DEVELOPMENT AND TRYOUT OF TEACHING LEARNING MATERIAL ON ENGLISH FOR STANDARD VIII STUDENTS OF ADARSH NIVASI SCHOOLS FOR SCHEDULED TRIBE IN GUJARAT

A SYNOPSIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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1.1 INTRODUCTION

- 1.1.1 ADARSH NIVASI SHALA
- 1.1.2 ADARSH NIVASI SHALA FOR S.T.
- 1.1.3 OBJECTIVES OF THESE SCHOOLS
- 1.1.4 FACILITIES PROVIDED IN THESE SCHOOLS
- 1.1.5 ADMISSION PROCESS IN THESE SCHOOLS
- 1.1.6 DAILY SCHEDULE IN ADARSH NIVASI SHALA FOR S.T.
- 1.1.7 STATUS OF TEACHING-LEARNING IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT
- 1.1.8 STATUS OF TEACHING-LEARNING OF ENGLISH IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT
- 1.1.9 BACKGROUND OF THE STUDENTS STUDYING IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT
- 1.2 CONCEPT OF TEACHING -LEARNING MATERIAL
 - 1.2.1 REASONS FOR DEVELOPING TEACHING LEARNING MATERIAL IN PRINTED FORM
- 1.3 REVIEWS OF THE RESEARCHES
 - 1.3.1 RESEARCHES DONE IN INDIA
 - 1.3.1.1 OBSERVATION OF THE RESEARCHES FROM INDIA
 - 1.3.2 RESEARCHES DONE ABROAD
 - 1.3.2.1 OBSERVATION OF THE RESEARCHES FROM ABROAD
- 1.4 IMPLICATION FOR THE PRESENT STUDY
- 1.5 RATIONAL OF THE STUDY
- 1.6 RESERCH QUESTIONS
- 1.7 STATEMENT OF THE PROBLEM
- 1.8 OBJECTIVES OF THE STUDY
- 1.9 HYPOTHESIS
- 1.10 EXPLANATION OF TERMS
- 1.11 DELIMITATION OF THE STUDY
- 1.12 METHODOLOGY OF THE STUDY
 - 1.12.1 POPULATION AND SAMPLE OF THE STUDY
 - 1.12.2 TOOLS FOR DATA COLLECTION
 - 1.12.3 DATA COLLECTION
 - 1.12.3.1 PHASE–I DEVELOPMENT OF THE TEACHING LEARNING MATERIAL
 - 1.12.3.2 PHASE-II IMPLEMENTATION TEACHING LEARNING MATERIAL
 - 1.12.3.3 PHASE-III TO STUDY THE EFFECTIVENESS OF THE TEACHING LEARNING MATERIAL
 - 1.12.4 DATA ANALYSIS
- 1.13 MAJOR FINDINGS
 - 1.13.1 MAJOR FINDINGS OF QUANTITATIVE ANALYSIS
 - 1.13.2 MAJOR FINDINGS OF QUALITATIVE ANALYSIS
- 1.14 SUGGESTIONS FOR THE FURTHER STUDY

1.1 INTRODUCTION

English is the most important communicative language as it is spoken by maximum number of people in the world. It has been used almost all over the world. It plays a vital role in connecting the people living in different parts of the country as well as in the world. Because of its uniqueness, the government of India has given it a special place in Education. Though English plays a vital role in developing one's career, it is not being paid adequate attention in teaching-learning process of English language. The ELT Annual Conference, held at Hyderabad in 1979, admitted the fact that "The standard of teaching English at secondary level, by and large, is unsatisfactory. It is necessary to review the methods of teaching English used in the class room." It clearly points out that we should think about the methods of teaching English language. Prof. Gokak (1964) says "what is needed is something like a revolution in the methodology of teaching English. Though for last several years this subject has been taught at school level, students are not able to read, write and communicate his/her thoughts correctly and confidently in English."

What Prof. Gokak noticed in 1964 is right for present situation also. And this fact is more crucial for the tribal students. There are lots of schools in Gujarat where we can find maximum number of students belong to tribal community. The schools named Adarsh Nivasi Shala for S.T. in Gujarat are one of such kind. After visiting some of the Adarsh Nivasi Schools for S.T. and having discussion with some of the teachers and the principals of these schools, the researcher tried to understand the status of teaching-learning in these schools. Having discussed with some of the teachers and the principals working in these schools, the researcher came to know that the traditional method of teaching is used the most in these schools. And the students have to completely depend upon their teachers for their learning. In such condition, if

the teacher is not competent enough or not prepared well, the condition of the students becomes worse. This information led the researcher to search for some other means of learning for these students. And the present study of developing and trying out of teaching learning material on English for std. VIII students of Adarsh Nivasi Schools for S.T. in Gujarat is the modest attempt in this direction.

1.1.1 ADARSH NIVASI SHALA

As per the circular number - PAVARU/1585/180/, dated-11/5/87, Gujarat government has introduced the scheme of Adarsh Nivasi Shala in Gujarat since 1986-87. In the beginning, the government started only twelve Adarsh Nivasi Shala in 1986-87. Out of these twelve schools; six schools were for Scheduled Tribe (ST) students, three schools were for Scheduled Caste (SC) students and three schools were for Socially and Economically Backward Caste (SEBC) students. Initially, all these schools were run and managed by the Director, Social Welfare Department, Govt. of Gujarat. But then as per the circular no. AAMASHA/1487/3214/GA/31-7-93 and the circular no. BISIE/1093/UO-56/JA/22-7-94, the Adarsh Nivasi Shala for S.T. got separated. And thus, all these schools were distributed in three different sections. They were Adarsh Nivasi Shala for Scheduled Tribe (ST), Adarsh Nivasi Shala for Scheduled Caste (SC) and Adarsh Nivasi Shala for Socially and Economically Backward Caste (SEBC). As Adarsh Nivasi Shala for S.T. is in the central point of this proposed study, some of the detailes about these schools are given below.

1.1.2 ADARSH NIVASI SHALA FOR S.T.

According to Information Commissioner (2008), there are 43 Adarsh Nivasi Shala for S.T. in Gujarat. Out of them 23 schools are for boys and 20 are for girls. And 5,709 students are taking their secondary and higher secondary education in them. As per the circular no. NASHAAA/2088/1502/GA/1-4-1989, the objectives of

introducing the scheme of Adarsh Nivasi Shala and the facilities provided in these schools were as follow.

1.1.3 OBJECTIVES OF THESE SCHOOLS

The Adarsh Nivasi shala for S.T. were introduced with a view to provide better education opportunities to the tribal students. The tribal students can also get the opportunity of getting better education was the main objective of this scheme. There were some other objectives also for introducing this scheme. These objectives were as follows.

- To expand the education among S.T. students.
- To provide quality education to the intelligent S.T. students.
- To provide hostel facilities with education to the S.T. students.

1.1.4 FACILITIES PROVIDED IN THESE SCHOOLS

The students studying in these schools are provided free education, food, and text-books. They are provided with four pairs of uniforms and other stationeries worth Rs. 100/-, bed and bedding, dinner set, galvanized trunks, etc. in free of cost. These schools are given the facilities of laboratory, colour television, radio, playing things, musical instruments, etc. But when the researcher had visited some of these schools, he found that all the schools did not have the facilities like advanced laboratory, television, radio, enough playing things, etc. This thing indicates that the all students studying in these schools do not have all facilities that they should be provided. Now, it is interesting to know the admission process in these schools.

1.1.5 ADMISSION PROCESS IN THESE SCHOOLS

As per the circular no. PAVARU/1585/180/11-5-87, the circular no. SAKA/AANASHA/education/91-92/6190-6279/9-7-91 and the circular no.

AANASHA/2000-232-GA/5-4-2000; the admission process in these schools is as follow:

- Admission would be given in Standard VIII on the basis of the merit of the students in Standard VII.
- There are 60 percent seats reserved for S.T. students, 10 percent seats reserved for S.C. students, 15 percent seats reserved for SEBC students and 15 percent seats reserved for OBC/Economically backward students.
- Except S.T. and S.C. students, the annual income of the parents should not be exceeded Rs. 15000.
- Students must have got minimum 50 percent marks in Standard VII. But for the girls students, OBC students, handicapped students and the children of widows; there is a relaxsation of five percent of marks.
- The students who want to get admission in these schools have to fill up the form in given period of time. The admission forms are available in all the Adarsh Nivasi Shala in Gujarat and also in the offices of the Tribal Vigilance Officer.
- If any seat remains vacant, it should be filled up with the students belong to the school category i.e. S.T.

As discussed above, though these are the schools for tribal students, the students belonging to other cast also can get admission in these schools. But according to the data collected from the Adarsh Nivasi Shala of Surat and Tapi district, one thing is cleared that most of the students studying in these schools belong to S.T. community which can be seen from this table.

TABLE: 1 STUDENTS STUDYING IN ADARSH NIVASI SHALA OF SURAT AND TAPI DISTRICT

Sr. No.	School Name	S.T.	S.C.	SEBC	OBC	Total
1	Adarsh Nivasi Shala (S.T.), Surat	118	00	01	01	120
2	Adarsh Nivasi Shala (S.T.), Tarsadi	182	02	05	00	189
3	Adarsh Nivasi Shala (S.T.), Mahuva	161	01	02	00	164
4	Adarsh Nivasi Shala (S.T.), Vyara	305	05	10	00	320
5	Adarsh Nivasi Shala (S.T.), Songadh	322	04	04	00	330
6	Adarsh Nivasi Shala (S.T.), Ukai	103	00	00	00	103
	Total	1191	12	22	01	1226

The table1 indicates that in Adarsh Nivasi Shala of Surat and Tapi district, out of 1226 students, 1191 students belong to tribal community only. It means 97.15 percentage students belong to tribal community. So, we can say that the education to the tribal students is at the centre of the proposed study.

1.1.6 DAILY SCHEDULE IN ADARSH NIVASI SHALA FOR S.T.

As per the circuler no. TD/AANASHA/02/2005-06/889 to 901/21-7-2005, all the Adarsh Nivasi Shala for S.T. in Gujarat have to follow the following schedule.

TABLE : 2 DAILY SCHEDULE IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT

Sr.no.	TIME	ACTIVITY
1	5-30 to 6-00	Morning Work
2	6-00 to 6-30	Exercise
3	6-30 to7-30	Bath/Breakfast

4	7-30 to 8-00	Prayer
5	8-00 to 8-40	First period
6	8-40 to 9-20	Second period
7	9-20 to 9-55	Third period
8	9-55 to 10-30	Fourth period
9	10-30 to 11-00	Recess
10	11-00 to 11-35	Fifth period
11	11-35 to 12-10	Sixth period
12	12-10 to 12-20	Recess
13	12-20 to 12-55	Seventh period
14	12-55 to 13-30	Eighth period
15	13-30 to 15-30	Lunch & Rest
16	15-30 to 17-00	Extra Coaching
17	17-00 to 18-00	Playing games
18	18-00 to 19-30	Home work &reading
19	19-30 to 20-30	Dinner
20	20-30 to 21-30	General discussion, Cultural activities, etc.
21	21-30	Go to bed

Though all the schools have to follow the above given schedule, it has become clear from the collected data that some of the schools do not follow it properly. According to the principals of those schools, they have made some changes regarding time because of the unfavourable local condition. And they have taken the permission of the Tribal Vigillance officer of their district for that.

Before going ahead it is very much important to know the status of teachinglearning in Adarsh Nivasi Shala for S.T. in Gujarat.

1.1.7 STATUS OF TEACHING-LEARNING IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT

As the researcher himself has been working in one of the tribal schools for last seven years and, also, he has discussed with many teachers of Adarsh Nivasi Shala about the methodology of teaching, he has some idea about the status of teaching-learning in these schools. In most of the tribal schools, traditional method of teaching is used. The main reasons behind that are insufficient facilities of modern technology and most of the teachers are not able to use technology. Most of the schools do not have any competent teacher having the knowledge of using technology, so the students are not in a condition to use it properly. Most of the tribal schools are in remote area, so problem of power supply is also there. Because of all these problems, the students have to completely depend upon their teachers for their learning. In such conditions, if the teacher is not well prepared or not competent enough, the condition of the students becomes worse. It is proved by many researches that with the help of technology, the teaching-learning process becomes easy and effective. But as discussed above, it is very difficult to use technology in these tribal schools.

If we glance at the result of the S.S.C. board examination of these schools, we can understand that most of the students studying in these schools are very poor. We can understand this better with the help of the following table based on collected data. The table indicates the figures of the result of the S.S.C. board examination (2008-09) of the Adarsh Nivasi Shala for S.T. in Surat and Tapi district.

TABLE: 3 THE RESULT OF S.S.C. BOARD EXAMINATION (2008-09) OF THE ADARSH NIVASI SHALA FOR S.T. IN SURAT AND TAPI DISTRICT

Sr.no.	School Name	Total	Students	Students got
		Students	passed	60 up Percent
1	Adarsh Nivasi Shala For S.T.,	30	19	07
	Surat			
2	Adarsh Nivasi Shala For S.T.,	34	32	17
	Tarsadi			
3	Adarsh Nivasi Shala For S.T.,	33	20	04
	Mahuva			
4	Adarsh Nivasi Shala For S.T.,	83	80	66
	Vyara			
5	Adarsh Nivasi Shala For S.T.,	77	52	06
	Songadh			
6	Adarsh Nivasi Shala For S.T.,	25	15	02
	Ukai			
	TOTAL	282	210	102

The above given data points out that out of 282 students only 102 students got first class in S.S.C. board examination (2008-09). And if we do not count the figures of Vyara, it becomes clear that out of 199 students only 46 got first class. Now, it is very much interesting to know the status of English language teaching in these schools.

1.1.8 STATUS OF TEACHING-LEARNING OF ENGLISH IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT

As the researcher, himself, has been working as an English teacher in one of the Adarsh Nivasi Shalas for S.T., and also, he has discussed with many other English

teachers of these schools, he has collected some data about the status of English subject in these schools.

According to the collected data, most of the teachers working in these schools has opinion that the students who get admission in std. VIII seems to be very much poor, specially, in English. According to the teachers, some of the students, when they come in std. VIII, cannot write even capital and small alphabets properly. So they find it very much difficult to teach English to them. According to the collected data, most of the teachers, working in these schools, use traditional method of teaching English, i.e. Translation method. They rarely use technology or some other aids of teaching to teach English.

The collected data indicates that the students' weakness regarding English and the teacher's inability to use communicative approach in the class room affects the result of English subject badly. The result of the English subject in S.S.C. board examination (2008-09) of Adarsh Nivasi Shala for S.T. in Surat and Tapi district would help us to understand the status of English in these schools.

TABLE : 4 THE RESULT OF ENGLISH SUBJECT IN SSC BOARD EXAMINATION (2008-09) OF ADARSH NIVASI SHALA FOR S.T. IN SURAT AND TAPI DISTRICT

Sr.no.	School Name	Total	Students	Students got
		Students	passed	60 up Percent
1	Adarsh Nivasi Shala For S.T.,	30	26	01
	Surat			
2	Adarsh Nivasi Shala For S.T.,	34	32	04
	Tarsadi			
3	Adarsh Nivasi Shala For S.T.,	33	32	00

	Mahuva			
4	Adarsh Nivasi Shala For S.T.,	83	83	10
	Vyara			
5	Adarsh Nivasi Shala For S.T.,	77	76	05
	Songadh			
6	Adarsh Nivasi Shala For S.T.,	25	22	02
	Ukai			
	TOTAL	282	271	22

The above given data indicates that even after the teacher's hard work and the students' constant efforts, out of 282 students, only 22 students got first class marks in English.

Realising the importance of English language and the problems and weaknesses of the students regarding this subject, the tribal development department has started the programme of teaching English through SATCOM. Under this programme, the students would also be taught English through SATCOM, using T.V. This thing clearly indicates that the government is also very much aware of the importance of English language teaching. And so, the government is also trying to search for some effective method of teaching-learning for English subject. In this proposed study, the researcher is also trying to do the same. And for that, the researcher tries to develop and test self learning material for the students of std. VIII. But before developing the self learning material, it is very much essential for the researcher to know the background of the students studying in these schools.

1.1.9 BACKGROUND OF THE STUDENTS STUDYING IN ADARSH NIVASI SHALA FOR S.T. IN GUJARAT

As we have discussed, most of the students studying in these schools are from tribal community. So, to understand the background of these students, we must understand the background of tribal community.

According to the census 2001, among the total population of 5,06,71,017 in Gujarat, the category of scheduled tribes is comprised 74,81,160. It means the scheduled tribes population is almost 14.76 percent of the total population of Gujarat. The ten districts namely, Sabarkantha, Panchmahal, Dahod, Vadodara, Narmada, Bharuch, Surat, Navsari, Valsad and Dang each with more than 20 percent of its population belonging to scheduled tribes, together contain as much as 92.48 percent of the tribals of the state.

According to the Commissioner (2005), Tribal Development Department, Gandhinagar; the main reason of the backwardness of the people belonging to the tribal community is the low literacy among them. According to him, they do not send their children to schools because of their poor economic condition and also because they live in hilly area.

As most of the tribal population lives in remote area, the tribal students face many difficulties in getting education. Because of parent's illiterate background, they cannot get any help from them regarding their education. As they are very poor, they cannot spend much in getting necessary facilities like; tuition, extra materials, books, notebooks, etc.

There are many villages without high schools. So the students have to go to a distance of three to five kilometers to get high school education. In high schools also, they do not have adequate facilities of library, laboratory, etc. According to collected data, most of the teachers in villages use traditional methods of teaching as they do not have enough facilities of modern technology. Though government has introduced

the scheme of JYOTI GRAM YOJNA, even today, many villages face the problem of electricity. There are lots of villages, according to the collected data, where electricity has not reached yet and if it is reached somewhere, the problem of power-cut is there. So even after having the facilities like computer, television, tape-recorder in some schools, the students rarely get the benefit of it.

It is positive sign regarding the development of tribal people that the ratio of tribal children taking admission in the primary school has been increased. Following details given by Information Commissioner (2008) indicates the increase in the figures of the tribal students taking admission in the primary schools over different years.

TABLE: 5 TRIBAL STUDENTS IN THE PRIMARY SCHOOLS

YEAR	BOYS	GIRLS	TOTAL
2003-04	764169	649064	1413233
2004-05	764309	649183	1413492
2005-06	764413	649272	1413686

All this discussion reflects that the tribal students are doing progress and need proper care for their development. And in this world of technology, it is very much necessary for every one to have the knowledge of English language to make his/her progress. To understand this one must know the importance of English language teaching and its objectives.

1.2 CONCEPT OF TEACHING -LEARNING MATERIAL

One of the major observations in the current period is that the key of the learning is individualized which suit to the individual need, his own idiom, his style and his way of learning. It is possible through individualized or self learning materials. Individualized instruction material, therefore, is accepted by different types and levels

of learners. The most important factor of this material is that, though the goals of this instruction are same, the progress of the learner differs as their rate of speed varies and they learn according to their own pace. The progress is dependent upon one's own ability and pace. This follows the principles of learning.

There is a change in emphasis from teaching to learning in the self learning material. The teacher's function is to provide materials and experiences to provoke interests and starting points for new studies rather than building programmes and lessons which stress end points. Modern learning theorists consider learning to be a change that takes place inside the learner. Self learning is an individual act which takes place inside the learner. It makes learning a process of active seeking rather than passive absorbing. Preliminary evidence shows that learner spends more time with this method than the conventional one.

A self learning approach enables the learners to progress as rapidly as they are able to. They can spend extra time on those points which are difficult for them. They are not required to wait for the rest of the class before they can proceed. Also, they are not required to leave a topic, they are not sure of, merely because, the majority of their classmates have already moved on.

As we have discussed that the students learning in these schools are very much poor, particularly, in English; they can't use self learning material effectively. They need the help of their teacher to use the developed materials. The teacher has to help the students in his learning. The teacher has to guide them how to use these materials. The teacher has to help them whenever they find any difficulty.

In short, the students are in the centre of this method. But for proposed study, the teacher is also there to help them in their difficulty. Here, the teacher is not expected

to discuss each and every point in detail but he has to play the role of a guide or a helper.

Keeping in mind above benefits, many researchers have worked on developing self learning material. Review of the literature suggest that some of them have developed PLM, CAI and many other kind of self learning material. But for the proposed study, the researcher tries to put emphasis on printed material to develop teaching learning material. The reasons behind that are given below.

1.2.1 REASONS FOR DEVELOPING TEACHING LEARNING MATERIAL IN PRINTED FORM

It is proved by many researches that the use of technology is very much effective in teaching-learning process. The technology of teaching learning material in printed form will be quite suitable for the students studying in Adarsh Nivasi Schools for S.T. as the other forms of teaching learning materials may not be so adoptable to those students because of the following reasons which are based on collected data by the researcher.

- The students and teachers in these schools do not have the proper knowledge of using other gadgets like computers.
- It will be quite difficult to provide adequate facilities, individually, to the students.
- The atmosphere at these schools is not so conducive for the students to use other technological gadgets independently.

In such condition, student can use the technology of TLM in printed form according to his convenience. Besides above given reasons for using the printed material in developing the TLM, there are some advantages also there in the mind of the researcher for using printed material in developing the TLM. Those advantages

are as follow. The researcher tries to develop TLM using printed medium for the proposed study keeping in mind the following advantages of it.

- Printed medium will be both feasible and economical in view of the resources available in these schools.
- Printed material allows the learner to study at his own place convenient to him even out side the school where other gadgets are not available.

Considering the above given reasons and the advantages of developing the TLM using printed medium, the researcher has ventured into this area. An attempt is made to review the related literature in this area to have a comprehensive base in the field.

1.3 REVIEWS OF THE RESEARCHES

Review of the researches was done in two parts – Researches done in India and researches done abroad.

1.3.1 RESEARCHES DONE IN INDIA

Review of the researches done in India are presented as below:

Dewal (1973) carried out a study of difficulties in teaching English and effectiveness of the programmed teaching. Major findings of the study were (i) Programmed teaching worked well with teachers who were untrained in teaching English (ii) It oriented teachers in managing classroom instruction (iii) It helped developing subject competence of the teacher.

Sabharwal (1978) conducted a research to study the comparative effectiveness of Programmed Auto Learning vis-à-vis other methods of teaching English as a second language to L1 and L2. The objectives of the study were to assess the efficacy of four different treatments of TESL viz. the bilingual method, the audio-lingual, grammar translation and programmed auto learning methods and to find out which of the four have the better effect on the students. The findings of the study were that grammar

translation and bilingual methods were more effective in comparison to other two methods.

Shah (1979) conducted a study entitled "Development and Tryout of Multimedia Package on Effective Questioning in the Context of Micro-Teaching" at South Gujarat University. He wanted to develop Self-Instructional Multimedia Package on effective questioning which would be helpful to pre-service and in-service secondary school teacher and to tryout the package by experimentation and to explore the feasibility of the package.

He selected 32 teachers as a sample randomly, out of them 16 were in-service teachers in secondary section of gujarati medium schools of Surat city and 16 were teacher trainee from a college of education. He developed the Multimedia Package on Questioning skills. The experiment was conducted by using single group design. The data collected were analyzed by using i-test and chi-square technique. The major findings were: (1) The teachers who were exposed to the treatment of the Self-Instructional Multimedia Package Course showed significant improvement in all the skills except one. (2) As regards to the percentages of the pupils' talk, there was significant improvement. (3) Sixteen of the 17 measures showed significant difference at 0.01 level between the pre test scores and the retention scores. (4) The qualitative evaluation was that the teachers were quite satisfied with the package course as far as educative importance was concerned.

Joseph (1983) has evolved a strategy for teaching English grammar at high school level. The findings indicated that the students and the experts have expressed highly positive reaction towards the multimedia instructional strategy. Both in terms of achievement and ranking by the student, branching form of PLM was found to be the most effective one. Deviated linear form, although similar to branching form in terms

of achievement, was found to be having comparatively inferior stand in their ranking by the students.

Prabhudane (1984) conducted a study entitled "A Critical Study of the Effects of Using Self Learning and Discussion Methods of Instruction and Objective Assessment Tools, Measuring Higher Level Intellectual Skills and Abilities as Teaching Devices, on the Development of Learners' Scientific Attitude and Problem Solving Skills" at Poona University.

The objectives of the study were (i) to develop objective assessment tools measuring higher level intelligence skills and activities and also steps in the scientific method. (ii) to use this material as a self instructional teaching device and also as a stimulus to group discussion. (iii) to measure the changes produced in the students with respect to the use of the scientific method, higher abilities and knowledge of the subject matter of given experiments in psychology.

The tools developed for the evaluation of the students' were (i) pre-test and post-test to measure higher abilities. (ii) Pre-test and Post-test to measure scientific attitude and (iii) Post-test to measure content area at the knowledge level. The researcher used the pre-test post-test controlled group design. B.Ed. students, numbering 70, 35 each in Experimental and Controlled group, all from a college of education, formed the sample.

This study contributed to the development of instructional material and the use of self learning and the discussion method of teaching. The instructional material was effective in self-instruction.

Jain (1987) conducted a study entitled "A study of English Language teaching in secondary school of Gujarat State" at the Maharaja Sayajirao University of Baroda. The objectives of the study were: (I) To examine the objectives of teaching English in

a historical perspective (ii) To analyze the curriculum in view of the objectives of teaching English (iii) To study human and material resources available and (iv) To study the methods of teaching, evaluation and the difficulties faced by teachers in teaching English. The tools used were questionnaire, opinionnaire and interview. The collected data were analyzed qualitatively. The major findings of the study were: (i) Objectives of teaching English have been an evolutionary process. In the beginning, the main objective was the creation of "a class of persons who were Indian in blood and colour but English in taste, in words and intellect" but now the emphasis is on the acquisition of four language skills. (ii) When regard to class room teaching, it was found that over 70% teachers still used lecture and translation methods. However, group work, discussion etc. were used in few cases. (iii) The evaluation of students' performance was not merely based on written examinations alone but also on internal assessment in which their oral performance was also taken into consideration. (iv) Teachers teaching English were found overburdened by teaching load, clerical duties, co-curricular activities, etc. Over-crowded class rooms also added to their burden.

Kapadia (1988) conducted a study entitled "Development and try-out of programmes for remedial teaching of English for the post HSSC level" at Gujarat University. The objectives of the study were: (i) to identify grammatical errors in the written expression of the student who have passed HSSC. (ii) To locate the areas of the high frequency of errors in English. (iii) To develop programmed Learning Material (PLM) for remedial teaching in the selected areas of errors in English. (v) To observe effectiveness of the programmes for remedial teaching in English.

The sample consisted of 160 students who were selected by three criteria: achievement score in English at HSSC examination, ease of availability and readiness to improve their level of English and whose level was from 26 to 35 in English. The

sample comprised 80 from urban area and 80 from semi-urban area. Before administrating the final programmed learning material, the pre test was carried out and after finishing the try out, post test was administered. The difference was tested with t-test.

The major findings were: (i) Programme I (pronoun) was found very relevant and had the instructional potential as aimed at. (ii) Programme II (concord) consisting of 100 frames was more difficult than the first one. (iii) Programme III (tenses) having 108 frames, the longest chunk of the programmed material required revision. (iv) Programme IV (sequence of tenses) was the most complex from all. (v) From pre-test to post-test, the mean score always increased.

Jayashree (1989) conducted a study entitled "Identification of the difficulties in teaching and learning English as a second language among the high school students." The objectives of the study were to find out the difficulties of teachers and students in teaching and learning English as a second language in the high school. The seminar was conducted to find out the difficulties in teaching and learning of English. And the collected data were analyzed with mean, SD and t-test. The findings were the children's improper listening nature and their inattentiveness in class. They also found that the students were not interested in studying English.

Sharma (1989) conducted a study to design a course in written English for the high school stage: a communicative approach. The objectives of the study were to find out selectively from the teachers and the students about the needs of the in the classroom. The major findings of the study were a large number of the students were poor in written English and the well designed communicative syllabus incorporating the needs of the students can in tension free, interactive classroom, create the satisfying

and positive attitude towards learning writing and enhance the skill of writing and revising.

Dubey (1990) conducted a study entitled "A comparative study of a play-way self-learning Technique and the Traditional method of teaching Hindi at initial primary syage" at university of Rajasthan. It attempts to compare the effectiveness of play-way self-learning technique with the Traditional method of Teaching Hindi of primary stage. The objectives were (i) To develop useful SLM for illiterate children and (ii) To compare self-learning and Traditional method. The study was conducted at three stages. The major findings were: (i) The experimental group of children was found to be superior to the controlled group in recognition of alphabets, in reading sentences and writing. (ii) Experimental group was more interested in learning. (iii) Play way self-Learning method of teaching Hindi was found to be much better than the traditional one.

Pradhan (1990) conducted a study entitled "A comparative of the effectiveness of the Direct Method and Bilingual Method of Teaching English in Class X in the District of Cuttack" at Utkal University. The objectives were (i) To analyze inadequacies of different methods of teaching adopted before. (ii) To develop, in pupils, four language skills. (iii) To measure the achievement of controlled groups and experimental groups taught by the Direct Method and Bilingual Method, respectively.

The sample comprised 300 students from six schools belonging to both boys' and girls' schools. The tools used were a Proficiency test in English, Socio-economic status scale, school Achievement test results apart from Interaction Analysis Category System of N.A. Flanders. Analysis of Variance was used to treat data.

The major findings were: (i) The ANOVA revealed only two significant effects.

The first one was the main treatment effect which showed that the treatment produced

significant effect. (ii) The Bilingual Method explored and utilized the linguistic habits of the children already established. (iii) The teacher took fewer amount of time and labour for planning the lesson and taught more effectively.

Rajendram (1992) conducted a study entitled "Activity-Centred Teaching of English: An Experimental Study" at Annamalai University. The main objective of the study was to study the difference in achievement in reading and writing skills of the students taught under the conventional method and activity-centred approach to teaching of English.

The sample comprised 98 students (62 boys and 36 girls) through an achievement test. The tools used were – Psychological test and tests of attainment or achievement. The collected data were treated using descriptive statistics and test of significance.

The major findings were: (i) The Activity-Centred approach to teaching of English produced an improvement in reading and writing skills. (ii) There was no significanct difference in the achievement of the reading and writing skills between the students taught under Activity-Centred approach and the Conventional method.

Sevak (1993) conducted a study entitled "Development and Try-Out of a self-Learning Multimedia Package on Education Technology" at South Gujarat University, Surat. The purpose of the was the development and tryout of self-learning multimedia package and obtained the suggestions regarding the quality of multimedia package. 30 B.Ed. students and 30 teachers were taken as a sample of the study. Programmed Learning material, Video Film and Handbook were used as the mediatools. He found that teachers and students both could remarkably succeed in their studies.

Hsu (1994) conducted a study entitled "Computer Assisted Language Learning (CALL) the effect of elementary language students' use of interaction modification on

listing comprehension." The objectives of were to examine the L2 students request modification of the input they hear while working on computer based learning material and if this international computerized modifies help L2 students listening comprehension and language acquisition. Data for the study were collected from 15 elementary L2 students by using single group pre-test post-test design. The findings revealed that L2 students use the tools made available by computer technology to make input comprehensible and computerized modification and language acquisition.

Das (1998) conducted a study entitled "Exploring effectiveness of computer assisted learning material on rhymes in different modes". The objectives of the study were to develop computer software on rhymes in graphic text, graphic text music, and graphic text with music recitation modes and to study the effectiveness of the different mode of presentation. The findings of the study revealed that the computer as a potential medium significantly contributing to the realization of the objectives and also computer assisted teaching material developed by researcher ensure higher learning in all areas of language development.

Khirwadkar (1998) conducted a study entitled, "Development of Computer software for learning chemistry at standard XI." The findings of the study revealed that the developed CAI was effective in terms of academic achievement of the student and instruction time. The teacher and students have positive attitude about the developed CAI. And the achievement of the student was affected by the IQ, academic motivation and attitude.

Zyoud (1999) conducted a study entitled "Development of computer assisted English language teaching for standard VIII students" with the objectives to develop a computer assisted ELT programme for standard VIII Gujarati medium students. To study the effectiveness of computer assisted ELT programme on experiment students'

achievement in vocabulary, grammar and comprehension with respect to their intelligent, motivation and attitude. It also studied the attitude of the student towards the usefulness of Computer Assisted ELT programme. The researcher used Basica for developing software. The findings of the study were that the developed package helped students in learning vocabulary and grammar but it had no effect on comprehension. Student had the positive attitude towards it.

Ngagbam (2000) conducted a study of English language learning and its use by professionals and non-professionals of Vadodara City. The study revealed that both professionals and non-professionals were satisfied with the English courses which were being taught at different levels i.e. primary, secondary university and professional courses. However most of the professionals and non-professionals felt that changes in the syllabus of English courses should be worked out in such a way that the changes become an efficient tool for the learners.

Panchal (2006) conducted a study entitled "Development and Tryout of Self-Learning Materials in English Subject on the Unit of Active and Passive Voice for the Students of Standard – XII" at Veer Narmad South Gujarat University, Surat.

The objectives of the study were: (i) To study the effectiveness of the developed self-learning materials of the various sub units related to 'Active and passive voice' in English on the achievement of the students of std XII. (ii) To study the effectiveness of the developed self-learning materials of the topic of Active and passive voice in English . (iii) To get the opinions of the students regarding self-learning materials on Active and passive voice.

The sample was selected be stratified Random sampling technique. Four schools – two from urban area and two rural area were selected. For this study, experimental

research design was used. It was developmental cum-experimental in nature. The collected data were analyzed statistically using t-value Anova and Ancova.

The major findings were (i) t-value for all the four sample schools of urban and rural area is significant at 0.01 level. (ii) The students enjoyed learning 'Active and passive voice' through self-learning materials.

Meghani (2009) conducted a study entitled "A Study of Frustration among the Teachers of Adarsh Nivasi School in the Context of Some Variables" at Dr. Babasaheb Ambedkar Open University, Ahmedabad. The objectives of the study were: (i) To study the level of frustration among the teachers working in Adarsh Nivasi Schools. (ii) To study the frustration of teachers in Adarsh Nivasi schools in context of Gender and Caste. (iii) To study the frustration of teachers in Adarsh Nivasi schools in the context of their educational experience. The major findings were: (i) on average, the frustration was found in 65.8% teachers. (ii) The frustration was found more in female teachers than the male one.

1.3.1.1 OBSERVATION OF THE RESEARCHES FROM INDIA

As the investigator traversed the educational researches done in India, he could see comparatively only few researches done in the area of educational technology. Though there are only few, these researches brought from the immense wealth of practical knowledge related to classroom teaching and learning in the modern world of science and technology. A careful review of the related researches exhibited the fact that Self-Learning Materials Computer Assisted instructional Material and Programmed Learning Materials play a vital role for a good teaching and a better learning. Printed Self-Learning Material forms a part and partial of classroom.

The findings of the related educational researches done in India can be summarized in the following lines:

- (a) Most of the researches support the fact that the prepared material enhances learning among the students significantly. [Kapadia (1988), Dubey (1990), Panchal (2006)]
- (b) Computer Assisted Learning Material is essential in the classroom teaching as it is useful in developing clear concepts and in stimulating learning. [Hsu (1994), Das (1998), Khilwadkar (1998), Zyoud (1999)]
- (c) The instructional material was effective in self-instruction. [Shah (1979), Prabhudane (1984)]
- (d) The instructional strategy for learning is quite feasible in Indian classrooms in terms of time. [Prabhudane (1984)]
- (e) Learners as well as teachers were helped in acquiring a better knowledge through various techniques Viz, Programmed Learning Materials or Self-Learning Materials or Self-Instructional Materials. [Dewal (1973), Joseph (1983), Kapadia (1988)]
- (f) Teaching Learning with the help of Multimedia Package is proved to be very much effective. [Shah (1979), Sevak (1993)]
- (g) Students have a higher ability to retain knowledge when they learned through the prepared material.
- (h) The teachers should be given encouragement and proper training to develop their own instructional material for teaching learning process.
- (i) Students liked and had a positive attitude towards instructional technology.
- (j) There was no significant difference in the achievement of the reading and writing skills between the students taught under activity-Centred Approach and the Conventional Method. [Rajendram (1992)]
- (k) Most of the teachers used lecture and translation method in the classrooms and also they were over burdened by teaching load and the other works. [Jain (1987)]

- (1) The students do not take enough interest in studying English. [Jayashree (1989)]
- (m) The well designed communicative syllabus can enhance the skill of writing and revising. [Sharma (1989)]
- (n) Most of the teachers working in Adarsh Nivasi Schools are suffering from frustration and the condition of the female teachers of these schools is even worst. [Meghani (2009)]

1.3.2 RESEARCHES DONE ABROAD

Review of the studies done in foreign countries is presented as follows:

Macdonald (1973) conducted a study entitled "The Development and Evaluation of a Set of Multimedia Self – Instructional Learning Activity Package for Use in Remedial English at an Urban Community College" at Memphis State University. He used pre test – post test design as a method of research. He applied Analysis of Covariance (ANCOVA) as a statistical method to analyze the collected data. One hundred and twenty six community college students at a mid-south urban community college enrolled in remedial English classes as a sample.

Three Multimedia Self Instructional Learning Activity Packages were developed and tryout. It was compared with traditional method. Through this study he found that the students in the experimental group showed a significant difference in post test scores on the criterion measures at the 0.01 level. Students in the experimental group on the post – experimental attitude measure scored significantly higher (at 0.05 level) than the students in the controlled group.

Aqeel (1989) conducted a study entitled "The Effect of Classroom Instruction on students' Reading Achievement in English" at University of Salford (United Kingdom) to study the differential effects of instructional methods for teaching English as a foreign language on student classroom interaction and reading

achievement. Two groups of Arab students enrolled in English language studies course in the United Arab Emirates University were randomly assigned to one of the two instructional techniques; a Content English Method (CE) and a General English Method (GE). Students were observed in their classrooms using international analysis data collection procedures and measurement. In addition, students were given Pre and Post reading achievement test as well as an exposure self report questionnaire to evaluate the effect exposure to the target language may have an classroom interaction and reading achievement. The result of the study showed that the Content English Groups had more initiating interactions than did the General Groups, and also, had more responding interactions than did the General English Groups. Other significant results were obtained when comparing male and female students in the two instructional groups.

Hatcher (1999) conducted a study entitled "A Causal Comparative Study: Motivational and Learning Strategies of Developmental and Non-developmental Freshman English Composition Students at Mississippi community Colleges" at the University of Mississippi. A causal comparative study examined differences in motivational and learning strategies of developmental and non-developmental freshman English composition students enrolled at Mississippi community and junior colleges. An 81-item questionnaire, the motivated and learning strategies questionnaire (MSLQ) was administered to students to examine it freshman English composition developmental and non-developmental students differed in their self-reported perceptions on fifteen motivation and learning strategies scales.

Four hundred and ninety five students enrolled in freshman developmental English compositions classes and freshman non-developmental English composition classes at the main campuses of 14 0f the 15 Mississippi community and junior colleges

participated in the study. Two intact classes were randomly selected from each institution. Data were analyzed using an independent t-test. Results showed significant differences in 8 of the 15 motivation and learning strategic scale. Freshman developmental English community students in Mississippi community colleges scored significantly higher then non-developmental freshman English composition students.

Chang, D. (2000) conducted entitled "Design and Implementation of a Schema-Based Learning System on the Web." The purpose of the study was to address the design and development of web-based system that complements the human cognition need to structure and restructure information in is hierarchical representation, and to view and associate information at the learner's preference. The study evaluated the usability and the effectiveness of the schema-based learning system by collecting feedback from a group of students in this course. The study used the feedback to refine the design of the schema-based learning system.

Manochehri (2001) conducted a study entitled "The Effects of Web-Based Learning (WBL) Versus Traditional Instructor Based Learning (IBL) on Students' Knowledge and satisfaction based on student learning styles." The purpose of this study was to compare the effects of WBL versus those of Traditional IBL on student knowledge and satisfaction based on student learning styles. The study examined a sample of under-graduate students who were enrolled in the college algebra offered as both oncampus instructor based (Traditional) and Web-based at the University of North Texas (UNT). A total of 36 Web-based students and 58 Instructor-based students participated in this study.

This study utilized a posttest – only intact group. Student knowledge and student satisfaction was measured at the end of the course as independent variables. Based

upon the results of the LSI, post-learning examination and satisfaction a series of twoway analysis of variance (ANCOVA 4*2) techniques and independent variable test was used for each of the independent variables, knowledge and satisfaction based on a student's leaning style.

The results revealed that students' learning style were statistically significant for knowledge when learning on the web versus instructor-led. In addition, the learning style was important factor for Web-based learning. The results indicated students with Assimilator and converger as learning styles required better result with the web-based lerning method. Further more, the study found that there is significant difference in students' satisfaction based on learning on the Web versus Instructor-led.

Bolliger, D.U. (2002) conducted a study entitled "The Design, Implementation, and Evaluation of a Web-Based Training Programme for Future School and Administrators in a North West Florida School District". For the study web based instructional product was successfully developed and evaluated through a field test. The module was a prototype of a new learning and training system which was required for the Florida principal certification. The participants consisted of one instructor and twenty five trainees. Trainees evaluated this web-based training programme favorably. They have also offered several recommendations for the revision of the module.

Buzhardt, J. (2002) conducted a study entitled "Integrating Internet into the Classroom: The Effect on Learning, Student Satisfaction, and Labor Costs." The study assessed the cost effectiveness of replacing pen-and-paper assignments graded by instructors with online assignments graded by computer. One hundred ten students were randomly assigned to use either pen-and-paper study guide or online study guide. No statistically significant differences were found on any of the measures. The

researcher concluded that while these results may not generalize to all settings or courses, in this case online instruction into a classroom-based college course saved labour cost and increased students' satisfaction.

Lyson, H. L. (2002) conducted a study entitled "The Effect of Technology Use on Student Writing Proficiency and Student Attitudes toward Written Assignments in a Ninth-Grade Language Arts Classroom." The purpose of the study was to determine whether computer technology had an effect on essay writing, as measured by an established writing assessment rubric and readability index. As well as writing proficiency, this study sought to address whether computer technology had an effect on students' attitude toward writing, as by a survey instrument. A sample of 281 ninth grade language arts students at one junior high school participated in the project. The students were divided in two groups, with one group (experiment) utilizing laptop computer in English class through out the year for writing the assignments and activities. The other group (control) used traditional handwritten methods for completing written work in the language art classroom. Administration of pre-test and post-test essay for both the groups took place at the beginning and end of the investigation. Analysis of the scores from both groups indicated that students using computers had significant essay scores on the post-test essay. The results of this data indicated that students may have more positive attitude toward writing, both with and without a computer, when using computer technology. The conclusion was drawn that computer technology, when utilized in a writing classroom, can enhance student writing proficiency and promote positive attitude towards writing.

Munday (2002) conducted a study entitled "Effect of Learning Strategy Awareness on Learning, Learner and Instructor" at Oklahoma State University. The purpose of this study was to describe the effects of learning strategy awareness on learning,

learner and instructor. In the eight week session accelerated under-graduate business administrator's degree program at Newman University in Wichita, Kansas. The study was descriptive of nature and used quantitative and qualitative methodology to characterize the learning strategy preferences of current undergraduate business administration degree program adult students. The population selected for this study was two voluntary groups of adult students which included one instructor and 30 adult students. The chosen evaluation instrument used was the "Assessing the Learning Strategies of Adults (ATLAS). The ATLAS instrument was to assess the learning strategy preference (Navigators, Engagers and Problem Solvers) of the students. A voluntary focus group session was with each group of learners in order to gather qualitative data to describe the exact ways members of each group go about learning, the barriers, they face in the learning process and the things that facilitators do to help and hinder them in the learning process. Chi-square was employed to compare the Newman University accelerated undergraduate business administration degree program adult student to the norms of ATLAS.

Instrumented Learning was an effective way of creating adult learning awareness. The ATLAS instrument created awareness with each student. Adult student can realize positive impact in the academic achievement if they know their learning strategy preferences the end of the four week study. The post-test showed that the ATLAS made a significant increase in their knowledge base. ATLAS was a very participant and accurate learning strategy preference identifier tool. Instructor can make a significant impact in the academic achievement of their adult students by knowing the strategy preference of the students. An awareness of individual learning strategies was an important element of being learner centered.

Springer, J. (2002) conducted a study entitled "The Formative Evaluation of a Computer Assisted Instruction Module for Metric Area Instruction, for Pre-Service Teachers: Its Effect on Student Achievement and Its Congruence with ADDIE (Analysis, Design, Develop, Implement, Evaluation) Instructional Design Model." This research examined the effectiveness of a computer assisted instruction programme in teaching basic knowledge of the metric area to pre-service teachers. The pre-test and post-test design was used for the study and the population was divided into two groups-treatment and control. An analysis of variance of group means derived from a quasi-experimental non-equivalent control-group design was used to examine a research question on the effectiveness of CAI teaching metrics to pre-service teachers. The CAI metrics programme produced a significant increase in metric knowledge as measured by the post-test instrument. Analysis of linear and area subtests revealed that the increase on overall scores was attribute to the area subtest. Gabrielle (2003) conducted a study entitled "The Effect of Technology-Mediated Instructional Strategies on Motivation, Performance, and Self Directed Learning." The purpose of the study was to check the affect of motivation, performance and self directed learning of undergraduate students. The other purpose of the study was to use new technologies to efficiently deliver these instructional strategies as supplementary course content. The researcher communicated with control and experiment group via e-mail and used e-mail to direct experimental group students to technology-mediated instructional strategies.

The findings of the study suggest that systematically designed technologymediated instructional strategies can positively affect motivation, performance, and self directed learning. Further, new technologies can help improve the efficiency of delivering such strategies.

Casanova, A. (2004) conducted a study entitled "An Analysis of Computer-Mediated Communication Technologies as Tools to Enhance Learning". The integration of computer-mediated communication (CMC) technologies into the higher educational settings have required faculty to change their roles from the direct instructional model to a model based on constructivist's ideas. CMC instructional tools (Its) have provided a change by shifting a traditional teacher centered setting into a teacher facilitator environment. Teacher's professional development has become an important task to effectively integrate technology into their courses. Questions concerning the implementation and value of CMC technologies and their impact in higher education are not yet clear. The purpose of this research study was to determine the extent to which CMC technologies promoted the achievement of stated goals and objectives for course taught in higher education. This study was directed by three research questions: (1) In what ways are higher education faculty using CMC technologies to deliver their courses? (2) What is the faculty's primary instructional intent for the CMC technologies they selected for integration into the teach9ng process? (3) In what ways does the integration of selected CMC technologies promote achievement of stated goals and objectives in their courses? The research study population consisted of 17 higher education faculties from the Trek 21 project at West Virginia University during the year 2001. These participants received technical training, enhanced webdesigned courses, worked collaboratively and prepared instructional resources during a 7-day week period during summer 2001. The data collection was done by survey, course analysis and interview. Findings indicated that faculty was mainly using CMC technologies to support teaching practices and to improve teacher's productivity.

Charsky (2004) conducted a study entitled "Evaluation of the Effectiveness of Integrating Concept Maps and Computer Games to Teach Historical Understanding."

The purpose of the study was to determine if one of scaffolding, concept mapping, would affect the participants' games performance, game knowledge, and historical understanding. Three different ninth grade advanced global history classes participated in the study. Each class was randomly assigned a treatment condition.

The results indicate that there was not a significant difference between the treatment groups in game knowledge, and historical understanding. However, the participants' responses and comment made in journals shows that the student did learn about theoretical history and history in general. The results also indicated that the no concept map groups' motivation for the treatment improved compared to their motivation for regular class room instruction.

Eteokleous, N.P. (2004) conducted a study entitled "Computer Technology Integration in Cyprus Elementary Schools." The purpose of this study is to evaluate the current situation in Cyprus elementary classrooms regarding computer technology integration. The study examined how Cypriot elementary teachers use computers and the factors that influence computer integration in their classroom practices. To address the research questions that guided the study, an evaluative case study design was applied. It employed a mixed method approach through the usage do structured questionnaires and semi-structured, open ended interviews as the major methods of data collection. The value of the proposed study lies in its potential to help policymakers, educators and stakeholders that have the power to take decisions and design policies, in gaining understanding on how computers are used in the classroom and the factors that influence their use.

The results of the quantitative analysis indicated that while Cypriot teachers use computers rather extensively for their own purposes, they use them less frequently in their classes. Regression analysis revealed that teacher's education, school climate,

teacher's professional behavior and teacher's attitudes towards the use of computers in education, were significant predictors for classroom computer use. The results of the qualitative analysis summarize the factors that influence teachers in applying computers in their classroom practices. A general uniformity across the three categories of teachers revealed, in terms of the factors that function as barriers in applying computers in the classrooms. The factors can be summarized as follow: lack of resources; tyranny of the curriculum; incomplete and inadequate professional development training.

McLaughlin, D.K. (2004) conducted a study entitled "Towards a new paradigm for teaching and learning: A case study of the process of integrating instructional design and technology at Florida Community College at Jacksonville." The study examined the process by which administrators, faculty and instructional design staff at Florida Community College converted four traditionally formatted courses to online courses in order to integrate innovative instructional design and learning strategies with instructional technology. The study also examined the design and development of an electronic instructional design assistant that would enable the user to systematically design curriculum that incorporated learning and motivational theory. The researcher used case study design to describe the model and processes the college administration used to implement the project. The purpose of this study was to explore how one institution of higher education addressed the gap that exists between systematic and collaborative instructional design and the use of instructional technology in online course development. Data for the study was collected through semi-structure interview and a review of project related records, reports, guidelines and artifacts. Data was also obtained through field observations and researcher participation in training and professional development sessions with faculty and staff.

Chin (2004) conducted a study entitled "Effectiveness of Implementing Computer Assisted Language Learning Teacher in the English for Specific Purpose Training Program" at Lynn University. In order to determine the "effectiveness" of a corporate ESP training program, the approach for this study was to evaluate trainees' pretest and posttest scores related to the ESP training program. The study found that within two months of the implementation of the blended learning in the Activation English Training Program, participants had significant improvement on their test scores. Participants in the study, generally, had positive attitudes towards learning English with CALL before and after two months of the Aviation English training Program. The study also found that participants who had positive perceptions of CALL facilitating interactions in the classroom tended to have positive attitudes towards using CALL in learning English.

Chitiyo, R. (2006) conducted a study entitled "Integration of Instructional Technology by University Lecturers in Secondary School Teacher Education Programmes in Zimbabwe: An Exploratory Study." The objective of the study was to examine how the lecturers conceptualize IT integration. How they integrate IT into their instruction, the support given by their institutions and the constrain they face. The qualitative methodology was used. For data collection three tools were used questionnaire, interview and analysis of documents. Findings of the study revealed that majority of the lecturers were integrating IT largely as hardware in nature viewing it as audio-visual aids. (DAI 67, 8 feb. ph.d. pg 2947)

Floyed E.H. (2006) conducted a study entitled "The Use of Technology and Its Effect on Student Achievement." The study was conducted to examine the use of technology and its effect on student achievement. The result of the study revealed that when comparing surveys of administrators, teachers and students with student test scores,

the principal responses indicated a negative correlation to student test score result. The responses of the teachers in the teacher technology survey and the teacher pedagogy survey showed no correlation to student achievement and responses for the students in the student technology survey indicated a positive correlation to student achievement. The data showed that student technology use increases student achievement increases. (DAI April 2006 vol 67 no 10 pg. 3786)

Gilbert, D. W. (2006) conducted a study entitled "Effectiveness of Computer-Assisted Instruction Blended with Class-room Teaching Methods to Acquire Automotive Psychomotor Skills." The study was conducted to check the effectiveness of blending online computer – assisted instruction (CAI) With traditional classroom instruction were investigated in the Automotive technology Department at Southern Illinois university Carbondale. Results were determined by a psychomotor electrical diagnostic skill evaluation of two matched groups exposed to different blending methods of teaching basic electrical concepts. Following the course of blended instruction, active electrical circuit boards measured participants' hands – on diagnostic problem solving abilities. Frequency trends within the response data set exhibited could be attributable to CAI blending methods. In conclusions of this research study blended teaching methods experienced by the experimental group demonstrated a comparatively higher level of psychomotor electrical diagnostic skill capability. (DAI 67, 8 feb. ph.d. pg 2947)

Paul M. (2007) conducted a study entitled "An Aural –Oral Approach to the Teaching of English Usage". The objective of the study was to compare the effectiveness of a conventional reading – writing and aural- oral approach in teaching standard English usage to high school students. The population sample of the control group consisted of 111 students. The experiment group included 145 students. The

control group was taught with reading- writing approach and the experimental group was taught English usage. The findings established the hypothesis of this investigation at 0.05 level of confidence. The result that the high school students who were taught with aural—oral approach performed significantly better than the students of control group, taught with reading-writing approach. (Disst. Abstract int. vol.68, 3 2007 Ed.D pg 917)

1.3.2.1 OBSERVATION OF THE RESEARCHES FROM ABROAD

A careful review of related researches done abroad revealed that Indian researches concentrate on school level the most. While the researches done abroad concentrates on almost all levels of education. The review also revealed that comparatively more researches have been done abroad in the field of Self-Learning Material in instructional technology. The related researches revealed that the findings of the researches done abroad reflected striking similarities with the findings of the Indian researches. Besides, the findings of the related educational researches done abroad can be summarized on the following points:

- (a) Students were able to identify a number of benefits of self-directed learning.

 [Macdonald (1971)]
- (b) The use of Instructional technology increased variety, interest and attention specially enhanced feed back for both instructor and students. [Munday (2002)]
- (c) Students noted the importance of hands on experience and other forms of active learning. [Mannocherri (2001)]
- (d) Online Instructor in classroom can save labor cost, and also, increase students' satisfaction. [Buzhardt (2002)]

- (e) The use of computer technology can enhance students' writing proficiency and promote positive attitude towards writing. [Lyson (2002)]
- (f) Systematically designed technology mediated instructional strategies can positively affect motivation, performance and self directed learning. [Gabrielle (2003)]
- (g) CALL is one of the effective techniques for teaching-learning of English language. [Chin (2004)]
- (h) Aural Oral approach is better than Reading Writing approach in teaching Standard English Usage. [Paul (2007)]

1.4 IMPLICATION FOR THE PRESENT STUDY

The review of related researches revealed that a variety of instructional media have been used in order to identify their effectiveness in terms of students' achievement. The review brought out the fact that there is an important link between the experiences of students' learning and achievement and the educational media used. From the review of related researches one can easily understand that SLM in the instructional media is the connection between students and information. As the investigator found out from the collected data that the tribal students were in the centre of the study and they were very poor in study, particularly, in English subject; he decided, after a healthy discussion with the experts, to develop TLM rather than SLM.

As the investigator searched through the related researches done in India, no research had reported in the field of education of the tribal children studying in Adarsh Nivasi Schools run by Tribal Development Department of Gujarat. Therefore the present study is needful and important. This study would not only add knowledge of teaching the subject of English for VIII standard tribal students in Adarsh Nivasi

Schools, but also to all the subjects at all levels of education to select and develop their own teaching media on consonance with the content area for a better teaching and learning.

From the reviewed researches, the investigator has found that there has been a great concern regarding the teaching – learning of English. As many researches have been conducted on this aspect, which can be seen from the studies conducted by Dewal (1973), Jain (1987), Kapadia (1988), Jayshree (1989), Sharma (1989), Ngangbam (2000), Macdonald (1973), Aqeel (1989), Chin (2004) and Paul (2007). Most of the researches have been related with the difficulties in teaching or learning of English and the remediation. And many researches have been conducted to see the effectiveness of the different methods of teaching English. All those researches have been based on CAI, CALL, PLM, CALM, etc. No research was found measuring the effectiveness of developed TLM and that too was for teaching English to Std. VIII students studying in Adarsh Nivasi Schools. Therefore, the investigator proposed the present study to teach English to std. VIII students in Adarsh Nivasi School.

1.5 RATIONAL OF THE STUDY

For successful Teaching –learning Process, a teacher should explore a wide variety of materials; to find suitable aids for instruction, to supplement what the text book provides, to add some information, to broaden the concepts and to arouse interest of students. The selection, the improvisation and the use of the proper instructional aids play an important part in the realization of the instructional objectives of the subject. The text book, though very important among the instructional aids is not adequate in itself, to help the students to acquire expected learning in terms of set forth objectives. It needs to be supplemented by other aids such as, a work book, test items, charts, pictures etc.

Teaching-Learning Material in a printed form is one of the devices of the technology, which has great importance in the field of education. And with its uniqueness of giving motivation, information, self practice through illustration, it makes teaching and learning more interesting and encouraging. The syllabus of English in Std. VIII is likely to be immensely useful to the students of the stage. If the philosophy of using prepared material, which constitutes the bedrock of the teaching learning strategy of the stage, is employed consistently and imaginatively, this syllabus has very potential to build up a strong language base among the students, which will help them a lot in pursuing their higher studies in future.

Learning through prepared material allows much more simultaneous involvement of all the learners. Moreover, it gives chance to all the learners for active participation. Educational psychology has long observed that the active learner is the better learner. If the active learner learns how to learn and if he acquires significant learning attitudes, then the transfer of knowledge to other subjects and areas will be greater.

Language is the most important aspect of human life because it makes human beings different from the other animals. And the universal language which opens the window of the world information has its own importance. English language enjoys the status of universal language because it has been the most important language of the world. It is called the library language as a vast amount of world information and literature is available in English. It is considered as a link language as it connects one country to the other. It is also considered as the language of trade and commerce as a very large portion of the world trade and commerce is done through this language. As it is one of the web languages, student cannot use web effectively, without the knowledge of English. At present the impact of the English is so much that the

teaching-learning of English language plays an important role in the society at large and the secondary schools as particular. Considering the importance of English language, the researcher has decided to undertake the proposed study to contribute something to enhance English language teaching-learning process.

As the English language is so much important, it is very necessary for the tribal students also to learn it. But the results show that the tribal students studying in Adarsh Nivasi Schools for S.T. in Gujarat are not good at English. They seem to be not much interested in learning English. The reasons behind that may be the lack of competent teachers and the traditional method used in teaching-learning. Considering, specially, about the of the Adarsh Nivasi Schools for S.T. which are situated mostly in villages, and also, considering the available resources and technology, and considering the feasibility aspects of these schools, the researcher tried to find out whether the Teaching Learning Material based on printed medium, is beneficial for these students or not; by this proposed study.

Improvement in English language efficiency among the students of standard eight would be more beneficial because teaching at this stage will provide them enough time for the preparation of the board examination on which the teachers as well as the parents give more stress. Because of this reason, the researcher has decided to undertake the study related to the students of standard eight.

The discussion of the review of related researches given below will make the thing further clear.

The review of related researches carried out in area of teaching and learning shows that many studies have been undertaken related to developing self learning material or programmed learning material. Jain (1987), Kapadia (1988), Rajendram (1992), Aqeel (1989), Manochehri (2001), Mundey (2002), are some of the related researches.

But the investigator observed that the studies related to the development of self learning material or programmed learning material for teaching of any subject shows that these strategies have proved effective as they were based on the needs of learners. The investigator, from the reviewed literature, as briefly discussed above, did not come across any study conducted for teaching English to the students of standard VIII of Adarsh Nivasi School for S.T. using Teaching Learning Material. Therefore, the researcher has done the modest attempt to undertake the proposed study with the following research question in mind.

1.6 RESERCH QUESTIONS

In the process of formulating the proposed research proposal and studying the related literature the following research questions came in the mind of the researcher. The researcher tried to get the answer of these research questions in the process of this research work.

- Whether teaching -learning material can be used for effective teaching of English among the students studying in Adarsh Nivasi Schools for S.T. in Gujarat?
- Whether students studying English through teaching-learning material do better in comparison to the students studying the same through traditional method?

1.7 STATEMENT OF THE PROBLEM

Development and Try Out of Teaching - Learning Material on English for Standard VIII Students of Adarsh Nivasi Schools for Scheduled Tribe in Gujarat

1.8 OBJECTIVES OF THE STUDY

1. To develop the Teaching Learning Material to teach English to standard VIII students of Adarsh Nivasi Schools for S.T. in Gujarat.

- 2. To study the effectiveness of the developed Teaching Learning Material in terms of students' achievement in English.
- 3. To study the effectiveness of the developed Teaching Learning Material in terms of students' reaction.
- 4. To compare the achievement of students taught through Teaching Learning Material and Traditional Learning Material. (i.e. text book)

1.9 HYPOTHESIS

There will be no significant difference between the mean post-test achievement scores of standard VIII students studying English through Teaching Learning Material and Traditional Method taking their pre-test achievement score as co-variate.

1.10 EXPLANATION OF TERMS

TEACHING LEARNING MATERIAL: For the present study, Teaching -Learning Material (TLM) means the material developed by the researcher using print medium.

ACHIEVEMENT OF THE STUDENTS: The marks scored in the test constructed by the researcher on the topics selected will be the achievement of the students.

REACTION OF THE STUDENTS: The belief of the students regarding the developed Teaching Learning Material will be taken on the three point scale with the help of reaction scale.

1.11 DELIMITATION OF THE STUDY

The present study will be delimited to teach only five Units of Std. VIII English text-book, i.e. A Quiz, Let's Go Shopping, A Fireman's Day, Bamboo – A Wonderful Plant and The Prince and His Friends.

1.12 METHODOLOGY OF THE STUDY

The present study is a developmental cum experimental study. Quasi Experimental research design was used for the present study.

1.12.1 POPULATION AND SAMPLE OF THE STUDY

All the students of Standard VIII studying in all 43 Adarsh Nivasi Schools for S.T. of Gujarat constituted the population for the proposed study. The sample for the proposed study was selected purposively. For it the researcher selected standard VIII students studying in two Adarsh Nivasi schools of Surat district namely Adarsh Nivasi School, Surat and Adarsh Nivasi School, Tarsadi-Kosamba. These schools were selected with purpose of getting all the required facilities. On the basis of the result of the Pre Test 30 students from Adarsh Nivasi School, Surat and 30 from Adarsh Nivasi School, Tarsadi-Kosamba were taken as the Sample. The students who got equal marks in Pre Test were taken as a sample. From the selected school VIII standard students of Adarsh Nivasi School, Surat were taken as an Experimental Group and VIII standard students of Adarsh Nivasi School, Tarsadi-Kosamba were treated as a Control Group.

1.12.2 TOOLS FOR DATA COLLECTION

The researcher constructed achievement test for the pre-test and post-test purposes related to selected topics of Unit 1 to 5 of standard VIII Gujarati Medium following GS&HSEB curriculum. The achievement test included objective type questions, questions based on paragraph, find out similar words, find out odd one, questions based on advertisement, blanks etc. The constructed test was shown to the experts in the field of English. The suggestions regarding sequence and the sentences were duly incorporated in the achievement test.

The researcher also developed the Teaching Learning Material to teach English to the selected sample. For the development of that, the researcher went through standard VIII text book. Then, he prepared the rough draft. It was shown to the experts, and then, according to their suggestions, the final draft was prepared. The TLM includes pictures, explanations, exercises, games, tests etc. The TLM was in the printed form.

A Likert type three point reaction scale was prepared to know the reaction of the students about the developed TLM. It was constructed by the researcher in which the students have to put tick mark $(\sqrt{})$ in the appropriate box, ranging from Yes to No.

1.12.3 DATA COLLECTION

The required data were collected with the help of pre-test, post-test and reaction scale which were constructed by the researcher himself. During the experiment, the researcher observed the students – their likings, disliking, their activities, their way of learning, etc. On the basis of that observation, also, the researcher collected some of the important data. For the collection of data the study was conducted in three different phases.

1.12.3.1 PHASE–I DEVELOPMENT OF THE TEACHING LEARNING MATERIAL

The researcher went through the Standard VIII English textbook of Gujarati Medium, which is prescribed, by Gujarat Secondary and Higher Secondary Education Board, Gandhinagar. The researcher took the first five Units from the text book. These Units are: A Quiz, Let's Go to the Shopping Centre, The Fireman, Bamboo – the Wonderful Plant and The Prince and His Friends. After gathering information regarding all these five Units from the text book, the researcher administered the pretest constructed by him related to Units of the research work. The test was administered on both the groups – the experimental as well as the control group. To complete the test, the students were given two hours. The test paper includes objective questions based on paragraphs, find out similar words, find out odd one out, question

answer based on advertisement, change the text, fill in the blanks, question – answer etc.

Development of Teaching Learning Material was done in the form of printed material. Before preparing the material a great deal of healthy discussion was done with the English teachers teaching in different Adarsh Nivasi Schools. This discussion was, mostly, done on Phone. On the basis of that discussion, the rough draft of the material was prepared. The rough draft was first shown to the experts in the field of education, technology as well as the English teachers teaching in Adarsh Nivasi Schools. And the suggestions given regarding pictures, simplification of language and logical sequence were duly incorporated by the researcher.

Development of Teaching Learning Material was done in two parts – Pre-stage learning material and current learning material for selected topics. Pre-stage learning material was developed in such a way that it helped the students to understand the selected topic in a better way. It also prepared in such a way that the students could have the clear-cut idea for using such kind of teaching learning material. Lots of pictures, charts, examples, test and evaluation material, games, exercises etc. were used to increase the interest of the students in learning English as well as in using the Teaching Learning Material.

1.12.3.2 PHASE-II IMPLEMENTATION TEACHING – LEARNING MATERIAL

The researcher implemented the developed teaching – learning material on experimental group. This implementation was done from June-2010 to August-2010. The developed teaching – learning material was implemented by the researcher himself. The control group was being taught the same topics during the same period of time by the qualified teacher teaching in Adarsh Nivasi School, Tarsadi –

Kosamba. During this period of time, the researcher, also, observed the students of the experimental group and tried to find out some necessary data.

1.12.3.3 PHASE-III TO STUDY THE EFFECTIVENESS OF THE TEACHING LEARNING MATERIAL

The researcher administered the post-test on the students of both the groups - experimental group and the control group to know the achievement of the students and to know the effectiveness of the developed Material. The same test which was used as a pre test was used as a post test to check the effectiveness. A reaction scale developed by the researcher was also administered on the experimental group to know the reaction of the students about the developed material. It was Likert type three point scale which includes twenty statements to know the reaction of the students about their study experience with Teaching – Learning Material.

1.12.4 DATA ANALYSIS

The collected data were analyzed qualitatively as well as quantitatively. For quantitative analysis U – test were used and reactions of the students regarding the developed TLM were analyzed using frequency and percentage and also with the help of intensity index analysis. For qualitative analysis, observation during the experiment was used.

1.13 MAJOR FINDINGS

The major findings can be divided in two parts – Findings emerged from quantitative analysis and findings emerged from qualitative analysis. Both types of findings are as follows:

1.13.1 MAJOR FINDINGS OF QUANTITATIVE ANALYSIS

The major findings that emerged from the quantitative analysis are:

- The adjusted post test mean scores of the control group and the experiment group taught through TLM by taking pre test as the covariate found to be 12.23 and 20.67 respectively which showed the difference of the adjusted mean 8.44. The computed F-value significantly higher than the table value at 0.01 level and the U-value 825.92 and Z-value 5.56 showed that the probability was less than 0.00003 which indicated that the students taught through TLM modes achieved more than the students taught through traditional method.
- The reactions of the students of the experiment groups were taken for the developed TLM and the intensity index was used to study their reactions. From the intensity index 2.85 on the reaction scale, it was found that the students have a positive reaction towards the developed TLM and they were agreed with the positive effectiveness of the developed TLM.

1.13.2 MAJOR FINDINGS OF QUALITATIVE ANALYSIS

The major findings that emerged from the qualitative analysis are:

- It was noticed by the researcher that the students were very active in learning with TLM. This indicates that they liked to learn with TLM.
- The researcher noticed during the experiment that they were eager to know what was given next in the TLM. This shows that they took interest in learning with TLM.
- During the experiment it was found out that students were helping their classmates, and also, were taking help from others. The researcher noticed that the students were discussing their problems and understanding with one another. They were found to be work in a group. It indicates that learning with TLM inspired the students to work in a group.

- The researcher, also, noticed that most of the students went through the given material many times. This shows that TLM inspired the students to revise the points properly.
- Most of the students were found to be interested in pictures, games and different exercises. With the help of pictures, they tried to find out the meaning of the given word.
- Students were found to be comparing the given material with the prescribed text-book. Specially, at the time of Unit 4 Bamboo The Wonderful Plant, they enjoyed the comparison of TLM and the text book. They tried to find out the meanings of the words that were given in the unit by taking the help of pictures and the word meaning given in the boxes in TLM.
- It was noticed that the students were using TLM whenever they liked –
 whenever they found time. In this way, the students got the advantages of self
 learning material also.
- The students were not only discussing their problems with their classmates, but also, they approached the teacher (researcher). They, also, came to the researcher to show how they had completed the exercises, to express their feelings about the pictures, exercise or game they like, to express their positive feelings about the extra reading material related to the text book.
- Whenever the researcher told the whole class to speak some words after him, they took active participation in it. They seemed to be very enthusiastic to learn new words' pronunciation. Later on, when they were free in school or in the hostel, they tried to speak the word with correct pronunciation.
- The students were tried to prepare themselves for the unit test, and also, they were very much eager to know their result. When they were not satisfied with

their result, they went through the concerned points again and tried to prepare themselves fully.

• The overall observation of the researcher shows that the students were enjoying the learning with TLM.

1.14 SUGGESTIONS FOR THE FURTHER STUDY

Since the present study was limited to five Units of Std.-VIII English text-book, the students of Adarsh Nivasi School, Surat and printed teaching learning material only; the researcher would like to suggest some more topics for the further research.

- The students of other schools can also be taken as the sample for future research by making use of same TLM which will help to confirm the result of the present study.
- Other Units of Std.-VIII English text-book can also be taught with the help of TLM.
- This kind of TLM can also be developed and tested for the other standards,
 like standard VIII.
- Much more advanced package can be developed for teaching same or similar topics of English for future research.
- TLM can also be developed for the other subjects by their teachers.
- The effectiveness of the same TLM can be tested by taking other variables like gender and the general schools Adarsh Nivasi Schools.
- The same kind of TLM can be made using technology instead of printed material.

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