high mean value of CISCE perceptual values relative to WB as far as demonstrative teaching style is concerned. This finding asserts that the students enrolled under CISCE are more benefited with regard to demonstrative teaching style relative to students enrolled in WB. The null hypothesis is rejected at 5% level.

Gender wise Analysis of Perception of Demonstrative Teaching style

The testing of Hypothesis- 3 is addressed as below.

GENDER WISE ANALYSIS

GENDER	N	Mean	Std. Deviation	t-test statistic	p-value
MALE	181	20.69	4.72	-2.16	0.00
FEMALE	169	18.94	3.97		

Table showing Gender wise analysis of Perception of Demonstrative teaching style scores

The perceptual scores of male students is higher than that of female students as far as perception of demonstrative teaching styles is concerned. This is justified by the t-test statistic. The probability value attached with t-test statistic is 0.00(less than 0.05). This finding makes the t-test statistic highly significant at 5% level. This significance implies that the female and male students show differences in means of perception scores in demonstrative teaching style. Since the mean perceptual score is higher in case of male students, the difference in values becomes more pronounced. Hence the male students are relatively better-off in perceptual outcomes as far as demonstrative teaching style is concerned. The null hypothesis is rejected at 5% level.

4. Conclusion

The difference in the perception of Demonstrative teaching style across location, board and gender the following hypotheses are framed. The sample consists of 350 students. The data for the study were generated from a questionnaire on students' perception of Authoritative teaching style in Geography. The questionnaire was prepared by the lecturer from selected topic of inferential statistics namely two sample t-test. The urban students are relatively more proactive in perceptual outcomes as far as demonstrative teaching style is concerned relative to semi-urban students. The students enrolled under CISCE are more benefited with regard to demonstrative teaching style relative to students enrolled in WB. The male students are relatively better-off in perceptual outcomes as far as demonstrative teaching style is concerned. Hence the demonstrative teaching style is justified in this study.

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