CHAPTER-II

REVIEW OF RELATED LITERATURE

INTRODUCTION

Reviewing literature is an important part of the investigation. In many ways researchers are helped by reviewing for e.g. information about quantum of work done problems could be tracked more Wittlingly risk involved in duplication of work can be controlled. In addition to these researches understands problems associated with this field. Chiefly researcher time and energy both get spare cause of review guiding hypothesis indicative ways of investigation and comparative data for interpretive purpose are provided by the survey of relative literature. The researchers study the related literature to great extent for preparing a foundation for defining the problem precisely interpreting the data meaning fully and comparing similar studies. In different stage of the review, the problem and the related dimensions to the problem are studied.

IMPORTANCE OF THE REVIEW OF THE RELATED STUDIES

In any research programme the most fruitful phase is researching for related material though it is time consuming. Researchers comes to know and get benefited by the work which is already been done in their field like attempts made by other, methods of attack which have been promising and problem which they need to focus. According to Singh &Bajpal, the significance of ‘Review of more related literature’ is as follows:

“For any specific research project the researcher must be thoroughly familiar with both previous theory and research. To assure this familiarity, every research project has as one of its early stage, a review of the theoretical and research literature”.

Brog & Gall (1963) expressed their views as follows: “The literature in any field forms the foundation upon which all further work will be built.”
In the context of purposes of the survey of related literature Good, Barr and Scats expounded their views as follow:

1. Utilizing the existing facts already available to solve the problem adequately without any additional research and by avoiding risk of duplication
2. Providing Ideas, theories, explanation or hypothesis which are valuable in precise description of the problems
3. Suggesting methods of research which are appropriate to the problem.
4. Locating the comparative data useful in the understanding the results.
5. Contributing into the general scholarship of the investigator.

Other than helping the arranging of research work an audit of related writing additionally give a level of commonality to the examination with the work which has been done in past moreover their contributions to the exploration widens the tremendous information pool that has just been tapped. So it can be reasoned that it is vital to found, uncover and assess the past research reports. The investigates which have coordinate with show. Studies are evaluated for satisfying this reason.

Wiersma (1976) states that, “Educational research is not or at least should not be, carried out in an informational vacuum”.

**Source of Previous Studies Follows General Guidelines**

In the field of sell learning technologies the concept of Computer Assisted learning is at very young stage. Researches regarding programmed Instruction and computer Assisted Language learning specifically in developing countries like India, are quite less in numbers. In states like Haryana there is not any meaningful in respective field. By looking at such situation” Internet is main help for investigator for researching the international resources available about the past research done in the respective field. The Scholarly articles and research papers has been downloaded from the internet by the investigator with the help of INFLIBNET center Delhi. INFLIBNET- Data and Library Network Center (www.Inflibnet.ac.in or mirror at Inflibnet.ernet.in) is a self-ruling - Inter University Center (IUC) of University Grant
Commission (UGC) worried about making the framework for sharing of library and data assets material and administrations to scholastic and research organizations. Keeping in mind the end goal to create data condition, it works together with the libraries of the Indian Universities to shape the eventual fate of the scholarly libraries. In extra, the material like article and research paper which are not available for free download from the INFLIBNET Centre are purchase online form their publishers.

Review Literature on English Language


Out of 41 studies reviewed, 4 studies have been conducted at primary level, 15 at high school level, 18 studies have been conducted at higher education level, 1 study was conducted to teach creative writing online to teachers, 1 study was conducted in which poets were interviewed to explore nature of poetry and teaching and learning of poetry. 1 study was conducted to investigate effects of implementation of ECFE (Early childhood family education) programme, 1 study on participatory action process was done in a community, whereas, 1 case study of teachers’ evaluation was done at higher education level in participatory approaches.

In most of the studies conducted in India and Abroad on creative writing, tools, such as questionnaire, opinionnaire, interview-schedule, rating scale, reaction scale, rubrics and students’ writing samples were used. In the area of Participatory approach, Keller used qualitative methods of observation, interviewing and the review of program documents. Hunt used survey-questionnaire. Magarray used participatory evaluation. Annerstedt et al. used problem-based storyboards to study participatory approach on learning. Simpson used case study to study effect of team learning on development of creative writing of college students and Latha used activity-based approach to
promote participatory approach.

In the researches done overseas on written communication, Hilldenbrand (1985) suggested that the mode of writing could influence the writing process. Jones (1985) investigated the factors constraining writing and found out that monitoring would not lead to improve writing. The study suggested that the process oriented writing instruction would help acquisition of English. Sarma (1989) designed a course in written English. The study found that the use of communicative language teaching strategies can bring about an improvement in the use of desired skills. In the study conducted by Antonisamy (1996), the package of auto instruction program was helpful to the students. In the study conducted by Boughey (1997), the group writing experience was considered favourable both by students and lecturer. Group writing provided more practice in writing and discussing, and manipulating the ideas. Paulus (1999) found that the changes made in essay writing of students was a result of peer and teacher feedback. It was also found that overall improvement in essay writing can be done by multiple drafts. Lamberts (1999) found that conferencing improved students’ writing skill effectively. In the study conducted by Sengupta (2000), the teaching strategies were found to have a measurable influence on writing performance of students. Weber (2001) found that the concordance and classification based approach gave understudies a solid establishment in paper composing and also in lawful thinking. Bassett et al. (2001) found that the students’ writing abilities were increased and there was an increased self-confidence in the editing and revising of student work in area of writing. Hopkinns (2002) found that the intervention was helpful to low achieving students as their essay writing skill was improved. In the study of Stone, Ashbaugh and Warfield (2002), the results were consistent with the predictions. Kamala (2003) developed communicated strategies to enhance the written communication skill in English. It was evident that the students performed well in content, in writing and the form of writing in progressive tests. The use of the communicative strategies facilitated the enhancement of written communication skill.

In the research studies stated above, it has been found that some researchers have evolved methods in E.L.T. (English Language Teaching).

The study conducted by Weber (2001) revealed that a strong and firm foundation was
created in essay writing as well as in legal reasoning by concordance and genre based approach. In the study conducted by Agesilas (2002), the findings were that in improving the writing skills components like students perceived classroom environment, peer response, collaborative writing and speaking helped the students. The findings of Teo (2004) study suggested that structured guidelines led to English language learners’ constructive collaboration in writing. Franco (2008) found that learning through wiki supported students in their writing skills and developing social relationship. Dufrene (2010) found that wiki encouraged the interaction of peers and facilitated online group work. Schnee (2011) found that students liked the intervention and their attitudes towards writing generally increased. Zhao (2014) discovered that there was a dynamic and ceaseless educator bolster way to deal with peer appraisal which demonstrated to considerably influence students' observations, and the nature and saw estimation of companion evaluation individually. Troestern (2015) found that the students had a better understanding of the writing process, and they had more confidence when analyzing their own writing. One of the implications of the study conducted by Adleir (2002) was that students need enough structure to keep play functional; and they should be given freedom to play with the structures of words. In the study conducted by Tarnopolsky (2005), he found that by using language and the grammatical, syntactical, lexical, and stylistic means for expressing the ideas, emotions and feeling, students developed skills of writing sophisticated creative English.

**HISTORY OF CALL**

Since 1960s, Computer have been used for language learning we can divide this 30+ history, mainly into three stages. Communicative call, behavioristic call, and the integrative call. There was a particular level of innovation and in addition a specific instructional method that related at each stage. Sub – part of the more extensive field of PC Assisted directions are the Behavioristic call considered in the 1950s and actualized in the 1960's and 1970's. Bore and practice implies tedious dialect bore is been included by this method of call impacted by the behaviorist learning mode. Correspondence call considered as next stage ended up plainly known toward the finish of 1970's and 1980's and mid 1980's new PCs were giving gigantic potential to
individual's work amid this period. PC as mentor another call display utilized for open exercises has PC as jolt .The PC was all the while being utilized as a part of a specially appointed and detached mold and finger itself making a more noteworthy commitment to minimal as opposed to focal components of the dialect learning. this is been points out by critics in late 1980sand early 1990s content based approach was used to give learners an authentic environment as well as this was used to integrate the various skills of language learning. A new perspective on technology and language learning termed as integrative call has been led by this Integrative call is a to integrate LPRW with technology into the language learning process. Bax remark on this as "Incorporated call is identified with mechanical development and alludes to the phase when the innovation winds up plainly imperceptible, implanted in ordinary practice and in this way "standardized" If we consider typical illustrations, a wristwatch, a pen, Shoes and composing are for the most part advancements which to the degree have turned out to be So standardized that scarcely these are considered as "advances". While discussing about the importance of the ‘CALL’ Warschauer discussed the importance of Call by saying that we have no BALL no PALL and no CALL when we have CALL, giving importance to computers as a natural part of the learning process. It is not a remarkable thing if computer are being used in language learning. It dates back to 1960.Though computer was mainly restricted to universities with prestigious computer science departments. In the area of educational technology, many studies have been conducted all over the world on Curriculum, Educational on the psychology and language teaching. In spite of this, it was through the different essential from of sources and looking into the writing through auxiliary sources, accessible inside the scope of the investigation, limit and time. We can see the survey as introduced underneath:

STUDIES CONDUCTED ABROAD
The two approach of CALL which researchers developed and compared are Computer Aided Language Learning Package and computer Assisted English Language Learning Package.

In the Computer Assisted English Learning method, computer makes English language learning easier for students. At the same time teacher user the computer to facilitate English language learning for student in the other method which computer
Aided English Language Learning.

In 1997, Levy provided the following definition of CALL: "Computer Assisted Language Learning (CALL) may be defined as 'the search for and study of applications of the computer in language teaching and learning.'" By explaining more “The role of the computer in CALL can broadly be divided into two main areas:

a) As a tool
b) As a tutor.”

In the current era, this role of computer as a tool and as a tutor have been compared i.e. the researchers developed two approaches of CALL namely Programmed Learning and Computer Assisted Language Learning (CALL) Package. Computer Assisted English Learning is a method through which computer facilitates the learning of the students. In Programmed Learning, frames are used by the teacher as a method for learning English language. Whereas, self learning opportunities are available through Computer Assisted Language Learning Packages.

Gale (1958) conducted the use of film method and traditional method in teaching of Physics. Both methods were found equally effective. The film method was less effective in absence the of classroom teacher.

John and William Russel (1962) held various experiments to study the use of lessons through T.V. Using the traditional way of teaching Biology and Both the methods were found equally effective.

Donald (1962) held an experiment to evaluate the use of the linear programmes and Branching programmes for Geometry. It was found that linear programmes are more effective than branching programmes.

There had been twelve studies during the period 1958 to 1989. Out of which only one was conducted from 1950’s and 1970’s each. Three studies were conducted in the 1960s. and other seven were conducted on 1980’s. In the survey, four studies used research method. Other seven studies used experimental method. One study, used both survey and experimental method of research. Three studies compared the communicative approach with the conventional approach. Two studies had group
techniques under communicative approach. There were even two examinations which analyzed the viability of Film strategy and the customary technique and T.V. lessons with the customary strategy. In one of the investigation, study was accomplished for punctuation interpretation and basic approach. Two reviews asked the position of the open and the auxiliary approach. The investigation which utilized direct and the Branching projects, depended on test and review was to contrast bilingual approach and the ordinary approach.

In the outcomes, unmistakably informative approach was powerful in four out of five examinations. It was likewise seen, in one of the investigation that the open approach is not the single answer for the educational issues. The open approach demonstrated valuable in two investigations which were directed utilizing the procedure of gathering strategy.

Aziz (1984), conducted a survey based on grammar translation and structural approaches, and in which no association was found between students’ performance and their intelligibility.

Dodson (1967) conducted a study on Bilingual approach which proved effective.

Gale (1958) and John and William Russel (1962) conducted a study where film method was compared with the traditional way of teaching and T.V. lessons were compared with the traditional method and all the methods were found to be equally effective.

Dodson (1967) examined a variety of scientifically controlled experiments at the primary and secondary level in the university college of Wales Abersywyth. He demonstrated that advance of securing dialect abilities the utilization of first language by the educator was not ominous. Then again, it made for redress reenactment reactions, (a) proficient learning and combination of new outside dialect materials, and (b) the accessibility of more prominent sum time for additionally hone in this manner giving the understudies more dynamic contact with the remote dialect. The best outcomes as far as speed and quality were discovered when sentence significance was obtained by methods for the primary language, comparable talked by the instructor.
Scottish Education Department (1972) held a test in aggregate instructing in present
day dialects, in which ten schools took an interest for somewhat less than two terms
and this work went about as an index to Rowland's gathering work in current dialects,
materials office unit, dialect showing focus, college of York.

In the test, The schools instructors were given the material on gather procedures and
they were given significant flexibility in sorting out their work. The Stress was on
continuous presentation of gathering framework and a watchful evaluation of what
was being accomplished. As a rule, schools settled on a constrained use of gathering
techniques. An extensive variety of exercises was given. They included basic
exercises like tuning in to recorded material and working out responses to questions in
view of them, to truly difficult ones like composition short stories. The instructors
detailed the accompanying focal points is (1) Self learning by Increased cooperation
of understudies (2) Discipline change in a troublesome class; (3) Pupils had abnormal
state of inspiration and premium (4) Real expected achievement in frail understudies.,

speaker's assessments and elucidations of freak articulations which was composed by
Arab EFL students', set up and researched the distinction between judged clarity and
instinctive nature.

The targets of the investigation were:

(1) To examine distinction between judged understandability and expectation;

2) To examine the degree to which mistake sort (linguistic or semantic);

(3) To give approval measures to judgments of clarity.

The apparatus of the examination depended on four-point size of clarity and
expectation. In this Study, test ponder was of240 American under graduates. It
utilized two factorial outlines and t-test and ANOVA factual techniques. The
investigation discoveries uncovered that no affiliation was found between the
understudies' execution and clarity.

Long and Porter (1984) displayed a paper at amid the 18thannual TESOL. There
was a contentions on the utilization of gathering work in classroom for second dialect learning. A Psycho-semantic basis for bunch work in view of the open approach has risen up out of second dialect securing research. There have been numerous more academic contentions for the utilization of gathering work in second dialect learning. The creators gave them consistent game plan.

At long last they have given research discoveries to help the accompanying cases.

Individual dialect hone openings in gather work in understudies is apparently than in bolt step lessons.

In gathering work, scope of dialect capacities rehearsed by singular understudies is more extensive than in bolt step educating.

SL yield in unsupervised gathering fill in as 'out in the open', in understudies execution was of a similar level of linguistic exactness in their bolt step work led by the instructor.

In gathering work, the recurrence of other rectification and fruitions by understudies is higher than in bolt step educating.

In the little gathering, the understudies take part in more transaction than in educator fronted, entire class settings.

Berns (1985) in his examination 'utilitarian Approaches and informative fitness: English Language Teaching in Non-local settings'. Which was held in Prague and British etymological conventions, and in setting of India, Japan and Germany had the accompanying discoveries:

- The open philosophy does not furnish with any answer for instructive issues.
- The open procedure gives just the methods by which such issues might be tackled.

Spada (1986), studied Instructional differences with the relationship of process-product study of communicative language,

In this examination it was explored that there is a conceivable connection between
instructional procedures and learning out-comes in three classes of a grown-up informative program of English as a moment dialect.

Consequences of the investigation uncovered that there were contrasts in the routes in which results of three unique classes were gotten. Results additionally demonstrated that students in the informative class enhanced more on three tests.

Nunan (1987) in a subsequent report examined the level of honest to goodness correspondence in a class and for this five informative dialect lessons were recorded, interpreted and broke down. The outcomes were confirm that after every one of the endeavors ,in an open classes, cooperation’s may not be greatly informative .

Speth and Brown (1988) a the university of Nebraska-Lincoln, USA, held a study with factor analyses of items and sub scales. The reason for existing was to look at inventories from three hypothetical viewpoints: psychological process, ways to deal with learning and self-governing investigation.

A specimen of 383 understudies in instructive brain research classes at a vast American University Completed the inventories in view of the open approach.

With the sample study of 383 students, the findings revealed that the to quite an extend students preferred communicative approach of learning.

White (1989) launched a programme for motivating students to learn the English language through communicative approach, than the traditional orientation learning in China, considering the frequent learning styles of the understudies. The understudies communicated seek for such an approach. Exercises gave open doors for familiarity, and their comprehension and improvement as self-sufficient clients of the dialect.

PC Assisted Language Learning Package offers chances to understudies for self-learning, while requires the educator to be required in arranging and doing learning exercises. In the Programmed Learning educator is dynamic in showing utilizing outlines basically as a guide to instructing.

Chifari, et al. (2000) investigated some subjective and motivational relates of educators' states of mind towards the PC in school. They analyzed educators 'saw
self-adequacy” (Bandura, 1986; 1997) with their way to deal with the PC, as an instructive apparatus. A PC self-adequacy scale, adjusted from an English form created by (Eachus and Cassidy, 1997) was directed to 43 instructors from different schools. Similar subjects filled in a poll which was accommodated investigating their PC encounter. Results uncovered high connection between’s self-adequacy and PC encounter, recommending that self-viability was a vital subjective associate of inspirational disposition towards the PC.

Gray and Souter (2002) explained the use and perception of teachers towards ICT in the secondary subject areas. A comparison of 393 teachers was done, in which the perception of science teachers was compared with the teachers from other disciplines. The finding revealed that science teachers were positive with regard to use of ICT in comparison to the teachers of other disciplines. The computing facilities were available but actual use was quite low. Even where the use was high, it was only limited to very narrow range of applications, particularly focusing word-processing. In spite of the awareness of ICT in science and their confidence, teachers felt it was not drastically changing the teaching way nor the teacher-student relationship. The need of more support in the classroom and professional development with felt to exploit the use of ICT.

Matthíasdóttir, et al. (2003) studied the use and the attitudes of teachers toward the use of ICT and how it effects their teaching. The study had 47% response which was conducted in 14 Icelandic high schools and one of the private School. The main findings were that Internet was quite commonly used among the Icelandic high school teachers. Internet was used by teachers in their teaching and to send and receive projects and essays from the students. 81% of the teachers agreed that they preferred using computers in their teaching. They were not taking the advantage of the interactive exams and web discussions which are few of the array of opportunities that ICT offers, nor were they certain that ICT in teaching leads to better outcomes in teaching learning process of student.

Albirini (2004) examined the state of mind of EFL educators towards ICT in Syrian secondary schools and to find the relationship of mentality of the instructors’ with chosen set of factors. An examination of 326 example teachers heedlessly looked over
the masses was given surveys and expansive trail phone gatherings of 15 educators was driven and the results from both quantitative and subjective exhibited that they had optimistic perspectives toward ICT in the field of preparing. They had genuinely idealistic perspective of the characteristics of the PCs, yet were modestly unbiased towards the social significance of ICT in Syrian schools and society. The educators showed squat levels of PC capacity, get to, and planning. There was critical motivation between the aura of teachers' toward ICT and the distinctive self-sufficient variables like PC attributes, social perceptions, PC wellness, PC get to, and PC get ready. Distinctive backslide examination showed that PC properties, social perceptions, PC aptitude had considered fit prognostic assessment of PC perspective toward ICT. The results exhibited that 0.58% of the distinction in PC perspective was cleared up by the free calculates joined this examination.

Batane (2004) ponder in one of the optional school in Botswana, where the devoted educators were to prepare to have ICT in their classes. Extensively meeting of the primary, 15 instructors and three authorities from the Ministry of Education was accomplished for the accumulation of the information. The finding uncovered that when innovation was first presented in the schools, instructors with past comprehension of PCs were the preeminent to be required in the operations of PCs. The educators saw that the presentation of PCs was for showing subjects like arithmetic and science. There was an efficient approach used to prepare instructors in the school for expanding their contribution and getting the advantage of preparing.

Gömleksiz (2004) studied 150 teachers of English and investigated the use of technology in their classes and their view and attitude towards use of technology. The survey was made of 36 items, comprising of affirmative and negative attitudes, and was found that there was a positive attitude in teachers towards the use of technology but lacked to acquire and utilize the technology as desired.

Simonsson (2004) examined 103 Hispanic bilingual primary teachers and researched on the utilization of innovation by the educators in their classroom as an element of their convictions, demeanors and discernments. Stepwise different direct relapse investigation technique for insights was utilized to gauge the utilization of innovation by the educator. Study discoveries demonstrated that the aggregate difference was 50.6 percent. The innovation was utilized as an element of the bilingual instructors'
convictions, states of mind, and relied upon the utilization of innovation by their counterparts in their classrooms.

Sugar, et al. (2004) studied in his theory of Planned Behaviour, the educators' convictions about innovation selections as a contemplated, consider, deliberate basic leadership process. The overview was led in south eastern schools of United States. The investigation discoveries demonstrated that individual educators' disposition towards embracing the innovation was from their own convictions and the outside elements like help from key people and logical assets (e.g. subsidizing) were fundamentally not influencing the choices.

Sa’ari, et al. (2005) explored the benefit instructors of three auxiliary school, each speaking to three areas in Malacca and their states of mind and saw competency towards data innovation (IT). The examination in view of a Questionnaire in the Malay dialect which featured that the instructors were having inspirational states of mind towards IT yet there was an inadequacy in incorporation of fitting ICT aptitudes during the time spent educating and learning. The outcomes utilizing MANOVA examination demonstrated that there were huge contrasts between the gathering of skillful and bumbling instructors as far as their value, certainty, nervousness and abhorrence toward the utilization of IT.

Sugar, et al. (2005) implemented the Theory of Planned Behaviour (TPB) to evaluate teachers’ technology attitudes by analyzing the interviews of six teachers conducted in a semi structured way, and a 45 items based questionnaire as a follow up in four schools. In this colloquium, they critiqued the effectiveness of the Theory of Planned behaviour a basis for assessing teachers’ attitudes and beliefs towards technology. The study concluded was that The Theory of Planned Behaviour offered researchers successful avenues in investigating teachers’ decision-making processes, particularly with respect to the use of technology.

Kiridis, et al. (2006) researched the recognitions and the dispositions of Greek instructors towards the utilization of ICT, and concentrated the capability of the reconciliation of new advancements out in the open essential training. The specimen made out of 951 elementary teachers was utilized. Results uncovered that ICT was significantly a helpful instrument in instructing and learning, and for the most part concurred with its misuse in schools, still they were not completely persuaded about
the prudence of the quick presentation of new advances in essential training.

Sadik (2006) investigated Egyptian educators' perspectives towards individual use and specialist school use of PCs. Trial of 443 instructors was used. He watched that to incredible degree teachers, especially folks exhibited high perspective towards usage of PCs. They had elevating perspective towards the use of PC at individual and what's more at school level. The teachers who were readied conveyed more elevated amount of inspiring attitudes and assurance.

Samak (2006) explored factors that may impact the states of mind towards data and correspondence innovation (ICT) by Jordanian educators of English as a remote dialect (EFL). Hypothesis of Reasoned Action was utilized to examine the example making out of 363 educators and the information examination was finished by enlightening and inferential insights. The study results showed that EFL teachers of Jordan had affirmative attitudes towards ICT. Also it was found that qualification showed affirmative relationship with attitudes whereas age and teaching experience showed pessimistic relationship.

Wozney, et al. (2006) investigated the individual qualities, instructor dispositions, and current PC innovation rehearses among 764 educators from both private and state funded school segments in Quebec. Anticipation esteem hypothesis was utilized to build up the Technology Implementation Questionnaire (TIQ) and it was reasoned that the utilization of PCs outside of showing exercises was the most impressive indicator towards the utilization of innovation by the educator in the classroom.

Boon et al. (2007) examined educators' states of mind toward the utilization of innovation based direction as a successful instructional system in social examinations classes. An open finished overview was utilized on the impacts of Inspiration 6 automated realistic sorting out programming apparatus. Study comes about demonstrated inspiration of instructors towards the utilization of programming.

Hung and Hsu (2007) fundamentally investigated the present status of PC based innovation (CBT) use in optional schools of Taiwan. Survey was given to 100 optional school science instructors to research the mentality of educators' towards PCs and their significance of CBT in classroom directions. The examination comes about uncovered that there was huge relationship of age and position of instructors with their disposition. The senior instructors were less positive and had low enthusiasm
towards computers. It was likewise discovered that lone with male educators, there was undeviating connection between’s level of inspirational state of mind toward PCs and degree of utilization of CBT in classroom direction.

**Petros (2007)** built up a Greek Computer Attitudes Scale (GCAS) of 30 things, with certainty, fondness, and intellectual subscales to psychometric properties to test the state of mind of Greek populace towards PC. Surveys were utilized, specimen included members from the overall public (185 and 354 people, separately), 222 educators and 99 college understudies, and were dissected. Results demonstrated that both the unwavering quality (inward consistency and test–retest) and legitimacy (simultaneous) of the GCAS were sufficient. It was discovered that the connection amongst age and PC mentalities was not critical, while sex did not significantly affect PC states of mind scores.

**Cavas, et al. (2009)** examined the Turkish essential science instructors’ mentalities toward ICT in training and explored the connection between educators’ states of mind and factors which were identified with instructors’ close to home attributes (sex, age, and PC experience and PC possession at home). STATICTE instrument was utilized to gather the information (which was produced by specialists and directed to 1071 science instructors consistently conveyed in geographic areas of Turkey). Spellbinding measurements were utilized to dissect the information. The examination comes about uncovered that instructors from science, from the two sexual orientations were keeping up idealistic states of mind toward ICT. In any case, the relationship varied with their age, responsibility for at home and their involvement with PC.

**STUDIES CONDUCTED IN INDIA**

Various investigations and related studies have been conducted on Education in India. The underneath studies were reviewed under the following sub headings:

**Studies based on Programmed learning material**

**Bhal (1974)** contemplated the adequacy of the modified learning strategy in sexually transmitted disease. VIII for the unit ‘Sex, Number and Case’ of Grammar. The targets of the examination were as given underneath.

1. To construct the customized learning material for the unit ‘Sexual orientation, Number and Case’.
(2) To test the viability of the modified learning technique.
(3) To test the co-connection between scholarly obtaining and knowledge level and between scholastic procurement and the modified learning technique.

For the analysis, sixty understudies of sexually transmitted disease. VIII were chosen. Trial bunch was educated by the Linear modified learning strategy, while control aggregate was instructed by the conventional technique. The got information was inspect through basic proportion. The investigation comes about demonstrated no impressive contrast between scholarly accomplishment of the understudies educated through conventional strategy and the one with customized learning technique.

Bhatt (1982) constructed and examined the efficacy of programmed learning material for the chapter Power and Indices of Algebra (Mathematics) of grade VIII. He formed two groups, one out of which was taught with programmed learning method and the other with traditional method. Critical ratio was used to examine the data and conclusion was drawn both the methods are equally effective, with no significant different in the mean scores of both the methods.

Sharma (1986) developed and inspected the viability of modified learning material for the section "Vectors" of Physics of review XI. A similar examination was done to test the viability of Programmed learning technique with the customary strategy. Sixty understudies were isolated into two gatherings, one to be educated through modified learning technique and the other through customary strategy. T-test was utilized to inspect the information and was presumed that modified learning technique was exceptionally viable than the conventional strategy.

Bhatt (1990) built and analyzed the customized learning material on the part 'Genuine Numbers' of Algebra in Mathematics for review VIII. The goal was even to look at the viability of the readied self-learning material. Seventy understudies were chosen as test and irregular two gatherings were framed and through pre-test post-test plan and if esteem was utilized for investigations and assessment. One of the gatherings was instructed through customary strategy and the other through the modified learning technique. The investigation comes about reasoned that the customized learning material was more compelling than the customary strategy.
Studies based on Computer Assisted Learning

Chaudhary (1990) studied the attitude of teachers towards School Television (STV) and its correlation with behavior towards mass media and job satisfaction. Primary school teachers from 104 villages under Jaipur having television were taken as sample. Tools comprised of television scale and an interview schedule to examine the attitude of teachers' towards television. Study was analyzed by using 't' test, ANOVA STV was an accepted by teachers, as a support method in teaching learning by presenting the instructional material. There was positive relation between attitude of teachers' towards STV and their job satisfaction.

Kumar (1993) studied the attitude of teachers as well as students towards the educational programmes on television and examined its learning impact on students. He used Historical and Experimental Methods in his research. Treatment was given with 4 Video Cassettes (20 minutes each) developed by the Centre for Educational Technology, Lucknow. The sample was taken from six different Primary Schools of Lucknow City. Attitude towards Educational Television Programmes Scale and Achievement Test in Geography and Social Studies were taken for data collection. Percentage methods were used for computation and analysis of data. The findings of study were: (1) both the teachers and the students had favourable attitude for educational television programmes. (3) Students and teachers in general were satisfied with technical aspects of programme production such as clarity of sound and picture.

Meera (2000), studied to examine and evaluate the difference between the Conventional Lecture Method and the Computer Assisted Instruction (CAI). In order to analyse the efficacy of individualized Instructional strategy for realizing the instructional objectives in the subject Biology of grade XI. Four groups of Thirty five students were selected as sample using probability sampling method. He concluded that by the Drill, Practice and Simulation and other modes of Computer based Instruction , the instructional objectives were more effective than conventional lecture. Retention test also reflected that it has also led to increase in the retention of cognition of what have already been previously learnt.

Natesan (2001), associated the effectiveness of teaching concepts of mathematics by video-cassette, and comparing the efficacy with that of traditional method. The study
was done through Experimental method (equivalent group design) and samples were taken of 45 boys and 45 girls, using probability sampling method. The study findings concluded that there was an increase in the academic achievement level of the experimental group which was taught through video-cassette.

**Subbaiah (2005)** studied and investigated the use of ICT in teacher education. The need of ICT was identified, and knowledge and skills among the teacher educators were examined in relation to certain selected variables. The study took The study included 71 English teacher educators and 200 teacher trainees as sample taken by probability sampling method from Education and Training institutes from Tamil Nadu. Various tools like Questionnaire, Interviews, Attitude scale, Diary analysis was used and study findings concluded that there were not enough computers nor was the quality of teaching in these institutions.

**Annaraja and Joseph (2006)** inspected the level of mentality towards ICT in educator learners. Thirteen male and eighteen female educator students were chosen as test through Random inspecting strategy from the instructor training Center of MG University, Kottayam. The specialists utilized their scale to break down the demeanor of educators towards ICT and utilized test like t-test and chi-square. The investigation discoveries uncovered that 68% of educator students demonstrated abnormal state of demeanor towards ICT. Out of which 54% of men and 78% of ladies had abnormal state of demeanor towards ICT. Be that as it may, there was no significant contrast between the state of mind of male and female educator students towards ICT. What's more, no huge affiliation was found between disposition towards ICT and father's instructive capability, mother's instructive capability, father's occupation and family pay.

**Mishra and Panda (2007)** inspected the states of mind of different employees from IGNOU towards e-learning, and to recognize different hindrances and inspirations of e-learning reception and utilize. 150 full time employees of the IGNOU were chosen and information was gathered through the technique for review. The study revealed that widespread use of computers and usage of email led to an optimistic approach and a higher degree of relationship towards e-learning. The most significant motivators were the interest of individual to use technology, intellect and technology
infrastructure whereas the barriers were deprived internet access for students and deficiency in the e-learning training with meager institutional policy and instructional design.

Kumar Rajender (2007) attempted to find the best instructional method out of three, i.e., Audio-Video Instructional System (AVIS), Conventional Instructional System (CIS), and Multimedia Instructional System (MIS) for teaching Information Technology at the secondary level. 120 students were randomly selected from three CBSE affiliated schools, and were assigned to three groups on the basis of their Intelligence test and taught through three different methods. Multimedia Instructional System proved to be the best method for teaching Information Technology at secondary level.

Mehra Vandana (2007) studied to determine the attitudes of school teachers towards use of computer technology for instructional purposes. Samples of 200 teachers from Chandigarh affirmative approach towards the use of computers. In instructional setting, there was a major need of training for using computers.

Anjali Khirwadkar (2008) explored the relevancy of ICT in education with focus on teachers’ training Multimedia Package for laboratory method in teaching of chemistry at pre-service level developed by him and tried on sample of 18 B.Ed. students of the year 2005-06 batch offering teaching of chemistry as a method, showed efficiency of the established multimedia platform in learning the management concept in chemistry laboratory over other conventional approaches. The study held in Schools of Gujrat and took 94 sample and finding were in favour of CALL. In this study, package were developed in visual basic. The researcher found the study beneficial and took guidance in her research from it.

Raja (2008) found out the access of media infrastructure at home of the distance learners and awareness of services offered through media and infrastructure in the study centers of Dr. B.R. Ambedkar Open University from two districts of Andhra Pradesh selected for collection of data. The sample size comprised of 343 learners selected from the study centers of two districts revealed that television, radio and tape recorder were widely available with majority of the respondents at their home; while computer-mail and video-cassette player were not easily available with the respondents. In response to awareness, half of them told that they were aware of
television lessons; 37% were aware of radio lessons; and the rest said that teleconference, video lessons and audio lessons were part of the media support service.

Khirwadkar led an examination on Development of Computer Software for Learning Chemistry at Standard XI. Two gatherings of 30 understudies were chosen haphazardly and different instruments like pre-test, posttest, unstructured meeting plan and organized meeting plan for science instructor of standard XI were directed. Information were factually broke down with the assistance of ANOVA, ANCOVA, content investigation and rates. It was reasoned that significantly test gather understudies demonstrated uplifting state of mind about different parts of programming bundle particularly with respect to introduction of substance, consistent sequencing and dialect utilized for understanding the substance. The school subject educators constantly held the uplifting demeanor. 

Nalayini conducted Quasi – experimental study on Advancement and Validation of Computer Assisted Instruction in Physics for High School Students 

The investigation included 200 understudies of IX review and different apparatuses were utilized. The measurable information was broke down with the assistance of the assistance of t-test and relationship method. The investigation found that it was less demanding for the understudies thought that it was simpler when to the take in a similar idea through PC.

RESEARCH WORK FROM OTHER REFERENCES

Pandya and Chaudhary (2000) did an investigation on impacts of Computer Assisted Learning (CAL) in accomplishing higher psychological aptitudes. The examination was done to decide the level of fulfillment of subjective abilities through Computer Assisted Learning (CAL) contrasted with conventional way to deal with instructing and to look at the impact of CAL on the learning accomplishment of young men and young ladies. The fundamental substance chose were lessons of material science. Study configuration picked was 'Pre-test posttest coordinated gathering test plan'. Accomplishment test was built for accumulation of the information. By utilizing 't'-test and 'F'- test and Chi-square system the information were measurably broke down. The outcomes indicated adequacy of the CAL approach over the conventional one.
Male understudies were observed to be better in learning material science. Ranade (2004) built up a PC Assisted instructional (CAI) Package on 'Different Intelligences' for instructor teachers and analyzed its viability as far as accomplishment. The specimen comprised of 25 instructor teachers from both country and urban locales of Maharashtra, Goa and Tamil Nadu. Study configuration was 'Pre-test posttest single gathering test outline'. The CAI Package included two periods of PowerPoint Presentation; For taking in the substance and For assessing the substance. It was discovered that there is a critical increment in accomplishment in the posttest than in pre-test. She additionally investigated the remarks acquired from members seeing the introduction and in light of it examined the responses of members towards future utilization of CAI by them. Most members felt considerably more positive about utilizing PCs for instructing learning, subsequent to review this introduction. Numerous, who were nearly PC uneducated, felt persuaded to learn PCs subsequent to seeing their helpfulness in educating learning. The individuals who were at that point PC educated complimented that they learnt a ton of new procedures that they would use in their future introductions. The discoveries, quantitative and subjective, uncovered that the introduction was compelling in achieving learning. It was likewise similarly powerful in bringing out positive responses towards utilization of CAI in instructing learning.