CHAPTER - III

REVIEW OF RELATED LITERATURE
<table>
<thead>
<tr>
<th>CHAPTER III</th>
<th>REVIEW OF RELATED LITERATURE</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>STUDIES CONDUCTED ABROAD</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>STUDIES CONDUCTED IN INDIA</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td></td>
<td>72</td>
</tr>
</tbody>
</table>
CHAPTER III

REVIEW OF RELATED LITERATURE

INTRODUCTION

An understanding of the existing literature pertinent to the present study familiarizes the researcher with what is already known and what is yet to be known and tested on the topic. Besides, the review of previous literature provides an apt background for the development of the issue under investigation. The logical connections between the previous body of literature and the current work enable the researcher to be in the proximity of the solution. Therefore, a review of previous literature comprising studies on instruction through video, television, tape-recorders and radio and on listening comprehension while acquiring a second language is made and presented in the following pages.

STUDIES CONDUCTED ABROAD

Short, Sarah (1977) compared variable tone-compressed speech and normal rate speech based on time spent and performance of school children. The findings indicated that variable-speed audiotapes could be very effective in increasing reading speed. The students' reading rate gradually increased with increase in their listening rate. The ear, it seemed, helped to train the eye.

Olsen, Linda (1979) attempted to study the effects of rate-controlled tape-recorder on the listening comprehension of school children. The results showed that learning time could be cut (as much as 50 percent and an average of 32 percent) and comprehension increased (as much as 9.3 percent and an average of 4.2 percent) through the use of compressed and variable-speed audio-tapes. One reason that comprehension increased with accelerated listening rate was found to be that the listener was forced to increase his or her concentration on the material and another was that he or she was freed from the distractions that often accompanied normal speech such as pauses, throat clearing and other extraneous sounds.

Mueller, G (1980) experimented with visual contextual cues and studied their effects on listening comprehension of second language learners. This study revealed that
visual contextual cues used as script activators significantly enhanced beginner's comprehension of second language listening texts. Subjects with better linguistic proficiency were not affected by the use of such cues. Mueller's results pointed out the interesting question of L₁ interaction between L₂ proficiency and background knowledge in comprehension.

**Champion, Normajanblack** (1982) studied the use of commercial television in educational institutions. The major findings of the study revealed that educational institutions in the community studied have had frequent and continued interaction with and access to local television stations. Yet, changes at the television stations - economic, regulatory and personnel - had resulted in changes in air-time for educational programmes. Though the study is limited to one specific community, the attitudes of these broadcasters and educators and their suggestions to educational institutions for successful interaction with television stations should provide useful insights to those who are concerned with media access.

**Jones, Gaynellsara** (1982) made an attempt to study the relationship between media training and media use. The findings of the study revealed that there was a significant correlation with training in the areas of television, bulletin boards, globes, maps and projections, and the grade level taught by a teacher was not a significant factor in the use of the selected media.

**O'Brien, Paula Sullivan** (1982) made an attempt to investigate the role of the visual dimension for the teaching of foreign languages and its need in the language laboratory for the learning of dialogues, vocabulary, grammar and pronunciation. Two 20-minute video lessons were taught to two groups of native speakers of Spanish who had then enrolled themselves in beginner's English language class. The control group received simultaneous auditory and orthographic presentation of the lessons. The experimental group received simultaneous auditory, orthographic and pictorial presentation of the video lessons. Results showed that the experimental group scored significantly better in the post-test.

**Gras, Steven Michael** (1983) examined difficulties in second language learners experience in comprehending informal speech. Informal speech was hypothesized to be more difficult to comprehend than formal speech. His subjects, 79 Korean students,
completed two attitude questionnaires, one assessed integrative orientation and listening comprehension tests which measured their proficiency in informal and formal spoken English. It was found that informal style was more difficult to understand than formal style. Syntactic, phonological and lexical features of informal style hindered second language learner comprehension. Another major finding of the study was that proficiency increased with an increase in passive exposure to English through the use of television, radio, etc.

Massoudi, Symin (1983) attempted to study the development and evaluation of an interactive video computer programme in comparison with a similar traditional programme of instruction. The findings of the study revealed that there was a significant difference in achievement between the experimental and the control groups (p > 0.05 ) as measured by the post-test. The experimental group's performance was significantly better than that of the control group. Gender difference did not leave any effect on the performance of both the groups. The students comprising the experimental group considered the interactive video computer programme to be a positive experience and an effective learning tool.

Alagheely, Abdulaziz. M (1984) investigated the factors affecting teachers' utilization of language laboratories in secondary schools in Saudi Arabia. The findings revealed that 95% of the sample agreed that the main purpose of the lab was to aid teaching, and an almost equal percentage felt that a language laboratory should be an essential part of the school system. Almost all the subjects agreed that, if they could design their own teaching methods, the language lab would be more useful.

Glisan, Eileen. W (1984) studied the effect of word order on listening comprehension and pattern retention of second language learners. The findings indicated that word order significantly affected the degree of comprehension of the L2 learners. Word order and sentence position were found to significantly affect surface retention of the learners. It was an indirect evidence to support TG theory indicating that an aural processing strategy of converting pattern to the basic word order might have been utilized by the learners.

Lipsky, Richard. L (1984) investigated the role of four different types of instructional strategies, viz. drawing, identification, terminology and comprehension,
upon learning from an instructional television programme. Major findings of the study indicated that different instructional television strategies could differentially affect the mental skills that were necessary to complete a task. Thus, in spite of common content, knowledge acquisition was mediated by different types of activities relevant to the nature of the strategy involved. Time-on-test data of the study revealed that all treatment groups (conventional, interactive and interruptive televised instruction) were equally effective in the amount of time it took learners to proceed through a battery of four post-tests. This finding is of importance to the ITV producer in that he must often choose the most cost-effective strategy to reach the designated educational objective.

Molina-Mercado, Jose Antonio (1984) attempted to determine the relative effectiveness of videotaped, audiotaped and written contents of television programmes. Analysis of Variance (ANOVA) revealed that knowledge post-test mean scores were higher than pre-test mean scores (p<.01) with the exception of the control which showed a decrease. Differences among treatments (p<.01) subjected to pairwise contrast showed that video-cassette post-test means were higher than the other treatments (p<.01), and the treatments had higher post-test means than the control (p<.01). This study suggested that television and other media were useful as instructional media.

Ajibero, M (1985) made an attempt to study the attitudes of faculty members towards media technologies in Nigerian Universities. The findings of the study pointed out that the significance of media technologies to the realization of goals of the modern educational system could not be overstressed. They provided information that was more accessible to individuals and they had higher penetration in areas where print media were unsuccessful. They provided experiences not easily obtained through other materials and contributed to the efficiency, depth and variety of learning.

Alcala, Maria Elena (1985) examined the values of compressed speech and two presentation modes (narrative only and narrative and pictures) on the comprehension of discourse. The results suggested an interaction between the use of pictures and words-per-minute rate. The pictures that accompanied discourse were helpful for listening comprehension when a very high words-per-minute rate was used.

Andrews, Kenneth Gerald (1985) made an attempt to study the effectiveness of instructional feedback provided by interactive videodisc instruction. The study
compared the use of interactive videodisc technology as a medium of instruction to a conventional lecture-cum-videotape presentation involving the learning of a complex medical task. The results of two achievement tests (post-test and sequence test) were analysed to compare the groups. In both the tests, the videodisc group performed significantly better than the no treatment group. The use of video feedback was found to be slightly more effective than the use of verbal feedback, especially for higher video relevant items, and frequent interaction was found to be significantly more effective in some cases than infrequent interaction.

**Bakken, Jerome Lee** (1985) studied the effects of simultaneous reading and listening upon reading comprehension of reading passages of differing difficulty levels, as measured by an immediate recall protocol, with first year German students in a university programme. The purpose of the study was to ascertain whether a reading-while-listening approach might be a better strategy for improving reading comprehension than a reading only approach. The results indicated that significant differences existed between the treatment groups.

**Barker, Evelyne S** (1985) conducted a study to investigate transfer effects of listening practice to reading among 59 recently arrived refugees from Southeast Asia and Central America. It was hypothesized that after 12 weeks of listening practice, the experimental group would achieve significantly higher means in listening and reading than the control group instructed in grammar. The results of the study confirmed experimental treatment effectiveness and indicated a positive trend of learning transfer from listening to reading. However, the tool used for the study, the Secondary Level English Proficiency (SLEP) test developed by Educational Testing Service (ETS, 1980, 1981) was found, in an item analysis of the instrument, not suitable for use with the refugee students of limited English proficiency.

**Corbett, Julie Webb** (1985) studied the effects of television viewing habits on achievement following mediated instruction. The study showed that when comparing the effects of video learning, audio learning and narrative learning with the preliminary reading and listening test performances, the video treatment group scored significantly higher than the total sample. The relationship between comprehension and achievement from narrative learning showed a moderate amount of correlation and the relationship between auditory memory and achievement was slightly lower than the results obtained.
from comprehension tests. Difference in age, educational level and race had effects on achievement whereas gender difference revealed no such effects.

**Howe, Kenneth Daniel** (1985) attempted in his study to develop a new instructional technology for the initial phase of foreign language and second language instruction. The basic tenet, central to this study, was that in any foreign language or second language learning situation, listening comprehension skill should be developed ahead of speaking skill.

**Kinsey, Constance Cooke** (1985) studied the effects of an assisted reading programme on listening comprehension. The theoretical framework underlying assisted reading was that reading process could be facilitated if children had quantities of readily accessible meaningful reading material and that exposure to an abundance of oral language would enhance listening comprehension. The treatment consisted of an assisted reading programme in the form of simultaneous reading of and listening to taped books over a six month period. The results indicated that reading achievement and listening comprehension improved significantly for all language dominant subgroups. The bilingual group did not record any significant gain in listening comprehension.

**Stibravy, John A** (1985) studied the attitude of students towards classroom use of instructional television. His findings suggested that the more educated the student, the less he expressed favourable attitudes towards instructional television; the lesser the GPA the greater was the percentage of students who expressed favourable attitudes towards television instruction.

**Abrams, Arnold** (1986) studied the effectiveness of interactive video in teaching photography skills. The objective of the study was to assess the effectiveness of interactive video in the teaching/learning process. More specifically a comparison was made of the relative effectiveness of interactive video (IV) and linear video (LV) as modes of delivery in the acquisition of basic photography skills in an independent learning environment at college level. The findings of the study showed that the IV group recorded significantly and consistently larger achievement gains than did the LV group. It was also concluded that IV instruction, if carefully designed and implemented, could be a very powerful and effective mode of instruction from the viewpoints of both achievement and attitude.
Armstrong, George Blake (1986) studied the effects of background television on cognitive performance. The findings indicated that children would perform more poorly if they habitually watched entertainment television while doing homework, reading lessons or involving themselves in similar intellectual activities.

Haynes, George Randall (1986) conducted a study on laser videodisc and its uses in contemporary educational applications. The findings of the study showed that interactive tools had the potential to overcome the elitism that continued to prevail in our contemporary school system. This treatise favoured induction of videodisc medium into learning environments.

Peterson, Donna (1986) studied the effects of video-assisted instruction on achievement and attitude of pupils in first grade math. The results of the study showed that the video-assisted instruction was as effective as live instructions with reference to pupils' achievement. The video-assisted group also made significant long term positive gains in its attitude toward mathematics.

Wiesner, Peter (1986) conducted a field study on communication in distance learning. The sample of this exploratory study comprised adults enrolled in telecourses offered by New Jersey Community Colleges. The study concluded that telecourses and other technological systems might hinder intellectual growth as they eliminated the opportunity for contact.

Berkbeak, Rosalia (1987) sought, by means of a questionnaire, prognostications related to the status of education and the possible role of educational technology and technologists in the educational enterprise by 2001 A.D., as perceived by prominent educators. Some of the more important findings indicated that there was considerable consensus expressed by the respondents regarding their prognostications for education. They projected little to moderate change to the goals of education, with the pre-eminent role of the teacher and the importance of the school system persisting. However, they predicted curricular changes. Educational technology would be used extensively but in combination with the expertise of teachers.

Eisenstein, Shuller.S and Bodman.J (1987) studied an experimental video approach in a class in English as a second language for beginning learners. The teaching approach used in the class was based on an innovative video series developed by Caleb
Gattegno (1977). The tapes in this series were particularly unusual in that no teacher appeared on the screen. Instead, the focus was on students as they learned, and the viewer learned along with them. The study pointed towards generally favourable results for the video approach in terms of objective data on gains in the second language. Perhaps the most striking difference between the video and the traditional teaching approaches was the lack of a native model on the tapes. Viewers had to develop criteria for deciding when the learners on the tapes were accurately representing the structure and phonology of the target language since during the viewing period no external speaker judgements were overtly stated.

Javetz, Esther (1987) studied the effects of using guided and unguided listening practices on listening comprehension of novice second language learners. Two instructional videotapes were conceptualized and produced according to available theory and research from the fields such as instructional design, foreign language education and discourse processing incorporating the variables known to affect listening comprehension. Each videotape was used in two implementations, learner-controlled and computer-controlled. The resulting four implementations were combined into three sequences. One superior treatment was found, which included two listening experiences with a computer-controlled video. This superior treatment, guided listening, was another confirmation of the notion that guidance was a necessary component in the instructional/learning process.

Kapali, Ratna (1987) made an attempt to study the use of instructional television in Nepal. The findings of the study showed that the Nepalese had favourable attitude towards the use of instructional television in the schools of Nepal. The educational leaders of Nepal felt that instructional television could assist with educational programmes designed to promote educational, economic, social and cultural aspects of development.

Rosenbusch, Marcia Harmon (1987) studied the interrelationships among selected variables, viz. vocabulary, listening comprehension, oral production and pronunciation, in 52 children, three through five years old, learning a second language. A multiple classification analysis of variance procedure revealed that highly motivated
subjects performed better on vocabulary and oral production, but not on listening comprehension.

**Rost, Michael Allen** (1987) explored second language listening interaction with pre-recorded lecture texts. A series of tasks which varied in degree of ‘fixed’ difficulty was designed: multiple-choice probe tasks, cloze completion tasks and written summary. Learner performances on the tasks were analysed by a combination of quantitative and qualitative methods. The quantitative analyses indicated that text variables of elaborative episode insertion did have a significant task performance and that inclusion of organising episodes did not have a consistently significant effect. They also indicated that prior presentation of background information for the lecture did affect subsequent task performances. Qualitative analysis of summary protocols clarified many of the theoretical concerning interactions of text knowledge with prior conceptual knowledge and linguistic competence.

**Silverstein, Mark Alan** (1987) conducted a study on social interaction analysis of elementary school students and a level one videodisc system in an educational environment. The findings of the study showed that the patterns of behaviour most often suggested the presence of active acceptance. Implications of this study for educators included the recognition that students apparently showed in the videodisc system and they actively engaged it in an accepting manner.

**Weissenrieder, Maureen** (1987) conducted a study to suggest a pedagogical direction to facilitate comprehension of Spanish-language newscasts for L2 learners. The findings revealed that listening skills were best facilitated if comprehension strategies and how they interacted with the target register were adequately understood. Essential to the understanding of this interaction were the following issues:

(a) a discussion of the role that listening comprehension played in language skill formation and, in particular, the need to teach comprehension of the news;

(b) a description of the relevant linguistic properties of the broadcast register in Spanish; and,

(c) a discussion of the listening task in general and how it was pertinent to the news in particular.
Douglas, Patricia Jeanne (1988) attempted to study the effectiveness of interactive satellite delivery versus conventional delivery in selected courses. The findings of the study revealed that the courses presented on the Corporation Education Network (CENET) were equivalent, in terms of knowledge gained, to the same courses taught in the conventional manner and these courses on the CENET were perceived by the students as being of equal value, in terms of content, teaching/learning situations, objectives, interaction, graphics and evaluation, as the same courses taught in the conventional classrooms.

Echevarria, Ramon Luis (1988) studied the importance of listening comprehension in the process of second language acquisition. He considered the teaching methods used in the past that might offer reasons for preferring aural training ahead of oral production or vice versa. He elicited opinions of teachers and students about their own training and its effectiveness and reviewed recent innovative methods that placed emphasis on the teaching of communicative competence. The study presented evidence offered by many scholars that substantiated the advisability of emphasizing aural training before demanding oral production. The author agreed with this view and considered it very important in the development of lasting skills in a foreign language.

Esarey, Gary. R (1988) studied factors affecting the listening comprehension and attitudes of native speakers to the speech of foreign learners of English. The results showed that the number and type of errors had no effect on listening comprehension scores.

Khaniyile, Emmanuel Bafana (1988) considered the effects of television as an adult education medium in moderation of Zulu culture. The author concluded that adult education was necessary to modernise the Zulu community and television as a medium would be most helpful in this direction. The results also pointed to the factor that group viewing was an effective learning process.

Suriyawongse, Suteera (1988) made an attempt to study the attitudes of faculty members in the Open Universities in Thailand toward media technologies. The subjects felt that radio as the form of media was most frequently used in the past. They considered television as the form of media which made the content of the course more
clear for students, promoted students’ independent study, increased student motivation, was helpful in improving instruction and was cost-beneficial. They also favoured the use of closed circuit television as the form of media which enhanced teaching quality and student learning in virtually all instructional contents, aided instructors and improved instruction. They were, however, of the opinion that interactive video systems as the form of media were most inhibiting to instructors.

Van, Rooyen-Maree Anina (1988) considered television as a medium of instruction to fulfil non-formal educational needs of Whites in the Republic of South Africa. The study concluded that a relevant educational television programme that was aimed at providing for specific learning needs of adult learners could not be developed unless the needs of the target group were identified in advance of planning and development.

Brund, Earlese (1989) conducted a study on map literacy with an aim to design an instructional videotape to teach map-reading skills to high school students. The findings showed a significant increase in the students’ academic performance, a more positive attitude toward map-reading and a tremendous liking for the use of VCR in the classroom.

Cemiamo, Katherine Sears (1989) attempted to study the relationship of preconceptions and the effects of interactive and covert practice in the context of video-based learning. The results of the study indicated that the learners who were provided with an interactive video lesson that included practice questions and feedback recalled significantly more information than the learners who received lessons on television without practice questions and feedback.

Conrad, Linda (1989) experimented with time-compressed speech on native and English as a foreign language listening comprehension. The experiment used time-compressed speech to handicap the process of listening comprehension in an attempt to observe aural processing strategy differences among groups of native English speakers and high- and medium-level skill groups in Germany learning English. The findings of the study revealed that overall recall of the time-compressed sentences decreased with decreased proficiency in English. Whereas native listeners demonstrated a strategy of
concentrating on key content words in the stimulus, both listener groups tended to recall more words they had heard in initial or final sentence position.

Dawson, Bruce Alan (1989) attempted to study the effectiveness of interactive video simulation in teaching discipline theory to pre-service teachers. The findings showed that interactive video simulations could help pre-service teachers learn the discipline theory. The premise that interactive video simulations could be beneficial in equal measure to either sex was supported. The personality factor seemed to play little or no role in the ability of pre-service teachers in learning the discipline theory with the help of interactive video simulations.

McNeil, Barbara Jean (1989) used a meta-analytic technique and investigated 63 studies integrating them for studying cognitive achievements effects after interactive video instruction. The findings revealed that the focus of interactive video research was turning from comparative studies and moving toward investigations of instructional alternative strategy, for group-paced learning and as a supplement to traditional instruction. Traditional forms of instruction should not be totally abandoned for interactive video.

Steel, David Brooks (1989) studied on the effects of non-programmed, non-remediated and interactive videotape approaches on the achievement of school students. The results revealed a significant difference among the post-test means at 0.01 level. The control group showed a 1.5 per cent increase in achievement from the pre-test mean to the post-test mean. The non-programmed group registered a 46 per cent gain and the non-remediated group a 80.16 per cent increase. The interactive group recorded a 151.27 per cent increase from the pre-test mean to the post-test mean.

Anyanetu, Patrick Emeka (1990) considered the video cassette recorder (VCR) as an optional extension service delivery tool. The objective of this study was to examine the potential of the VCR as an alternative for delivery extension services to the Co-operative Extension Service clientele in an information sharing environment. It was concluded that the majority of the VCR users perceived it as an effective means of improving their skills and acquiring more competencies related to their work in the privacy of their homes.
Boatman, Dana Frances (1990) made an attempt to study acquisition patterns of grammatical, lexical and phonological systems in second language. It was observed that while second language learners master L2 grammatical and lexical systems, native-like control of new phonological systems was rare. This was partially attributed to learner’s failure to master the phonetic features which used to contrast L2 phonemes. It was also found out that the learner’s auditory phoneme identifications and representations did positively correlate with their performance on the grammar test.

Kakanant, Chanida (1990) made an attempt to study the effects of interactive videodisc laboratory simulation on problem-solving and learning performance of high school students in learning chemistry. The results showed that the IVD group scored significantly higher in problem-solving strategies and spent less time to complete an experiment than the control group. The study indicated the benefits of using the IVD laboratory simulation technique in facilitating problem-solving performance of the students and saving their learning time. It also demonstrated that IVD simulations could be a promising alternative to live instruction-cum-demonstration and would enhance laboratory instruction pertaining to complex, expensive and time-consuming laboratory experiments.

Learmont, Donna (1990) measured the affective differences between host-site and remote-site distance learners participating in two-way interactive TV classrooms for high school credit. Though there were no statistically significant group differences attributable to teacher control and discipline, the results revealed that there were some significant affective differences between the groups of students pertaining to personal contact with the teacher, teacher feedback and perceived cognitive achievement with regard to the amount of time the teacher spent with the students.

Nixon, David Earl (1990) made an attempt to study the learning outcomes of post-secondary students in an interactive video at an Iowa Community College. The objective of the study was to compare the learning outcomes of the students who were enrolled in various liberal arts and science courses for one full semester as a measure of effectiveness of simulteaching via two-way interactive television. One group of students received instruction at an origination site with the simulteacher present and the other group received instruction via interactive television at a remote site. The findings of the study showed that simulteachers could deliver instruction as effective to students via
interactive television located at remote sites as to students positioned face-to-face with
the simulteachers at the origination sites.

Stafford, Jenice Yvonne (1990) studied the effects of active learning with
computer assisted instruction in comparison with interactive video instruction. The
study concluded that retention was significantly higher in the case of interactive video
instruction as opposed to computer assisted instruction.

Ziegler, John Herman (1990) attempted to study the effect of interactive video
on learning perceived effectiveness and user attitudes in academic library orientation
programmes. The objective of the study was to determine if there were any significant
differences in recall learning and perceived effectiveness among the groups using
interactive video (with learner control), linear interactive video and conventional tours to
orient themselves to an academic library. The results revealed that the interactive video
with learner control treatment group significantly outperformed the other two groups in
both recall learning scores and perceived effectiveness scores.

Bennett, Beverly Jean (1991) studied the influence of television from the
perspective of an African-American male. The study concluded that television was an
influence in the lives of the African-American males. Though the respondents considered
television programmes to be unrealistic, they still had an impact on the aspirations, values
and attitudes of the young African-Americans.

Emmans, Cindy (1991) conducted a study on interactive video discs and
analysed various skills involved in educating educators. The results of the study revealed
that the best way to educate educators in the use of IVD technology would be first
through one or more formal workshops. The emphasis of the training should consider
the question of sufficient time for individual interaction and practice with the equipment.

Hall, Arbie (1991) made an attempt to study the effects of minimodule
instructional design on reaction and achievement through interactive television
instruction. The study compared the effects of traditional and minimodule instruction
delivered through an interactive television system in an industrial setting. The instruction
was a series of minimodules versus traditional lecture style delivery. The effects upon
the students' attitude and achievement were evaluated. The minimodule approach
focussed on increasing the frequency of dialogue between the student and the instruction
with the help of a structured format. The results showed that there were more favourable student reactions and highly significant achievement for the minimodule treatment.

**Hrecz, Rita Arlene** (1991) studied the impact of interactive video discs and role playing strategies relating to student learning and attitudes about subject abuse as taught by pre-service teachers. The findings showed that there was not much significant difference in learning between interactive video groups and other groups.

**Jan, Jiunn-Jyn** (1991) measured the impact of television on the cultural values of Chinese students. The study revealed that if television did not have an impact on their acceptance of American values, this impact was likely to range from being mild to moderate. However, the gender of the respondents and their meaningful interaction with Americans might influence the impact of television on their acceptance of American values.

**Leitner, Rona Karan** (1991) made a comparison of the effects of reading comprehension of educational video, direct experience and print media. The findings of the study showed that the educational video was more effective when compared to traditional lessons in print media for all ability levels (effect size, $d=0.5$), the video lessons generated a larger effect size than the hands on lesson for low ability readers ($d=0.69$) and there was no significant difference between the effect of the video lessons on low ability readers and the traditional lessons on high ability readers ($d=0.29$). The video lessons generated a higher mean score for all ability readers than the hands on lessons, but the results only neared the level of significance ($d=0.40$). Besides, there was a 24 percent of the variance which was explained by ability level, a 5 percent by the treatment given and a 2 percent resulted from an interaction between the treatment and the ability levels. In brief, the study encouraged the use of educational video as a pre-reading activity in order to provide prior knowledge and thereby increased comprehension especially for low ability students. It also demonstrated that educational video could be used as a substitute for direct hands on experiences.

**Libler, Rebecca** (1991) conducted a study on the effectiveness of interactive television as the chief mode of instruction in high school physics classes. The findings
revealed that the students in the interactive television classes generally held positive
attitude towards the content of physics.

Mason, Lynn Merrick (1991) conducted a study on the effectiveness of
interactive video simulated chemistry laboratories on learning outcomes and attitudes of
students enrolled in a freshman college chemistry laboratory course. The results of the
study revealed that the students were able to acquire knowledge of laboratory safety
procedures and experiments via interactive video simulated chemistry laboratory
experiments without any decrease on their attitude. Field independent learners achieved
better than field dependent learners. It was also known that freshman general chemistry
laboratory classes would profit from a judicious mixture of traditional laboratory and
interactive video simulated laboratory experiments.

McWhirter, Michael Edwin (1991) studied the effect of level one videodisc
technology on sixth grade student achievement in science. The primary focus of this
quasi-experimental study was on the effectiveness of level one videodisc instructional
format as opposed to traditional textbook instructional format on student performance in
science on a two week unit on weather. The study concluded that level one videodisc
format could influence student performance.

Merhot, Carole Jean (1991) compared the effects of real-time motion videodisc
and still frame on a group of second grade students via interactive hypermedia. The
study showed that there was no difference between hypermedia still frame and real-time
motion treatments; there were no interaction effects between cognitive style field
independent and field dependent dimension when treated either through hypermedia still
frame or through real-time motion presentation.

Obermier, Timothy Ronald (1991) compared the academic performance of
video-based distance education students and on campus students. The study found that
there was not much significant difference in academic performance between graduate
students receiving their instruction via video-based distance education techniques and
graduate students receiving their instruction via the conventional on campus instructional
method. The study also found that students of video-based distance education
instructional delivery performed equally well when compared to their on campus
counterparts. The video-based distance education group did not differ in their academic
performance as compared to the on campus group in the discipline areas of natural sciences, engineering and business.

Al-Sharhan (1994) studied the use of audio-visual aids in intermediate stage schools for girls in Riyadh (Saudi Arabia). The results showed that the subjects significantly favoured the use of audio-visual aids in all course-subjects and the experimental group was on the higher side of the scores in the post-test in course-subjects treated with audio-visual intervention.

STUDIES CONDUCTED IN INDIA

Seth, Indu (1983) made an attempt to study the effectiveness of educational television on the educational development of primary school children. The investigator inquired into the issue in terms of language development, acquisition of information related to ETV programmes and scholastic achievement. She also studied the effect of intervention programmes, i.e. pre-telecast and post-telecast activities conducted by teachers along with ETV programmes. The results showed that language development of children exposed to ETV was higher than the control group. The experimental group treated with intervention programmes significantly compared better than the other experimental group without intervention programmes. The ETV group with intervention was found the highest on acquisition of information related to ETV. The scholastic achievement of students exposed to ETV programmes along with intervention was higher than the other two groups. An important implication of the study was that if more programmes pertaining to syllabus areas were telecast, it might contribute more in the achievement of students in school subjects.

Gill (1984) investigated into the impact of ‘Teach-English-Learn-English’ (TELE) radio programmes on teachers' as well as pupils' English in the state of Gujarat. The four language areas devised by the author to measure the proficiency of listeners in English were pronunciation, vocabulary, grammar and listening comprehension. The findings showed that the impact of the TELE series on the teachers' own English was positive and was even greater in the case of the pupils. The TELE series helped the teachers and the learners of English in the rural schools. This supported the contention that radio could fruitfully be used to strengthen the teaching of English in rural areas where facilities were comparatively inadequate.
Wad (1984) studied the scope of communication media such as radio and television in education at high school level in the state of Maharashtra. The findings showed that school broadcasts were useful in increasing the span of attention of school-going children. The need of communication media in the teaching-learning process was felt by teachers and parents. The teachers in rural areas were more keen on using radio and television programmes in the learning process. The communication media remained a complementary aid of classroom teachers and they were keen on using these media if the syllabus to be completed was not heavy.

Dhamija (1985) compared the effectiveness of three approaches of instructions, viz. conventional, radio-vision and modular on achievement of students in social studies. One of the findings of the study showed that the involvement of students in the classroom was maximum when they were taught through the radio-vision approach.

Gunasekaran (1988) analysed the errors committed by pupils at phonological level in the case of learning English as a second language. He found out that phonological errors were due to lengthening or shortening of vowels and introduction, dropping or germination of consonants. He also found out that lexical errors were due to the impact of the spoken forms of English.

Balasubramanian (1989) attempted to study the classroom climate in relation to pupils' achievement in English at higher secondary stage. In this study, the author also made an attempt to study the communication patterns of teachers teaching English at the higher secondary stage. The results showed that professional experience and qualifications of the teachers, their gender, nature of school management and location of the school had no significant influence on most of their communication patterns. It was also found out that indirect influence patterns of teachers' classroom behaviour influenced better achievement-motivation and academic achievement in English while direct influence patterns of the teachers' classroom behaviour caused low level achievement-motivation and academic achievement in English.

Dhanabagyam (1989) constructed an experimental design to compare the achievement of two learner groups which were taught through video assisted instruction and conventional instruction respectively. The findings marked significant difference
between the experimental and the control group. Television lessons were found to be interesting and useful for the attainment of learning objectives.

**Duraisamy** (1989) made an attempt to study the relationship between the performance of school students in conventional group and television medium group and to find out whether television increased their understanding of the subject matter. The findings of the study were that the use of instructional media had a significant effect in teaching and the use of television medium helped the low achievers to perform better in the post-test.

**Indrani** (1989) conducted an experimental study to compare the retention of concepts in school students who learnt through conventional method and video-recorded instructional material. The findings of the study were that forgetting was very less in the experimental group and the differences between the means of consecutive tests were highly significant. The video-recorded instruction was found to be more effective than the conventional mode of instruction.

**Lakshmipathyraju** (1989) compared the effectiveness of programmed learning (book format) and television lesson in teaching pupils at secondary schools. The findings of the study suggested that there was no significant difference between the two modes of instruction i.e. book format programmed learning and television lesson. Both the groups achieved equally in their immediate post-tests. Television teaching, however, helped the girls achieve better than learning through PL booklets.

**Rajamani** (1989) studied factors which affected instructional technology and its application to teaching at higher secondary level. The findings of the study revealed that the group of pupils taught through video assisted strategy had shown significantly higher gain in achievement scores than the group of pupils taught through the conventional methods. There was no relationship between the socio-economic status of pupils and their achievement. Age, sex and medium of instruction, however, affected the instructional technology and its application to teaching.

**Girija** (1990) attempted to study the learning process of English by higher secondary students. One of the findings of the study was that medium of instruction and socio-economic status of pupils affected their learning process. The students exposed to
mass media like radio, television and newspapers were found to be overconfident and in their cases the learning process of English was very smooth.

Pushpalatha (1991) made an attempt to study the learning process of English as a second language at the higher secondary level. Her findings showed that phonological errors affected the comprehension skill of the pupils. The errors in vowels included change of vowels, substitution of vowels, omission and replacement. Similarly, in the case of consonants, the errors were due to replacement, substitution, addition and consonant clusters.

Purushothaman, Shanmugasundaram and Stella (1992) attempted to study the effectiveness of video assisted instruction in improving the skill of pronunciation in English of school children. The subjects were in three random groups treated with video assisted instruction, audio assisted instruction and traditional instruction respectively. The findings revealed that audio assisted instruction was superior to traditional instruction, and video assisted instruction was still better than audio assisted instruction. The authors were of the opinion that the supremacy of video assisted instruction in the acquisition of pronunciation skill might be due to the fact that the lip movements were observable in the video format which added to meaningful learning.

Sudarsan (1992) studied the media effectiveness in teaching-learning situations at the secondary level. The findings of the study revealed that the listening power of the students in audio group got increased along with their promotion from one standard to next higher standard. Unlike the audio media, vast difference was not noticed in the overall performance of the students of the experimental group in visual media. The scores of the experimental group in TV media revealed that the mean scores got nearly the equal treatment effect in the lower and the higher standard. The general performance scores in multimedia showed that the scores were higher than the performance in other media viz. audio, visual and TV.

Sushma (1992) made an attempt to diagnose the comprehension skills of the primary students learning English as a second language. The study revealed that the subjects committed errors at the phonological level. They showed tendency for wrong analogy over generalisation.
Singh, Ummed (1993) studied different media of instruction, viz. traditional mode, programmed learning material in linear book format, programmed learning material in tape-slide format and programmed learning material in audio-tape format, in terms of their relative efficacy. The results of the study demonstrated that programmed learning material in tape-slide format as a method of instruction could be better than the other media and the programmed learning materials in other formats could be at least as effective as traditional teaching by classroom teacher. The study concluded that productivity of the classroom and participation in teaching on the part of students could be optionally increased with the help of tape-slide programme.

Balasubramanian and Yoganandam (1994) studied the effectiveness of pre-recorded audio cassette as a supplementary device in teaching English pronunciation to school children. The findings revealed that while trained teacher was effective in improving the pronunciation of English vowels, diphthongs and consonants among subjects, pre-recorded audio cassette as a supplementary device was effective in improving the pronunciation in respect of consonants only. Pre-recorded audio cassette as a supplementary device was as good as specially trained teacher in improving the pronunciation of English sounds among school children.

Purushothaman and Stella (1994) studied the effectiveness of teacher-controlled interactive video for group instruction. The tools used were IV treatment, traditional lecture and discussion on a script for video lesson prepared by the authors. The findings showed that the teacher controlled IV technique resulted in better academic achievement compared to the other two techniques. The teacher's role when combined with a validated video lesson was able to produce the most desired effect on learning. The traditional question whether the teacher component would be eliminated from the system of education was emphatically denied or ruled out from the findings.

Usha (1994) investigated the factors which affect the listening comprehension of second language learners in India. Her subjects were L2 learners of English. The study categorised the linguistic factors influencing the listening comprehension of L2 learners in India into four levels, viz. phonological, lexical, syntactic and semantic. Speech rate and schemata were other factors that influenced listening comprehension. The findings revealed that effective listening was imperative if any utterance was to be understood correctly. A failure to perceive any one of the features - phonological, lexical, syntactic
Goel and Vasthava, Ranjana (1995) made an attempt to study comparative effectiveness of Piagetial Teaching Model (PTM) through live demonstration, direct video and interactive mode. The sample for the study comprised nursery teacher trainees (1991-92) of the Institute of Education, Indore. The control group took a live demonstration on PTM. One experimental group viewed in direct mode and another group was treated in interactive mode. Analysis of the data was done by using ANCOVA taking pre-test scores as covariate. It was found that the differences in the mean achievements through the live demonstration mode, the direct video mode and the interactive mode were not significant. So a video programme could be used as a substitute for live demonstration. Further, if the mediated demonstration was self-contained, there was no need to offer interactive mediated presentation. So a video programme for training on PTM could be equally effective.

Reddy and Ramar (1995) attempted to measure the effectiveness of multimedia based modular approach with special reference to low achievers at school level. The results showed that the media method, through audio and video cassettes, was more effective than the traditional method and it enabled the low achievers to cope up with normal students to a great extent.

Sahoo, Namita and Goel (1995) attempted to study the achievements of rural, urban and B.Ed. students through direct, simulated talk-back and interactive modes. Twenty-five Country Wide Class Room (CWCR) programmes telecast by Doordarshan were experienced by the subjects in different modes. The findings revealed that interactive mode was more effective than talk-back mode and talk-back mode was more effective than direct mode in both rural and urban students, whereas, the order of effectiveness with the B.Ed. students was talk-back - interactive - direct.

Soundararaja Rao and Rajaguru (1995) studied the effectiveness of video assisted instruction on the achievement of slow learners. The findings revealed that the slow learners of control and experimental groups were alike in immediate retention. However, female slow learners of video instruction group performed better in immediate retention than conventional learning group. The socio-economic status and parents'
educational status had least impact on intelligence of both the groups of learners. The male and female learners were alike in intelligence test. The intellectual ability of slow learners was positively correlated with post-test and retention test. The correlation between post-test and retention test was also positive.

**DISCUSSION**

The review of studies on instruction through radio, tape-recorders, non-interactive video and interactive video as well as studies on listening comprehension while acquiring/learning a second language both in formal and informal situations of learning conducted in India and abroad assisted the investigator to be familiar with the trends and the patterns existing in the areas of investigation and provided him with a suitable background for the development of the present study. Besides, the review of literature enabled him to be in the proximity of the solution to the problem in hand.

It was found that the different instructional media revealed differential effectiveness in the realisation of the instructional objectives in different teaching/learning situations. The ensuing discussion is an attempt in this direction to study the relative importance of the studies reviewed and their significance to the problem in hand. Not only does it bring out a synthesis of the related studies but also furthers our understanding of the importance or otherwise of audio and video in the acquisition and learning of a second language.

Media technologies provide experiences which cannot be obtained easily through other materials and they contribute to the efficiency, depth and variety of learning (Ajibero, 1985 and Al-Sharhan, 1994). They also enable the low achievers to cope with normal students to a great extent (Reddy, 1995). Media training and media use have a significant correlation in the areas like television and other projections (Jones, 1982).

Radio, as a medium of education remains a complementary aid of language teachers and it strengthens the teaching of English, especially in rural areas where facilities are insufficient (Gill, 1984; Wad, 1984; Dhamija, 1985 and Girija, 1990).

It is felt by a majority of language teachers that the language laboratory is an essential and useful component of the school system. In the absence of a laboratory, the tape-recorder could be exploited by the language teacher to a great extent. Pre-recorded
audio cassettes help the English teacher to improve the pronunciation of school children. Interaction in the classroom can be increased with the help of these cassettes (Alagheely, 1984; Singh, 1993 and Balasubramanian, 1994). The rate-controlled tape-recorders are helpful to the language teacher in developing listening comprehension skills of the students (Short, 1977; Olsen, 1979 and Alcala, 1985).

Entertainment television for educational purposes, however, does not find support from the findings of the majority of the investigations studied. The children would perform poorly if they are habitual watchers of entertainment television. The attitude of high achievers towards entertainment television is also not positive in many cases (Stibravy, 1985; Armstrong, 1986; Bennett, 1991 and Jan, 1991). On the other hand, instructional television coupled with frequent dialogues between the students and the teacher has evoked positive responses. Television as an effective medium for the purposes of distance education and adult education is an important finding of some of the studies in various contexts (Seth, 1983; Lipsky, 1984; Molina, 1984; Wiesner, 1986; Kapali, 1987; Douglas, 1988; Khaniyile, 1988; Suiryawongse, 1988; Van Anina, 1988; Lakshmipathyraju, 1989; Learmont, 1990; Hall, 1991, Libler, 1991 and Sahoo, 1995).

Visual contextual cues, in the form of video programmes, are also effective in language teaching and learning situations. The induction of videodisc medium into learning environments has been found to yield higher performance in the acquisition and learning of new languages. The active acceptance of the learners in this regard is also a positive sign for introducing interactive video in the second language classroom to a great extent. Laboratory simulation techniques, simulteaching and learner-controlled home video are a few possibilities of the video medium (Andrews, 1985; Abrams, 1986; Haynes, 1986; Peterson, 1986; Eisenstein, 1987; Silverstein, 1987; Brund, 1989; Cemiamo, 1989; Dawson, 1989; Indrani, 1989; Rajamani, 1989; Steel, 1989; Kakanant, 1990; Nixon, 1990; Stafford, 1990; Ziegler, 1990; McWhirter, 1991 and Purushothaman, 1992). A few studies, however, warn that traditional forms of instruction should not be totally abandoned for interactive video (McNeil, 1989; Hrecz, 1991; Mason, 1991 and Merhot, 1991).

Proficiency in the case of the non-native speakers has been found to increase with an increase in passive exposure to English through the use of television and radio (Gras,

In any foreign or second language learning situation, listening comprehension skill should be developed ahead of speaking skill (Howe, 1985 and Echvarria, 1988). Guidance is a necessary component in the improvement of listening comprehension skills (Javetz, 1987). Prior presentation of background information affects task performances in listening comprehension (Rost, 1987). Vocabulary, word order, sentence position, grammar, oral production, pronunciation, register and reading programmes assist very much in the development of listening comprehension skills (Glisan, 1984; Bakken, 1985; Barker, 1985; Kinsey, 1985; Rosenbusch, 1987; Weissenrieder, 1987 and Usha, 1994).

Syntactic, phonological and lexical features of informal speech hinder second language learner's listening comprehension (Gras, 1983 and Conrad, 1989). While second language learners master grammatical and lexical systems in that language, their control of new phonological systems is rare. This affects their performance on the listening comprehension tests (Boatman, 1990 and Sushma, 1992).

CONCLUSION

Our real-life listening activity, according to Penny Ur (1984), has the following characteristics:

(a) We listen for a purpose;
(b) We make an immediate response to what we hear;
(c) We see the person we are listening to;
(d) We come across some visual or environmental clues as to the meaning of what we hear;
(e) We hear stretches of discourse in short chunks;
(f) We hear discourse which is spontaneous and different from formal spoken form in the amount of redundancy, noise and colloquialisms and in its auditory character.

When we watch television or listen to a news item or a lecture, we hear uninterrupted talk for a comparatively longer period of time. Whether it is informal listening or formal listening, the classroom practice should usually incorporate such characteristics of real-life listening. The AV media, in the forms of radio, tape-recorder, television and video
cassette player, might provide the second language learner a certain type of practice in
listening comprehension. They help him to hear the distinct English sounds, understand
the English systems of stress, intonation and rhythm, cope with redundancy and noise,
facilitate prediction, understand different accents and exploit aural and visual
environment clues for successful listening comprehension.

From the review of related literature, the researcher finds that a substantial body
of empirical studies has shown the significant advantages of the AV media in achieving
the envisaged objectives of language learning in general and those of learning English as
a second language in particular. It is understood that the AV intervention has been
found to improve the learners' proficiency in listening comprehension and with this
assumption in view the researcher designed the study reported in this thesis and made an
attempt to explore the implications of audio-video intervention in developing listening
comprehension in English at the higher secondary stage.