P R E F A C E

The teaching of English as a compulsory foreign language begins in Rajasthan from class six and continues upto class eleven. After six years of schooling, it is hoped that students will gain a fair mastery of the language.

The situation, however, is different. Many students after six years of learning English, fail to acquire most of the basic linguistic skills. The problem of falling standards in English has assumed, at least in Rajasthan, a staggering dimension.

The problem of falling standards in English should not be regarded as an outcome of the apathy of educational bodies responsible for the improvement of students' competence in English. Far from it. The bodies like the State Institute of Language Studies, Jaipur and the Central Institute of English and Foreign Studies, Hyderabad are doing commendable work in improving teachers' competence and effectiveness. Other institutions like the Rajasthan Board of Secondary Education, Ajmer and the Nationalisation Board of Textbooks, Jaipur are also fully alive to the problem. But the magnitude of the problem outruns the devised solutions. The efforts put in for improving

students' performance in English seem to limp and drag behind the galloping march of the problem. The problem needs concerted efforts and quick remedy.

There are two areas where one can hopefully search for effective remedies. The first pertains to innovative practices (and principles) germane to language teaching and the second pertains to management of instruction in general.

The structural situational approach (Fries, 1945,1952; Wallwork, 1970) the consrastive analysis (Lado, 1964) bilinguialism and generative transformational grammar (Chomsky, 1957,1965) are some of the recent trends which promise to speed up language acquisition. Similarly team teaching (Shaplin and Olds,1964), simulated teaching (Tansey,1971) nongraded teaching (Goodlad and Anderson, 1959) and structuring (Bruner, 1963,1964,1966) are some of the trends which may be adopted for improving instruction.

I have not examined any of the aforesaid trends. Instead, I have tried to explore the potentialities of educational technology and systems approach; the two trends which have recently appeared on the educational horizon.

Skinner, Stolurow, Glaser, Gagne and many of their associates hold that students' scholastic achievement can be improved by improving the design of instruction. Skinner (1954, 1964,1968,1971) holds that a learner's behaviour can be shaped

and maintained in strength if the learning environment is properly manipulated and contingencies of reinforcement are properly arranged. Stolurow (1965) holds that it is much better to master the teaching model than to model a master teacher. Glaser (1962) holds that performance can be improved if instruction is designed on systems lines rather than on conventional lines which hazily monitor the output and have practically no feedback loop. Gagne (1970) holds that for improving scholastic achievement teachers should concentrate more on impersonal conditions of learning than on personal conditions of learning.

The aforesaid trends, heralded by Skinner (1954) have, since sixties, blossomed out as a movement called programmed learning, also called educational technology (Lumsdaine, 1964; Hawkins, 1970). Fantastic efforts have been made in the developed countries to improve students' achievement by using programmed instruction. Besides programmed texts, other teaching media like teaching machines, vedio tapes, TV instruction, talking typewriters, language laboratories, etc. have also been used for teaching languages and other subjects.

In India, encouraging work has been done in the field of programmed instruction. Programmed material in the form of texts have been prepared in education, banks, industries and defence organisations. Research studies (Shah, 1969; Kulkarni, 1968;

Kapadia, 1972) have also been conducted to find out the effectiveness and other variables of programmed material. On the whole it is now realised that students' performance improves when they are taught through programmed teaching.

I have been associated with programmed learning since 1968. It has been my personal experience that programmed learning can be a useful instructional strategy in India. It would help students to improve their scholastic achievement. Goaded with this idea, I humbly contributed my share in diffusing and disseminating the idea of programmed learning in Rajasthan. But I always felt that in the present educational system, an instructional strategy devoted to programmed learning only doesn't properly fit in. Often it is administratively resisted. Probably zeitgeist is not favourable to a situation of total automated learning. A breakthrough, however, can be attempted if programmed learning is made a part of the total instructional system. We have to have ~~the~~ a systems approach. I, therefore, thought about PROGRAMMED TEACHING. It views instruction as a system. Programmed learning material form but one of the elements of this system.

The idea of programmed teaching sprouted in my mind in 1969 when Dr. S. S. Kulkarni asked me to read articles of Ellson and Mitra on programmed teaching. These articles hinted at the vast potentialities of programmed teaching but didn't show how the strategy was to be designed. The idea of an instruction al

system suited to the needs of Indian schools was further discussed with Dr. C. K. Basu, C. L. K. Misra and G. B. Shah.

With this background, I decided to explore possibilities of systems approach to the teaching of English. Two stages were identified where I should use systems thinking. One, at the design stage of the study and two, at the stage of developing and implementing programmed teaching. Flow charts 1 and 4 outline the systems model followed in this study. Flow charts 7, 8, 9 and 10 depict how systems thinking has been incorporated in designing programmed teaching strategy.

It is difficult to react objectively to one's own 'product'. Involvement generates subjectivity. An individual, to that extent, develops a blurred vision. It is therefore wiser for me not to comment on the potentialities of programmed teaching. However it should be pointed out that as a footnote when language laboratories, radio teaching, TV and educational satellite instruction would come into operation in India, systems approach would be badly needed. Different instructional media would have little value if they are not properly coordinated and integrated into the totality of the instructional system. The man-machine system would be the need of tomorrow's India. Programmed teaching which is a man-material-system would help us to pave the way for that challenging tomorrow.

How such students have gained through programmed teaching is a point of secondary importance. The important point for the investigator is that a study has been designed on systems model and that a teaching strategy based on systems thinking has been conceived, developed and implemented.

The pages following report this attempt.

..... And right action is freedom
From past and future also.
For most of us this is the aim
Never here to be realised.

(T.S.Eliot)
