



## USING SIMULATED CONDITIONS TO MODIFY BEHAVIOUR AMONG PUPIL TEACHERS

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### **Abstract**

*The objectives of the study were to measure the effectiveness of simulated conditions on behavior modification of pupil teachers of social Study. For this purpose the investigator selected 100 pupil teachers from Govt. aided Colleges affiliated to Kurukshetra University, Haryana by using random cum purposive sampling method. As a tool FIACS were used. The collected data were process by applying suitable statistical techniques i.e. mean, S.D. 'F' test & t-test are used. The result of the study reveals that. The lack of confidence in class is removed by simulation teaching and students get full confidence of teaching in class room situations. The defects in present teaching process as well as content were removed under simulated conditions.*

**Keywords:** *Simulated Condition, Behaviour Modification, Pupil Teachers.*

### **Introduction**

The general belief is that pupil-teachers as compared to the students of other professional courses like Medicine, Engineering, etc. appear to be less intelligent and less confident. They also seem to be intellectually and academically poor in our country. It may be because of the fact that entry to the Engineering and Medical courses is difficult as compared to B. Ed. courses. Owing to an inadequate number of engineering and medical institution and comparatively large number of B. Ed. colleges (Gupta, 1972, Bhatnagar, 1979-80, Association of Indian Universities, 1981- 82). In Haryana region we have more than 150 B. Ed. Colleges but engineering college ratio is very small as compare to this number.

### **Objectives of Study**

1. To find out the effect of simulated conditions in modification of teaching behavior.
2. To find out the effect of simulated conditions on teaching behaviour of social study.

### **Hypothesis of Study**

1. Simulated conditions will be more effective in modification of teaching behaviour than present system of B.Ed. pupil teachers.
2. The effect of simulated conditions on modification of teaching behaviour of social studies teachers is better than present practice programme.

### **Methodology**

In the present study investigator used flander's ten categories system of interaction analysis as a tool. In present study the investigator used Percentage, Mean, S.D., analysis and interpretation of data. As per need and nature of the study the investigator used experimental method. In the present study investigator consider population all the B.Ed. pupil teachers of kurukshetra University, Haryana. The present sample of study was random cum – purposive sample. 100 Social Study pupils teachers were taken from Government aided colleges for the study. Then 50 pupil teachers of social study made as control group and 50 social study teachers taken as experimental group to compare the results.



### **Procedure of the Study**

In this study whole sample was divided into two equal part one as experimental group and control group. Each group was of 50 pupil teacher. The experimental as well as control group further divided into small groups each of (8 to 10) pupil teachers. Thus, pre and post stage data of teaching skill of each group were collected with the help of Flander's Ten Category System. The Hypothesis was verified on the basis of statistical calculations according to data collection by experiment.

### **Analysis & Interpretation of Data**

One of the rigorous analyses was used for the interpretation of teacher-pupil interaction in term, of behaviour ratios. These behaviour ratios have been obtained from data of social study group pupil teachers, which were organized into tabular forms. In the present investigation sixteen important behaviour ratios were calculated, data for each behaviour ratio were organized to calculate mean standard deviation, standard error and fiduciary limit, also with regard to pre and post observations of experiment and control groups.

### **Social Study Group Data**

**Pre Stage:** The rerated data of pre stage pupil teachers of social study group are taken in Table 1 and shows that means, standard deviation, standard errors and Flander's becomes of experimental and control group are same as 0.05 and 0.01 levels. The lowest means, standard diversion standard error and fiduciary limits were 18.00, 10.39, 3.46, 25.99 to 29.63 whereas highest values 55.00, 28.32, 9.44, 76.81 to 86.72 at both levels respectively.

**Post Stage:** The behaviour ratio data of social study group pupil teachers are given in the Table 2 shows that mean, standard deviation, standard error and fiduciary limits of experimental and control groups are different at both levels. The lowest mean, standard deviation, standard error and fiduciary limits were 15.29, 4.94, 1.65, 19.10 to 20.83 and highest values were 67.72, 20.62, 6.87, and 83.59 to 90.80 respectively. Behind this the lowest and the highest mean, standard deviation, standard error and fiduciary limits were 14.00 and 57.15, 9.39 and 30.93, 3.13 and 10.31 and 21.23 to 24.52 and 80.97 to 91.79 at 0.05 and 0.01 levels respectively.

### **Analysis of Data of Social Study Group**

Table 1 indicated the F-ratio of Teachers Talk (TT) among eighteen groups in pre and post-stages was found 9.22. It was found significant at 0.05 and 0.01 levels of confidence. So, the positive hypothesis was accepted and it was inferred that there is significant difference between various pairs of aforesaid groups. Significance of difference between two means of aforesaid groups was necessary to reach the definite conclusion. Therefore, the investigator calculated the critical ratios given in Table 3. Table showed that all the critical ratios of experimental pre-and post-stage and control were found significant at both levels.

So, the hypothesis was accepted and hence it was concluded that the effectiveness simulated teaching was more effective than traditional practice. Table 1 exposed that the f-ratio of Indirect Teacher Talk (ITT) related to experimental and control situations in pre and post stages was found significant at both levels (0.05 and 0.01) of confidence. Therefore, the positive hypothesis was accepted for significance of difference between aforesaid groups. It was necessary to reach certain conclusions. The investigator calculated critical ratios which were given in Table 3 revealed that critical ratios of pre and post stages of experimental and control groups were found significant at both levels. So, on the basis of critical



ratios the hypothesis was accepted and it was concluded that effectiveness of simulated teaching practice was found better than present teaching practice programme, in situations.

Table 1 brought that F-ratio of Direct Teacher Talk (DTT) among experimental and control groups in pre and post stages was found 5.80. It was found significant at both levels of confidences. So, the hypothesis was accepted. It was necessary to reach the certain conclusion. Therefore the investigator calculated critical ratios which were given in Table 3. Table disclosed that critical ratios between pre and post-stages of experimental and control group were found significant at both (0.05 and 0.01) levels and the hypothesis was accepted. Hence, it was concluded that simulator teaching practice was superior to present one.

Table I showed the F-ratio of Pupil Talk (PT) among groups related to experimental and control found 7.50. It was found significant at 0.05 and 0.01 levels of confidence and the hypothesis was accepted. So for significant of difference between two means of aforesaid groups, it was necessary to reach the appropriate conclusion about the hypothesis and the investigator calculated critical ratio of various pairs as given in Table 3.

Table disclosed that all the critical ratio between pre – and post – stages of experimental and control groups were found significant at both levels. Thus the hypothesis was accepted. Table 1 displayed that F-ratio of Silence and Confusion (SC) among groups related to experimental and control was found 4.45 and found significant at 0.05 and 0.01 levels of confidence. So, the hypothesis was accepted and it Now, for significance of difference at certain conclusion.

So, the investigator verified the hypothesis by the test of critical ratio i.e. t-test. The critical ratios were given in Table 3. Critical ratio between pre-and post-stages of experimental and control groups were found was inferred that there is significant difference between significant at both levels. Thus on the basis of critical ratio various pairs of aforesaid groups. The hypothesis was accepted and it was concluded that between means of aforesaid groups was necessary to reach simulator practice teaching was better than present practice programme.

Table 1 indicated that the F-ratio of Indirect to Direct ratio (I/O) among groups related to experimental and control found 5.12. Ratio was found significant at both levels of confidence and it hypothesis was accepted. So it was inferred that there is significant difference between various pairs of aforesaid groups. Therefore, significance of difference between two means of aforesaid groups was necessary to reach at certain conclusion. So, the investigator calculated critical ratio between various groups which were given in Table 3. Table unfolded that all the critical ratio of pre and post stages of experimental and control were found significant at 0.05 and 0.01 level. Thus, the hypothesis was accepted.

Table no. 1 brought that F – ratio of Teacher Response Ratio (TRR) 7.13 among groups was found significant at both level of confidence. Thus, the hypothesis was accepted and it was inferred that there is significant difference between various pairs of aforesaid groups. But for significance of all deference between two means of aforesaid groups at was must to reach at certain conclusion about the hypothesis so, the investigator calculated critical ratio which were shown in table no. 3. Table disclosed the critical ratio of pre and post- stages of experimental and control were found significant at both levels and hypothesis was accepted.



Table no. 1 displayed that the F – ratio of Teacher Question Ratio (TQR) among groups was found (6.67) significant. Significance of the difference between means of aforesaid groups was a must to reach the appropriate conclusion. So, the investigator calculated critical ratio given in table no. 3. Table unfolded the critical ratios of pre and post stage of experimental and control groups were found significant at both levels. Thus, on the basis of critical ratio the hypothesis was accepted. Table no. 1 in directed the F – ratio of Content Cross Ratio(CCR) among groups found 7.63. It was found significant at 0.05 and 0.01 levels of confidence and hypothesis was accepted. Therefore, significance of difference between means of aforesaid groups was calculated on the basis of Critical ratios which were given in table no. 3. Table has shown that critical ratio between pre and post-stages and experimental and control groups were found significant at both levels. Thus, the hypothesis was accepted.

Table no. I showed the F-ratio of Steady Stage Ratio (SSR) was found 3.90 were significant at both levels of confidence with accepted hypothesis. But for significant difference between various pairs of aforesaid groups was necessary to reach a certain conclusion. Table exposed that critical ratio between experimental and control were significant at both levels. So, the hypothesis was accepted.

**Table 1: Showing ratio wise central tendency, variability and fiduciary limits of pre stages data of the social study group**

| Ratio        | Experimental Group |       |                 | Fiduciary Limit |       | Control Group |       |                 | Fiduciary Limit |       |
|--------------|--------------------|-------|-----------------|-----------------|-------|---------------|-------|-----------------|-----------------|-------|
|              | M                  | SD    | SE <sub>M</sub> | 0.05            | 0.01  | M             | SD    | SE <sub>M</sub> | 0.05            | 0.01  |
| <b>TT</b>    | 51.00              | 27.84 | 9.28            | 72.44           | 82.18 | 51.00         | 27.84 | 9.28            | 72.44           | 82.18 |
| <b>ITT</b>   | 21.00              | 12.85 | 4.28            | 30.89           | 35.38 | 21.00         | 12.85 | 4.28            | 30.89           | 35.38 |
| <b>DTT</b>   | 35.00              | 18.41 | 6.14            | 49.18           | 55.63 | 35.00         | 18.41 | 6.14            | 49.18           | 55.63 |
| <b>PT</b>    | 18.00              | 10.39 | 3.46            | 25.99           | 29.63 | 18.00         | 10.39 | 3.46            | 25.99           | 29.63 |
| <b>SC</b>    | 27.00              | 16.29 | 5.43            | 39.54           | 45.24 | 27.00         | 16.29 | 5.43            | 39.54           | 45.24 |
| <b>(I/D)</b> | 35.00              | 18.94 | 6.31            | 49.58           | 56.20 | 35.20         | 18.94 | 6.31            | 49.58           | 56.20 |
| <b>(i/d)</b> | 42.00              | 23.39 | 7.80            | 60.02           | 68.21 | 42.00         | 23.39 | 7.80            | 60.02           | 68.21 |
| <b>PIR</b>   | 30.00              | 18.15 | 6.05            | 46.98           | 53.33 | 30.00         | 18.15 | 6.050           | 46.98           | 53.33 |
| <b>TRR</b>   | 38.00              | 20.64 | 6.88            | 53.89           | 61.12 | 38.00         | 20.64 | 6.88            | 53.89           | 61.12 |
| <b>TQR</b>   | 55.00              | 28.32 | 9.44            | 76.81           | 86.72 | 55.00         | 28.32 | 9.44            | 76.81           | 86.72 |
| <b>CCR</b>   | 48.00              | 25.47 | 4.49            | 67.61           | 76.53 | 48.00         | 25.47 | 4.49            | 67.61           | 76.53 |
| <b>SSR</b>   | 42.15              | 25.47 | 4.49            | 67.61           | 76.53 | 42.15         | 25.47 | 4.49            | 67.61           | 76.53 |
| <b>PSSR</b>  | 31.00              | 16.73 | 5.58            | 43.89           | 49.75 | 31.00         | 16.73 | 5.58            | 43.89           | 49.75 |
| <b>TTR89</b> | 49.00              | 26.85 | 8.59            | 69.67           | 79.07 | 49.00         | 26.85 | 8.59            | 69.67           | 79.07 |
| <b>TQR89</b> | 42.00              | 22.84 | 7.61            | 59.58           | 67.57 | 42.00         | 22.84 | 7.61            | 59.58           | 67.57 |
| <b>VC</b>    | 33.15              | 17.15 | 5.72            | 46.21           | 52.22 | 33.15         | 17.15 | 5.72            | 46.21           | 52.22 |

Table disclosed that the F-ratio of Instantaneous Teacher Response Ratio (TRR89) among groups found 7.87. It was found significant at both levels of confidence with accepted positive hypothesis. Now for significance of difference between two means of aforesaid groups was necessary to reach at certain conclusions. So the investigator verified the hypothesis by the test of critical ratio, i.e. t-test. The critical ratio was given in Table 3. Table displayed that critical ratio between pre and post stages of experimental and control groups were found significant at 0.05 and 0.01 levels with accepted hypothesis. Thus on the basis of critical ratios it was concluded that simulated conditions was better than present practice programme.



**Table 2: showing ratio wise central tendency, variability and fiduciary limits of post stage data of the social study group.**

| Ratio        | Experimental Group |       |                 | Fiduciary Limit |       | Control Group |       |                 | Fiduciary Limit |       |
|--------------|--------------------|-------|-----------------|-----------------|-------|---------------|-------|-----------------|-----------------|-------|
|              | M                  | SD    | SE <sub>M</sub> | 0.05            | 0.01  | M             | SD    | SE <sub>M</sub> | 0.05            | 0.01  |
| <b>TT</b>    | 38.00              | 11.61 | 3.87            | 46.94           | 51.00 | 53.22         | 28.85 | 9.62            | 74.61           | 85.54 |
| <b>ITT</b>   | 33.00              | 08.12 | 2.71            | 39.26           | 42.11 | 23.12         | 13.73 | 4.58            | 33.70           | 38.51 |
| <b>DTT</b>   | 23.00              | 07.12 | 2.37            | 28.47           | 30.96 | 33.02         | 18.41 | 6.14            | 47.20           | 53.65 |
| <b>PT</b>    | 30.33              | 08.73 | 2.91            | 37.05           | 40.11 | 14.00         | 09.39 | 3.13            | 21.23           | 24.52 |
| <b>SC</b>    | 15.29              | 04.94 | 1.65            | 19.10           | 20.83 | 25.12         | 14.62 | 4.87            | 36.37           | 41.48 |
| <b>(I/D)</b> | 47.35              | 14.02 | 4.67            | 58.14           | 63.04 | 37.11         | 21.84 | 7.28            | 53.93           | 61.57 |
| <b>(i/d)</b> | 54.69              | 17.02 | 5.67            | 67.79           | 73.74 | 44.12         | 25.73 | 5.91            | 43.76           | 49.97 |
| <b>PIR</b>   | 45.52              | 13.94 | 4.65            | 56.26           | 61.14 | 30.11         | 17.73 | 5.91            | 43.76           | 49.97 |
| <b>TRR</b>   | 50.15              | 15.03 | 5.01            | 61.72           | 66.98 | 41.00         | 22.12 | 7.37            | 58.02           | 65.76 |
| <b>TQR</b>   | 67.72              | 20.62 | 6.87            | 83.59           | 90.80 | 57.15         | 30.93 | 10.31           | 80.97           | 91.79 |
| <b>CCR</b>   | 38.42              | 12.02 | 4.01            | 47.68           | 51.89 | 50.52         | 27.29 | 9.10            | 71.54           | 81.80 |
| <b>SSR</b>   | 52.12              | 15.62 | 5.21            | 64.16           | 69.63 | 39.15         | 22.73 | 7.58            | 56.66           | 64.62 |
| <b>PSSR</b>  | 43.73              | 12.85 | 4.28            | 53.61           | 58.10 | 33.05         | 18.18 | 6.06            | 47.05           | 53.42 |
| <b>TTR89</b> | 61.15              | 18.60 | 6.20            | 75.47           | 81.98 | 52.11         | 29.50 | 8.83            | 74.82           | 85.14 |
| <b>TQR89</b> | 54.90              | 16.17 | 5.39            | 67.35           | 73.01 | 44.52         | 24.04 | 8.01            | 63.02           | 71.43 |
| <b>VC</b>    | 21.09              | 05.18 | 1.73            | 25.09           | 26.90 | 18.72         | 11.02 | 3.72            | 27.20           | 31.05 |

Table 1 unfolded that F – ratio Instantaneous Teacher Question Ratio (TQR89) among groups was found 8.40 and significant at 0.05 and 0.01 level of confidence. Therefore, the positive hypothesis was accepted. But for significance of difference between two means of aforesaid group was must to reach the definite conclusion and critical ratio were calculated for hypotheses which were given in Table 3. Table disclosed that critical ratio o pre and post stages of experimental and control groups were found significant at both levels. Thus, the hypothesis was accepted.

### Findings

1. The lack of confidence in class is removed by simulation teaching and students get full confidence of teaching in class room situation.
2. The defects in present teaching process as well as content were removed under simulated conditions.
3. The skill of lecturing in an appropriate manner was increased.
4. The skill of writing on blackboard neat as far as possible individually and appropriate use of space on blackboard was increased undoubtedly under simulated conditions.
5. The effect of questioning skills of B. Ed. Pupil teacher was notable.
6. The skill of narration and illustrations was increased in B. Ed. pupil teachers under simulated conditions.

### Conclusion

The simulated conditions are more effective than present practice programme to modify the teaching behaviour of B. Ed. Pupil teachers. The effect of simulated teaching process in modifications of behaviour of Social Studies Pupil teachers is better than present programme of practice.



## **Reference**

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