

CHAPTER VI

SUMMARY

A summary of the total investigation giving briefly the rationale of the study, objectives, hypotheses, methodology and finding is presented in this chapter.

6.00 INTRODUCTION

A considerable part of the recent research in the field of education is being devoted to the area of teacher effectiveness. According to Flanders and Simon: "Teacher effectiveness is an area of research which is concerned with relationships between the characteristics of teachers, teaching acts, and their effects on the educational outcomes of classroom teaching". (Flanders and Simon, 1969, p. 1423).

A review of the researches in this area by Morsh and Wilder (1954), Bellack and Hueb⁽¹⁹⁶²⁾er (1960), Fattu_L and Howsam (1960), Smith (1962), Anderson and Hunka (1963), Medley and Mitzel (1963), Ryans (1963) Biddle and Soar (1964), Amidon and Simon (1965) and Gage (1965) spotlighted a few considerations for the future researches. They concluded that: (1) even examples of best teaching may not provide the theoretical basis for the most effective

teaching, (ii) more powerful statistical methods are required to identify relationship between teaching behaviour and their effects, (iii) collection of observational data is the most direct way of learning about teaching, and (iv) a conceptual framework for understanding research findings on teaching is necessary.

The above mentioned conclusions have given a lead to researches in this area. It has been found that teacher behaviour is related to pupil achievement (Flanders and Simon, 1969). So far the research in the direction of linking the process of teaching and the product of teaching has been general in nature. Nearly all the studies have taken one or the other dimension of teacher behaviour for creating difference in the experimental treatment and then relate it either to general achievement or attitudes of pupils. There has been hardly any attempt to relate teaching behaviours to specific cognitive achievement of the pupils. Recently there has been a demand for the study of cognitive aspects of teacher behaviour (Gage, 1965; Getzel and Jackson, 1963; Flanders, 1965). Another question raised is that of finding evidence on the related question of how much effect differences in teacher behaviours are likely to have on the amount which pupils learn in the classroom (Wright and Nuthall, 1970). These are some of the considerations that led to the undertaking of the present investigation.

6.10 THE PRESENT STUDY

The study specifically reads as "Relationship Between Patterns of Teacher Classroom Behaviour and Pupils' Attainment in Terms of Instructional Objectives". The study has its delimitations of key concepts, sample and the analysis. The study was conducted to fulfil the following objective and hypotheses.

6.11 Objective of the Study

The study was undertaken with the major objective of finding out the relative effectiveness of the four different patterns of teacher classroom behaviour, namely, (i) narration, (ii) open questions, (iii) narrow questions and (iv) narrow questions with feedback, upon the pupils' attainment for the instructional objectives of knowledge, comprehension and application.

6.12 Hypotheses

The study tested the following hypotheses:

- (i) There will be no difference in the attainment scores for knowledge, when the pupils are being taught by either of the four patterns.
- (ii) There will be relatively low attainment for comprehension and application objectives

when the pupils are being taught through pattern I as compared to other three patterns.

- (iii) There will be comparatively high attainment for application objective when the pupils are being taught through pattern II.

6.20 DESIGN OF THE STUDY

A pre-test, post-test design with four replications was used to see the effect of four treatments applied by three teachers. The experiment has been limited to a specifically selected unit in History and was conducted in fortyeight classes of VII grade. The attainment on post-treatment test represented four different attainment criteria according to the objectives of knowledge, comprehension, ~~comprehension~~ application and total attainment.

6.21 Sample

Three female teachers ~~of~~ similar age and experience were trained to produce the four patterns of behaviour.

The subjects consisted of the pupils of forty-eight classes of VII grade of Municipal Corporation schools of Baroda city. They were randomly assigned to different treatments - twelve classes for each. The

sample used for analysis purposes consisted of 416 boys and 557 girls.

6.22 Content of Lessons

For the purpose of the experiment, a special unit from the course content of VIII grade on 'Aryans' was selected. It had three instructional objectives, namely, knowledge, comprehension and application defined on the lines of Blooms (1956) and Sanders (1966), A pilot study with two experienced teachers helped to prepare the content for the four treatments.

6.23 Treatments

The treatments designed for the study were as under:

- (i) Narration (Pattern I): It implies a highly teacher centred teaching of the content. The information sequenced for all the three objectives was provided by the teacher with no participation of the pupils.
- (ii) Open Questions (Pattern II): In this method the presentation of the content is in such a way as to ensure maximum participation of pupils through planned open questions and teacher responding to pupil responses

through positive and corrective feedback.

(iii) Narrow Questions (Pattern III): For this treatment, the teachers were programmed to ask a set of narrow questions to invite a certain degree of pupil involvement but the teacher did not respond verbally to pupil responses.

(iv) Narrow Questions with Feedback (Pattern IV): It is similar to pattern III except for the teacher's reactions to pupil responses. Positive and corrective feedback was given as for pattern II.

6.24 Instrumentation

The study involved the use of following tools:

- (i) The Flanders' Interaction Analysis Category System for the purpose of training the teachers to produce the desired patterns.
- (ii) The Desai and Bhatt Verbal Group Test of Intelligence for finding out the IQ of the pupils.
- (iii) The pre-test of Achievement in History for VII grade constructed and standardized by Kokila Jhaveri (1970).

- (iv) The Post-treatment Attainment Test for the selected unit in History. It was specially constructed for the study based on the three instructional objectives.
- (v) Special lesson plans were prepared and tried out before final use according to the four selected patterns of teacher behaviour.

6.25 Training of Teachers

The teachers were given training for producing the four patterns of teaching behaviour in classrooms. The FIACS and lesson plans were used for this purpose.

6.26 Statistical Techniques Used

The study involved the use of descriptive statistics, product-moment correlations, three-way analysis of variance and analysis of covariance.

6.30 FINDINGS

The descriptive statistics employed (mean, SD), product-moment correlations between the variables of intelligence and pre-achievement and the criterion variables of total attainment and attainment for knowledge, comprehension and application objectives and the three-way analysis of variance to see the influence if any is being exerted by the variables of intelligence, pre-

achievement and four patterns on criterion measures, necessitated the use of covariance for testing the hypotheses. One way analysis of covariance employed for intelligence and pre-achievement separately resulted into the following conclusions:

1. Hypothesis I was not supported as pattern III was found to be more effective as compared to other three patterns.
2. Hypothesis II was partially accepted. Though pattern I showed comparatively low attainment for comprehension, none of the patterns showed any differential effects for the attainment of comprehension. Pattern III came out to be the most effective pattern for the attainment of comprehension objective.
3. Hypothesis III was not supported as pattern II did not show any significant high attainment for application objective. Rather, none of the patterns produced any differential effects for this objective.

The results were same when the post-treatment scores were adjusted for the variables of intelligence and pre-achievement.

6.40 CONCLUSIONS

The above findings help to infer that some participation of pupils is necessary in the classroom discourse as against either no participation (hypothesis I) or comparatively more participation (hypothesis II). The second conclusion is that narrow questions are comparatively more effective than open questions in the realization of knowledge and comprehension objectives.

The nature and amount of feedback requires further investigation.

It is hoped that the present study will be useful for planning and improving the teacher training programmes. But before the results can be used for such a purpose, it is necessary to validate these results through further replications. It is suggested that future research studies may take up other new patterns and study their efficacy for different instructional objectives.