C H A P T E R   IX

RESUME' AND RECOMMENDATIONS

The problem undertaken for investigation was to study difficulties in teaching English and to evaluate the effectiveness of programmed teaching. Three questions were raised at the outset of the investigation.

(1) What are those factors which hinder the achievement of students?

(2) Is there any solution which can eliminate all or some of these factors?

(3) What is the empirical validity of the proposed strategy?

The investigation has answered all the three questions. There are six factors which hinder students' achievement. Programmed teaching is an alternative which would overcome four out of six factors. An experiment has shown that students performed better when taught through programmed teaching.

1. RESUME'

The over-all design of the study followed Kaufman's model (1971). The first step was to identify the problem. It is everyone's observation that students' performance in English is poor. Little can be done in the direction of performance improvement unless one knows what factors contribute to the

students' poor performance.

To explore factors which contribute to students' poor performance can be a full research work in itself. The researcher delimited his area and decided to get the views of teachers only. A questionnaire was prepared and administeded on 93 teachers of Udaipur district. Responses revealed that teachers consider the following factors as significant difficulties which hinder students' performance.

      1. Shortage of trained teachers.

      2. Lack of subject competnce in teachers.

      3. Dearth of good teaching-learning material.

      4. Lack of individual attention and teachers' heavy work load.

      5. Poor socio economic background of students.

      6. Uncongenial school climate.

Analysis of the questionnaire also revealed a significant and an interesting point. Teachers do not agree with the commonly held view that students' performance in English is poor because they (students) are dull or that teachers do not want to teach or have no interest in teaching.

The second step in the study was to explore alternatives to overcome all or some of the difficulties. Three alternatives were proposed.

      (1) Appoint trained and competent teachers, to provide training to teachers in service and to reduce the teacher-pupil ratio.

      (2) Develop auto-instructional material on all topics.

      (3) Implement programmed teaching strategy.

The third step in the study was to select an alternative

which appeared to be more feasible.

The selection of an alternative or a solution depends upon many considerations. The alternative to be selected must be administratively possible, socially acceptable, economically practicable and technically feasible. The investigator felt that due to environmental constraints alternatives first and second were not feasible. The third alternative appeared more feasible.

The fourth step was to implement the alternative. The investigator developed the programmed teaching strategy and prepared the material to be used in it. He taught a group of students of class VIII studying in four different schools through programmed teaching. The material prepared for the programmed teaching strategy included programmed material for students, remedial exercises for slow learners, content notes and teachers' guide for teachers.

The fifth step in the study was to evaluate the strategy.

The performance of a system is generally evaluated on four criteria, viz., cost, performance, utility and time (Banghart, 1969). In this study the programmed teaching strategy was evaluated on two criteria only, viz., performance and utility.

Evaluating a teaching strategy in terms of students' performance require a research design of the experimental type.

The investigator, therefore, planned and conducted an experiment in four government schools of Udaipur. The experimental design adopted was the pre-test-post-test-control group design.

In a two-group design, it is essential that the two groups should be randomly matched. But in this experiment the investigator was asked by the Dy-director of Education as well as by the headmasters not to disturb the classes. Hence the investigator matched the groups statistically by following analysis of co-variance.

The analysis of result showed that the experimental group secured significantly higher on the post test than the control group.

The effectiveness of the programmed teaching approach was also assessed in terms of utility. It was found that the programmed teaching strategy overcame four out of six difficulties as perceived by the teachers. With the help of the programmed teaching strategy, the shortage of trained and competent teachers, was overcome. The strategy helped to individualise instruction and provided fairly good teaching learning material to students and teachers. The programmed teaching, however couldn't overcome two felt difficulties viz uncongenial school climate and poor socio economic background of students.

The programmed teaching strategy worked well in schools where teachers were not trained in teaching English.

2. SOME DEVELOPMENTAL ISSUES

Programmed teaching represents a small step towards the application of systems approach to classroom instruction. It has been observed (Trow, 1963) that isolated media disjointly used prove comparatively less effective. What is needed is an acceptable integration of different media into a unified whole. This study is a step in that direction. Basically it is a men-material system.

In years to come *when* different media like film strips, films, radios, Teachers Language Laboratories would be used in classroom teaching, it would be necessary to integrate them in one whole so that together they have a synergistic effect. We would then need much complicated men-machine systems.

2. Programmed teaching, if accepted would compel us to rethink about 'teacher education'. If one finds that modules of teacher's guides and content notes can help teachers in becoming effective managers of learning, one is likely to question the utility of teacher education which is quite expensive and time consuming. People may reorient their thinking about conventional teacher training programmes when they realise that it is easier to change strategies in material than to change habits in people (Lange and Wedberg, 1970 p.22).

3. Procedural changes suggested

If programmed teaching is accepted as an instructional strategy it would require preparation of instructional packages at some central level.

It is difficult for any establishment to prepare programmed teaching packages for the whole state. However, things can be taken up at the district level.

The district Inspector of Schools can institute a cell in his inspectorate which would look after the development of the material. Such a cell can be named as the 'Teaching-Material Cell' or the 'Material Development' cell.

To begin with, an inspectorate can delimit itself to such subjects and such areas which appear to be very important. Areas can be decided upon by inviting the expert opinion of subject teachers and Board examiners.

4. Suggestions to Future Researchers

No work has been done in programmed teaching in India. This study is more of an exploration of its potentialities than a final comment. The investigator would very much wish that more and more programmed teaching packages would be developed in different subjects and tried out under field conditions.

Another area which need to be explored is that of systems approach which has very lighly washed the educational shores. The investigator feels that possibilities and potentialities of the systems approach should also be explored in different areas like school administration, and planning.

The content area covered in this study was delimited to a few aspects of written English only. It is hoped that somebody would take up the development of a 'system' to teach spoken English also.

In this study the experimental group had to move within a given time limit. In other words the time factor was kept constant and performance varied. We hope someone would design a system which would demand a fixed level of performance without time restraints. A thinking has already started in this direction (Carroll, 1962, Bloom 1958, Dewal 1973).

5. Conclusion

The researcher designed the investigation on the systems approach and developed a teaching strategy to meet the required needs. The strategy, programmed teaching, overcame some of the felt difficulties of the teachers and helped students to perform significantly better than those students who were taught by the conventional method. It was also found that the strategy proved useful in a situation where teachers were under-qualified

and untrained in teaching English.

The effectiveness of programmed teaching doesn't pronounce it as a panacea for all educational ills. Love for programmed teaching would be as futile as hatred for conventional teaching. What is important is the realisation that unless instruction is viewed as a system much headway cannot be made merely by improving this or that part of the instruction. The functioning of a discrete component is immaterial unless it is viewed in the context of the whole system. It is not the presence but relationship of components which is important.

न ‑चास्य दोषो न ‑च मे गुरणे वा ।
सन्सर्गा जा दोष गुरगः भवन्ति ॥

In the present educational system most of the teachers are ill trained or untrained. Many of them lack subject competence. All of them, probably, are having a heavy load of work. In such a system, the output of a teacher cannot but be a cause of concern. Not that these teachers do not want to teach well but they, with all their sincerity, cannot teach well. If we help them, they would not fail us.

Learning English is an experience which, more often than not, is accompanied by fear of failures. Students seldom get success experiences. Teachers, on the other hand, fail to

give individual attention. These factors coupled with many other factors result in students' poor performance. Students' poor performance invites the wrath of teachers and parents. They hold students responsible for their (students) poor output and many a time use aversive controls. This generates, in students, a distaste for the subject, aggression towards elders and indifference towards authority. The result that follows is not unknown.

Although programmed teaching cannot improve the total educational environment, it can, in its own limited way, help a bit to improve the classroom climate. The success experiences gained by the students and the confidene generated in teachers may prove potent inputs for ensuring the desired output.

Skinner (1968 p 258) has rightly said that "educational output cannot be improved simply by increasing its support, changing its policies or reorganising its administrative structure. We must improve teaching itself." Programmed teaching which is an integrated system of instruction is a step in that direction.