

CHAPTER



COLLECTION OF DATA

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IV

COLLECTION OF DATA

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The aim of this study is to find out the effect of the training in classroom Interaction analysis and regular feedback, training in interaction analysis and Conventional method of teaching in producing better classroom climates and the changes brought about by them in the performance of the pupils. So this study requires three different groups of teachers using three different methods of teaching. In order to find out the effects of different teacher behaviour, two groups of teachers - Experimental Group 1 and Experimental Group 2 were trained using FIACS. The Experimental Group 1 teachers were given regular feedback after observing each class during the period of the Experiment. The methods adopted to give training to teachers of E1 and E2 in FIACS is presented in this chapter.

(A) THE TRAINING COURSE

1. Organisation : Phase I

All the teachers teaching standards IX, X and XI in Experimental Group 1 school and Experimental Group 2 school were contacted by the investigator personally. Out of these

teachers, 7 teachers of Experimental Group 1 school and 7 teachers of Experimental Group 2 school were chosen to teach all the academic subjects namely English, Tamil, Mathematics, Science and History and Geography in IX Standard A and B sections.

Phase II :

The investigator and one of his colleagues were trained in FIACS system in the Centre of Advanced Study in Education, Baroda. With constant practice in the method of observation, they achieved inter-observer reliability to the extent of 0.88. After achieving optimum inter-observer reliability, the investigator along with his colleague observed all the classes taught by the teachers who teach IX Standards. These teachers evinced great zeal in the research under taking. Next, seven teachers were selected to teach IX standard A and B sections in the Control Group. Care was taken, in selecting these teachers, to ensure that all the subjects namely English, Tamil, Science, Mathematics and History Geography were represented.

Phase III :

Before briefing the Experimental Groups 1 and 2 on the FIACS system and indirect behaviour patterns, three FIACS

observations were made, and individual, master and master matrices were prepared. Three observations were made and matrices were prepared for the Control Group teachers as well.

During this phase, various tests to measure classroom climate (that is) Students' Adjustment Scale, Classroom Trust Schedule, Pupils' Academic Motivation Scale, Students' Dependency Scale, Students' Expectancy Scale, Students' Activity Scale, Classroom Climate Scale and Sociometric Scale, were administered to pupils of standard IX in all the three schools. Achievement tests in English, Tamil, Mathematics, Science and History Geography were also administered. The scores obtained in these tests were recorded and preserved for later use. The other details like age, and socio-economic status were also recorded.

2. Sessions : Phase IV

It was a felt need to orient teachers of the experimental groups 1 and 2 in the Flanders' Interaction Analysis category system and the effect of indirect behaviour in relation to direct behaviour. Therefore, a five day orientation course was arranged to impart adequate knowledge regarding the FIAC system and the importance of change in teachers behaviour, on the hypothesis

of investigation. As the research was an experiment on classroom climate, the lectures and demonstrations were given on classroom climate, components of classroom climate, life in classroom, achievement motivation and psychological education. The course material was printed and given to the teachers on the first day of the course. The training course was organised in the Sarvajana High School, Peelamedu, Coimbatore.

The investigator himself received training from Prof. D.B.Desai (Professor of Education, Faculty of Education and Psychology, M.S. University, Baroda). Prof.D.B.Desai and six other experts working under him were invited to conduct the orientation course.

The details about the training programme was given below :

AN ORIENTATION COURSE FOR TEACHERS

(Achievement Motivation, Teacher Behaviour and Classroom Climate)

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27th May to 31st May 1977

Date	Items of Training Covered	Methods
27-5-77	Word Association Sentence Completion My role in my school The class is, Significance of achievement motivation Curriculum exercises	Lecture, Group discussion

(Continued....)

Date	Items of Training Covered	Methods
28.5.77	Brief review of previous day's work Teacher Behaviour Flanders Interaction Analysis Category system - detail discussion of categories with illustrations Communication behaviour Curriculum exercises	Lecture discussion Role-play Self study
29-5-77	Brief review of the previous day's work Ground rules for recording - discussion about ground rules - practice in the use of categories. Classroom Climate Achievement motive development Assignment for sensitivity	Lecture Discussion Role-play Self study
30-5-77	Teacher behaviour - recognising, time sense, noting, pairing of categories, Preparation of Matrix, interpretation of matrix Classroom climate components Analysis of classroom events Climatograph Curriculum exercises	Lecture discussion group practice Demonstration group work
31-5-77	Discussion about researches in interaction analysis, changing one's own classroom behaviour How to create effective climate Curriculum exercises Evaluation Session Future programme of feed back	Lecture discussion Practice

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After the intensive training programme, the experiment was in action for six weeks. After observing

each class of the Experimental Group 1 teachers, the investigator met them individually and gave them directions in making use of certain categories more. At the end of the week, all the teachers of the experimental group 1 were met by the investigator and discussed with them the matrices prepared for each one of them and suggest categories which they have to use more and which they have to use less, to create a better classroom climate.

3. Psychological Aspects of the Treatment

First, if input was to be given to change teacher behaviour, the change would be overtly evident. Change in teacher behaviour is measurable in terms of the Flanders' Interaction Analysis category system.

Secondly, changed teacher behaviour could be sustained even after training, by continued practice. Behaviour patterns acquired during their classroom behaviour training Seminar were not confined to the training period alone but the teachers carried these interaction patterns to their actual tasks of teaching in their schools. The effects of intensive 'classroom behaviour training' are sustained and transferred to actual teaching situations.

Lastly, the results of the classroom behaviour training period were found to be in agreement with the findings reported by Amidon and Powell (1966), Amidon and others (1967), Ober (1967), Hill (1967), Davidson (1968), Pareek and Rao (1971a) and Rangotra (1971). This would suggest that classroom behaviour training, based on Interaction analysis can be used effectively as one of the training strategies. Once the conceptual basis of the interaction pattern is prepared, it is operationalized into behaviour patterns. Once an objective, reliable and valid system of observation of classroom teaching is developed, teachers become oriented to the system, and they provide intensive feedback to develop appropriate classroom patterns.

It is known from experience that no person behaves exactly in the same way at different times. The teacher in the class may be dominant or direct on some occasions and integrative or indirect on some other occasions. Even in the same classroom period he may exercise his influence by lecturing or ordering or by allowing the pupils to decide what they should do. The general behaviour of the teacher sets the patterns of the classroom interaction or classroom climate. If he is dominant he promotes a

restrictive social climate in the class; if he is integrative, he helps in developing a permissive social climate.

In most of the interaction variables, after initial improvement in the hypothesised direction, a declining trend without reaching significance was discernable. Is it that the teachers of the experimental groups will relapse into their original behaviour patterns after a further lapse of time ? If so, after how much time and why ? will all of them relapse or only a few ? Is the relapse related to some institutional characteristics like organizational climate, academic climate, cultural influence etc. ? If so, what type of teachers in what type of institutions, and under what conditions will relapse ? These questions have to be answered only by further empirical investigations.

4.1 Psychological Education Input Model of the Present Study

It is a common knowledge that different aspects of human growth and development are interdependent. Each aspect of human growth interacts and influence other aspects resulting in the development of the individual's personality. And, it is accepted that school education

should facilitate an all round development of the individual. However, the system of schooling, as it exists today, emphasises the intellectual aspect of development with a highly subject-biased curriculum (Weinstein and Fantini, 1975). As a result, the other aspects of development of the pupils, in particular, the emotional aspect, are generally neglected. Many a time, one would come across instance where in the psychological development of the pupil is neglected, resulting in emotional imbalances and thereby blocking the pupils' intellectual growth. So it is the duty of the teacher to create productive learning experiences. The teacher should respect the child as a human being considering it her privilege to assist him in unfolding his dormant potentialities through appropriate activities. The teacher should also help him realize that the responsibility for the way he lives life is his own. This would pre suppose great ingenuity on the part of the teacher in selecting and organising classroom experiences. This requires the organization of school activities in such a way that it would integrate psychological inputs with academic work in classroom. In the present study the psychological education input model' developed by Choksi (1976), was given to pupils of Experimental Group 1 classes and its effect was studied on their psychological development. Table 4.1 gives the Psychological education input model used in the present study.

Table :4.1: The Psychological Education input Model of the Present Study

Basic Proposition	Input activities	Outcomes
<p>1. <u>Awareness of abilities and aspirations leads to clearer goal perception</u> If opportunities are given to think about their abilities and aspirations for future life, Clearer will be the perception of their immediate and life time goals.</p>	<ul style="list-style-type: none"> - Pupils write and discuss on - 'Who am I ?', - 'What would I like to be ?' - 'My aims ?' 	<ul style="list-style-type: none"> - improved self image - clearer goal perception
<p>2. <u>Awareness of their role in school leads to favourable attitude towards school.</u> If chances are given to pupils to objectively think about their roles in relation to school, more favourable will be their attitude towards school.</p>	<ul style="list-style-type: none"> - pupils write and discuss on - 'Myself and my school', - 'Word association 	<ul style="list-style-type: none"> - clearer perception of pupils' role on the school. - Correct perception of teachers' role - Favourable attitude towards school.
<p>3. <u>Healthy competition leads to concern for excellence.</u> If situations are created for healthy competition among the pupils, greater will be their concern for excellence</p>	<ul style="list-style-type: none"> - Pupils play games and work in group. - Spelling game - Preparation of charts in different subjects. - Preparation of question paper for the tests and work in group. - Doing assignment, project work in groups. - Reading story books and biographies and discussing about them. 	<ul style="list-style-type: none"> - Manifestation of more goal directed activity
<p>4. <u>Immediate feedback leads to need to achieve</u> If pupils are given immediate feedback regarding their performance in testing situation greater will be their need to achieve.</p>	<ul style="list-style-type: none"> - Pupils get individual as well as group guidance immediately after the announcement of their results. 	<ul style="list-style-type: none"> - Increase in their need achievement - Improvement in academic performance.

(Table 4.1 continued)

Basic Proposition	Input activities	Outcomes
5. <u>Realization of Discrepancy leads to Realistic goal-setting</u> If chances are given to pupils to realize the discrepancy in supposed and achieved goals, more realistic will be their goal-setting behaviour.	<ul style="list-style-type: none">- Pupils suppose the marks before the tests. They compare and find out the discrepancy between marks what they have supposed and what they obtained.- Pupils play ring toss and Block building game and discuss about it	<ul style="list-style-type: none">- Development of realistic goal setting behaviour- Development of moderate risk taking behaviour
6. <u>Awareness of abilities lead to decrease in anxiety.</u> If pupils have greater awareness about their abilities less anxious would they be in testing situations.	<ul style="list-style-type: none">- Pupils prepare and discuss about question paper.- Discuss about their abilities and also about their performance in previous tests.	<ul style="list-style-type: none">- Decrease in anxiety.
7. <u>Clearer role perception leads to Better adjustment</u> If more chances are given to pupils to perceive the roles of people around them, greater will be their level of adjustment.	<ul style="list-style-type: none">- Pupils write and discuss on 'what type of teachers do I like to have ?'	<ul style="list-style-type: none">- Better adjustment- clearer perception of teachers' role
8. <u>Accommodation of ideas leads to better classroom trust.</u> If pupils are accommodated to a greater extent in organization and management of classroom work, greater will be their classroom trust.	<ul style="list-style-type: none">- Pupils discuss and suggest to the teacher every week regarding sitting arrangement, activities to be conducted, scheduling of teaching in different subjects and their other activities.	<ul style="list-style-type: none">- Increase in classroom trust



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(Table 4.1 continued)

Basic Proposition	Input activities	Outcomes
9. <u>Involvement in classroom procedure leads to initiative level</u> If greater involvement is given to pupils in the decision making about procedures of classroom work, greater will be their initiative level.	- Pupils take responsibility of classroom work - discipline, cleanliness, maintaining bulletin board - Organizing cultural programme, educational tour.	- Increase in initiative level
10. <u>Chances for participation leads to greater activity level</u> If more chances are given to pupils to participate actively in various activities - academic as well as non-academic, greater will be their activity level.	- Question-answer sessions are conducted about both academic and general knowledge; pupils are divided into different teams for this purpose	- Increase in activity level
11. <u>Involvement in Extra-curricular activities lead to wider non-academic interests.</u> If pupils are involved to a greater extent in extra curricular activities, wider will be their non-academic interests.	- Pupils write and discuss on - My leisure time - Steps of honour - Pupils participate in various competitions organised in the school and also by other nearby schools.	- Development of non-academic interests - Positive changes in images for emulation.
12. <u>Mutual interaction leads to group cohesiveness.</u>	- Sitting arrangement of the pupils change thrice in a week in rotation	- Better social relations
13. <u>Freedom to select leads to Better Socio-metric status of the mates</u> If more freedom is given to pupils in choosing their mates during various activities within and outside classroom, better would be the Socio-metric status of the group.	-	- Positive changes in the sociometric status.

The psychological education input model of the present study consists of three components. The first component refers to a set of propositions which provide the theoretical basis for organising suitable learning experiences. The second component consists of a set of input activities which have been formulated based on the propositions enunciated and have been so planned as to achieve the outcomes expected. The third component refers to the set of outcomes which are expected to be the resultant of the various learning experiences provided. The model is presented under separate heads - the basic propositions, the input activities and the expected outcomes. Specific input activities and outcomes have been listed against each proposition. This has been done to illustrate the inter-relationships that exist between the set of propositions, the set of input activities and the set of expected outcomes. However, it should be noted that there is no one-to-one correspondence between the three sets. An activity might have its basis in more than one proposition and also more than one activity may have their basis in any one proposition. The same relationship holds good between the sets of input activities and expected outcomes also.

4.2 Basic Propositions

A set of propositions were enunciated which would clearly specify the mechanism underlying the development of the psychological domain of the children. Thus, these propositions constitute the basic theoretical foundations from which the practical aspects have to be derived. A basic theoretical assumption made in deriving the practical aspects is that the children would manifest only those behaviours which they get opportunities to practice.

5. Input Activities

A series of input activities were planned for the classroom and outside the classroom based on the set of propositions enunciated. These activities would provide ample opportunities to the children to practice those behaviours which would facilitate psychological development. However, it has been realized that such a purely behaviouristic and atomistic approach is futile as the behaviour patterns induced through such an approach would largely be short lived. Therefore, in operation the input activities are to be cogently integrated with

the regular schedule of classroom work. This would create a natural milieu for the operation of the model and also help to bring about changes in the children's overall development in a formal setting. Further, it would allow each child to internalize the behaviour patterns induced through the input activities in his own normal way without seriously disturbing the development of inherent instinctual aspects of his personality. Details about the various input activities have been provided below.

'Who am I ?'

The pupils were asked to write on 'who am I?' They were to write about their family, interests and attitudes, hope for the future. After completion of the writing, the pupils were to discuss about the same topic. The teacher herself spoke about 'who am I?' to encourage the children.

What would I like to be ?

Pupils were to write on what they want to become in future and state the reasons for selecting. Each pupil was encouraged and given chance to participate.

After the discussion, the teacher used to conclude by giving ideas regarding what they were supposed to speak about. The discussion aimed at inducing achievement thinking in pupils.

My aims :

Pupils were to list the short term goals which could be achieved within a week as well as long term goals which have to be achieved over a considerably long duration. The purpose was to make them perceive their goals more clearly and to commit themselves for the achievement of the goals they have set for themselves. It was repeated twice at approximately equal intervals of time during the course of experimentation.

Myself and my school :

The pupils were to answer four questions given for the item which mainly reflected their attitude towards the school. It measures pupils' perception of their role in school and of various school activities, teachers and norms of the school. Pupils were encouraged to discuss and express their ideas.

Word Association :

The words were announced one by one in the class. Pupils were to write two lines in response to each word announced. They were provided three seconds gap for writing each response. They were to discuss about it.

Competition :

In the regular classroom work, pupils were divided into groups. They worked together for school subjects. The competitive spirit was aroused in them for concern for excellence. The teacher was very careful about the healthy atmosphere of the group. Besides classroom work the pupils were encouraged to participate in the competition organized by other schools.

Change in their sitting arrangement :

Pupils spent their major part of their school hours inside the classroom. It is in fact, inside the classroom most of the likings, preferences, affiliation and understanding develop among pupils. But, generally, sitting arrangement never alter during the year. Pupils sitting in the last bench sits there only. This becomes a barrier

to their interaction. As a result, some pupils remained isolates only, certain other form rigid cliques among themselves.

A way to avoid such a tendency was to change the sitting arrangement. The change was made thrice a week, so that every individual gets chance to mix with others.

A sociogram was prepared thrice during the experimentation. The stars, isolates and cliques were identified among pupils and also pupils preferences and likings for others were noted. The change in the sitting arrangement was based on this data.

Goal discrepancy Scale (GDS) Treatment :

Pupils were asked to suppose about their marks on tests as well as on games. GDS treatment was repeated once in a week. Two days before the test, the pupils were asked to suppose the marks for the test. These marks were recorded on the sheet of progress report. These progress report sheets contained the column for marks supposed, obtained marks and discrepancy between the supposition of marks and marks obtained. After the test,

the pupils were informed about the marks they had supposed. The discrepancy was made clear to them by providing individual guidance. Generally, the weekly tests were conducted at the end of the week day. So the pupils were asked to suppose their marks two days before the tests and was recorded on the progress report sheet. To provide an immediate feedback, the marks were announced on the first day of the week, and counselling regarding their difficulties were provided individually as well as in the group. In the classroom, feedback was provided to bright pupils by praising them in the class and the weak pupils were encouraged to improve upon themselves and to compete with the group.

For non-academic aspect, Ring toss and Block building games were played.

Ring Toss Game :

In the 'Ring Toss' game, the pupils were asked to throw the ring on the peg from any distance around ten feet. This game is divided into four phases.

The pupils, in the first phase were asked to choose the distance and allowed to throw by themselves when none of their classmates were there. They were given three chances each.

In the second phase, the same pupils were asked to throw the ring on the peg from any distance they chose, but in this phase they had to play amidst their classmates. Here again three chances were given to each.

In the third phase of the game, the pupils were again asked to throw the ring on the toss from the distance chosen by them. This time, some positive incentives with some verbal tones like : 'good', 'Try again', 'you will succeed' etc. were given. Along with, incentives like credits were assigned to every feet of distance (e.g.) 1 foot = 100 marks, 10 feet = 1000 marks.

While, in the fourth phase of the programme reverse incentives were given. No feed back was given. Reverse incentives of the credit were set, i.e., the credits were reversed in the order of distance of feet, (e.g.)

1 foot distance	-	1000 marks
10 feet distance	-	100 marks

After the completion of the game, there was a discussion regarding the game. The game was played twice as pre-post measure.

Block Building Game :

It gives practice to pupils in goal-setting behaviour. A good number of wooden cubes were put on the table. The aim was to put as many cubes as possible on the top of the other. This was to be done by the pupil blind folded. Before the actual game started, pupils were to decide the number of cubes

he will be able to place. Pupils were to build twice for positive and negative incentive. Instructions were given to the pupils for building the blocks. After the completion of the game, there was a discussion about their gaps between their supposition marks and marks obtained. The game was played twice as pre-post measure.

These games were tried out to find appropriate ways in which they should be included in school work for understanding and improving their risk-taking and goal-setting behaviour respectively.

Group Work and Creativity :

This activity was included to help increase group cohesion, provide opportunity for creative activity, develop sense of belongingness and understand the importance of cooperative efforts.

The group work was organized thrice a week. The composition of group used to be changed everytime. Competitive spirit was aroused in them by giving the same work in all the five groups. They were asked to do their best to get the highest marks. Care was taken while forming the groups to see that each group had equal number

of bright and enthusiastic pupils. Both academic and non-academic items were included in the group work such as preparing charts in the school subjects, project work, spelling games, collection of materials and writing assignments.

Library Work :

This activity helps the pupils for developing reading habits, creating a sense of appreciation, knowing about the great personalities etc. Once a week, pupils were given story books. They were divided into three categories - religious, historical and biographical. A record was kept for each pupil for their selection of the books. Pupils were encouraged to read all the three types of story books. They were asked to write down in a note book the qualities and achievements of great people. The main aim of this activity is to increase the wealth of images pupils possess and hold as ideals for emulation.

Story Telling :

Once in a week during the moral instruction class, the teacher used to tell stories depicting the biography of the eminent people, indirectly stressing the points of their great achievements, good qualities and how they

reached the greatness. Through this, an attempt was made to induce achievement thinking in them. Pupils were also encouraged to tell and write stories in the class. After this, a group discussion session was arranged where pupils were asked to discuss about the qualities they liked most for practising in their own life.

What type of teacher do I like ?

The pupils were to write about the qualities they like most in the teacher. This exercise was meant to provoke some ideas in the pupils about the teacher. They were to discuss their exercise in group.

Steps of Honour :

The pupils were asked to write the names of three persons whom they honoured most and also forward reasons for their choices. Teachers first explained the purpose of the activity and himself gave out the names of persons whom he honours most.

Leisure Time :

The pupils were required to respond to four questions provided to them on a printed sheet. The questions were meant to extract information regarding the activities they

do in their leisure time which would indicate their non-academic interest. Pupils were to speak about the activities they do in their leisure time.

5.2 Expected Outcomes

The third component of the model as has been noted earlier, relates to output specifications. A list of expected outcomes has been specified, which, taken together, would serve as an indicator of psychological development of the children. Thus, one can study the effectiveness of the model by measuring and evaluating the changes in those aspects of behaviour specified by the various expected outcomes. Further, an appraisal of these outcomes at intermittent stages during the course of the programme would serve as useful feedback to the teacher as well as to the pupils.

6. The Schedule of the Treatment

A schedule of the programme for introducing Psychological education inputs was prepared before the actual experiment started. The inputs were integrated with the regular work of teaching. As the experiment was for six weeks, the first and the last week were scheduled for

administration of the pre and post tests. The other activities were carried out in the remaining four weeks.

B. THE EXPERIMENT

1. Pre and Post Test Scores

As this was an experimental study, it requires a minimum of two observations in experimental groups and control group. Before starting the experiment, a pre test in the academic subjects were administered on all the students ($N = 304$). These tests were scored and tabulated. The other tests - Pupils academic motivation scale, classroom trust schedule, students adjustment scale, students expectancy scale, students activity scale, classroom climate scale, sociometric scale and students' dependency scale - Form A and Form B were administered to all the students before the experiment. These tests provided a measure of different aspects of classroom climate.

In order to measure teacher behaviour before the experiment, three observations per teacher were made using Flanders' technique. Subsequently, individual and master matrices were prepared for all teachers ($N = 21$). These

matrices provided an appropriate measure of teacher behaviour before the experiment.

In confirmity with the procedure usually followed in experiment, teachers in the experimental groups did not have any contact with those in the control group. The teachers in the control group had no knowledge regarding changes in teacher behaviour, and the Flanders' techniques. They merely followed conventional practices in teaching their respective subjects. Teachers in the Experimental groups, on the other hand were exposed to orientation programme regarding classroom teacher behaviour.

The experiment started after teachers in the experimental groups received knowledge and practice regarding 'indirect' and 'direct' teacher behaviour. The duration of the experiment was for six weeks from June 20th, 1977 to August 2nd, 1977. During this period six observations per teacher were made for all teachers - experimental group 1, experimental group 2 and control group teachers using the Flanders' technique. From these teacher behaviour observations, individual, master and

master-master matrices were prepared. The matrices relating to teachers in the experimental groups established the sustenance effect of changed teacher behaviour.

During the experimental period teachers in the experimental group 1 received 'feedback' and 'reinforcement' after each observation. Their subsequent behaviour made it evident that feedback and reinforcement had the desired effect. Where necessary, improvement in teacher behaviour was sought to be brought about also by casual comments from time to time. No feedback was given to teachers of experimental group 2.

Every observation was made for 20 minutes using Flanders' technique. Immediately after each observation individual matrices was prepared and shown to teachers in the experimental group 1.

2. Administration of Tests

Before the experiment, different tests were administered to the students of experimental group 1, experimental group 2 and control group, under phase III, reported earlier. The tests were scored and recorded for later use.

During the period of the experiment two teachers made objective type of achievement tests were prepared in English, Tamil, Mathematics, Science and History and Geography and administered successively on all the students, E_1 , E_2 and Control groups. In all the achievement tests, required and advanced information was given to the students for their preparation. In order to avoid the bias and prejudice in the setting up of the questions in the achievement tests, help was sought from a separate group of experienced teachers, teaching standard IX. This arrangement maintained the difficulty and discriminatory value of test papers common to all students. The content matter of the tests was fixed for all and the date of test administration was also fixed in advance. Through out the period of experiment, the contents of the lesson to be taught were the same for all the groups of students - E_1 , E_2 and Control groups. Even the progress of the lesson for each day and week was fixed before hand, so that in all classes - E_1 , E_2 and Control groups - the same coverage of the contents was maintained. More over, the aids to be used in teaching the prescribed lessons in different subjects were also fixed and intimated to teachers of experimental group 1, experimental group 2 and control group.

3. Pupil Behaviour

The students chosen for this project evinced keen interest and enthusiasm from the very beginning of this experiment. Their readiness to help this investigation was seen from their active participation throughout the period of the experiment without being absent or on leave. Students in the control group were quite cooperative throughout the period of the experiment. However, their classroom behaviour pattern was just like any other ordinary Indian classroom.

In the experimental groups 1 and 2, the change towards cordial relationship with teachers was markedly evident. The teachers found those students to be eager to clear their doubts and sought the help of the teachers.

4. Other Variables

At the end of the period of the experiment, different tests such as Pupils' Academic Motivation Scale, Classroom Trust Schedule, Students' Adjustment Scale, Students' Expectancy Scale, Students' Activity Scale, Classroom Climate Scale, Sociometric Scale and Students' Dependency Scale Form A and Form B were administered to all the students of E_1 , E_2 and Control groups. This measurement showed the

change in the interaction pattern of pupils after the experiment. All the tests were valued and the scores were used to find out the variation between the pre tests and post tests.

5. Observation During the Conduct of the Experiment

Teachers of the experimental group 1 and experimental group 2 believed that teacher behaviour had changed. This itself influenced changes in their behaviour to a considerable extent. Their democratic behaviour in the classroom led to a permissive social climate. Pupils began to show greater interest in learning lessons.

The teacher behaviour training and feedback given to experimental group 1 and the training given to experimental group 2 brought about a permanent change in the behaviour patterns of the teachers. This inturn, brought about a significant and positive change in the behaviour pattern of the students.

Another important observation made during the experiment was that a few problem boys behaved like other normal boys in the experimental groups. This noticeable change among some of the problem boys was

welcomed by the teachers and they realized that the change from direct to indirect behaviour was responsible for this.

After the experiment was over with the experimental group 1, experimental group 2 and control group teachers and pupils, a cluster of raw data became available. The data regarding teacher behaviour for all the three groups were represented by means of individual teacher behaviour matrices and the data regarding the effect of teacher behaviour upon the pupils were represented in terms of different scores. The next important question is to find out how far the hypotheses have been confirmed by the experiment. Therefore, the data obtained in all the three groups - experimental group 1, experimental group 2 and control group are to be subjected to different types of statistical analysis. The two following chapters will, therefore, be devoted to the analysis of data and a discussion of the conclusions which emerge from them,
