C H A P T E R   IV

<u>ANALYSIS OF DIFFICULTIES</u>
and
<u>EXPLORING ALTERNATIVES</u>

One of the important objectives of classroom
instruction is to help students to improve their language
performance. It is sometimes not possible because, not
infrequently, language teachers find themselves confronted
with factors and issues that tend to frustrate their goal
of improving students' linguistic achievement.

It is difficult to identify with any degree
of accuracy the major obstacles that one can anticipate in
the way of students' achievement. Yet it is a task which
must be attempted. In developing a teaching strategy, it is
always advisable that one should find out difficulties which
plague classroom instruction and then propose a strategy
that would eliminate all or some of the difficulties. One
would agree with Palmer (1968 p.25) that 'it is manifestly
absurd to solve a problem the factors of which are not
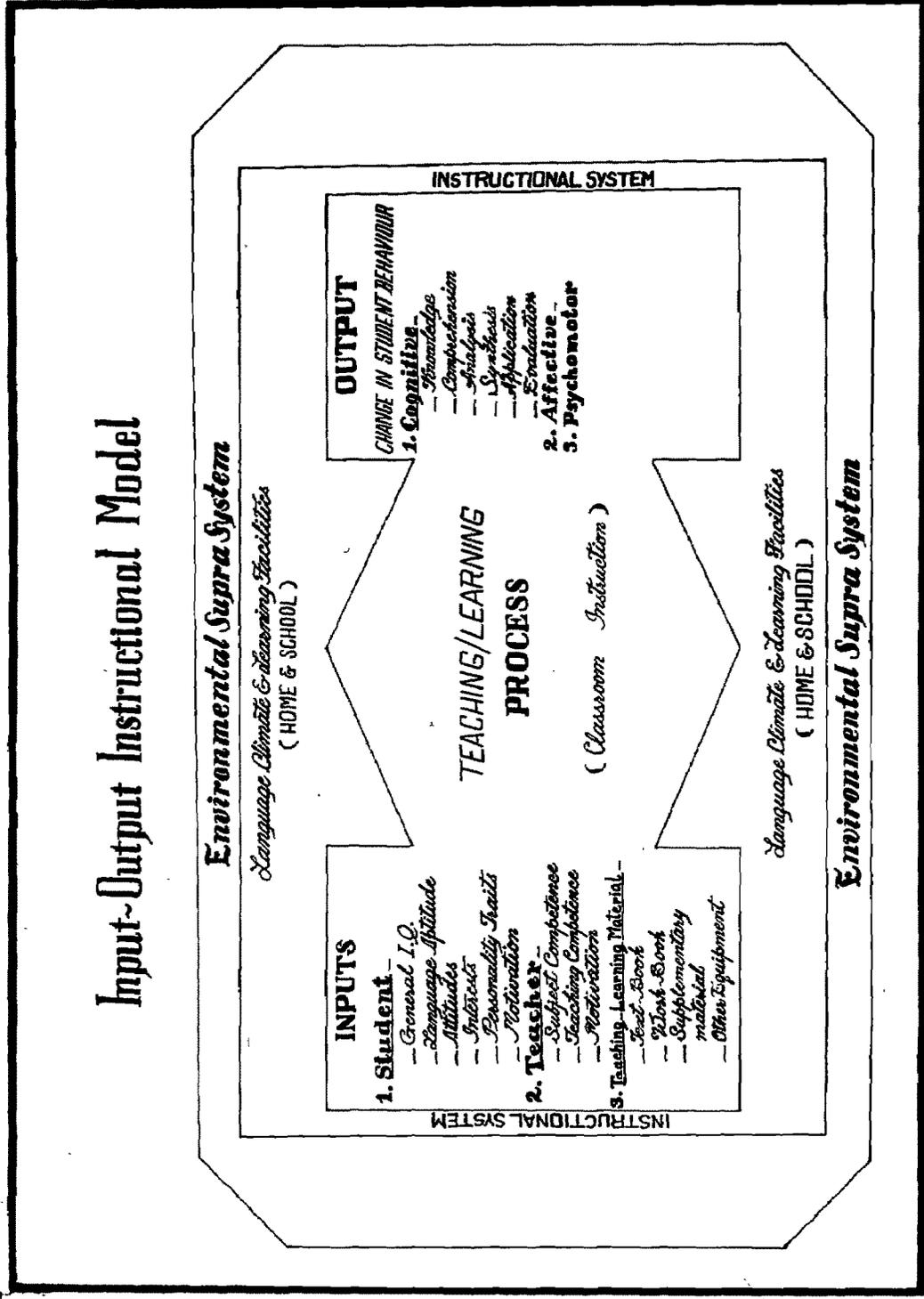known'.

1. The Instructional Model

If we consider education as a 'knowledge industry'
(Reid,1969,p.4) we should apply to it notions of efficiency
and examine the 'knowledge industry' on an industrial input-
output model. Popham (1972,p.5) gives a simple input-output
model of education.

Input	→	Operation	→	Output
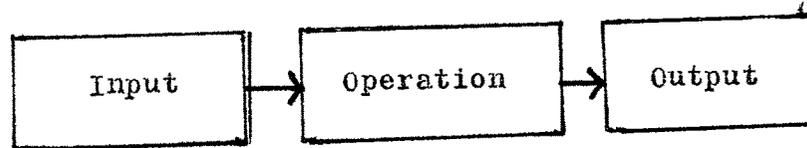
In an instructional system students' performance or
changes in students' behaviour can be termed as 'output'.
Students, a teacher and the teaching-learning material are
the 'inputs'. The teaching per se is the process or the
operational phase. The output of an instructional system
depends as much on the 'inputs' and the 'process' as it depends
upon the other environmental factors. Any difficulty at the
'input' or at the operation of 'process' stage or in the
environment directly influences the quality and the quality of
the "output'.

Taking Popham's model (1972) as the basis, the
investigator has developed an instructional model with special
reference to the teaching of English shown in Fig. 8.

Input~Output Instructional Model

Environmental Supra System

Language Climate & Learning Facilities
(HOME & SCHOOL)

INSTRUCTIONAL SYSTEM

OUTPUT

CHANGE IN STUDENT BEHAVIOUR

1. **Cognitive**
— Knowledge
— Comprehension
— Analysis
— Synthesis
— Application
— Evaluation
2. **Affective**
3. **Psychomotor**

TEACHING/LEARNING
PROCESS

(Classroom Instruction)

INPUTS

1. **Student**
— General I.Q.
— Language Aptitude
— Attitudes
— Interests
— Personality Traits
— Motivation
2. **Teacher**
— Subject Competence
— Teaching Competence
— Motivation
3. Teaching - Learning Material
— Text Book
— Work Book
— Supplementary material
— Other Equipment

INSTRUCTIONAL SYSTEM

Language Climate & Learning Facilities
(HOME & SCHOOL)

Environmental Supra System

Students' output (in this study:Students' performance in English) depends upon the 'inputs' and the 'process.' This doesn't mean that other environmental factors ~~influences~~ do not influence the 'output'. The environmental factors which form the supra system also influence the output quite significantly. The climate of the school, the learning facilities provided by the school, and the climate at home have a tangible impact on the instructional output of the students. Any difficulty in the supra system will directly influence students' performance.

If one analyses 'inputs', he finds that inputs of an instructional system comprise of three elements viz (a) students, (b) teacher and (c) the teaching-learning material.

When students are taken as one of the inputs, their intelligence, aptitudes, interests, motivation and other personality traits influence the instructional output. Similarly Motivation and the competence of the teacher also influence the instructional output. The quality of the teaching-learning material, both for the students and the teacher, also influences the output. Difficulty at any of these levels is bound to influence the 'output'.

As the quality and the quantity of the output of an instructional system depends upon the inputs, they also

depends upon the teaching process. Carroll (1963) considers
two factors, viz. the design of instructional and learning
opportunities (time spent in teaching and learning an
instructional unit) crucial to learning. These two factors
also influence the instructional output. Fig. No. 5 presents
the input-output instructional model in detail and also
depicts other environmental factors influencing the 'output'.
Unless a clear understanding of the instructional system is
gained, one cannot fully specify the factors that may hinder
or minimise the instructional output. Flow Chart No. 8
depicts factors residing both within and without the system
which influence students learning.

2. Factors influencing the Instructional Output

There is a great dearth of empirical research
on factors influencing instructional output. Brooks (1964, p68)
considers (a) teacher,(b) student, (c) text-books and (d) physical
setting as factors influencing the teaching of English. Weakness
at any of the four points would create difficulties. Halliday,
McIntosh and Strevens (1964,p. 181) observe that youth,
amount of experience of the language received by the learner,
rate at which experience is taken, and motivation influence
acquisition of language skills. Halliday et.al (1964 p. 182)
observe that "an early start, extensive experience at frequent
intervals and a strong motivation are propitious

circumstances that favour language learning".

Strevens (1966,p. 103) holds that three types
of difficulties,viz pedagogical, linguistic and
organisational, influence language learning. According to
Strevens pedagogical difficulties may be at the preparation,
presentation,or testing stages. Streven's pedagogical
type of difficulties can be termed as 'process' difficulties
in the model presented by the investigator.

The second category of difficulty according
to Strevens is linguistic difficulties. These include
degrees of similarity and contrast between learner's
mother tongue and the target language. The organisational
type of difficulties include lack of teacher competence,
enlightened educational administration, uptodate and
better training programmes. The organisational type of
difficulty in the terminology of the model developed by
us, resides both at the 'input' and at the supra system
levels.

Mackey (1969) discusses three factors crucial
to language learning. They are linguistic factors, social
factors and psychological factors.

Linguistic factors include how the target
language differs from the first language and how it
interferes with the second or the target language.

Social factors include the home, the community and the occupation

of the learner, the socio-economic status of his parents, the

ethenic group, the school climate and the reading

material available at home or in school. Psychological

factors include the age, intelligence, memory span, readiness,

emotions, drive and personality of the learner.

All the factors enumerated by Mackey (1969)

fall under 'input', 'process', and the environmental

factors specified in Fig. No. 8.

Lado (1964) holds that four factors, viz

the students, the teacher, the material and the setting

influence the instructional output. The Flow Chart No. 8

covers all these factors.

Pant (1967) holds that seven factors are

responsible for students poor performance. They are

students' poor involvement in learning English, ineffective

methods followed in higher primary schools, defective content, lack

of equipment, rigid administration and poor techniques of

evaluation.

Khan (1969) points out that the main difficulty

in teaching English is unfavourable attitudes of untrained

teachers towards the teaching of English.

Banerji (1963) observes that foreign language

teaching bristles with four inherent difficulties. He lists

lack of suitable textbooks, faulty teaching methods, advanced age of learners, and lack of good teachers as the main difficulties in teaching English.

The investigator assimilated all the factors listed down by Brooks (1964), Halliday, McIntosh and Strevens (1964), Strevens (1966), Mackey (1969), Lado (1964), Pant (1967), Banerji (1963) and Khan (1969) and found that all the aforesaid factors can be divided into seven main categories which he has termed as 'types of difficulties'. They are discussed below.

3. Types of Difficulties

(1) Difficulties inherent in the subject matter

One of the difficulties in teaching English is due to the nature of English itself. Unlike Hindi, it is not a phonetic language. Some of the sounds of English are quite alien to a Hindi learner. Sounds like /ð/, /θ/, /f/, /ʒ/ are very difficult to be imitated by a Hindi learner. Words which contain /ð/, /θ/, /f/, /ʒ/ and /æ/ sounds for example this or thing or fin or measure or man pose special difficulties both for the teachers and for the student in teaching and learning the English language.

Difficulty also arises due to word-order. The Word-order of many sentence patterns in English is quite different from that in Hindi. Thus, when a student wants

to express: मैं बड़ौदा जाता हूँ / he invariably says "I am Baroda go". Irregular spelling of ‸the English language also poses special problems. ‸The Spelling in English follows different rules. The sound of /ʃən/ is differently represented by /tion/ or /shion/ or /ssion as in substitution, Fashion, submission.

Previous learnings sometimes also interfere with subsequent learnings. Students wrongly generalise at all levels i.e. at the phonetic level, at the syntactic level, at ‸the vocabulary level, and at ‸the semantic level.

At the phonetic level, students generalise pronounciation of /i/ in bit and bite, or /oo/ in Moon and cook or /c/ in city and cat or /S⁄ in dogs and cats.

Generalisation also creates difficulties in vocabulary. Since /-ed/ is a sign of ‸the past‸tense, students generalise their learnings of "played", "jumped", and transfer them to 'goed', or 'comed'. Students also commit mistakes by generalising at ‸the semantic level. Hence they say I drink (पीता हूँ) tea; I drink cigaratte. Instances can be multiplied. The point is: the structure of ‸the English language differs from ‸that of the Hindi language and therefore it creates difficulties for a Hindi learner. This ‸is the first type of difficulty in teaching English. We would call this type of difficulty as Content-centred difficulty.

(2) <u>Difficulty as a product of teacher variable</u>

Difficulties in teaching can also come up as
a result of lack of training and competence on the part
of teachers. Some teachers lack subject competence, some
are poor in communication, some are less willing to teach,
some have negative attitude towards the teaching profession
itself. These factors influence teaching and ultimately
influence students' performance. This type of difficulty
can be termed as teacher-centred difficulty.

(3) <u>Difficulty as a product of administrative and
finance variable</u>

The difficulties in teaching can also creep
up as a result of negligent and careless attitude and
unimaginative and stereotype approach of the management or
of the Education Department. There are many instances where
teachers are not posted in schools in time and classes
remain vacant, proper selection is not done while appointing
teachers and the required material is-not for teaching
English is sometimes not purchased. These types of
difficulties can be termed as Administration-centred
difficulties.

(4) <u>Difficulties as a product of learner variable</u>

Difficulties in teaching English may come up as
a result of the quality of the learners involved.
Characteristics like intelligence, auditary and oral

sensitiveness, perseverance, linguistic aptitude and
interest in learning English are factors, the lack of which
may work as difficulties while teaching English. These
types of difficulties can be termed as learner-centred
difficulties.

(5) Difficulties as a product of parent-guardian variable

       Difficulties in teaching may come up as a
result of the negligence of parents and guardians. Parents
may not provide their sons and daughters the required learning
material. Some parents may ask the students to help them
in their domestic work. They do not provide them sufficient
time for self-study. Such difficulties can be termed as
parent-centred difficulties.

(6) Difficulty as a product of teaching-learning -
    - climate variable

       Sometimes the total environment of the school
or of home may be unfavourable for the teaching and learning
of English. Here the attitude of the headmaster and the
attitude of the locality, where the school is situated
towards English, play an important part. We can term these
types of difficulties as climate-centred difficulties.

(7) Difficulty as a product of poor methodology

       Difficulties in teaching may come up due to the
poor methodology followed by the teachers. Some linguists

have given certain principles which help language learning.
Teachers may adopt ~~seek~~ a methodology that does not incorporate
most of these principles. As ~~such~~ *a result, the* students' performance
deteriorates. If there is ● poor interaction between
students and a teacher, if students are *not* actively involved in
the teaching learning process, if home work is not properly
assessed, *the* students' performance is very likely to be
negatively influenced. Factors pertaining to the methodology
can be termed ~~as~~ Þrocess-centred difficulties.

Difficulties examined above can be subsumed under
'input', 'process' and 'environmental' difficulties.
Difficulties discussed under 'subject-centred difficulties',
'teacher-centred difficulties' and 'material-centred
difficulties' are 'input' difficulties. Difficulties which
are 'climate centred' and 'administration centred' are the
'environmental' difficulties residing in the supra system.
Difficulties which are teaching and learning centred are
'process' difficulties. .

Flow Chart No. 8 *shows* ~~implies~~ that any difficulty
either at the 'input' or at the 'process' or at the 'supra
system' level is likely to influence the desired outcomes
at the 'output' level. It is, however, not known what
difficulties tend to influence the instructional output

and to what extent. And unless specific difficulties are known, little can be done to improve the instructional system.

4. Developing the Questionnaire

Keeping in view the type of difficulties discussed above, the investigator prepared a questionnaire to find out what exactly the difficulties are, and to what extent they are perceived 'significant' by classroom teachers.

First of all an open ended question was given to twelve teachers who had put in more than five years of teaching experience. The question given was "In your opinion what are those difficulties which stand in the way of students' performance in English".

The following areas of difficulties emerged ~~out~~ from ~~of~~ the responses given by twelve teachers to the question posed.

(1) Poor teaching at the higher primary level.

(2) Lack of interest on the part of students.

(3) Non-cooperation of the headmaster.

(4) Structural approach is ineffective.

(5) Many teachers are not fully trained.

(6) Many teachers are not competent.

(7) Students are economically poor.

(8) There ~~is~~ *are* no facilities at home.

(9) Textbooks are no t~~u~~pto the mark.

Keeping in view the responses secured ~~on~~ *to* the open ended question along with the type of difficulties conceptually formulated, a fifty-four item questionnaire was developed. It was shown to ~~the~~ *a* language expert and necessary modifications were made. Four items which were considered less clear were dropped. Finally fifty items were selected.

Items in the questionnaire cover difficulties at all the ~~four~~ *three* levels, viz., at the input level, at the process level and at the environmental level. For ~~the~~ convenience, difficulties were grouped under 'student centred', 'teacher-centred' and 'Process and material centred' difficulties. *The* ~~each~~ categor~~ies~~*jes*~~have~~16, 16 and 18 items respectively. The questionnaire is given in Appendix 1.

5. Analysis of the Questionnaire

The questionnaire had 50 items. ~~The~~ *Sixteen* items presented difficulties which were student-based. Item No. 1,2,3,4,5,6, 12,13, 14,15 present motivational, personality, interest and attitude variables. Item Nos. 7 and 8 present discriminative and articulative abilities of students the lack of which may hinder students' performance in English. Item No. 9 ~~is~~ *refers*

to students' reading habits. Item No. 10 is on environmental
variable touching the supra system. The item is intended
to find out whether the indifference of parents is a
significant factor in students' performance. Item No. 11
is on 'time' whether students get enough time to read
English.

The second set of 18 items present factors which
are teacher-centred. Items 1 through 12 pertain to teachers'
competence, motivation, involvement and teaching skills.
Item 13 through 18 present factors which are administration
and climate centred. It was the intention of the investigator
to find out whether these factors are considered significant
for students' achievement in English.

The third set of items contains 16 items. These
items present factors which are 'process' and 'material'
centred items. The remaining items (MP 1 to 12 and 16) are
'process' centred items.

The investigator will like to stress a point
here. Though some factors have been grouped together as
'teacher centred' or 'student-centred' or 'material and
process centred' they often interact with and influence
one another. The main interest of the investigator was not to
find out the amount of influence each set of factors had on

students' performance. The objective of the investigator was to find out those 'significant' factors which according to teachers tend to influence students' performance in English.

6. Quantifying the responses

The questionnaire in its final form contained 50 items. The teachers were requested to record their responses on a five point scale given beside each item. The scale contained 5 points i.e. strongly agree, agree, undecided, disagree and strongly disagree. Each point was given a numerical weightage as shown below:-

+2	+1	0	-1	-2
Strongly agree	Agree	Un-decided	dis-agree	Strongly disagree

There were 92 teachers who filled in the questionnaire. Thus the maximum weightage an item could accumulate was +186. And the minimum weightage an item could accumulate was 93 x -2 = -186. The item carrying a weightage of 186 would have been the most significant factor. Similar the item getting a weightage of -186 would have been the most insignificant one.

The investigator decided that those items which would get a weightage of 93 or more would be termed as significant items and items which got a weightage of less than 93 (from 0 to 92) would be termed as insignificant items. Items that carried any negative weightage were considered as negative items.

The weightage of 93 points was chosen because this implies that teachers 'agree' that the particular item influences students' performance.

7. Administering the Questionnaire

The questionnaire was administered to 93 teachers of English of Udaipur district. The sample included all the teachers of English of Udaipur city and participants of a workshop organised by the State Institute of Language Studies, Jaipur, in Udaipur in May, 1971. The questionnaire was administered in the presence of the Inspector of Schools, Udaipur. The investigator explained to the teacher how to check the items. The five point scale was explained to the teachers.

All the teachers completed the questionnaire. The data were, later on, analysed.

8. <u>Analysis of Data</u>

The teachers who completed the questionnaire were both trained and untrained. There were 38 untrained graduate and post-graduate teachers and 55 trained graduate and post-graduate teachers.

The responses of teachers were not categorised under 'responses of the trained teachers' and 'responses of the untrained teachers'. It was not the objective of the investigator to find out how responses of trained teachers differ from those of the untrained ones. Responses of all the 93 teachers on a particular item have been compiled together. Thus each item has a composite weightage.

(1) <u>Analysis of Factors relating to Student-centred difficulties.</u>

Table No. 4.1 gives total weightage of items on student-centred difficulties.

TABLE 4.1

Responses on Student-Centred Difficulties

	Items	Weightage
S. 1	Students have poor motivation.	74
S. 2	Students lack perseverance.	63
S. 3	Students are ᵗᵒᵒ dull ~~enough~~ to learn English and have a low I.Q.	-25
S. 4	Students have poor linguistic aptitude.	34
S. 5	Students have little interest in learning English.	65
S. 6	Students have negative attitude towards learning English.	51
S. 7	Students can't pronounce English sounds.	43
S. 8	Students cannot distinguish English sounds.	67
S. 9	Students have poor reading (study) habits.	52
S. 10	Parents of students are indifferent to their day to-day progress.	86
S. ii	Students do not find enough time to read.	77
S. 12	Students are not attentive.	18
S. 13	Students do not cooperate with teachers.	73
S. 14	Students avoid hard work.	65
S. 15	Students are not obedient and sincere.	16
S. 16	Students' socio-economic background is such that it does not facilitate English learning.	97

The above table reveals three important points.

(a) Teachers do not agree that students are dull and have a low I.Q.

(b) There is only one factor which according to our definition can be considered ~~as~~ significant. It is item No. #6. Teachers feel that it is the socio-economic background of the students which, to a large extent, is responsible for students' poor performance in the English language.

(c) Although teachers agree that all the remaining fourteen factors constituting Student centred difficulties are responsible for students' poor performance in English, they, however, are not significant factors. The weightage of all the remaining 14 items, separately, does not exceed 93. Hence these items come under the category of non significant factors.

(2) Analysis of factors related to Teacher Centred Difficulties

Table 4.2 presents total weightage of items on Teacher centred difficulties.

TABLE 4.2

Responses on Teacher-Centred Difficulties

Items	Weightage
1. Teachers are not properly and fully trained.	131
2. Teachers do not have subject mastery.	101
3. Teachers are not motivated to teach.	44
4. Teachers have no interest in teaching English.	-31
5. Teachers are careless in preparing lesson plans	43
6. Teachers do not at all prepare lesson plans.	9
7. Teachers do not like to put in extra efforts.	39
8. Teachers have heavy workload.	95
9. At many places such teachers teach English who are not competent.	109
10. Teachers lack dedication.	29
11. Teachers just do not want to teach.	-42
12. Teachers do not motivate students to learn English effectively.	58
13. Classes remain vacant.	59
14. The time allotted to English teaching is inadequate.	63
15. Classes are not organised on ability basis.	77
16. Classes are large.	92
17. Schools do not have proper equipment for teaching English such as linguaphone records, tape recorders, etc.	100
18. School climate is such that it doesn't promote English teaching.	100

The above table reveals three important points.

(a) The respondents do not agree that teachers have no interest in teaching English or that they just do not want to teach.

This observation is in contradiction to the commonly held notion by the educational administrators and general public that teachers in schools do not teach at all. This point is being refuted in the responses obtained in this study.

(b) There are five points which have been considered as significant. They are:

teachers are not fully trained;

teachers do not have subject mastery;

school climate is not congenial to learning English;

schools do not have proper equipment to teach English, and

teachers have a heavy work-load.

The remaining 10 factors constituting teacher-centred difficulties do not come under the category of significant factors as individually they do not carry a weightage more than 93. Hence, although teachers agree that these factors are responsible for students performance yet they do not consider them as very significant.

(3) Analysis of Factors related to Teaching-learning Process and Teaching Material

Table 4.3 shows item-wise weightage of Process and Material centred difficulties.

TABLE 4.3

~~Responses~~ Responses on Process and Material
Centred Difficulties

S. No.	Items	Weightage
1.	Lesson plans are not based on the previous knowledge of the students.	46
2.	Previous weakness is not remedied.	64
3.	Instructional Objectives are not spelled out specifically.	46
4.	The technique of lesson planning is not at all known to the teachers.	26
5.	Individual attention to each student is not given.	98
6.	All students are not engaged in classroom activity and oral drill.	69
7.	All students do not participate in doing written work.	59
8.	Practice in speaking and writing English is not provided to students.	· 57
9.	Home work is not properly assessed.	64
10.	Home work is not assessed on the next day.	97
11.	Classroom work is not assessed in the same period.	109
12.	Each mistake is not very specifically pointed out to the students by teachers.	97
13.	Students do not have good ~~supp~~ reading supplementary material and work books.	115
14.	Students do not have textbooks which can help them to learn English effectively on their own.	101
15.	Reading material for teachers which can help them to teach better is not available.	110
16.	The diagnosis of students' weakness is not done properly.	71

The following points emerge ~~out of~~ *from* the above table:-

1. Teachers do not disagree on any item. That is teachers ~~consider~~ *agree* that all the factors listed in Table 4.3 contribute to students' under-achievement.

2. There are seven factors which have been considered ~~as~~ significant. They carry a weightage of more than 93 points. The significant factors are item Nos. 5, 10, 11, 12, 13, 14, 15.

(4) Items on which teachers disagreed

Table 4.4 gives items on which teachers disagreed. Teachers do not think 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.

TABLE 4.4

Items on which Teachers Disagreed

S. No.	Item No.	Weightage	Items
1.	T.11	-42	Teachers just do not want to teach.
2.	T.4	-31	Teachers have no interest in teaching.
3.	S.30	-25	Students are dull and have low I.Q.

The above findings imply that teachers are willing to teach and students are intelligent enough to learn. From this observation one can infer that according to teachers the trouble lies elsewhere. There are 13 items of the questionnaire which separately have a weightage of more than 93 points. They come under the category of 'significant difficulties'. According to teachers these are the most potent factors responsible for students' under-achievement in English.

(5) Significant Difficulties

Out of 50 factors given in the questionnaire, teachers considered 13 factors significant. Teachers perceived that due to factors given in Table 4.5, students fail to perform upto the required standard. Table No. 4.5 gives factors which were considered 'significant' by the teachers.

TABLE 4.5

Table showing Significant Difficulties

S.No.	Item No.	Weightage	Item
1.	T.1	131	Teachers are not properly and fully trained.
2.	M.P.13	115	Students do not have good reading material, supplementary material and workbooks.
3.	M.P.15	110	Reading material for teachers which can help them to teach better is not available.
4.	T.3	109	At many places such teachers teach English who are not competent.
5.	M.P.11	109	Classwork is not assessed in the same period.
6.	T.2	101	Teachers do not have subject mastery.
7.	M.P.14	101	Students do not have textbooks which can help them to learn English effectively on their own.
8.	T.18	100	School climate is such that it doesn't promote English learning.
9.	T.17	100	Schools do not have proper equipment for teaching English such as linguaphone, tape recorder, etc.
10.	M.P.5	98	Individual attention to reach student is not given.
11.	M.P.10	97	Home work is not assessed on the same day.
12.	S.16	97	Students' socio-economic background is such that it doesn't facilitate learning English.
13.	T.8	95	Teachers have a heavy workload.

The above 13 factors can be grouped under 6 heads as some of the items are mutually related. Six major factors emerged.

1. Shortage of trained teachers (Item No.T.3)

2. Lack of subject competence in teachers (Item No. T.3 and T.2)

3. Dearth of good teaching learning material (MP.13, MP 14, MP 15, T.17).

4. Lack of individual attention and heavy work load (MP11, MP 5, MP 10, T.8).

5. Students'
   Poor socio-economic background(Item No.S.16).

6. Uncongenial school climate (Item No.T.18).

Now onwards the above six factors will be considered as significant difficulties.

9. Validity of Teachers' Views

The study revealed that in the opinion of teachers there are factors which influence students' performance significantly. Factors which emerged in this study as significant coincide with the actualities of the educational world and thinking of linguists like Brooks(1964), Banerji (1963), and Markle (1965).

Evidences which support the views of teachers are given below:-

(1) Shortage of trained teachers

The number of teachers trained in the methodology of teaching English is very very low. The Inspector of Schools, Udaipur in a written communication to the investigator has said that hardly 1 per cent teachers are trained in teaching English at the higher primary schools in Udaipur district.

(2) Lack of subject competence in teachers

It has been reported by the teachers that one of the blocks to students' performance is that teachers are not well versed in the English language. The Second All-India Educational Survey (Buch 1967, p. 99) revealed that there are 4,35,939 teachers in the middle sections. Of the teachers in the middle section 86.91 per cent are matriculates. Only 14.9 per cent are graduates and 2.5 per cent are post-graduates. If a degree and teacher training are considered desirable qualifications, 10.80 per cent of the teachers possess them. The Number of teachers in the secondary section is 2,77,137. The percentage of teachers who fulfil the desirable qualifications of a degree and teacher training is 60.64. The percentage would be very low if specialised training in teaching English is considered as the desirable qualifications for teaching English.

(3) Dearth of good teaching learning material

It has been observed by Banerji (1963), Marckie (1965) and Brooks (1964) that one of the major limitations of classroom instruction is poor quality of textbooks and near lack of the supplementary material.

In Rajasthan, the Nationalisation Board of Textbooks has published textbooks for higher primary classes but there is no single book published by the Nationalisation Board for supplementary reading. Hence the observation of teachers is a statement of a fact.

(4) Lack of Individual attention and heavy workload

The observation tallies with the realities of life in schools. A graduate teacher has to take not less than 36 periods a week. This means that out of 8 periods, a teacher is required to teach for 6 periods. Besides this, teaching assignment, a teacher is required to collect school fees, maintain class register, take 'adjustment' periods, attend games, arrange for co-curricular activities. These educational assignments along with a teacher's family responsibilities, leave little energy in a teacher to give individual guidance and assess home work. Even a very sincere teacher cannot do justice to his educational assignments under the existing circumstances.

(5) <u>Poor Socio-economic Background</u>

The observation of teachers in the study revealed that most of the students come from poor socio-economic strata. This seems to be a correct observation. Students who come from the higher economic group join English medium schools and other public schools. Others who come from the higher middle group, join private schools. A large majority of students joining government schools come from the low economic group.

(6) <u>Uncongenial school climate</u>

No research data are available which support or refute the above observation. Research work on the staff relations in the schools of Rajasthan (Sharma,1967) throw only a marginal light on the climate of schools.

10. <u>Difficulties residing in the Supra System</u>

Teachers ~~consider~~ think that six major difficulties stand as the main roadblocks to students' performance. The first three difficulties, viz., shortage of trained teachers, lack of subject competence in teachers and dearth of good teaching learning material are the 'input' difficulties. The fourth difficulty, viz., lack of individual attention, is the 'process' difficulty. The remaining two difficulties, viz., poor socio-economic background of students and uncongenial

school climate are the difficulties which reside in the supra system. These two difficulties are the environmental difficulties (see Flow Chart 8 C).

The investigator feels that since the last two difficulties do not fall within the boundary of the instructional system, it is advisable that these two difficulties should be left out. The investigator feels that as he cannot explore any alternative which can take care of the above two difficulties, it is better to concentrate on four factors which are the main blocks of the instructional system itself.

Now onwards the investigator would concentrate on only 4 difficulties of the instructional system and would try to explore alternatives that may overcome the four difficulties of the instructional system.

11. Exploring Alternatives

As stated in Chapter II the present study/on
'systems' lines. We have, by now, completed the first two steps of the study viz the problem has been identified, and some significant factors contributing to the problem have been identified. Now, the next step (Flow Chart 4) is to propose an alternative or alternatives which may promise a solution to the problem.

A search for alternatives can only be made within the confines of existing resources, time available, value pattern of the society and overall educational structure. Alternatives should be explored keeping in mind the environmental constraints.

The main issue, now boils down to two points -

1. Teachers think that students' poor performance in English is mainly due to -

    - shortage of trained teachers

    - lack of competent teachers

    - dearth of good reading material, and

    - lack of individual attention.

2. A teaching strategy designed for improving students performance in English must take cognizance of the above four factors. That is, unless some remedy is proposed that would overcome the perceived difficulties, little can be done to improve students' performance.

How to do it is the crux of the problem.

One of the ways to overcome the shortage of trained teachers is to get all untrained teachers trained, especially in the teaching of English.

There is only one institute in Rajasthan - the State Institute of Language Studies, Jaipur which

is engaged in training secondary school teachers in English
teaching. The backlog is so huge that it would take a number
of years to train all teachers, in effective techniques of
teaching English. Further this approach would involve a lot
of financial expenditure and generate administrative ~~state~~
problems.

Developing competencies in teachers of English
is likewise a problem of huge magnitude. The Department
of Education or the Board of Secondary Education, Rajasthan
can start refresher courses for teachers of English or
can provide postal tuition. But this solution is again time
consuming and would involve a lot of financial and
administrative problems.

The solution to the problem of lack of individual
attention can be attained if number of students in each
class is reduced or the number of teachers is increased.
Appointing more teachers who would share some of the functions
of subject-teachers would involve financial considerations.
Probably it may not be acceptable to the Department of
Education.

Stolurow (1965) contemplated that the quality
of instruction can be improved either by imitating the
model of the most effective teachers or by refining and
revitalising the teaching process. He calls the first

approach ~~as~~ the 'modelling the master-teacher' approach
and ^the^ ~~second~~ as the 'mastering the teaching model' approach.

In the first approach, the classroom teacher is required to follow all those techniques of teaching which are followed by the most effective teachers. Teacher training becomes one of the most important considerations in modelling the master-teacher approach. The second approach is to master the very process of teaching. In this approach, teaching is designed on those principles of learning which ensure maximum performance. The main thrust of this approach is to master the teaching model and manage,what Gagne (1970) calls, ~~as~~ the condition of learning.

Many educationists (Markle, 1965; Ellson, 1971; Mitra, 1971; Kulkarni, 1969) have felt that it is not advisable to lean on the 'creative teacher' model. Lange and ^Wedberg^ (1970) observed that it is difficult to change an instructor than to improve instructional material. The investigator agrees with the thinking of the above psychologists and feels that the second approach,i.e.,'mastering the teaching model' approach promises a better future.

The limitations of 'modelling the master teacher' approach are ap,arant. In this approach teachers are trained in the hope that after their training, their

effectiveness would increase which in turn would help
students to achieve more and perform better. This line of
thinking, to the investigator, appears rather vague. This
is because –

(1) all teachers inspite of ⟨the⟩ best education and
training may not be equally effective

(2) an effective teacher may not be effective
on all occasions. That is training may
shape the behaviour but may not maintain the ~~beh~~
behaviour in its strength.

(3) the very concept of training teachers
depends upon an elusive quality of teacher
effectiveness. Till ~~~~ ⟨now⟩ we do not know
(Gage 1963, Mitra, 1972) what elements
specifically constitute ~~~~ teaching
effectiveness.

12. Programmed Learning: A Possible Alternative

The investigator is of the view that programmed
instruction can overcome two difficulties i.e. it can
individualise instructions (which ⟨the⟩ teacher cannot do under
the present condition) and it can provide good teaching
learning material which ensures students' opti~~~~mum
achievement. Programmed learning only indirectly overcomes

the shortage of trained teachers. The major instructional roles of teachers are taken up by the programmed material. As such the problem of the dearth of trained and competent teachers is solved to a certain extent indirectly.

Studies of Stolurow (1963), Marty (1962), Grell (1963), Carroll (1963), Morton (1960) have shown that programmed learning is an effective method of teaching a language. The effectiveness of programmed learning lies in the fact that the preparation of programmed material incopporates those basic principles of learning which optimise students' performance. A programmed material is based on the principle of 'small steps', 'active participation of students', 'immediate knowledge of results' and gradual 'shaping or behaviour'.

Programmed learning is expected to create a real stir, nothing short of revolution, in the field of teaching and learning. This is because programmed learning has the following advantages –

1. It allows students to focus on limited amount of material at a time.

2. It requires responses to each segment of material.

3. It has certain amount of autonomy. Students can learn without the help of a live teacher.

(4) It is accountable. It is supposed to accomplish something and that something is measurable.

(5) It is individually paced.

(6) It is cyberantic in nature. Responses of students work as input. There is a feed back.

(7) Sequencing of content items is not done on a _priori_ judgement. It is student oriented. Sequences of learning items are empirically tested.

Programmed learning also incorporates these principles of learning which many linguists (Halliday, *et.al* 1964) Brooks, 1964, Lado, 1964, Finocchiaro, 1966) consider essential to language learning.

(1) By demanding active participation programmed learning makes the student construct the linguistic response he is expected to generate. Language learning is a skill learning. It cannot be learnt unless the learner actively participates in the game of learning.

(2) The principle of small steps of programmed learning is fully in keeping with the language learning principle that the learner should be exposed only to a limited segment of a linguistic skill at a time.

(3) By following gradual approximation and by
providing prompts and cues programme learning
shapes those linguistic responses which are not
in the repertoire of the leanner,

(4) By giving correct responses in the body of
programmed text, the programming technique immediately
informs the learner about the correctness of the
response. This helps in minimising the error rate.

(5) Review and practice 'frames' provide to the learner
intense practice in meaningful ways.

13. Reasons for not proposing Programmed Learning as an
Alternative

Although programmed learning can overcome
some of the problems perceived by the teachers and although
it is an effective technique, the investigator is not
proposing programmed learning as an laternative. This is
because programming all the teaching items is a colossal
task. It demands a lot of time and energy. Further, all
teachers cannot be equally effective programmers.

Another reason for not proposing programmed
learning as an alternative is that the Department of
Education would be unwilling to accept the suggestion.
Replacing the instructional system as it is today by purely

auto instructional techniques triggers off a number of problems. The State Department of Education would not like to face these problems.

Designing classroom instructions solely on auto-instructional lines generates another problem of the 'roles' of teachers. Neither the State Department of Education nor teachers themselves would like to part away wholly with the instructional roles. We should strike a balance between a situation (hypothetical) of automated teaching and conventional teaching.

14. Programmed Learning be made a part of the total system

The investigator thinks that maximum advantage can be secured if programmed learning is made a part of the total instructional system.

The alternative which is being proposed is not programmed learning but Programmed Teaching. This concept of programmed teaching is systems oriented. The emphasis in programmed teaching is not only on programming some 'content areas' but on programming the 'instruction' itself. In developing this concept, the investigator was inspired by the works of Elison (1971), Mitra (1971) and Kulkarni (1968). Dr.G.K.Basu and G.B.Shah helped the investigator to chisel his thinking on systems analysis.

15. Programmed Teaching

Programmed teaching is an off shoot of programmed learning movement. In the U.S.A., the concept of programmed teaching came only in sixties, Ellson, from Indiana University, felt that instead of shaping the behaviour of students we should shape the behaviour of teachers. Further he felt that it is easier to shape the behaviour of teachers than to shape the behaviour of students. Ellson (1971) argues that if we can provide teaching guides, and other instructional material to the teachers, we can bring their responses under control. Responses of teachers, in turn, would become stimuli to the students.

🔳 Concept of Programmed Teaching
(I)

Ellson (1971, p.107) defines programmed teaching as 'a method based on recently developed educational techniques which is designed to improve the quality of teaching that can be achieved by poorly qualified teachers'. It is a strategy which controls the behaviour of the teacher by detailed instructional materials and teachers manuals developed and tested before use in the field.

The material used in programmed teaching includes instructional notes for the teachers as well as for

the students. It also includes notes on how to develop
and manage the teaching learning situations. These notes,
in the form of programmed material, content notes, film
strips etc. help a teacher to manage instructional
activities effectively and help students to learn a task
more effectively and economically.

Programmed teaching is not a method in the sense
the term 'method' is understood in pedagogy. It is not
a method like Montessori, Project or the Direct Method.
It is a broad teaching strategy which combines various
media for optionum realisation of predesigned instructional
goals.

The term 'strategy' is purposely used here.
The term 'strategy' comes from the science of warfare.
An army, before fighting the actual war, builds a strategy
and prepares a plan. This strategy takes into account all the
possibilities of failures, limitations existing on their
own side, locates areas which needs special defence and
singles out areas which demand concerted attack. In an
instructional system there are many weak spots. Unless
proper care is taken of these weak spots, students'
performance cannot be significantly raised. Programmed
teaching as strategy takes into account the weak spots of the

instructional system and offers a feasible solution to
overcome some of the instructional problems.

(2) Programmed Teaching in India

The concept of programmed teaching in India
is quite a recent idea. Mitra contemplated the possibility
of a programmed teacher. He saw a great future for a programmed
teacher. According to Dr.Mitra a programmed teacher knows
what he is to do. Mitra (1971,p.84) comments "once a teacher
knows that he can produce a particular kind of teaching
behaviour which produces specific kinds of learning in
students, he will be relieved of much of his anxieties'. This
helps in improving teachers' effectiveness and students'
performance.

In 1969 at the third Annual Conference of Indian
Association of Programmed Learning at the M.S.University
of Baroda Kulkarni and Dewal (1969) presented a paper
which incorporated the technique of group-responding and
group confirmation. This approach can be considered as the
first step towards programmed teaching in the sense that the
group-confirmation and group-responding technique attempt
to implant two principles of programmed learning to
conventional teaching. The aforesaid attempts although
peripheral and marginal can be called as the precursors of the
programmed teaching concept in India.

16. 📖 Programmed Teaching as a Systems Approach

The concept of programmed teaching which the investigator is developing is based on systems thinking. If we consider instruction as a 'system', we would see that it is made up of a number of components. The basic components of an instructional system are (a) students, (b) the teacher, (c) the teaching-learning material and (d) the pattern of interaction among the above three components. If specific functions are allocated to each component and if they are made to interact cooperatively to achieve a predetermined goal, we develop an instructional system. Programmed teaching is an attempt to develop such an instructional system. Unlike programmed learning, programmed teaching tries to "programme" the whole instructional system.

17. Components of Programmed Teaching

The programmed teaching strategy in this study, has four component materials. They are content notes, a teaching guide, programmed material for students and remedial exercises.

(1) Content Notes

The Content Notes provide enrichment material to teachers. The notes help teachers to develop subject competence.

(2) Teachers Guide

The Teachers Guide provides a predesigned plan of instruction to teachers. Thus, it helps a teacher to manage classroom instruction more effectively.

(3) Programmed Learning Material

Programmed Learning Material provides auto-instructional material to students. The subject matter is divided into small steps. After each step (frame) the student gets the knowledge of the correct response. The material allows the learner to move at his own pace.

(4) Remedial Exercises

Remedial exercises provide material for practice. Some students would take more time and need more practice to learn a given verbal behaviour. In programmed teaching, the function of providing more practice to slow learners is taken up by the 'Remedial Exercises'.

Programmed teaching is a four pronged strategy to improve instruction.

(1) It builds subject competence in the teachers. This is done by the 'content notes' provided to teachers.

(2) It provides a predetermined sequence of instructional events to the teachers. In other words it equips teachers to manipulate instructional process effectively. This is done by the 'Teachers Guide' provided to teachers.

(3) It provides students with auto-instructional material. It allows students to move at their own pace.

(4) It gives additional exercises for remedial teaching. The remedial exercises which form the fourth component of programmed teaching package provide remedial material to slow learners.

18. <u>Programmed Teaching and Felt Difficulties</u>

As stated in Chapter I this study is an attempt to answer three main questions:

(1) What are the main difficulties in teaching English?

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

(3) What is the empirical validity of the effectiveness of the proposed solution. In other words, how far is the proposed solution effective?

The earlier section of this chapter reported and analysed the difficulties in teaching and learning English. Six significant difficulties emerged from this investigation.

(1) Shortage of trained teachers.

(2) Lek of subject competence in teachers.

(3) Dearth of good teaching learning material.

(4) Lack of individual attention to students and heavy load of work on teachers.

(5) Students' poor socio-economic condition.

(6) Uncongenial school climate.

Programmed teaching strategy can, directly or indirectly, overcome the first four difficulties. However it cannot overcome difficulty No. 5. Similarly it cannot directly improve school climate. Nonetheless it can indirectly create favourable learning

climate.

We discuss below how programmed teaching can overcome some of the felt difficulties.

(1) Shortage of trained teachers

If the term 'trained' teachers is understood in its conventional sense, programmed teachin g cannot overcome the shortage of trained teachers. But if we understand that a trained teacher is one who can effectively manipulate a teaching-learning situation appropriate to stated objectives, then programmed teaching does help teachers to manage conditions of learning. The "Teacher Guide" component of programmed teaching package provide material to teachers whih controls a teacher's classroom respons es. Thus it helps to 'train' a teacher in the methodology of teaching a particular lesson. In this sense programmed teaching helps us to overcome the shortage of trained teachers.

(2) Lack of subject Competence in Teachers

Programmed teaching can directly overcome the difficulty of lack of subject competence in teachers. Most of the teachers, specially teaching in higher primary schools, are poor in English. Programmed teaching can overcome this obstacle by providing "content notes" to teachers. Teachers before coming to the class read content notes provided in the package. The 'content notes' equip the teacher with linguistic knowledge needed for effective communication.

(3) <u>Lack of Good Teaching-Learning Material</u>

The adjective "good" used in the above heading needs a definition. By the term "good" we mean the material which is designed keeping in view students interest and understanding level.

The programmed teaching package contains material both for teachers and students. 'Content notes' and Teacher's Guide are materials which are useful and helpful to the teachers. The 'Programmed material' and the 'Remedial exercises' are useful material for students.

There is, however, enough scope to evolve more effective and more interesting forms of learning materials.

(4) <u>Lack of Individual attention and Heavy work load</u>

Programmed teaching positively helps teaches in individualising instruction. It also helps tom to de-load themselves.

The programmed teaching package contains 'programmed material' and Remedial exercises. Programmed material individualises instruction. It helps students to move with their own pace. Remedial exercises take care of slow learners. Thus programmed teaching helps in individualising instruction.

Teachers besides regular classroom teaching are required to correct home and class assignment. This increases teachers' work load and makes his own work tiring and dull. Programmed

teaching strategy takes some of the onventional functions off a teacher's shoulder and assigns them to materials. Thus the correction of home assignment which is often done by a classroom teacher is, in programmed teaching strategy, taken up by the material component of the strategy. This reallocation of funmtion deloads a teacher and provides him with some spare time. This he can use for guiding individual students.

Programmed teaching is an approach which promises to overcome the felt difficulties. Now it is to be seen that it is an effective teaching strategy in terms of students' performance. An empirical try out can only show the effectiveness or otherwise of the strategy.

Chapters five, seven and eight discuss the experimental evaluation of the strategy. The next chapter discusses the setting and the design of the experiment.