CHAPTER V

Summary

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Is your study a process process or a process product or a pre-process product?
5.1 INTRODUCTION:

The teaching practice programme, organized for Student-Teachers in most of the teacher education colleges and departments, seems vague and does not give the Student-Teachers a precise idea of what is to be achieved by teaching practice. The Teacher Educators on their part are more eager to assess the overall effectiveness of a Student-Teacher than help him to developing into an effective teacher. The approach is rather global. It is recognized that each bit of the teacher behaviour in the class-room has considerable influence on the student's minds. It is the teacher who is active in the class-room most of the time. The practice teaching programmes of the teacher training colleges have so far laid emphasis on the content and methodology aspects of teaching. The effectiveness of teaching is to be judged to the extent it has caused learning in the child. The communication process of the teacher, the class-room has been found to be mainly responsible for the proper educational growth of the child, although he is also expected to direct the pupils in activities outside the class room in order to enable them to make necessary changes in their
way of thinking and acting. Whatever may be the efforts to change school practices, ultimately it comes down to the teacher's class-room behaviour, his teaching and the teacher-pupil interaction. The verbal interaction between the teacher and the pupils creates the climate of freedom or restriction for the pupils in the class-room. Not much attention has been paid on studying and analyzing teacher's verbal behaviour. Since the teacher exerts a great deal of influence on the pupils, teacher's behaviour as an important variable in the dynamics of class room should attract the attention of teacher education colleges.

A number of techniques are being used currently in India as well as in other countries for the modification of human behaviour. Some of these techniques include T-Groups, role play, programmed learning, achievement motivation training, interaction analysis, micro-teaching etc. These techniques have become the educational innovations in the training of teachers both at pre-service and in-service levels and have shown promising results in other countries.

Since in last decades some educational researchers have been trying to develop concept in terms of which classroom interaction could be described. Attempts have been made to analyse
interaction in a class room. The advantage of class room interaction analysis lies in the fact that its utility has been established as a training tool as well as a tool to measure class room behaviour patterns in the studies of Pareek and Rao (1970a), Sharma (1972), Jangira (1973) and Pangotra (1973). Studies have indicated the effectiveness of interaction analysis in helping teachers to modify their teaching behaviour in the class room. Some of these studies include those by Krik (1964), Hough and Amidon (1964a, 1964b), Soar (1966), Furst (1967), Hough and Ober (1967), Bondi (1969), Buch and Santhanam (1970b), Pareek and Rao (1971b), Sharma (1972), Jangira (1973) and Pangotra (1973) which reported changes in teacher behaviour due to training and feedback.

5.2 Variables:

(i) Independent Variables:

In the present study, the following training strategies are considered as independent variables:

1. Traditional training strategy.

2. Training through Flanders Interaction Analysis Category System.

(ii) Dependent Variables:

The following variables were treated as

dependent variables:

1. **Pupil's Attitude (Reaction of Pupils):**

   The attitude or reaction of pupils under the charge of control and experimental groups are taken as one of the dependent variables. The student-teachers trained through traditional method and F.I.A.C.S. technique should naturally differ in their style of teaching which, in fact make an impact on attitude and reaction of their pupils. Hence, the attitude/reaction of pupils towards different training strategies was considered as an criterion variable.

2. **Achievement:**

   The student-teachers of both the groups, trained through traditional and F.I.A.C.S. technique teach two different group of pupils. The pupils under the charge of experimental and control groups should have different achievement scores in the subject. Hence, the achievement of the pupils has been taken to be one of the dependent variables (criterion variable).

   Specifically the present study was undertaken to fulfill the following objectives.

5.3 **OBJECTIVE OF THE STUDY:**

   The objectives of the present study may be presented as follow:
1. To study the effect of training of Student-Teacher through F.I.A.C.S. vis-a-vis traditional method on class-room teaching competence.

2. To find out the difference in mean gain score on Attitude Scale of Student-Teachers trained through F.I.A.C.S. and traditional method.

3. To study the difference in the attitude (reaction) of pupils taught by Student-Teachers, trained through F.I.A.C.S. and the attitude of pupils taught by Student-Teachers who have been trained through traditional method.

4. To study the effectiveness of training of Student-Teachers in F.I.A.C.S. vis-a-vis traditional method as a means of improving pupil's achievement.

5.4. Hypotheses:

In order to fulfill the objectives of the study, following null hypotheses have been formulated:

1. Student-Teacher trained through F.I.A.C.S. do not differ significantly in their teaching competence as compared to the Student-Teachers who are trained through traditional method.

2. There is no significant difference between the mean gain score on Attitude Scale of Student-Teachers trained through F.I.A.C.S. (experimental group) and the mean gain score of Student-Teachers trained through
traditional method (control group).

3. There is no significant difference between the attitude score of pupils under the charge of experimental and control groups.

4. There is no significant difference between the achievement scores of pupils under the charge of experimental and control groups.

5.5 METHODOLOGY:

5.5.1 Research Method:

Keeping in view the objectives of the study the experimental method was employed to conduct the research. For the final experiment an experimental Pretest-Posttest design with experimental group and control group was executed. The experimental group and control groups included 16 Student-Teachers each. The groups were matched on variables of age, sex, socio-economic status, subjects at graduate level and teaching subjects etc.

5.5.2 Sample and Sampling Technique:

A random sampling technique was used for drawing out the representative sample of the Student-Teachers. A sample of 32 Student-Teachers were randomly drawn out of 90 Student-Teachers admitted to B.Ed. training course in Tilak Dhari Training College, Jaunpur, U.P. in the session 1991-92. The pupils
(students) of class VIII were taken from Tilak Dhari Singh Inter College, Junpur, U.P. for coaching purposes.

**5.5.3 Research Design:**

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<tr>
<td>Pre-observation of classroom behaviour and attitude of both the groups</td>
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<tr>
<td>Administration through TAB (2 lessons)</td>
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<tr>
<td>Phase 1: Administration of Teacher Attitude Inventory on Student-Teachers (TAI by S.P. Ahluwalia).</td>
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<tr>
<td>T: Oriental Orientation of control group in Theory of traditional method of teaching through FIACS technique</td>
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<td>R: Phase</td>
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<td>E: Method of teaching through traditional and simulated conditions followed by observation and feed-back (practice) by each student-teachers.</td>
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<tr>
<td>P: Post-observed Observation of Classroom behaviour and attitude of student-teachers belonging to both the groups through T.A.B.</td>
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<tr>
<td>Pre-Test: Administration of Achievement Test and a Reaction Scale (self-prepared) on the pupils to be taught by both the groups separately.</td>
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<tr>
<th>Time</th>
<th>Budget</th>
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<tr>
<td>16 days</td>
<td>15 days</td>
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Coaching Stage. 5
Student-Teachers of Student-Teachers of control group will of experimental days be sent to teach group will be sent the five assigned nt to teach the lessons to class same five assigned VIII B. of T.D.S.I. lessons to class C. Jaunpur through VIII A. of T.D.S.I. traditional method C. Jaunpur through FIACS approach.

Post-test Administration of Achievement Test and a Reaction Scale (self-prepared) on the pupils to be taught by both the groups separately.

<table>
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<th>5.6 Research Tools:</th>
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<td>The following measurement tools were used to carry out the present investigation:</td>
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<tr>
<td>1. Flanders Interaction Analysis Category System (F.I.A.C.S.) as a training tool.</td>
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<td>2. Teaching Assessment Battery as an observation tool of class room behaviour of Student-Teachers to assess their teaching competence.</td>
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<td>3. Teacher Attitude Inventory (T.A.I. prepared by S.P. Ahuluwalia) to measure the Attitude of Student-Teachers.</td>
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<td>4. An Achievement Test (self-constructed) to evaluate the achievement of Students (Pupils).</td>
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<td>5. Reaction Scale for teaching (self-prepared) to measure the reaction of pupils for teaching.</td>
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<th>5.7 Analysis of Data:</th>
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<td>The following statistical analysis will be</td>
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done to interpret the collected data:

1. The 't' test has been used to test the significance of difference between the control and experimental groups of Student-Teachers on T.A.I. at Pre-test and Post-test level.

2. The 't' test has been used to test the significance of difference between the control and experimental groups of Student-Teachers on TAB at Pre-Test and Post-Test level.

3. The 't' test was employed to test the significance of difference between the gain scores of control and experimental groups of Student-Teachers on T.A.I. and TAB.

4. The 't' test was also employed to find out the significance of difference between the pupils under the charge of experimental and control groups on Attitude Scale/Reaction Scale at Pre-Test and Post-Test level.

5. The 't' test was also used to test the significance of difference between the pupils under the charge of experimental and control groups at Pre-Test and Post-Test level.

The following formula was used to test the significance of difference between the two Means.

\[
\frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s_p^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}
\]
Where-

\[ t = \frac{M_1 - M_2}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}} \]

\[ M_1 = \text{Mean of the first group.} \]
\[ M_2 = \text{Mean of the second group.} \]
\[ s_1 = \text{S.D. of the first group.} \]
\[ s_2 = \text{S.D. of the second group.} \]
\[ N_1 = \text{No. of individuals in first group.} \]
\[ N_2 = \text{No. of individuals in second group.} \]

5.8 MEJOR FINDINGS:

From the above discussion of the result concerning the effect of Student-Teachers through F.I.A.C.S may be summarized as follows:

1. The Student-Teachers of experimental group gain more teaching competence due to training through F.I.A.C.S. in comparison to those of the control group who have been trained through traditional method of teaching.

2. The Student-Teachers of experimental group gain more favourable attitude due to training through Flanders Interaction Analysis Category System in comparison to those of control group who have been trained through traditional method of teaching.
3. The pupils who were taught by experimental group show more favourable attitude towards teaching in comparison to the pupils who were taught by control group.

4. The pupils under the charge of experimental group of Student-Teachers achieve higher score on an Achievement Test in comparison to the pupils who were kept under the charge of control group. It means that the teaching through Flanders Interaction Analysis Category System results in more learning on the part of Students (pupils).