Teacher Effectiveness of Secondary Teachers : A Study on West Bengal

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ABSTRACT *Teaching is an essential phenomenon in the education system. It is a goal oriented process directed towards the desirable changes among learners. The role of the teacher in education is one of the central issues in education. The teacher is the point of contact between the educational system and the pupil. The school effectiveness depends directly on the effectiveness of its teacher. Maximising teacher effectiveness is the major goal of education. The purpose of the present study was to find out the Teacher Effectiveness of Secondary Teachers of two Districts of West Bengal. The researcher used stratified random sampling. She selected two-hundred (200) secondary school teachers of Howrah and Burdwan districts of WB. Researcher adopted a questionnaire consisting of 50 items in order to measure teacher effectiveness. It was properly standardised by the researcher.*

Introduction

Education plays a key role in the development of a Nation and its human resources. Children are valuable national assets. The teachers have a great responsibility in moulding the character of children by giving quality education in the school. It is very important to know the effectiveness of teachers in order to enhance the quality of education as well as to improve the standard of students.

According to Anderson (1991) "…an effective teacher is one who consistently achievers goals which either directly or indirectly focuses on learning of their students." McBer, (2000) designed to provide a framework to describing effective teaching.

The term "teacher effectiveness" refers to the potentialities of the teacher to facilitate and enhance the conditions of learning so as to derive a desirable result.

- **Objectives :**

The objectives of the study were as follows –
i) to study the teacher effectiveness of the teachers.
ii) to make a comparative study on teacher effectiveness of the teachers in relation to sex (male & female) and strata (urban & rural).

- **Delimitations :**

The present researcher delimited her research area as follows:
i. The study was confined one major variable i.e. teacher effectiveness.
ii. Only two districts (Howrah and Burdwan) were considered for the study.
iii. The researcher considered her sample population as 200 secondary school teachers of West Bengal only. Stratified random sampling procedure was followed.

- **Hypothesis of the study:**

Hypothesis of the study in the Null form were as follows-
H_1: There would be no significant difference between secondary teachers of Howrah and Burdwan in respect to teacher effectiveness.

H_2: There would be no significant difference between male secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_3: There would be no significant difference between female secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_4: There would be no significant difference between urban secondary teachers of Howrah urban Burdwan in respect of teacher effectiveness.

H_5: There would be no significant difference between urban male secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_6 : There would be no significant difference between urban female secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_7 : There would be no significant difference between rural secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_8 : There would be no significant difference between rural male secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

H_9 : There would be no significant difference between rural female secondary teachers of Howrah and Burdwan in respect of teacher effectiveness.

- **Significance of the Study :**
Significance of the study were as follows –
a) The findings of the study will enlighten Howrah and Burdwan secondary school teachers in the light of teacher effectiveness, which if properly integrated in the classroom teaching learning systems.

b) The finding of study will act as important information source of teachers who are dealing with students daily in classroom.

e) Future researchers will get a new platform for designing their studies which is very demanding field in higher education.

- **Methodology :**
The methodology of the study were as follows-

i) Variables :
In the present investigation, the researcher took three independent variables. Then she divided the independent variables into two categories i.e. Treatment variable and Attribute Variable.

Treatment Variable: Teacher Effectiveness Attribute Variables: Gender and Strata (Rural and Urban)

ii) Sample :
Stratified random sampling was used in the investigation. On the basis of this 200 secondary school teachers were selected from two districts. A total of 34 schools (Howrah – 13 and Burdwan – 21) were selected, from urban and rural areas, by lottery system. Finally the researcher was selected 100 samples from both above said districts. Then she divided the sample into two categories namely male (50) and female (50) and subdivided into urban (25) and rural (25).

iii) Tool Used :

The researcher used *Teacher Effectiveness Scale (TES)* for secondary school teachers developed by Buam (2011) and finally standardised by the present researcher.

iv) Try out of the Teacher Effectiveness Scale (TES)

• **Administration and evaluation of the questionnaire**

The Teacher Effectiveness Scale was administered on the above sample by giving a booklet with blank response sheet. There were five response categories in Likert type five point scale i.e. Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. There were total 50 items (26 positive and 24 negative items). The scoring criterion was 5,4,3,2,1 or 1,2,3,4,5 according to positive or negative items respectively.

• **Item Analysis of the Questionnaire**

Item analysis was done by computing t-values of each item to examine the discriminating power of items of the questionnaire. The t-values of high score group (upper 27%) and low score (below 27%) in TES were only considered. As a rule 't' value equal to or greater than 1.75 indicated that the average response of the high and low group differed significantly. Thus the researcher selected 50 items, from among 75 items, for her study.

v) Validity of the Teacher Effectiveness Scale (TES)

Validity of the tool was determined by factor analysis method. To determine factorial validity of the tool, the researcher performed Principal Component Factor Analysis with Vari-max rotation. The result of Principal Component Analysis had been determined with their respective Eigen Value for this study.

Finally, the researcher considered 6 components for the tool. It was then subjected to Principal component factor analysis. The 6 components (determinants) along with their respective item numbers were determined.

vi) Reliability of Teacher Effectiveness Scale (TES)

The researcher considered two statistical measures for determining the reliability of the test,

viz., Test – retest Reliability (r = 0.69, < 0.05) and Internal Consistency. The dimensions of the questionnaire were:

Classroom Management (0.61),
Knowledge of Subject-matter (0.58),
Facilitator of the Learner (0.67),
Teaching Style (0.59),
Personality Characteristics (0.64) and
Interpersonal Relationship (0.63)
(Figures in the bracket were internal consistency of the respective dimension)

vii) Analysis and Interpretation of Data :

The data collected from sample were systematically classified and tabulated, scientifically analysed and interpreted by Descriptive Statistics and Inferential Statistics.

Descriptive statistics revealed that the Mean (144.67), Median (143) and Mode (142) were almost similar. This proved that the sample were normal. The standard deviation of the distribution was 11.71. The value of Skewness was -0.484. and the Kurtosis was 0.221.

The researcher hypothesised that male and female teachers of rural and urban localities did not differ significantly in relation to their Teacher Effectiveness level. In the following section attempt had been made to verify these hypothesis by the application of 't' test.

viii) Findings :

The result was given in Tables- 1, 2 and 3 respectively-

Table – 1: Showing 't' values of Teacher Effectiveness between teachers of Howrah and Burdwan, Male teachers of Howrah and Burdwan and Female teachers of Howrah and Burdwan

Groups\ Measures	Howrah	Burdwan	Howrah Male	Burdwan Male	Howrah Female	Burdwan Female
N	100	100	50	50	50	50
Mean	74.67	70	64.23	59.16	50.44	44.11
SD	9.00	5.19	4.11	6.30	6.16	5.04
SEM	1.12	1.31	1.18			
t-value	2.64*	2.45*	2.12*			

Significant at 0.05 level (2 tailed)

a) The 't' value between teachers of Howrah & Burdwan was significant at 0.05 level. Hence null hypothesis H_1^0 was rejected.

b) 't' value of Male teachers of Howrah & Burdwan was found to be significant at 0.05 level. Hence null hypothesis H_2^0 was also rejected.

c) 't' value of female teachers of Howrah & Burdwan was also significant at 0.05 level. Hence null hypothesis H_3^0 was also rejected. So, in all the above cases alternate hypothesis were accepted.

Table – 2: Showing 't' values between Urban teacher of Howrah and Burdwan, Urban Male teachers of Howrah and Burdwan and Urban Female teachers of Howrah and Burdwan

Groups\ Measures	Howrah Urban	Burdwan Urban	Howrah Urban Male	Burdwan Urban Male	Howrah Urban Female	Burdwan Urban Female
N	50	50	25	25	25	25
Mean	74.13	68.84	81.67	75.10	60.13	59.72
SD	6.34	5.16	5.54	5.11	6.22	5.09
SEm	1.41	1.13	0.76			
t-value	2.06*	2.87*	1.98**			

Significant at 0.05 level **Not significant at 0.05 level
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a) t' value of Urban teachers of Howrah & Burdwan was found to be significant at 0.05 level. Hence null hypothesis H_4^0 was rejected.
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b) t' value of male teachers of Howrah & Burdwan Urban was significant at 0.05 level. Hence null hypothesis H_5^0 was also rejected. So, alternative hypothesis was accepted.

c) But 't' value of female Urban teachers of Howrah & Burdwan was insignificant at 0.05 level. Hence null hypothesis H_6^0 was accepted.

Table – 3: Showing 't' values between Rural teacher of Howrah and Burdwan; Rural Male teachers of Howrah and Burdwan; Rural Female teachers of Howrah and Burdwan

Groups\ Measures	Howrah Rural	Burdwan Rural	Howrah Rural Male	Burdwan Rural Male	Howrah Rural Female	Burdwan Rural Female
N	50	50	25	25	25	25
Mean	72.29	81.44	61.85	61.40	50.80	59.37
SD	7.21	6.65	6.54	5.35	6.91	5.79
SEm	1.25	1.16	1.10			
t-value	2.57*	1.69**	2.75*			

Significant at 0.05 level **Not significant at 0.05 level

a) Obtained 't' value between Howrah & Burdwan rural teachers was significant at 0.05 level. Hence null hypothesis H_7^0 was rejected.

b) But obtained 't' value of Howrah & Burdwan rural male teachers was not significant at 0.05 level. Hence null hypothesis H_8^0 was accepted.

c) Obtained 't' value of Howrah & Burdwan rural female teachers was significant at 0.05 level. Hence null hypothesis H_9^0 was rejected.

I) **Discussion :**

i) The present study found out the differences between Howrah and Burdwan secondary school teachers in relation to teacher effectiveness. It was also found that the teacher effectiveness of secondary teachers of Howrah was significantly higher than Burdwan.

ii) It has also found that significant difference exist between male & female secondary teachers of Howrah and Burdwan in relation to teacher effectiveness. Male & female teachers effectiveness of Howrah was higher than male & female teachers of Burdwan.

iii) It was also found that there was significant mean difference in Teacher Effectiveness between total urban teachers and urban male teachers of Howrah and Burdwan. Total urban teachers and urban male teachers of Howrah were better effectiveness than Burdwan. But no significant mean difference in between urban female teachers of Howrah and Burdwan.

iv) The result also implied that there was significant mean difference in total rural teachers and rural female teachers in relation to Teacher Effectiveness between Howrah and Burdwan. But no significant mean difference in betweenrural male teachers of Howrah and Burdwan.

• **Educational implication of the Study :**
The following conclusions were drawn from the analysis of the study-
a. The study revealed that significant differences exist between Howrah and Burdwan total secondary teachers.
b. The result concluded that significance difference existed between in Howrah and Burdwan total urban teachers and male teachers, Howrah and Burdwan total rural teachers and rural female teachers.
c. It was also noticed that no significance difference in between Howrah and Burdwan urban female teachers, rural male teachers.

• **Suggestion for further Research :**
• In future the research project may be undertaken considering more variables with a large number of samples.
• The present study was included only two districts of West Bengal. The future study may include more districts in W.B.
• Teacher Effectiveness are not only the important topic to the secondary school teachers, but also to the elementary, primary, college and university level also to find the Teacher Effectiveness.
• Comparative study may be done on government secondary school teachers and private secondary school teachers to find out the teacher effectiveness.

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