CHAPTER – II

REVIEW OF RELATED LITERATURE
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2.1 INTRODUCTION

Research takes an advantage of the knowledge which has accumulated in the past as a result of constant human endeavour. Research is an endeavour to discover and develop knowledge. It is an intellectual process that has developed over hundreds of years ever changing in purpose and form and always searching for truth (Aggarwal, 1996). It can never be undertaken in isolation of the research work that has already been done on the problems which are directly or indirectly related to a study proposed by the researcher (Koul & Lokesh, 1997). Review of the related literature allows the researcher to update the current knowledge in the field of education. It helps the researcher to know about the methodology adopted, the tools and instruments used and findings obtained in the previous studies. The literature in any field forms the foundation upon which all future work will be built.

Review of Related Literature is considered as the one of the basic step in a formal research. The survey of related studies and literature not only provides access to the accumulated wisdom of the age but also enables the researcher to carry out his or her work systematically and successfully (Best & Kahn, 2000). Related studies and literature would stimulate the researcher to acquire an organized programme of reading as a source of problems in education to discover new problems and to avoid unnecessary duplication of research work and to aid in properly defining the problems that has been taken up for solutions. It also provides comparative data on the basis of which the significance of one’s findings can be evaluated and interpreted. It also adds
to the scholarship of the researcher practically, and all the human knowledge can be found in books and libraries.

2.2 IMPORTANCE OF REVIEW OF RELATED LITERATURE

Review is made on the related literature and relevant studies in the area of research by the investigators to get knowledge about the area. The previous research studies give ideas on the variables considered on a particular phenomenon by researchers and the cause and effect relationship between the variables in controlled and uncontrolled situations. Investigators used to go through the relevant studies to know about the experiences and difficulties that have come across by the previous researchers. In this sense, review is necessarily to be made for making the study a valid one. The past knowledge they could develop helping the researchers to deal with the research problem with confidence.

Moreover, the generalizations on the findings of the research can be made effective only when the researcher has a thorough knowledge of the past studies in the area. Vast reading is given on the relevant materials before the research is undertaken. According to Kothari (2000), “The researcher is a specialist rather than generalist”. If the researcher is to become a specialist in his area of research he needs to go through all the related literature and related studies. To frame objectives and hypotheses, the past knowledge on research studies is essential. A review of the related literature gives the researcher an understanding of the previous work that has been done.

Kothari (2000) has given certain guidelines on the important elements that should be noted. Reports of closely related studies that have been investigated, design
of the study including procedures employed and data gathering instruments used, population that were sampled, sampling method employed, extraneous variables that could have affected the findings, variables those were defined, faults that could have been avoided, and recommendations for further research.

Hence the researcher has undertaken a careful perusal of studies that are relevant, completely executed and clearly reported.

2.3 STUDIES RELATED TO PERCEPTION ON CURRICULUM

The word "curriculum" as it is defined from its early Latin origins means literally "to run a course." If one thinks of a marathon with mile and direction markers, signposts, water stations, and officials and coaches along the route, this beginning definition is a metaphor for what the curriculum has become in the education of our children. The total learning experience provided by a school, includes the content of courses (the syllabus), the methods employed (strategies), and other aspects, like norms and values, which relate to the way the school is organized.

All the learning which is planned and guided by the school, whether it is carried out in groups or individually, inside or outside the school. Curriculum can refer to the entire program provided by a classroom, school, district, state, or country. A classroom is assigned sections of the curriculum as defined by the school. For example, a fourth grade class teaches the part of the school curriculum that has been designed as developmentally appropriate for students who are approximately nine years of age.

There are multiple definitions of curriculum, from Oliva (1997).

Curriculum is:
i. That which is taught in schools
ii. A set of subjects
iii. Content
iv. A program of studies
v. A set of materials
vi. A sequence of courses
vii. A set of performance objectives
viii. A course of study
ix. Is everything that goes on within the school, including extra-class activities, guidance, and interpersonal relationships
x. Everything that is planned by school personnel
xi. A series of experiences undergone by learners in a school
xii. That which an individual learner experiences as a result of schooling

2.3.1 Types of Curriculum

Since curriculum reflects the models of instructional delivery chosen and used, some might indicate that curriculum could be categorized according to the common psychological classifications of the four families of learning theories "Social, Information Processing, Personalist, and Behavioral." Longstreet & Shane (1993) have dubbed divisions in curricular orientations as: child-centered, society-centered, knowledge-centered, or eclectic. Common philosophical orientations of curriculum parallel those beliefs espoused by different philosophical orientations such as Idealism, Realism, Perennialism, Essentialism, Experimentalism, Existentialism, Constructivism, and Reconstructivism. Some types of curriculum are,

a. Overt, explicit and written curriculum
b. Hidden or covert curriculum  
c. Societal curriculum  
d. The null curriculum  
e. Phantom curriculum  
f. Concomitant curriculum  
g. Rhetorical curriculum  
h. Received curriculum  
i. Internal curriculum  
j. Electronic curriculum  

**Qualities of Good Curriculum**

The following characteristics should be true of the education curriculum which will guide instruction:

i. Each curriculum objective should be concise and understandable to staff, students, parents, and the community.

ii. Each curriculum objective should encompass previous learning and require the student to integrate and then apply certain knowledge, skills, and attitudes in order to demonstrate achievement of the standard.

iii. Each curriculum objective should constitute learning that is:
   * Durable - will be useful to the student for a considerable period
   * Significant - will have a major effect upon how the student will function
   * Transferable - will be useful in meeting needs in other educational programs, the world of work, and/or the student's personal life
iv. Each curriculum objective should be feasible for the staff and students.

v. Each curriculum objective should be measurable on a cumulative basis and at different stages of the student's career in the district and the measurement should be both valid and reliable.

vi. Each outcome assessment and evaluation should be accompanied by both the criteria by which the learning will be judged and the standards of quality to be applied.

**Teaching for understanding:** It is leading students to engage in a variety of thought-provoking activities such as explaining, finding evidence in examples, generalizing, connecting, applying, making analogies, and representing the topic in new ways. Teachers assist students in making connections between prior and new knowledge to develop deep conceptual and procedural knowledge. Teachers who teach for understanding to i) make learning a long-term, thinking-centred process, ii) provide for rich ongoing assessment, iii) support learning with powerful representations, iv) pay heed to developmental factors, v) induct students into the discipline, and vi) teach for transfer.

**Assessment for Learning (Formative Assessment):** Formative assessment is a process used by teachers and students as part of instruction that provides feedback to adjust ongoing teaching and learning to improve students’ achievement of core content. As assessment for learning, formative assessment practices provide students with clear learning targets, examples and models of strong and weak work, regular descriptive feedback, and the ability to self-assess, track learning, and set goals.
Rigorous and Relevant Curriculum: A rigorous curriculum is one that is complex, provocative, and personally or emotionally challenging. A relevant curriculum requires students to use knowledge to solve complex, real-world problems, and to create works to use in real world situations. Rigor and relevance is represented by challenging content that is significant to a topic, includes authentic work, and the application of knowledge and skills to complex problems. It also entails the use of prior knowledge, the development of in-depth understanding, and the ability to develop and express ideas and findings through elaborated communication. The content is not just interesting to students, but involves particular intellectual challenges. When students successfully meet these challenges, their new learning will have meaning and value in contexts outside of the classroom.

Teaching for Learner Differences: It requires teachers to understand essential concepts and skills, to identify the contributing factors affecting the desired outcome, and to utilize a variety of methods to teach and reinforce the desired concepts and skills. It includes providing access to the general education curriculum for all students. Teaching for Learner Differences can best be accomplished by engaging in a process which has teachers using student and instructional assessment data to make sound instructional decisions to meet the needs of individual students.

Student Centred Classrooms: In student centred classrooms, students construct their own knowledge based on experiential, holistic, authentic, and challenging experiences. Teachers take the skills, knowledge, and concepts that the curriculum requires and connect them to students’ experiences, interests, and environment. They provide opportunities for students to communicate their understandings, reasoning, solutions, and connections. Teachers encourage students to reflect on their own
thinking and learning. Curriculum and assessments are centred on meaningful performances in real-world contexts. Classroom learning experiences are intentionally designed for collaboration.

One of the tasks of the Department of Education's (DE) Iowa Core lead team, as well as its network of trainers for each American Evaluation Association (AEA), is to develop training on these 5 characteristics, starting in the 2010-2011 school year for schools. One exciting aspect of this is both the DE's and the AEA's desire to make some of that training available in a range of flexible online formats, such as ongoing online courses, online communities, and self-paced online modules.

What's important to note is that, while these five characteristics are essential to a successful school, they are not necessarily mutually exclusive of each other. There will be elements of each that overlap. Even more important, they don't necessarily replace the initiatives that Iowa schools are already working on. An initiative like Authentic Intellectual Work, for example, makes heavy use of a rigorous/relevant curriculum, formative assessment, and a student centred classroom, while including elements from the other two as well. Therefore, schools will need to look for the match in what they are currently doing with the five characteristics, and then be cognizant of what they are not addressing from each.

Ekwueme (2013) conducted a study on “The national mathematics for Basic Education Programme (BEP) and the Millennium Development Goals (MDG) for mathematics teachers in Nigeria: Teachers perception and readiness”.

This study used a survey design. The instrument was teachers' questionnaire and interview on awareness and readiness. The interview was administered to the
different categories of the respondents using a 4-point Likert scale. Two hundred mathematics teachers were randomly selected from 100 schools (public and private) using stratified random sampling technique. Simple percentage and frequency counts were used on research questions. The findings revealed inadequacy in both human and material resources for implementation of the UBE (Universal Basic Education) project in CRS (Cross River State). On teachers' awareness, 71% believed that 6-3-3-4 is just changed to 9-3-4 as a new system, the quality of the new mathematics curriculum reduced as seen in their responses which points to the fact that most of them are unaware of the main objectives of the UBE and the rationale for restructuring the curriculum which mostly is to infuse emerging issues into relevant content and NEEDS (National Economic Empowerment Development Strategy) targets. Public primary school teachers also had higher attendance to re-training programmes than other teachers but attendances were still low (below 50%). On readiness, only 45% of teachers in public schools and 25% in private schools indicated readiness due to inadequacies in availability of resources for implementation and proper training required for taking off.

Bechtold (2012) conducted a study on “Early care and education teachers’ perception of high quality of early care and education programming in relation to their education attainment level and experience”.

In this research the perceptions of early-care and education teachers as they defined and described their perceptions of what a high quality classroom looks like and the teaching practices that they identify and use within their classrooms. Since research also proposes that the educational level of the teacher makes a difference in the quality of their practices. It was necessary to explore their perceptions regarding
higher education and their motivation to return to post-secondary education to obtain a degree. The research study was guided by the following six research questions: (a) How do early-care and education teachers define and describe a high quality classroom?, (b) What teacher practices do they identify as necessary in a high quality classroom?, (c) What influences their descriptions of high quality and their identification of the teacher practices that support high quality?, i.e., educational attainment level, experience, or a combination of educational attainment and experience, (d) Do early-care and education teachers identify a higher level of education as an indicator of quality?, (e) What is the perception of early-care and education teachers regarding years of experience?, and (f) What are the perceptions and reactions of early-care and education teachers regarding the current expectation or requirement that in-service teachers obtain a degree (Associate or Bachelor)? Multiple research tools such as open-ended interviews, field observations, informal surveys and reflection journals were used to gather data.

Through these data collection, it was able to authentically represent the "voices" of the early-care and education teachers and see patterns within their written and verbal responses. The data revealed a number of findings. First, the early-care and education teachers describe high quality early-care and educational programming as (a) child-centred, (b) involves parents, (c) teamwork within the centre, (d) environment of the classroom, (e) development of appropriate curriculum, as well as the (f) education and the (g) experience of the teacher. The second finding was that the teaching practices identified as necessary in a high quality classroom reflect either structural or process quality. The third finding regarding the educational level and years of experience representing early-care and education teachers mixed.
The majority of the participants did agree that some level of education is beneficial, such as, a Child Development Accreditation Certificate (CDAC), Associate in Applied Science (AAS) or Bachelor (B.Sc/BA). However, the participants pointed out that the focus of the degree program must be Early Childhood Education, preferably birth through age five years.

Longevity or their years of experience within the field of early-care and education was highly important and viewed as valuable to the participants and should be positively recognized and validated at institutions of higher education. Lastly, the trials and tribulations facing teachers going back to school were heard in many interviews, their hopes and dreams too often, and always at least an implicit dedication to quality for children and families they served.

Mohammed (2012) conducted a study on “Students opinions and performances towards physical education classes in Kuwait public schools”.

The aim of this study was to investigate student opinion and attitude towards physical education classes. Two thousand seven hundred (2700) students answered the survey. Among those, 1239 (45.3%) were male students and 1497 (54.7%) were female from six districts of Kuwait, such as, Al_Hawalli, Al_Asimah, Al_Jahra, Al_Mobarak, Al_Farwniah, Al_Ahmadi. Weight Status was determined from self reported height in meters and weight in kilograms and was calculated to determine the Body Mass Index. It was found that (24.7%) of both male and female were overweight and (12.4%) were obese. More than half of students (55.6%) agree that health education classes should be taught through physical education classes. Students believe of the importance of physical education classes (75.2%) and agree that physical education classes’ grades should be added to the overall grades (48.9%).
They indicated that physical education classes are fun (72.8%), make them feel happy (67.7%), and satisfied (60.5%). They acknowledged that physical education classes keep them fit (64.3%) and healthy (68.3%). Through physical education they indicate that they acquire more friends (67.3%). In order to change the student's perception toward physical education classes, appropriate national curriculum must be implemented by Ministry of Education. Physical education curriculum should be ensured that the students are receiving the minimal level of physical education through their school year. Health education can be related to physical education classes and should be taught through physical education classes to increase the understanding of their quality and healthy lifestyle.

Bahhouth (2012) conducted a study on “Students perception of international business curriculum: An explorative study a case of Lebanon”.

The aim of the present investigation was to examine the environment, content, and delivery of business education in Lebanon. It analyzed curriculum content and the students' perceptions of the value and applicability of the curriculum. It also explored the shift in emphasis toward an international perspective in curricula and its importance for the academicians as well as practitioners to understand the methods, techniques, and activities that are being used to prepare the future business workforce. This study presented ideas and perspectives about how business and international curricula in Lebanon are perceived. Data for this article were collected in Lebanon and reflects the students' perspective on its international business curriculum.

Al-Amari (2012) conducted a study on “Perception of high school students in Kuwait regarding their knowledge about physical education and the role of health education”.
This study was designed to assess the perceptions of high school students in Kuwait regarding their knowledge about physical education and the role of health education in promotion. The study was conducted using a questionnaire administered to 250 students (103 male & 147 female) from public high schools, during the academic year of 2009, percentage, mean, and standard deviation scores were calculated. The results of the study showed that the students possess high level of awareness about the importance of physical education and its effect on health. The perceptions of students differed significantly; the male students had higher levels of perception compared to their counterparts for participating in exercises. With concern for school physical education as a vehicle for promoting active lifestyles, this study suggested that despite differing perceptions, measures have to be included in the curriculum to ensure maximum participation. A co-ordinated, multilevel approach involving schools, communities and policy makers are needed to increase participation in daily, quality physical education among all students especially girls students.

Sutton (2003) conducted a study on “A study of elementary school teachers’ perceptions regarding the match between teachers’ teaching styles and students learning styles”.

The results from this study indicated a variation of findings. This research study suggested that observation was the primary critical method for determining students’ learning styles, which was not congruent with all prior research. This research study suggested that teachers did not teach according to the way they were taught in school, which was not congruent with all prior research. The research suggested that flexibility was a means to match teaching style to learning style which
was basically congruent to prior research. This research suggested that to experience higher levels of motivation, cooperation, and academic achievement or success effective teachers incorporated a learning style approach that was useful within their classroom regarding most or all of these areas: learning strategies, resources. Student ability, student interest, student grouping or planning. Prior research was congruent with this belief, also.

Carlson (2000) conducted a study on “Classroom environment as perceived by successful and unsuccessful students”.

The results of this study were not generalizable beyond the two community colleges. Descriptive data about this sample that was used in the analyses were available in this study.

Olvera (2006) conducted a study on “Standards – based reform in mathematics: Teacher’s perception of the influence on instruction”.

This study employed a qualitative research design to allow for an in-depth understanding of teacher’s perceptions. The study focused on three high schools within the same large and diverse urban southern California school district. The district studied was selected on the basis of having mandated instructional sequencing and pacing of the academic maths content standards to be used in the classrooms. A total of 12 teachers, four from each high school, were interviewed. Two major findings emerged from the study: (1) Teachers found guides useful, but not for students attaining mastery of the math standards, and (2) Instructional sequencing and pacing of the standards may actually be preventing better
instructional strategies, such as standards-based instruction methodologies, from occurring more often in the classroom.

The overarching result that instructional sequencing and pacing can be useful in the classroom but not for attaining mastery of the standards indicates a need for future research. Future research should include studying similar schools and districts also mandating instructional sequencing and pacing, but on a much larger scale, in order to illuminate whether some guides, from a teachers’ perspective, are better designed than others for students attaining mastery of the standards. Findings from this study indicated policy/practice implications, such as stringently research guide designs before deciding on a particular guide to implement in the classroom and making sure that a genuine accountability system exists before implementing guides.

Oner (2006) conducted a study on “A comparative analysis of high school geometry curricula: What do technology-intensive, standards-based, and traditional curricula have to offer in terms of mathematical proof and reasoning?”.

Findings suggested that there were differences across the three types of curricula regarding the both dimensions of the proof opportunity framework. While standards-based curricula provide more opportunities for students are offered opportunities associated with the first dimension of proving less in traditional curricula. However, it was observed that deductive proof opportunities are created in most of the sampled activities in both types of curricula. Nevertheless these opportunities appeared qualitatively different in character. Technology-intensive curriculum seemed to align with standards-based curricula regarding the first dimension of proving activity, offering mathematical generalization opportunities at higher levels. However, in his curriculum opportunities associated with non-proof
arguments out number and replace those of deductive ones. Although experimental/explorative activities are dominant in standards – based curricula and also presented to some extent in traditional curricula use did not appear to be central in any of these text books, the exception being the technology – intensive curriculum.

Treffner (2003) conducted a study on “School accountability and non-English speaking student’s academic performance”.

Results indicated that time in the English for Speakers of Other Languages (ESOL) program was a major factor in dents' academic progress. However, Limited English Proficiency (LEP) students' scores were significantly lower compared to non-LEP students' scores, especially in the reading portion of the test. Per-pupil expenditures and school size correlated positively with academic outcomes. However, detailed analysis showed minimal effect of school size and per pupil expenditures on score variability. Little applicable value was found in the relationship between school size, per-pupil expenditures, and academic outcomes.

Further research was recommended to consider best instructional practices in ESOL programs at the high-school level. Future research recommendations emphasized longitudinal studies, taking into account time in the program. The relationship of strictly instructional expenditures and academic outcomes would be another valuable research topic. The current study opened the investigation into high-school education programs for LEP students who did not perform up to the norm.
Bock (2004) conducted a study on “Student academic performance in undergraduate business programs: Difference between traditional and collaborative learning (TL & CL)”. These results of comparing the CL & TL groups with regard to both academic and affective measures indicated no statistically significant differences between the groups. That was in this study, the hypotheses that predicated better performance for the CL group were not proven true. The implication of these findings, if confirmed by others, may be that collaborative a learning in itself, will not produce better academic or affective results, nor will it result in better retention, as has been suggested by some experts. More studies of a similar nature were necessary to confirm or refute these findings.

Boyles (2008) conducted a study on “A comparison of the academic performance of students with mild disabilities receiving instruction from internationally certified and traditionally certified teachers”. Comparisons were made between the achievement results of the two groups of students using an independent sample - test. It was found that there was no significant difference in the reading achievement levels of students taught by teachers with international certificates when compared with students being taught by traditionally certified teachers. In the area of mathematics, students instructed by internationally certified teachers scored significantly below that of students instructed by traditionally certified teachers.
Gomez (2008) conducted a study on “Generational status and level of biculturalism and level of bilingualism as predictors of academic performance among immigrant Latino Hispanic youth”.

Using a different methodology to measure dialectical thinning may also explicated these results. Although the Asian/Asian –American/Asian-European participants did have a higher mean score on the Dialectical Self-Scale (DSS) than the European/European-American participants, this difference was not statistically significant. Whether or not Ethnic Perspective Taking Ability (EPTA) and dialectical self-construal as forms of cognition are related to academic achievement remains inconclusive.

White (2006) conducted a study on “The correlation between athletic participation and academic performance”.

The data obtained indicted similar years of teaching experience and gender composition in the two samples although they were different on five of the seven other demographic variables measured. Superintendent-principals did not vary in the frequency they reported engaging in nine of the 11 strategies. This study shows that even with the additional duties of superintendent, the superintendent-principals spend about as much time as principals engaged in the 11 strategies to improve instruction as identified by the Blasse & Blase (1999) Reflection Growth (RG) Model, and further, the study provides validation for that model. Further study was recommended to examine the quality various frequency of the interactions superintendent-principals have with teachers and indirect effects on student achievement. If any, superintendent-principals instructional leadership should also be studied. Further research was advised to identify the work load, work habits and organizational
strategies of superintendent-principals to determine how they get their work done while still engaging teachers as instructional leaders.

Rotter (2004) conducted a study on “Self-perception of leadership skills and attitudes of college sophomore student leaders”.

The major findings of this study indicated that after the semester course, there were no significant differences among sophomore student leaders regarding their attitude towards the construct leadership orientation and their attitude towards the construct group orientation.


These findings suggested that software organizations which invested in a Serial Peripheral Interface (SPI) framework, such as the Capability Maturity Model or ISO 9000, achieved a higher level of perceived Total Quality Management (TOM) practices than software organizations without any SPI framework investment. The difference between these two software organization groups related to the perceived financial performance was not significant. These findings implied that investment in a SPT framework probably will increase the level of software quality and overall TQM Practices. However, an organization will need to justify SPI framework investment based upon measures in addition to financial criteria.

Maartin (2000) conducted a study on “An investigation of academic performance of college science students through attribution retraining”.
Future attribution retraining studies should address the effect of antecedent variables on attribution belief and academic performance prior to administering treatment. Log keeping, as a qualitative augmentative tool to existing retraining techniques would be useful. While longitudinal studies were helpful, testing might be more beneficial when done mid-semester in addition to the end of the semesters.

Kumar & Anil (1999) studied whether open and Distance education has earned the credibility of an alternative and viable mode of education at all levels. The sample was drawn from the regional study centre of IGNOU located at Delhi. His findings revealed that unlike the conventional system, a heterogeneous group of learners enroll themselves in various distance education programmes. The characteristics of the learners influenced their academic performance in this system.

Manjulika (1995) studied the effectiveness of distance education with special reference to Karnataka state using descriptive survey and documentary method. The sample was drawn from Institute of Correspondence and Continuing Education (ICCE), Mysore University and IGNOU Regional Centre, Bangalore.

This findings inter-alia included a significant imbalance in the distribution of distance education institutions region / area-wise and also in the ratio of enrolment in distance education. Regarding the admission procedures adopted, nearly all respondents from ICCE and 90% of the respondents at IGNOU Regional Centre were satisfied.

More than 50% of students from both institutions did not receive the course material on time. All the students found the instructional material very useful. A large proportion of students found the assignments helpful for the term end examination.
However only 11% of respondents received back their evaluated assignments. More than half the students from ICCE were satisfied with the present system of examination. On the contrary, more than half the respondents from IGNOU were not satisfied.

Reddy (1995) investigated the learners' attitudes and suggestions in distance education by collecting data from 120 distance learners of Dr. B. R.Ambedkar Open University, Hyderabad. These findings were that as many as 75 learners reported that the printed materials were interesting and up to their standard. However, learners’ perceptions of course book and non-print media was that 50 and 32 learners respectively preferred them. Majority liked the contact classes and reported that they were very much useful for them. About half of the learners were concerned about the time taken for publication of results.

to learning and academic performance of students in traditional and open universities by taking samples from the IGNOU and two traditional universities of students who were undergoing the diploma in management course.

This finding included that students in Open University differ significantly from students in traditional university in terms of learner, content and context characteristics. Learner content and context characteristics significantly correlated with approaches to learning and academic performance of students both in open and traditional universities.

Academic performance that significantly correlated with approaches to learning could reliably be predicted by using learner, content, context characteristics
and approaches to learning of students both in traditional and open universities as predictors.

Venkataiah (1989) suggested a course team approach for the preparation of course materials for distance education. The major findings: Adequate attention must be paid to the preparation of course materials. The course team approach of the British Open University, though very expensive way of writing a course was feasible, economically viable and justified if the course material is used for a large number of students.

In the view of a large number of students for its courses, this team approach would be feasible, economically viable and would also ensure good quality of the materials.

Upreti & Chand (1988) studied the impact of teacher learning through correspondence course on upward mobility of the elementary teachers in the western region by selecting a sample of 172 elementary teachers.

This results indicated that factors like work place of teachers (home state or outside), rural-urban background, family structure, age, sex, religion and caste of the teachers have affected the vertical mobility of the teachers from elementary to the secondary level.

The inter generation mobility, rural-urban background, the type of management, sex, caste, age and the proximity of home from the workplace had all influenced the vertical mobility. Teachers from urban background and working in urban schools have more vertical mobility.
Mulay (1986) conducted a study of correspondence education in India by studying 23 institutes of correspondence courses at the University stage along with 63 teachers, 272 students from some of these institutions. This finding inter-alia included that some institutions tried some kind of innovative practices in the field of students’ support services, organization of student records and training of academic staff.

A high percentage of students (70) were satisfied with the content coverage of lesson scripts. Most of the students expressed satisfaction with regard to personal contact programme activities. They had complained about poor library facilities. The radio programmes were listened to by only 31% of students.

Pillai & Mohan (1984) studied the impact and performance of correspondence education programme of Madurai Kamaraj University by selecting a sample of 3000 candidates randomly from the students who had successfully completed correspondence education.

This finding included that the participants were men and majority comes from middle income group and were below 30 years. About 200 convicts in the central prisons of Tamil Nadu also took advantage of correspondence education.

Almost all the correspondence courses students found printed lessons most important. Only one-third of the candidates felt that contact classes were most useful. Assignments, response sheets and study centre were considered least useful by more than 50% of the students. Radio programme were considered as most useful or useful by about 68% of students.

Reddiar (1964) evaluated the professional competence of teachers in actual classroom teaching. The study also tried to find out the relationship between the
efficiency of teacher and their performance during the training period and the extent to which the trainees followed the techniques and methods learnt during the training in their classroom work when they served in school as teachers. This result showed that the grading of the performances of sixty three percent teachers during the study tallied with the classes secured by them in the practical examination.

Roy & Bina (1965) made an appraisal of teacher education programme by examining the success of teachers when they were students under training in an institute of education in Delhi and when they were in service in local secondary schools. For the pre-service success the marks in the public examination was taken. Principals' ratings and pupils' rankings were taken for in-service success. The study revealed that regarding teacher effectiveness there was a greater agreement between persons who had similar background of educational and professional experiences.

Prasad (1970) evaluated the professional efficiency of primary school teachers in Madhya Pradesh. Using a teacher efficiency schedule, teacher efficiency was measured in four subjects, Hindi, Social studies, General Science and Mathematics.

Debnath (1971) observed sixty seven teachers while teaching using an evaluation Performa. The important correlates of teaching efficiency, as found in the study, were knowledge of the subject-matter, sincerity in teaching, mastery of the methods of teaching, academic qualifications, mode of exposition, sympathetic attitude towards students, discipline, proper use of aids and appliances and the art of questioning. The findings through actual classroom observation revealed that age, experience, academic achievement and professional training were significantly related to teaching efficiency.
Jangira (1972) investigated whether the student-teachers sustain and carry over the classroom interaction patterns learnt in the training institute to their actual teaching performance when they assumed charge of their designed position in the teaching profession after completion of their training. The observational study revealed that student teachers sustained classroom interaction patterns even after twenty six weeks of their training.

Taylor (1973) tried to find out the extent to which the practicing teachers consider educational theory useful. Teachers from nine primary schools and four secondary schools gave data using a six point scale. The study of main subject, teaching practice, extracurricular activities and personal and social activities were rated as more satisfactory than curriculum and education courses.

Haughton (1997) studied the relationship between teacher preparation programme and quality of teachers. The purpose of the undertaking was to obtain from secondary school teachers their evaluation of the teacher preparation programme in which they participated. In response to the open-ended questions in the questionnaire the teachers cited inadequate content, insufficient materials and equipment irrelevant programme, insufficient time and inadequate practice teaching as shortcomings of the teacher preparation programme.

A follow-up study by Vashist (1997) of graduates who had gone into teaching was made at Stanford University. The sample consisted of the teachers employed in high schools. A questionnaire designed to cover all aspects of Stanford's teacher-educating procedure was sent to the teachers. A second questionnaire was sent to the employers to get judgement from them regarding the effectiveness of the individuals.
A third questionnaire was designed for employers to collect suggestions for improving training practices.

The outstanding impression from the questionnaires was that Stanford-trained graduates were well satisfied with their Stanford experience and that employers and supervisors were well pleased with Stanford trained teachers.

Singh (1983) compared the high and low academic achievers’ self concept by collecting data from a sample of 1524 students studying in class XI of different higher secondary schools in Jabalpur district. The main findings were a positive and significant relationship between self concept and academic achievement of Arts, Science and Commerce students. In general, there was a comparatively higher relationship between the self concept and academic achievement of Arts students than that of the students studying Science or Commerce. Again, there was a significant difference in the self concept of high and low achievers.

Goswami (1978) studied the self concept of adolescents and its relationship to scholastic achievement and adjustment by studying a sample of class X students from Agra. It was found that the global self concept of the adolescent males was significantly different from that of female adolescents. It was found that a positive and significant correlation existed between self concept and scholastic achievement. This relationship was positive and significant for male – female and rural urban sub populations. Interestingly, the relationship between self concept and scholastic achievement was stronger among the girls than among the boys.

Gupta (1978) studied the personality characteristics and academic achievement of scheduled caste and backward class students of Meerut University by
collecting data from students of six colleges of Meerut University randomly. The result showed that scheduled caste and backward students were poor achievers as compared to the non scheduled caste students. The post graduate as well as graduate students presented almost the same order of self concept as found in the case of scheduled caste students.

Biswal (1979) conducted a study on correspondence education in India by collecting data from all the directorates of correspondence education existing in the seventies. The Punjab University and Madurai Kamaraj University were selected for studying academic achievement. The findings inter alia included that there was no significant difference between the academic achievement of students of correspondence system and students of the formal system. The academic motivation of the students of correspondence education was found to be below normal.

Most of the students of correspondence education hailed from the second category of Socio-Economic Status (SES). The heads of departments of the directorates of correspondence education felt that suitable teachers were not available to them for development of instructional material. The teachers of correspondence education felt that the workload was more due to which justice to work was not possible.

2.4 STUDIES RELATED TO ATTITUDE

Allport (1935) defined attitude as “A mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related”.
Sorenson (1977), an attitude is a particular feeling about something. It therefore involves a tendency to behave in a certain way in situations which involve that something, whether person, idea or object. It is partially emotional and is acquired, not inherent, in an individual.

Rober Travers (1973), an attitude is a readiness to respond in such a way behavior is given a certain direction.

2.4.1 Nature and Characteristics of Attitude

1. Attitudes have a subject-object relationship, i.e., they always involve the relationship between the individual and specific objects, persons, groups, institutions, values or norms related to the environment

2. Attitudes are learned and acquired by experience and not inborn and inherent

3. Attitudes are relatively, enduring state of readiness. For example, the unlearned physiological motives like hunger, disappear once they are gratified

4. But attitudes on the other hand are relatively stable state of readiness

5. Attitudes have motivational affective characteristics

6. Attitudes are numerous and varied as the stimuli to which they refer

7. Attitudes range from strongly positive to strongly negative. When a person shows some tendency to approach an object, he is said to have positive attitude; when he shows a tendency to avoid the object, his attitude is negative
8. An attitude usually is considered as consisting three basic components – thinking, feeling and reacting. The first aspect pertains to belief; it involves the thoughts of a person has about the topic in question. The second aspect is related to a value. The third element is a predisposition to behaviour.

9. Attitudes are developed right from childhood through the process of conditioning, imitation and instruction.

10. Attitudes formed earlier could undergo changes in the light of new experiences; but this process is very slow and that is why we say attitudes are more or less stable.

11. It is viewed the different components of our environment only through the lens of our present attitude towards them. We refuse to look at the good features present in objects towards which we have negative attitudes.

2.4.2 Opinions and Stereotypes

Simpson & Yinger (1965) pointed out that all attitudes involve judgement. But judging people, objects, issues etc., without any evidence results in stereotypes, attitude loaded with one-sided judgement is called Stereotypes.

Stereotypes may be positive and negative. Negative Stereotypes are called ‘Prejudice’. Generally stereotypes are formed towards social groups. Examples of positive and negative Stereotypes are given below:

a. Brahmin boys are generally intelligent and honest (Stereotype)

b. Sikhs are usually brave and courageous (Stereotype)
c. Negroes are brutal and violent (Prejudice)

d. Thin people are cunning in nature (Prejudice)

Formation of Attitudes

Allport & Stagner (1937) suggested that attitudes are formed and undergone of the following four conditions.

i. Integration of Experiences: The accumulation and integration of a number of related experiences about an object gives birth to an attitude towards the objects. Attitude of a person towards other caste or religion has been formed in this way

ii. Differentiation of Experiences: When new experiences are acquired, they are differentiated or segregated from the already acquired experiences. This segregation or differentiation may tend to make certain attitudes more specific. For example, one might have formed the attitude that chettiars are business minded. But differentiation operates in forming the attitude that “Nattukottai Chettiars are Philanthropic” too, besides being business minded

iii. Trauma or Dramatic Experience: Attitudes are formed with greater speed and intensity on account of sudden occurrence of unusual shocking experiences. A shopkeeper whose shop has been burnt by the striking students may develop intensively negative attitudes towards all students

iv. The adoption of the Available Attitudes: A large number of attitudes are acquired in a ready-made fashion by simply following suggestions or examples of intimate friends, teachers, parents or adopting the mores and traditions of the community. Negative attitude of children of particular
social group towards another race or community is formed through the process of adoption rather than as a result of firsthand experience.

Factors influencing the Development of Attitudes

Attitudes result as a product of the interaction of one’s self with one’s environment. Factors influencing the following development of attitudes can be divided into two groups: (i) Factors pertaining to the individual self (ii) Factors within the individual’s environment.

a. Physical Development: Physical health, vitality, and somatic structure play important role in one’s social adjustment and through that exercise influence on the formation of attitudes in different directions.

b. Intellectual Development: Development of attitudes is conditioned by the growth of intelligence. The components of intelligence like memory, understanding, thinking and reasoning play a significant part in attitude formation as they help in gaining perceptual experiences.

c. Emotional Development: Emotions play a dominant role in overt or covert behaviour manifestations which are in turn related to attitudes.

d. Social Development: Each individual develops certain ideal values and a concept of self in which he has pride. These shape the attitude of the individual regarding moral behaviours and ethical standards to be followed in behaviour.

Mushome (2013) conducted a study on “The attitude of lecturers towards visually impaired students: A case study of one of the universities in the Limpopo province in South Africa”.

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This investigation presented the attitude of lecturers towards the visually impaired students in one of the universities in the Limpopo Province. First, it was argued that the experience of a visual impairment by a student has a greater effect on the strategies and methodologies used for instruction than on the curricular content to which the student is exposed. Specialized instructional strategies facilitated the visually impaired students’ successful participation within regular education classrooms. The degree of specialized intervention needed depends upon the intensity of the students' impairments. Despite the fact that the university had each year been registering students who were visually impaired, there is no indication that staff members are being trained to handle these students. Both qualitative and quantitative findings from interviews with visually impaired students, HODs (Heads Of Departments), and Deans/Directors of centres suggested that lecturers found teaching visually impaired students is a problem, because they are never trained to teach visually impaired students and that the institution should employ a permanent specialist in teaching visually impaired students and create a resource centre for them. This paper examined some of the concerns that the visually impaired students encounter and raises questions about how they learn and how they are being taught.

Behera (2012) conducted a study on “an investigation into the attitude of college teachers towards E-learning in Purulia District of West Bengal, India”.

In this study, the researcher made an attempt to study the attitude of college teachers towards E-learning in Purulia District of West Bengal. One hundred teachers (both male and female) teaching in Arts and Science streams were taken as representative sample of the whole population. An attitude scale was used for collecting the data. The means of both groups were tested for significance of
difference by using "t" test. The differences in the groups were statistically significant and the attitude of College teachers was more favourable towards E-Learning.

Gitonga (2012) conducted a study on “Teacher trainees’ attitude towards physical education in Kenya”.

This study investigated the attitudes of teacher trainees towards Physical Education (PE). It was hypothesized that teacher-trainees had negative attitudes towards PE. A total of 132 teacher trainees were randomly selected from a teacher Training College in Kenya completed a questionnaire adapted from Wear's attitude scale with equivalent forms. Statistical analysis included frequencies and the Chi Square method which was used to test the hypothesis. A probability level of 0.05 or less was taken to indicate statistical significance. Findings showed that teacher trainees have positive attitudes towards PE, with no significant gender differences. It was recommended that conducive teaching and learning environment as well as resources should be provided for effective teaching of PE in educational institutions and that PE should be made an examinable subject in Kenyan secondary schools. This would facilitate compliance to statutory requirements and promote the status of PE in Kenyan education system.

Hsieh (2012) conducted a study on “Urban early childhood teacher’s attitude towards inclusive education”.

This study investigated the relationship between urban early childhood teachers' attitudes towards inclusive education and personal characteristics, professional background, and programme context. Questionnaires were completed by teachers (n = 130) who taught preschool children in primarily low-income, urban
neighbourhoods. Attitude ratings were slightly above average, suggesting that teachers overall had a moderately positive attitude towards inclusive education. A hierarchical regression analysis was used to examine potential factors influencing ratings of inclusive education. Results indicated that none of the variables related to personal demographics significantly predicted overall attitude about inclusion. Among variables related to professional background, having had a positive past experience with children with disabilities predicted a positive attitude. The teachers' role within the programme also predicted attitude towards inclusive education, with lead teachers having a more positive attitude than assistant teachers. Implications are discussed for practice as well as for future research.

Isman (2012) conducted a study on “Saudi secondary school teachers’ attitude towards using interactive whiteboards in classrooms”.

This research aimed at investigating the Saudi Secondary school Teachers' Attitudes towards using Interactive Whiteboard in the classrooms. The research used the Quasi-Experimental approach, with one group (100) teachers, and limited to the Secondary School Teachers that enrolled in the first semester of (2011/2012) academic year. The research used Interactive Whiteboard Attitude Survey, observation skill card for using Interactive Whiteboard in the classrooms and structured interviews with students. The results indicated that there were appositive attitude towards using Interactive Whiteboard. But a few number of teachers used effectively the Interactive Whiteboard effectively in the classrooms. These results indicated that the teachers need a professional development program for effective using of Interactive Whiteboard effectively to help them in improving their Teaching skills and the students learning. More details of the results are discussed in the study.
Balci (2012) conducted a study on "The relationship of organizational corruption and organizational culture, attitude towards work and work ethics: A search of Turkish high school teachers".

The aim of this study was to analyze organizational corruption and to determine its level of relation to attitude towards work, work ethics and organizational culture. The data in study had been collected from 441 public high school teachers employed in the central districts of Ankara in the school year of 2008-2009. Data had been collected through "Scale for Organizational Corruption", "Scale for Attitude towards Work", "Scale for Work Ethics" and "Scale for Organizational Culture", all of which are developed by the researchers in this study. Correlation and regression analysis techniques have been used in analyzing the data. It was concluded from the study that there was a significant, though at an average level, relation between organizational corruption, organizational culture and work ethics and that there is a negative significant relation, though at a low level, between organizational corruption and attitude towards work. It was also concluded that the variables for attitude towards work, work ethics and organizational culture explain 38% of the variation in organizational corruption.

Timur (2012) conducted a study on "Determination of factors affecting preschool teacher candidates' attitudes towards science teaching".

The purpose of this study was to determine preschool teacher candidates' attitudes towards science teaching and to examine the reasons behind their attitudes in depth. In this study, mixed methods were used including quantitative and qualitative data. Quantitative data gained by attitudes towards science teaching scale, qualitative data gained by focus group interview with 10 preschool senior teacher candidates.
Data were analyzed by content analysis methods. At the end of the analysis four themes were attained. These four themes were; science content knowledge, experience of science teaching, opinions of the science education course in their undergraduate program, knowledge of science teaching methods. Preschool teacher candidates' attitudes towards science teaching were obtained good level. However, comfort-discomfort sub-dimension was identified as having medium attitude score. In addition, as a result of focus group interview data, science content knowledge and positive science teaching experience had been found to be most effective positive attitudes towards science teaching. In light of results obtained from the study, educational suggestions for preschool teacher candidates' attitudes towards science teaching are made.

Al Otabi (2012) conducted a study on “Attitudes towards the use of the Internet”.

The main purpose of this study was to investigate the relationship between the attitude towards the use of the Internet and its cognitive, emotional and behavioral components. To achieve the objective of the study, the researcher used the scale of the attitude towards the Internet of a random sample of students (n = 216) at Teachers College at King Saud University. The most important result of the study was the attitude that students have towards the positive use of the Internet. The uses of the Internet involved educational and cultural purposes, leisure and entertainment as well as purchasing purposes. Besides, there was the existence of significant differences at the level (0.01) between high and low Internet users in the general attitude towards the Internet in favour of the high users of the Internet.
Bektas (2012) conducted a study on “The relationship between personal values and attitude towards teaching profession”.

This study aimed to determine to what extent the personal values of class teacher candidates predict their attitude towards teaching. The universe of the research was teacher candidates from the Kazim Karabekir Faculty of Education, Ankara University in the 2010-2011 academic year, 305 teacher candidates from 1st, 2nd, 3rd and 4th year class were determined by the criterion sampling method constitute the sample of the research. A Personal Values Inventory and an Attitude Scale towards the Teaching Profession were the data collection instruments. For the analysis of data, frequency, arithmetic mean, standard deviation, Pearson Product Moment Correlation Analysis and Multiple Linear Regression Analysis were used. According to the data obtained, the personal values of the teacher candidates were found to predict their attitudes towards teaching profession in the proportion of 22%.

Ting (2012) conducted a study on “Attitudes of pre-service teachers towards teaching deaf and ESL students”.

This study explored pre-service teacher attitudes towards teaching a deaf student who uses Australian Sign Language (Auslan) compared to a student who was new to Australia and speaks Polish. The participants were 200 pre-service teachers in their third or fourth year of university education. A questionnaire was created to measure attitudes, and participants were also asked to list teaching strategies they would use with the two students. A factor analysis yielded two subscales: Teacher Expectations and Teacher Confidence. Results showed that teachers had higher expectations of the Auslan student than the Polish student, and were more confident about teaching the Auslan student. Differences between the two conditions were also
found for suggested teaching strategies. The findings have implications for teacher education programs.

Gokdere (2012) conducted a study on “A comparative study of the attitude, concern, and interaction levels of elementary school teachers and teacher candidates towards inclusive education”.

Inclusion was an educational approach providing students with special needs with education in normal classrooms, which was the least restrictive educational environment for them by offering the necessary services for full time or part time. Although the necessary laws and regulations appeared to execute this inclusive practice properly in Turkey, there were some problems regarding its implementation. Aim of this study contributes to the implementation by determining and solving the problems encountered in the inclusive practices by developing an assessment instrument comparing the attitude, concern and interaction levels of pre-service and in-service elementary teachers towards inclusive education. The study sample consisted of 68 in-service elementary teachers working at central elementary schools in Amasya and 112 pre-service elementary teachers in the elementary education program of Amasya University during the 2009-2010 academic years. For the study, an assessment consisting of four parts was developed and applied as a data collection instrument. The data gathered from the study was analyzed using the SPSS 18.00 package program. With the findings obtained, it had been determined that there are significant differences between the in-service and pre-service teachers' attitudes towards inclusive education and their interactions with individuals with special needs. It had been concluded that these differences are related to occupational experience and the preparation levels of the individuals with special needs. The findings of this
study suggested that professional development workshops and seminars on special and inclusive education would improve the knowledge of in-service elementary teachers and enhance the qualification of the inclusive practices.

Gafoor (2009) conducted a study on “Inclusive education: does the regular teacher education programme make difference in their attitude and skills”.

This study was to find out whether the regular B.Ed programme creates significant difference in the knowledge and understanding, and attitudes regarding inclusive education of student teachers and to see the broad implications of the finding for the improvement of regular teacher education programme in relation to inclusive education practice. The sample for this study which used a comparative design is comprised of two groups from an aided college of education of student strength 300 affiliated to University of Calicut, Kerala, India using simple random sampling (N = 55) with 48 female and 7 male students, at the beginning of B.Ed course. There was increase in the knowledge level of student teachers regarding inclusive education owing to the B.Ed programme, but was not optimal. Even after successful completion of the programme, some student teachers lack in essential knowledge regarding inclusive education. It was found that attitude towards inclusion is fairly high even before the teacher preparation course, revealing that the concept of inclusive education though in an evolving stage in India, the essence and principles are deep rooted in the society. B.Ed programme made significant positive impact on knowledge and attitude regarding inclusive education practice. As attitude towards inclusion is found less favourable among females and the improvement there of was not significant due to the teacher preparation, there is need for further strengthening inclusion related experiences in teacher preparation. It was concluded that, though
belief in theoretical possibilities of inclusion is strengthened after the B.Ed programme, it did not permit the teachers to do away with the doubts regarding the practical issues emerging from inclusion that may be because student teachers were not receiving practical, real life experiences of inclusion. The linguistic shift from integration to inclusion had not brought about corresponding changes in understanding. Inclusion remains a progressive cliche, something about which people can talk without thinking about what they mean. Hence, study called for strengthening inclusive education, content and method, at pre-service and in-service teacher preparation level, providing student teachers more of organized school based training in inclusion, organizational changes for promoting effective learning in practice teaching schools and close examination of thinking on inclusive education of teachers.

Boone (2004) conducted a study on “The impact of the human service organizational environment and professional identity on child welfare workers’ attitudes towards advocacy”.

This qualitative finding suggested that worker advocacy was influenced by the informal support networks within the internal organizational environment. The results of this study provided data on the context, tactics and strategies of advocacy in agency based practice.

Shbeer (2004) conducted a study on “A comparison of attitudes toward computer and text based instruction for at-risk students”.

The conclusion derived from this study was that the school had a positive influence on students' attitude and perceptions. The above mentioned results for all participants in the two settings were consistent with the results of the interviews and
the results obtained from the observations. One implication of this study was that replication with a larger sample in different alternative schools may give a better description of the effect of the self-paced computer based instruction on students attitudes. Also, a longer observation period and a larger sample of interviewed students can provide more insight into the school environment.

Ames (2003) conducted a study on “The role of learning style in university students’ computer attitudes: Implications relative to effectiveness of computer-focused and of computer-facilitated instruction”.

Data also indicated that students tended to select academic majors and instruction delivery methods that complemented their learning styles and computer attitudes. Implications for the future implementation of computers in schools and technology training, especially for females, were discussed and suggestions for future research were proposed.

Manav (1981) investigated the relationship of attitudes, self concept and values of professional and non professional college students with their achievement by taking a sample of 890 students. This finding included that the top professional students differed significantly from the non-professional students with regard to attitude towards teachers and society. The non-professional students had more positive attitude towards their teachers and society than the professional students. None of the self concept variables was found to be significantly related to the students’ achievement. There was no relationship between students’ attitude and achievement.
Hirunaval (1980) analyzed pupils’ self concept, academic motivation, classroom climate and academic performance by studying a sample of 1031 central school students of Gujarat. It was concluded that the self concept and pupils’ academic performance were positively related. It also scored that boys scored better on self concept than girls and urban pupils had better self concept than rural pupils.

Chaudhuri & Hom (1980) studied analytically the correlates of academic performance of college students (tribal) of Mizoram by surveying the levels of self-concept, anxiety, family influence and socio-economic status and the relationship of these factors and their effect on academic performance. The sample was drawn from 459 pre-university second year students of all the five colleges of Mizoram. The findings inter alia included that self concept emerged as the most significant correlate of academic performance. There was no significant difference between the boys and girls with regard to self concept.

Sang (1994) investigated the learning strategies and attitudes of adults in a distance basic education programme in Thailand and their relationship to the students’ academic achievement (grade point average). The results showed that adult learners had much difficulty with test taking strategies, test anxiety, fear and finding time to study. However, their ability to concentrate while studying was high. Most students preferred learning in the group meetings rather than by studying textbooks.

Further, the results on learning strategies suggested that for Thai females, self–confidence and self–image are more important to academic success than learning strategies. Further, the result revealed better learning strategies and attitudes for students who relied on textbooks than for students who relied on group meetings to learn the course contents.
Saxena studied self-concept, study habits and school attitude as correlates of Socio-Economic Status (SES) and cultural setting in different divisionary and failures of high school students of Kanpur district by collecting data from a sample of 720 high school and higher secondary students in the age group of 13 to 18 years.

These findings were that the SES had the most significant effect on self-concept, study habits and school attitude of different divisioners as well as failures of high school. The first divisioners belonging to the urban culture. In the case of third divisioners and failures also, rural culture significantly promoted study habits than the urban culture.

It was interesting to note that the first order interaction setting had no significant effect on self-concept, study habits and school attitude. Also the second order interaction among scholastic achievement, socio-economic status and cultural setting had no significant effect on self-concept, study habits and school attitude.

Gomathi (1982) conducted a critical study of the participants’ evaluation of selected postgraduate course of correspondence education programme of Madurai Kamaraj University.

The findings of this study revealed that there was no significant relationship between the achievement of the candidates and their evaluation regarding the realization of objectives and factors such as lesson units, response sheets, text books, contact seminar, study centres and evaluation. Achievement was associated with the evaluation of radio broadcast and instruction. There were more men (61%) than women candidates (39%). Sixty five per cent of the students were employed, of which 45% were teachers.
Khan (1982) studied the suitability of teaching through correspondence courses as offered by some Indian Universities at the first degree level by studying a sample of 43 English teachers working in the corresponding institutions and 100 under graduate students.

These findings included that the majority of the distance learners were teenagers, men and unemployed. Most of the students joined the correspondence courses because of their desire to improve their qualifications.

A large number of students complained about the lack of library facilities, lack of adequate contacts between the tutors and the students, and not setting proper instruction through lesson scripts. Majority of them did not submit their assignments and did not consider the personal contact programme as necessary elements of their studies. As a whole, a large number of students were in favour of correspondence studies, while 34% of them disliked the system.

Mathew (1980) attempted to identify desirable teaching competencies of physics teachers in the context of certain presage process and product variables. One hundred and thirty teachers were observed using an observation schedule developed by the investigator. The study identified fourteen factors of teaching competency.

Mutha (1980) attempted to identify the attitudinal, motivational and personality factors associated with effective teaching. Seventy five effective and seventy five ineffective teachers participated in the study. One of the major findings was that sex, professional training, nature of schooling and income level was significantly associated with teacher effectiveness.
George (1982) analyzed the role performance of teachers of English as assessed by different rating groups – high school teachers, language experts, parents, teacher-trainees and secondary school pupils. The role performance ratings were significantly lower than the role expectation rating scores for all rating groups. The main difficulties experienced by teachers in improving their role performance were pre-occupation with domestic affairs, the single optional system at the B.Ed course and poor standard in English of pupils, inadequate library facilities and heavy workload.

In this study in which eight hundred and seventy teachers of high school and forty eight principals of secondary schools of U.P state participated, Garg (1983) studied the professional responsibility present in the teachers of secondary schools in the context of the different types of schools. Teachers in "high support and satisfaction climate" were found to be more responsible professionally than teachers in "low support and satisfaction climate" schools. Teachers in schools with "low lack of facilities" were also found to be more responsible than teachers in schools with "high lack of facilities".

Khanna (1985) studied personality patterns of successful high school teachers. The researcher framed the hypothesis that there was significant difference between the achievement of the students of successful and unsuccessful teachers. R.C. Deva's Teacher Rating Scale was used as a tool. The analysis of data supported the hypothesis.

The problems of beginning teachers had recently become a matter of growing concern. This concern has produced a substantial number of research studies which describe the problems and difficulties encountered by the beginning teachers.
Teaching had a relatively unique feature of teacher physical and psychological isolation (Kremer - Hayon, 1987). The moment the teacher entered the classroom he/she has to face the situation alone. The transition from college to teaching seems to be more abrupt and less gradual as compared with other professions. The teacher made many decisions then and there, in some times very complex situations. No wonder then that beginning teaching was described as a reality shock.

Rajameenakshy (1988) made a study of the "Factors Affecting Teaching Competence of B.Ed. Trainees in Physical Science". The purpose of the investigation was to conduct differential and correlation studies between teaching and various factors. The study concluded that training in the skill of demonstration and micro-teaching significantly increased teaching competence. The teacher trainees having first class in the degree examination, higher socio-economic status, female teacher trainees and teachers who taught in girls' schools were significantly higher in teaching competence.

Krajicik & Penick (1989) assessed the effectiveness of Iowa-Undergraduate Pre-service Science Teacher Education Programme. The study provided evidence that pre-service teacher education can have a very positive effect on the development of pre-service science teachers into effective practicing teachers. Analysis of the responses of science teachers indicated that both programme graduates and comparison group teachers had similar course objectives and teaching strategies, used materials and equipment, a similar amount of time and allocated class time in similar ways.

A systematic assessment of the perceptions of serving teachers towards their pre-service education was carried out by Khan (1990) by surveying the entire science
and mathematics teacher output of the University of Botswana of the period 1980-1985. Respondents were asked to assess the importance, using a Likert-type scale of various items comprising the pre-service teacher education programme. The identification of teaching the less academically able as a key objective of pre-service training was a valuable finding of the survey. Many teachers suggested that the pre-service teaching practice should be longer and occur more than once in a given programme.

Wubbels & Korthagen (1990) carried out an investigation to find out whether a programme designed to promote reflective teaching among prospective teachers does produce teachers who differ from teachers educated in a more traditional subject matter oriented programme. All former students of two colleges who graduated between 1977 and 1986 participated in the study. The variable year of graduation was used to distinguish short term and long term effects, using a cross-sectional approach. No significant difference with respect to reflective attitude was found between the two groups.

Karp (1991) conducted a study on the Elementary School Teachers' Attitudes toward Mathematics. The teaching behaviour and instructional methods of elementary school teachers were investigated to determine whether teachers with positive attitude toward mathematics employ different methods in mathematics instruction than those with negative attitudes. Overall, teachers with negative attitudes employed methods that fostered dependency whereas teachers with positive attitudes encouraged student initiative and independence.

Pugh et al., (1991) conducted a study, an Investigation of Pre-service Teachers' Attitude toward Theory and Practical Application in Teacher preparation.
To determine program effectiveness, students were surveyed at the end of the spring and fall semesters for six years, examining their attitudes towards theory and practical application in teacher education. This study noted whether they felt competent about subject matter, audiovisuals, classroom management and routine, and communication. Results found their attitudes more positive in the fall on all four measures.

Koontz Franklin (1992) in their study 'An Assessment of Teacher Trainees Attitude' towards selected Instructional Media, they selected two groups: 168 students and 170 pre-service teachers. Based on the final results of this study, it was concluded that a formal course in the selection and utilization of instructional media can function as a primary factor in the development of student's attitudes in a positive direction.

Mathai (1992) found that attitude towards teaching profession is a significant predictor variable of success in teaching.

In this study, the effects of Hands-on, Minds-on Teaching Experiences on Attitudes of Pre-service Elementary Teachers, Pedersen & Mecurdy (1992) examined the effects of a science method course on the attitude of the pre-service elementary teachers (N=145) toward teaching science. Results indicated a significant positive change in attitude that was not significantly different for low and high science achievers.

Baxter & Anthony (1993) conducted a study on improving Teaching candidates' Attitudes toward Learning Theoretical knowledge. Study tested the hypothesis that teacher candidate who were exposed to a theory oriented normative model and given theory - oriented reinforcement within a practice-oriented context
would manifest more positive attitudes toward learning theoretical knowledge than those who were not so exposed. Results proved the hypothesis is plausible.

Benton et al., (1993) conducted a study about the Professional Development School's Impact on Student Teacher's Attitudes. The purpose of this study was to determine if student teacher's attitudes toward their student teaching experiences differed significantly after the addition of professional development school experiences. Two groups of student teachers were compared. A one way analysis of variance revealed significant differences for seven of the 38 items.

Godwin et al., (1993) in their study, the interactive Video Approach to pre-service Teaching Training: An Analysis of students' Perceptions and Attitudes investigated the integration of interactive video technology in to a traditional teacher education programme, analyzing student attitudes about classroom management strategies. Students completed a survey following a seminar demonstration of an interactive videodisk on classroom management. Subjects revealed positive attitudes toward the use of interactive video.

Huber et al., (1993) conducted a study on Attitude toward Diversity: Can Teacher Education programme really make a difference. They concluded that teacher education programme was revised to develop sensitive, nurturing teachers who understand student diversity. Pretests and posttests examined students’ professional and personal opinion about diversity found that field experiences create significant differences in attitudes toward diversity and social distance preference in educational settings.
Skariah & Sunny (1994) studied creativity of teacher trainees' in relation to their self concept, attitude towards teaching profession and success in teaching and found that high teaching success group and high attitude towards teaching group are more creative than the other groups.

Anderson & Dewayne studied (1995) about the pre-service Teacher's attitude toward children. Results from a teacher attitude questionnaire given to 1,405 pre-service teachers revealed large differences in attitudes toward children, associated with age, gender, and major. The most positive were females in elementary, least positive males in secondary. Those in special education were most positive, in music, art and physical education least positive, whether these attitudes manifest themselves in the classroom remains unknown.

Gardner (1995) analyzed the final years of the pupil-teacher system and the student teacher scheme, primarily through oral recollection rather than documentary analysis. The analysis led to the conclusion that entry into profession remained for many and particularly for student teachers, a baptism by fire. To emerge as a successful fully-fledged member of the profession, the rural student-teacher had to struggle hard of all.

Kumar (1995) in a study found that there is significant difference in the attitude of male and female teacher trainees towards teaching profession.

Reddy (1995) studied the attitudes of student teachers and success of student teachers, and reported that attitude of teachers do not significantly influence the success of student teachers.
Roos Mary et al., in their study (1995) the Influence of Early Field Experiences on the attitudes of Pre-service Teachers, investigated the effects of early field experience on the attitudes of elementary pre-service teachers toward teaching. Pre-test and post-test data were collected by means of an instrument employing a semantic differential scale measuring attitudes toward teaching. Results offered support for the inference that these pre-service elementary teachers have positive attitudes toward teaching prior to early field experience and have even more positive attitudes toward teaching after their easily field experience.

Marso et al., (1996) investigated the relationship between pre and post preparation development of attitudes, anxieties and confidence about teaching, and candidates’ success or failure in making the transition to teaching on 241 teacher candidates, and it was found that teacher preparation itself, had an impact upon teacher candidates' affective characteristics.

Mortis (1996) tried to identify the effectively demonstrated behaviour that were observed by secondary teachers during their teacher preparation programme and that they transferred to their classes. It was concluded that some things are indeed right with secondary teacher preparation programme. The classroom teachers had responded with verbatim accounts of behaviour that are effectively demonstrated during secondary teacher preparation programme and that are transferred to their classroom. The accounts when co-ordinate confirms that some teacher preparation programme are demonstrated in practice.

Downing et al., (1997) conducted a study about the science process skills and Attitudes of pre-service Elementary Teachers. This study examined whether there was a relationship between pre-service elementary teachers' competency in science
process skills and attitude towards the field of science. Study data obtained from 46 students enrolled in an elementary course data analysis found a significant positively relationship between how well teachers performed science process skills and their attitudes toward science. The two subscales that significantly correlated with the performance of science process skills were the confidence in learning science scale and the teacher scale.

Devi (2005) in a study, found that moderate and highly significant correlation exists between success in teaching and the predictor variables like, role conflict, attitude towards teaching profession and job satisfaction. It was also reported that role conflict and Attitude towards teaching profession are the two variables capable of significantly and efficiently discriminating between successful and less successful groups of women teachers of Kerala.

2.5 STUDIES RELATED TO MULTIMEDIA USAGE

It is a media and content that uses a combination of different content forms. This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia includes a combination of text, audio, still images, animation, video, or interactivity content forms.

Multimedia is usually recorded and played, displayed, or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine art; by including audio, for example, it has a broader scope.
The term "rich media" is synonymous for interactive multimedia. Hypermedia can be considered one particular multimedia application.

Multimedia may be broadly divided into linear and non-linear categories. Linear active content progresses often without any navigational control for the viewer such as a cinema presentation. Non-linear uses interactivity to control progress as with a video game or self-paced computer based training. Hypermedia is an example of non-linear content.

Multimedia presentations can be live or recorded. A recorded presentation may allow interactivity via a navigation system. A live multimedia presentation may allow interactivity via an interaction with the presenter or performer.

2.5.1 Major Characteristics of Multimedia

Multimedia presentations may be viewed by person on stage, projected, transmitted, or played locally with a media player. A broadcast may be a live or recorded multimedia presentation. Broadcasts and recordings can be either analog or digital electronic media technology. Digital online multimedia may be downloaded or streamed. Streaming multimedia may be live or on-demand.

Multimedia games and simulations may be used in a physical environment with special effects, with multiple users in an online network, or locally with an offline computer, game system, or simulator.

The various formats of technological or digital multimedia may be intended to enhance the users' experience, for example to make it easier and faster to convey information, or in entertainment or art, to transcend everyday experience.
A laser show is a live multimedia performance. Enhanced levels of interactivity are made possible by combining multiple forms of media content. Online multimedia is increasingly becoming object-oriented and data-driven, enabling applications with collaborative end-user innovation and personalization on multiple forms of content over time. Examples of these range from multiple forms of content on web sites like photo galleries with both images (pictures) and title (text) user-updated, to simulations whose co-efficient, events, illustrations, animations or videos are modifiable, allowing the multimedia "experience" to be altered without reprogramming. In addition to seeing and hearing, Haptic technology enables virtual objects to be felt. Emerging technology involving illusions of taste and smell may also enhance the multimedia experience.

**Educational Benefits of Multimedia Tools**

i. Provide students with opportunities to represent and express their prior knowledge

ii. Allow students to function as designers, using tools for analyzing the world, accessing and interpreting information, organizing their personal knowledge, and representing what they know to others

iii. Multimedia applications engage students and provide valuable learning opportunities

iv. Empower students to create and design rather than absorbing representations created by others

v. Encourage deep reflective thinking
Giving students an opportunity to produce documents of their own, provides several educational advantages:

1. Students experience the technical steps needed to produce effective multimedia documents, become better consumers of multimedia documents produced by others.

2. Students indicate they learn the material included in their presentation at a much greater depth than in traditional writing projects.

3. Students work with the same information from four perspectives: i) as researchers, they must locate and select the information needed to understand the chosen topic; ii) as authors, they must consider their intended audience and decide what amount of information is needed to give their readers an understanding of the topic; iii) as designers, they must select the appropriate media to share the concepts selected; and iv) as writers, they must find a way to fit the information to the container, including the manner of linking the information for others to retrieve (Smith, 1993). All of these contribute to student learning and help to explain the improved student learning that is often associated with IT-assisted Problem Based Learning (PBL).

There is another aspect to developing multimedia documents that empowers students. Students quickly recognize that their electronic documents can be easily shared. Because of this, students place a greater value on producing a product that is of high standard. An audience of one—the teacher—is less demanding than an audience of many—particularly one’s peers. Students quickly recognize that publishing a
multimedia document that communicates effectively requires attention to both the content and the design of the document.

Ogunlana (2012) conducted a study on “Perceived Use of Networked Multimedia Applications on Learning in Selected Universities in South West Nigeria”.

This paper specifically looks into librarians' perception on networked multimedia resources; the study aims to examine the concept of multimedia, the characteristics of multimedia, benefit accruable from multimedia and the use of multimedia applications improved student's skills. There was no significant difference between male and female perception on the use of networked multimedia application. There was no significant difference in the uses of multimedia applications between Federal, State and Private Universities. Uses of networked multimedia application have a significant effect on learning. The respondents' perception on the use of networked multimedia applications revealed that multimedia applications challenges students to want to learn and that improves their perception on learning and at the same time challenges their multiple senses and fosters teamwork.

Aronson (2009) conducted a study on “The effects of a multimedia video intervention’s emotional content and ethnic matching on HIV prevention and testing related knowledge, behaviour, and intent”.

This investigation indicated that instead of the standard practice of delivering a single type of educational video content to all learners, or even to particular groups of learners, future interventions could be fine-tuned for greater effectiveness among
members of specific population groups and to achieve specific cognitive, affective, or behavioral outcomes.

Debiase (2009) conducted a study on “Effects of colour and animation on visual Short – Term Memory (STM) in computer – environment learning tasks”.

This finding suggested that achromatic colour information interferes with visual STM learning tasks in specific contexts. Findings also suggested that the use of animations in visual STM learning tasks may interfere with complex visual STM learning. Numerous questions were raised for further research utilizing experimental designs that focus on visual STM learning tasks in contrast to designs that focus solely on identifying visual STM parameters.

Lugo (2004) conducted a study on “The effects of multimedia-based instructional technology on Algebra I problem-solving skills of ninth through twelfth grade students with learning disabilities”.

This result showed that for language learners, motivational and self-regulated learning components are correlated with reading achievement. Attribution for failure and learning goals were good predictors for self-assessment and reading achievement. The participants’ effort attribution and goal orientation patterns may reveal cultural influences.

Jaramillo (2007) conducted a study on “The impact of Interactive Powerpoint Instruction (IPI) on teacher practice and student writing in high-poverty classrooms”.

Findings suggested a positive relationship between teacher instruction, student participation, and student writing achievement, when using IPI during writing instruction in fifth grade classrooms of economically disadvantaged students.

The data suggested that, a computer like any other previous technology not only facilitates students learning experiences but also fundamentally reshapes and transforms the experience. The Chinese Dragons programme, which was constructivist, situated, and case based, evidently engaged and immersed the learners in simulated contexts to build up a complex understanding of Chinese dragons through multiple cases of exploration.

Moulton (2005) conducted a study on “A longitudinal study: the effect of a multimedia – training program on teacher attitude and willingness to integrate technology into classroom instruction”.

This study compared the attitudinal change towards multimedia development and classroom integration among those teachers who participated in the Just – In time five year project and a sample of these trained teachers one year after completion of the project. The sample consisted of 62 trained teachers, with 62% elementary teachers and 48% secondary teachers. Using a set of identical pretest and post test questions to measure change in attitude one year after completion of the project, the analysis of the secondary data indicated a significant positive change in teacher attitude towards the use of multimedia in the classroom. The analysis of the post-test data relating to the classroom integration of multimedia was equally positive. These results of this research may indicated that using a product driven model for multimedia with teachers has an enduring effect on teacher attitudes and the corresponding integration of multimedia software for classroom integration.
Walter (2004) conducted a study on “Designed music for multimedia instruction: A study of music as a complementary aspect of instructional design”.

Using MANOVA & ANOVA analytic techniques, results revealed a statistically significant difference indicating higher levels of performance from learners who experienced the designed background music version of the multimedia lesson. Implications are discussed regarding the versatility of musical design for instructional design success, the reformation of future interactions of auditory adjunct and cognitive load research and the viability of complementarily for instructional design and learning.

Sarkozi (2001) conducted a study on “A study of student and instructor interaction, performance and critical learning incidents in a traditional classroom and in an asynchronous learning network”.

Key results showed that on-line students while reporting the same degree of course satisfaction, actually defined interaction differently than the traditional student. The number of reported critical learning incidents and the amount of detail provided on course material by the traditional students exceeded that of the on-line students substantially. Further, while the on-line students covered more material and the instructor reported better responses to essay questions by these students, there were more substantive discussions with the traditional students. Class size proved to be important in the traditional classroom. The instructor and researcher could not see any attributable efficiency that would allow students to be managed on-line than in a traditional classroom.
This study concluded that while providing access to learning is important, needs to be mindful that technology cannot provide the meaning and that the learning process requires structure. Additionally, while the latest information can be communicated and provided instantly, meaning in human terms needs time to be nurtured and reflected upon.

According to Newton & Rogers (2001), multimedia was a class of computer-driven interactive communication systems, which create, store, transmit, and retrieve textual, graphic, and auditory networks of information. Multimedia means that computer information can be represented through audio, video, and animation in addition to traditional media, that is, text, and graphics, drawings, and images. Multimedia system is capable of processing multimedia data and applications.

According to Farber & Shuell (2001), multimedia involves processing, storage, generation, manipulation and rendition of multimedia information characterize multimedia system, and the resources could include online text files, pictures, video, audio, databases, archives, library catalogs, course notes, relevant links to various Web sites and easy access to search engines available on the Internet.

Multimedia networking provides the skills needed to set up, troubleshoot and maintain computer systems configured for a visual communication and computer graphics environment. Multimedia information networking is a composite field. It is a synthesis of aspects of multimedia systems, information systems, and computer networking each a vast field in its own right. It involves the fundamental concepts, theory, technology, and methodology required to build and use multimedia information networks, wide area networks, internetworking; and multimedia information networks are author's easy-to-read style and comprehensive approach.
combine with its excellent, well-thought-out examples to provide a valuable instructional tool for both the novice and the experienced reader. The instruction and use of networked multimedia technology has increased significantly in most Colleges and Universities. Regarded as the key to students' future success, multimedia resources technology has become an essential part of education. As multimedia combines the technology of video and computers, one of the most important advantages is that it may offer a unique environment for interactivity, learner control and student interest and motivation. It should be indicated that the quality of an instructional multimedia system depends on the integration of technology, information, and personnel.

There is an accelerated technological change accompanied by exponential growth in human knowledge, especially in the digital and networked environment. The idea of using multiple media to improve communication between humans and computers is not new. The term "multimedia" has two possible meanings. Firstly, the "media" refer to storage media such as WORMs, CD-ROMs, and disks. Secondly, it can refer to the presentation of information using different media such as sound, graphics, text, etc. Human beings often use at least two sensory channels which are visual and auditory (Fadamiro, 2000; Gbodi & Laleye, 2006) but frequently use the third, which is the touch sensory, and within these communication channels, a rich variety of media are employed.

A multimedia technology enables the creation of environments in which constructivist learning can take place. They make available to students original materials instead of pre-interpreted and diluted information. They provide tools for the exploration of that data so that students can investigate a topic and approach
it with genuine questions. In the process students create new and examine existing knowledge structures through the exploration of a topic as well as an appreciation of it.

Aberson et al., (2000), emphasis that multimedia technology ends up addressing an activity that is fundamental to academic, that is, the art of teaching. Orr et al., (2001) concluded that using multimedia based information technology in learning would positively impact learning. Pous (2000) in different studies of computer-assisted instruction found positive student perceptions on skills improvement. While Hult & Edents (2003) found video-aided teaching to be an effective and interpretive educational method for evaluating student skills, and Friel & Carboni (2000) found video based education to have the potential to support alternative experiences.

Using computer, video, Internet-based, and other multimedia materials in educational activities eases teachers' class-management problems, increases students' and teachers' attention levels, and enhances the learning-and-teaching process's effectiveness (Beer et al., (2000); Kablan (2000)). This means that the use of multimedia applications can overcome difficulties in education. This corroborates with Hartley (2007) assertion that multimedia applications motivated the learners, helps slow learners and students with learning difficulties; promotes individualized-learning, saves teachers' and students' time and increases productivity; provides constructivist learning environments, promotes student-centred led activities, promotes collaborative and cooperative learning, develops higher order thinking skills, promotes active learning.
Ozdener & Esfer (2009), reported students' favourable attitudes towards multimedia applications, and this foster more dynamic classroom discussion which involves critical thinking and problem solving, both of which can promote a student's academic and career success. Despite the favourable student attitudes that technology can yield in the classroom, some students perceive the technology as cold, impersonal and intimidating. They also express beliefs that their skill level is lower than what is needed to effectively utilize the technology offered, and may experience anxiety when faced with technology in the classroom (Katayama et al., (2005); Schult & McIntosh (2004).

Students had reported an increase in computer literacy after having exposure to multimedia technology. Further evidence indicated that students exposed to technology in the classroom do not feel greater amounts of self-efficacy for technology when compared to a traditionally-instructed control group (DeBord et al., 2004). In addition to promoting positive attitudes, the integration of technology in the classroom may also promote active learning and critical thinking in the classroom, interactive and dynamic; promote student engagement (Newlin & Wang, 2002). That was in contrast to more traditional and passive modes of acquiring knowledge, such as transcribing lecture content into notes with little student participation.

According to Krueger & Guttormsen (2000), knowledge was the recall of previously learned material and comprehension involves basic understanding of that material. In essence networked multimedia application assists students in knowledge and comprehension by listening to a lecture, watching videotape, or reading a textbook and then memorizing through rehearsal: one-way communication with simple effort. Sever (2001) believed that while all cognitive levels require active
learning to some degree, higher levels are enhanced with networked multimedia communication. A meta-analysis of instructional media found that computer-based instruction improves student attitudes towards learning and the content itself (Russell et al., 2000). Instructional films and the Internet increased higher student interest and motivation. Networked multimedia applications have the advantage of increasing student motivation to learn.

Guttormsen & Krueger opined that multimedia resources add new dimensions to the learning experience. Multimedia information sources present exciting possibilities for increasingly sophisticated and evocative presentations of material in many fields of education. Widespread use of this technology had implications for the learning, research, local network capabilities and the services provided by libraries. Most concepts were easier to present and comprehend when words are complemented with images and animations. Learners retained more when a variety of senses are engaged in delivering information. The intensity of the experience aided retention and recalled by engaging social and emotional as well as intellectual responses.

2.6 STUDIES RELATED TO TEACHER EFFICACY

Teacher efficacy “teachers confidence in their ability to promote students learning” (Hoy et al. 2000) was first discussed as a concept more than 30 years ago when these two items were included in studies conducted by researchers at the Rand Corporation: “When it comes right down to it, a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment”. “If I try really hard, I can get through even the most difficult or unmotivated students” (Armor et al., 1976).
The role of self-efficacy in teaching and learning continues to be an interest topic for researchers and practitioners alike. Self-efficacy (Bandura, 1977) has proved to be a powerful force in learning and motivation. Teacher efficacy—teachers’ confidence in their ability to promote students’ learning—was identified almost 25 years ago as one of the few teacher characteristics related to student achievement in a study by the corporation (Armor et al., 1976). Since that early study, teacher efficacy has been associated with such significant variables as student motivation, teachers’ adoption of innovations, superintendents’ ratings of teachers’ competence, teachers’ classroom management strategies, and time spent teaching certain subjects, and teachers’ referrals of students to special education.

Some of the most powerful influences on the development of teacher efficacy are mastery experiences during student teaching and the induction year. Previous research has found that some aspects of efficacy increase during student teaching while other dimensions may decline (Hoy & Woolfolk, 1990). Bandura’s theory of self-efficacy suggested that efficacy may be most malleable early in learning, thus the first years of teaching could be critical to the long-term development of teacher efficacy. Yet few longitudinal studies exist that track efficacy across these early years. This paper reports the results of an ongoing study of changes in teacher efficacy from entry into a preparation program through the first year of actual teaching. Bandura (1977, 1997) postulated four sources of efficacy expectations: mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion.

Mastery experiences are the most powerful source of efficacy information. The perception that a performance has been successful raises efficacy beliefs,
contributing to the expectation that performance will be proficient in the future. The perception that one’s performance has been a failure lowers efficacy beliefs, contributing to the expectation that future performances will also be inept. The level of arousal, either of anxiety or excitement, adds to the feeling of mastery or incompetence. Attributions play a role as well. If the success is attributed to internal or controllable causes such as ability or effort, then self-efficacy is enhanced. But if success is attributed to luck or the intervention of others, then self-efficacy may not be strengthened.

Organizational socialization is the process by which the requisite role orientation of offices, statuses, and positions is acquired by organizational participants. Although formal organizations do not affect all the basic needs of their members, few members can escape the formative influence of the values, expectations, incentives, and sanctions of the organization. Organizations shape orientations of personnel through a variety of mechanisms designed to make personal beliefs and values conform to the norms of the organization. Moreover, the period before and shortly after new participants join an organization is highly significant in terms of socialization; as Etzioni (1975) noted, it was a time "when efforts to induce consensus between newcomers and the rest of the organization are comparatively intense."

Efficacy beliefs of pre-service teachers have been linked to attitudes towards children. Undergraduates with a low sense of teacher efficacy tends to have an orientation toward control, taking a pessimistic view of students’ motivation, relying on strict classroom regulations, extrinsic rewards, and punishments to make students study. Once engaged in student teaching, efficacy beliefs also have an impact on
behavior. Student interns with higher personal teaching efficacy are rated more positively on lesson presenting behavior, classroom management, and questioning behavior by their supervising teacher on their practicum evaluation.

Although few studies have looked at the development of efficacy beliefs among novices, it seems that efficacy beliefs of first-year teachers are related to stress and commitment to teaching, as well as satisfaction with support and preparation. Novice teachers completing their first year of teaching who had a high sense of teacher efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress. Confident of new teachers gave higher ratings to the adequacy of support they had received than those who ended their year with a shakier sense of their own competence and a less optimistic view of what teachers could accomplish. Efficacious beginning teachers rated the quality of their preparation higher and the difficulty of teaching lower than those who were less efficacious. Also efficacious novices indicated greater optimism that they would remain in the field of teaching.

Annetta (2013) conducted a study on “Science teacher efficacy and extrinsic factors towards professional development using video games in a design based research model: The next generation of Science, Technology, Engineering and Mathematics (STEM) learning”.

Results of this study indicated that participants who used computers daily had higher efficacy while using inquiry-based teaching methods, and science teaching and learning. Additional emergent findings revealed possible motivating factors for efficacy. This professional development project was focused on inquiry as a pedagogical strategy, standard-based science learning as means to develop content
knowledge, and creating video games as technological knowledge. The project was consistent with the Technological Pedagogical Content Knowledge (TPCK) framework where overlapping circles of the three components indicated development of an integrated understanding of the suggested relationships. Findings provided suggestions for development of standards-based science education software, its integration into the curriculum and, strategies for implementing technology into teaching practices.

Mohamadi (2012) conducted a study on “Testing the mediating role of teachers' self-efficacy beliefs in the relationship between sources of efficacy information and students' achievement”.

The purpose of this study was to test the mediating role of teachers' self-efficacy, beliefs in the relationship between sources of efficacy information and students' achievement. For achieving this aim, this study suggested two alternative models, tested by Structural Equation Modeling (SEM) technique. In the first model, sources of efficacy information and teachers' sense of self-efficacy independently influenced student achievement. In second model, we examined a dependent 2-factor model, consisting of: (a) antecedent variable: sources of efficacy information, (b) mediator variable: teachers' sense of self-efficacy, and (c) criterion variable: students’ achievement. Among 284 teachers who participated in this study, Sources of the Self-Efficacy Inventory (SOSI) and Teachers' Sense of Efficacy Scale (TSES) were distributed. Findings of this study indicated that between two suggested models, the dependent model showed the best overall fit to the data. In this model, teachers' self-efficacy had meditational role between sources of teachers' self-efficacy and students’ achievement.
Garvis (2013) conducted a study on “Beginning generalist teacher self-efficacy for music compared with Maths and English”.

In the year 2008, generalist teachers throughout Queensland, Australia, responded to a questionnaire intended to create a snapshot of current self-efficacy beliefs towards teaching music. Beginning teachers were asked to rank their perceived level of teacher self-efficacy for Music, English and Maths. Results were analyzed through a series of repeated measures ANOVA to compare the mean scores for statistical difference. Findings suggested that generalist beginning teacher self-efficacy for Music declines as years of teaching experience increase, while teacher self-efficacy for English and Maths increases during this period. Results provided key insights for teacher educators, school administrators and policy makers into the likelihood of long-term music teaching in the generalist classroom. Greater support was required to reverse the documented snapshot of low teacher self-efficacy for music education in Queensland generalist teacher classrooms.

Malinen (2013) conducted a study on “Exploring teacher self-efficacy for inclusive practices in three diverse countries”.

The purpose of this study was to explain teachers' perceived efficacy for teaching in inclusive classrooms by using a sample of 1911 in-service teachers from China, Finland, and South Africa. Bandura's theory of self-efficacy was used as a starting point to develop distinct models for each country. It was found that in all countries, experience in teaching students with disabilities was the strongest predictor of self-efficacy, while the predictive power of other variables differed from country to country. The findings illustrate ways to improve teacher education to respond better to the challenges set by the global inclusive education movement.
Peters (2013) conducted a study on “Examining the relationships among classroom climate, self-efficacy and achievement in undergraduate mathematics: A multi-level analysis”.

For nearly 50 years, leaders in American industry, military, education, and politics have focused considerable attention on STEM (Science, Technology, Engineering, and Mathematics) education. Given the increased societal demand for STEM careers, the relationships among classroom climate, self-efficacy, and achievement in undergraduate mathematics needed to be examined. A purposeful sample of college algebra instructors (X = 15), employed at public 4-year universities in various states (X = 10) across the nation, was administered the "Principles of Adult Learning Scale" at the beginning of the semester to assess classroom climate. At the end of the course semester, their college algebra students (X = 326) were administered the "Mathematics Self-Efficacy Scale-Revised" and final college algebra examinations. The results of the multi-level analysis indicated: (a) students having higher mathematics self-efficacy also had higher mathematics achievement, (b) teacher-centred classroom climates had greater mathematics self-efficacy levels, (c) classroom climate was not a significant predictor of mathematics achievement, classroom climate did not moderate the relationship between mathematics self-efficacy and achievement, and (d) although boys reported higher mathematics self-efficacy than girls, gender differences were not found to exist in regard to mathematics achievement.

Hussein (2013) conducted a study on “The effectiveness of writing conferences and peer response groups strategies on the EFL secondary students’ writing performance and their efficacy (A comparative study)”. 
The above study aimed at identifying the necessary writing performance skills for the first year secondary stage students. These skills were necessary for writing the compositions. In the study, the writing conferences and peer response groups strategies were used to develop the students' writing skills, improve their achievement and performance in and enhance their self-efficacy. To achieve these purposes, the study designed activities based on writing conferences and peer response groups strategies. In addition, a teacher's guides were prepared to help English language teachers to handle writing compositions. The study made use of a performance writing test to measure the students' development in the writing skills, a self-efficacy scale and a holistic scoring rubric. The researchers adopted the experimental design. Two classes were assigned to be the experimental groups, studying/writing through the "Writing Conferences" Strategy and Peer Response "Groups Strategy." Another class was assigned to be the control group, studying through the steps suggested by the Ministry of Education. Results of the study showed that writing conferences and peer response groups strategies improved students' writing skills and self-efficacy. Thus, it was observed that the students who were the sample of the study enjoyed writing the compositions. In addition, the writing conferences and peer response groups strategies were effective in developing the writing performance and self-efficacy of the students.

Lee (2013) conducted a study on “Elementary and Secondary teacher self-efficacy for teaching and pedagogical conceptual change in Drama based professional development programme”.

This mixed-methods research study explored the potential relationship between the teacher self-efficacy and pedagogical conceptual change. The study
context was a drama-based instruction professional development model that specifically sought to facilitate pedagogical conceptual change. Significant differences were present between elementary and secondary teachers in self-efficacy for teaching and in pedagogical conceptual change. However, self-efficacy did not predict conceptual change. The independent variable (elementary and secondary teachers) was a significant moderator between years of teaching experience and self-efficacy. It discussed the significance of these findings in light of teacher training and teacher effectiveness.

Parrott (2013) conducted a study on “A picturesque view of dispositions, autonomy and efficacy during the educational preparation of early childhood educators”.

The intent of this qualitative study was to examine pre-service teachers' growing awareness of the role dispositions and autonomy play in the classroom and the implications these constructs had for teaching and learning. Teacher candidates' written reflections and focus group statements revealed three robust emergent themes: engagement, empowerment, and meaning making. When taking a wide lens view, these robust emergent themes nurtured certain dispositions, autonomy, and teaching efficacy. Teaching strategies such as the project approach (adult-oriented and with children) and the construction of Maths games were considered valuable assignments that strengthened a variety of dispositions by providing on-going opportunities for teacher candidates to engage in experiences that promoted autonomous thinking and actions during their preparation program. Teaching-efficacy emerged as a related construct and became an integral component of this study. As teacher educators helped pre-service teachers and wraped their minds around the sometimes illusive
dispositions construct, this study suggested that autonomy and efficacy should be included in this effort. In so doing, these constructs provided a meaningful foundation upon which teacher candidates could build and apply teaching and learning theories.

Yildirim (2012) conducted a study on “Turkish pre-service teachers perceived self-efficacy beliefs and knowledge about expository text as an instructional tool in their future classroom settings”.

The aim of this research was to examine Turkish pre-service teachers' knowledge and perceived self-efficacy beliefs towards using expository text as an instructional tool in their future classroom settings. The research sample were 346 pre-service teachers who studied in different teacher preparation programs which included elementary classroom and middle content classrooms (For example, Science, Social Studies and Turkish language arts) teaching professions. A teacher-efficacy inventory and a knowledge test about using expository text were developed and administered to the pre-service teachers in a public university in Turkey. The research findings showed that there was a small but positive correlation between the pre-service teachers' self-efficacy beliefs scores and the knowledge test scores in spite of the small correlation coefficient between the two variables. In addition, the pre-service teachers rated their self-efficacy beliefs as efficacious in using expository texts in their future classrooms. They also identified themselves as having medium level knowledge about use of expository text. Results indicated that while there was no significant difference regarding pre-service teachers' perceived self-efficacy mean scores in terms of gender, the pre-service teachers' knowledge mean scores about using expository text differed from each other according to gender. Moreover, findings revealed that the pre-service teachers' perceived self-efficacy beliefs and
knowledge, varied significantly from each other according to their training programs. The pre-service teachers’ knowledge had significant differences among course years, in contrast to this, their perceived-self efficacy beliefs did not differ from each other according to course year. Additionally, the interaction between course year and training programs had significant effect on the teachers' perceived self-efficacy beliefs and knowledge about using expository text.

Zach (2012) conducted a study on “Changes in teaching efficacy of pre-service teachers in physical education”.

The purpose of this study was to assess the teaching efficacy of pre-service (second and third year) and Student Teachers (STs in fourth year) in a four-year teacher education program, and to determine whether their teaching efficacy changed during any one year of the program. Two hundred and three pre-service teachers enrolled in second, third, and fourth year of a teacher education program (N = 53, 95, and 55 respectively) filled-in questionnaires, that examined their General Teaching Efficacy (GTE) and Physical Education Teaching Efficacy (PETE) in the beginning and at the end of one academic year. A MANOVA test was performed to explore the differences among three groups of students in the questionnaire factors. In order to examine whether one year of teacher education had an influence on the teaching-efficacy of STs, t-tests were conducted. Teaching-efficacy of STs significantly increased along one year of college education for all participants in all of the questionnaire factors. This study presented a comprehensive new instrument for evaluating PE teachers' efficacy. Based on the data, the teacher education program provided STs with sufficient knowledge, competencies, and practicum to enhance the teaching-efficacy needed for actual teaching. Practical implications suggested
evaluating the program in order to eliminate its weaknesses and preserve its strengths. For example, the longer the STs' experience was, the greater was their efficacy. Therefore, extending field experience and including sport and movement classes that emphasized the practice of teaching methods, were vital for teacher education programs intended to produce qualified and confident graduates.

Tan (2012) conducted a study on “Second career teachers: Perceptions on self-efficacy in the first year of teaching”.

The aim of this study was to examine second career teachers' perception of their self-efficacy in the first year of teaching in a school in Singapore. The five second career teachers reported in this paper were involved in a larger study that examined how new teachers, both first and second career teachers, were socialized into teaching in Singapore and their perceptions of their self-efficacy in the first year of teaching. The data were collected primarily through interviews. The teachers were also asked to plot their self-efficacy over a period of eleven months. The analysis of the data was performed using thematic analysis. The findings suggested that their perceptions of their self-efficacy are influenced by the academic performance of their students, particularly if they have not expected their students to do as well as they have done. Their perceptions of their self-efficacy are also influenced by their perceptions of how they performed in comparison to the more experienced teachers teaching the same subject in the same level. They are found to rate their self-efficacy more favourably when their classes outperformed their experienced colleagues. Their perceptions of how well they did in relation to other new teachers also had an effect on their sense of self-efficacy. Gaining the respect and approval of their students also improve how they perceive their self-efficacy.
Gibbs (2012) conducted a study on “Teacher-efficacy and pupil behavior: the structure of teachers’ individual and collective belief and their relationship with numbers of pupils excluded from school”.

The aim of this study was to investigate the relationship between teachers' individual and collective beliefs about their efficacy with children's behavior and whether these beliefs were associated with the use of exclusion as a sanction. A total of 197 teachers from 31 primary and nursery schools in the North East of England participated. Participants responded to questionnaires to assess their individual and collective efficacy beliefs. Demographic and school level data were also collected. Factor analysis indicated that teachers' individual efficacy beliefs were best represented by three factors: "Classroom Management", "Children's Engagement", "Instructional Strategies" that corresponded well to previous findings. Analysis of collective efficacy beliefs showed a similar structure that differed from previous findings. Individual efficacy was not associated with numbers of children excluded. One factor "Addressing External Influences" in the collective beliefs was negatively correlated with numbers of children excluded and appeared to mitigate the deleterious effects associated with socio-economic deprivation. This study added weight to the importance of understanding and supporting teachers' beliefs in their collective efficacy. In particular, this study underlines the need for strategies that will endorse and develop teachers' beliefs in their ability to manage children's behaviour successfully.

Phillips (2009) conducted a study on “Quantitative study of the correlation of teacher leadership and teacher self-efficacy on student reading outcomes”.
The findings of this study revealed that students' reading achievement, teacher leadership attributes, and teacher self-efficacy held no statistical significance. The literature suggested a correlation between student outcomes and teacher-efficacy. More research regarding the link between dimensions of teacher leadership and teacher self-efficacy and the correlation to student achievement on measures of reading should continue. The correlation should be further researched to determine the consistency of the correlation over time.

Brady (2009) conducted a study on “The association between self-efficacy and self-rated abilities and college students' adjustment and academic performance”.

The findings of this study revealed all five of the study’s hypotheses. Significant positive associations were found between self-efficacy and self-rated abilities; between self-efficacy, self-rated abilities, and college students academic performance, and among all four constructs.

Mc Laughlin (2007) conducted a study on “The relationship between personal teaching efficacy and grads”.

The findings of this study revealed that there was no statistically significant relationship between teacher’s individual level of efficacy and grades assigned to student work in English and or Mathematics. This was not consistent with the hypothesis generated that was based on the literature on the subject. Recommendations for future research were also suggested.

Bremer (2007) conducted a study on “Relationships between NWEA-MAP score information and teachers’ efficacy beliefs for student performance on the North Dakota State Assessment”.

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This result indicated that the number of ways teachers used NWEA-MAP score information made a significant difference in teachers’ scores on the efficacy measures. Using score information in three or four different ways was associated with the highest scores on the efficacy scales. Also, using test score information to set goals with students and to individualize instruction predicted teachers’ efficacy scores to a greater degree than using scores to adjust curriculum and instruction. The study, with its two new measures and its suggestions of relationships between variables, provided a starting point for new lines of research in sources of teacher-efficacy beliefs.

Vasquez (2008) conducted a study on “Teacher-efficacy and student achievement in ninth and tenth grade reading: A multilevel analysis”.

This result indicated that there was no statistically significant relationship between teacher-efficacy and student reading achievement gains.

Quesemberry (2007) conducted a study on “Examining the relationship between behavior policies and procedures, teachers’ perceptions of efficacy and job satisfaction, and children’s social skills and challenging behaviors in Head Start setting”.

Findings of this study suggested that teachers who perceive themselves as more efficacious rate the social skills of the children in their classrooms higher than teachers who perceive themselves as less efficacious. Findings also indicated that teachers with higher job satisfaction rate children’s social skills higher and children’s challenging behaviours lower than teachers who report being less satisfied with their job.
Prelli (2007) conducted a study on “Correlation between transformational leadership and collective teacher efficacy at the group level”.

This result of a paired t-test showed significance between teachers’ perceptions of efficiency at the grade level versus within the school, even though the difference between the means was very small. The teachers’ perceptions of the collective efficacy of their grade level team had only a very slightly higher mean (4.8682) than the mean (4.8278), which represented the teachers’ perceptions of teachers and was significant. The significance reported between the differences measured by the t-test suggested variance within the means and thus supported further study with a larger population sample.

Uden (2006) conducted a study on “Exploring the relationship between personal teacher efficacy and career trajectory”.

This study suggested the requisite time, opportunities, and resources need to be community may establish the vital foundation essential for teacher retention and career development. It would be most valuable to explore further the life “back story” of those who had transitioned into administrative roles because their data were the most distinctive and their profile was the most optimistic. Finally additional research into principal efficacy and career trajectory would provide important data with which to contrast the findings of this exploratory work.

McMaster (2005) conducted a study on “The development of self-efficacy in the teaching of reading”.

The strength of the effect of the follow-up coaching workshop model on implementation overpowered the other tested variables. Statistical significance of the
change in sense of efficacy for reading was lost when compared with the impact of the follow-up coaching model. Value co varied almost perfectly with implementation for this sample. Unexpected decreases occurred in the change in efficacy scores across treatment groups; a surprising number of participants rated their sense of efficacy lower on the final survey than on the first. Dips in self-efficacy beliefs with exposure to a potentially powerful, new teaching strategy underscore the importance of the final treatment component, follow-up coaching, to bolstering teacher’ motivation to overcome the anxiety of trying something new.

Hylemon (2005) conducted a study on “Collective teacher efficacy and reading achievement for Hispanic students in Reading First and non-reading first schools in Southwest Florida”.

Results from two-way analyses of variance (ANOVA) did not reveal significant differences between the two groups on a pre and post test administration of the Grade. When the two groups were combined, repeated measures ANOVA indicated a significant difference between pre and post administrations of the Grade with the post test being significantly higher Grades 4 and 5 showed significant gains between pre and post test while grades 2 and 3 did not. It was hypothesized that as students’ English proficiency improved, reading instruction became more meaningful and thus positively influenced the post test. Both the Grade and the Oral Reading Fluency test were significantly correlated with the Florida’s Comprehensive Assessment Test (FCAT). Regression analyses revealed that both were significant predictors individually and combined of the FCAT reading score.

Collective teacher efficacy was assessed with the short-form of the Collective Teacher Efficacy Scale (CTES). A total of 38 Reading First teachers and 30 non-
Reading first teachers completed the CTES and a brief biographical questionnaire. Results indicated significantly higher collective teacher efficacy in the non-reading first school. Findings did not support the hypothesis that the intensity of the Reading First program and the teacher training required would result in significantly higher collective efficacy. Differences in level of teacher education, experience, and years of teaching in a school were speculated as potential variables influencing the level of collective efficacy. Implications from this study were discussed along with recommendations for future research.

Elizabeth (2004) conducted a study on “School climate, teacher efficacy, and teachers’ inclination to participate in consultation and referral”.

General teacher efficacy was significantly and positively correlated with teachers’ inclinations to consult with a school psychologist when faced with an academically struggling student. General teacher efficacy was significantly and negatively correlated with teachers’ inclinations to refer children to special education. Results of regression analyses found that general teaching efficacy was the only significant predictor of teachers’ inclinations to participate in consultation and in referral.

Additional supplemental analyses found that the school climate variable, teachers’ work relationships was significantly correlated with teachers’ images to consult with other teachers. Regression analyses found that teachers work relationships predicted teachers inclination to consult with one another when faced with an academically struggling student. These results suggested that the existence of highly collegial relationships between school psychologists and teachers could increase teachers’ likelihood of using school based consultation.
Tobony (2003) conducted a study on “Measuring the influence of self-efficacy, fear of stigma, prior course selling experience, and encouragement on college student’s attitudes towards psychological counselling”.

Findings of this study suggested that although the few of being stigmatized may not affect students’ attitudes towards counselling in remains an important variable in the decision to seek or not seek counselling services. Actually engaging students in counselling related experiences will have the greatest influence on positively shaping their attitudes towards counselling.

Kind (2001) conducted a study on “The teacher – principal relationship and teacher-efficacy”.

The data for this study were compiled from 77 questionnaires. Pearson Product – Moment Correlations were used to determine the relationship between interpersonal relationships and teacher-efficacy. The 0.05 level of confidence was used to determine rejection or acceptance of the null hypotheses. Findings were summarized as follows: i) There was a statistically significant relationship between teacher perceptions of teacher – principal interpersonal relations and personal teacher-efficacy, ii) A significant relationship was found between teacher perceptions of the unconditionality of regard dimension of the teacher-principal interpersonal relations and personal teacher-efficacy. iii) A significant relationship was found between teacher perceptions of the congruence dimension of the teacher-principal interpersonal relations and teacher-efficacy, iv) No variables or combinations of variables predicated teacher-efficacy, personal teacher efficacy, or general teacher-efficacy.
Kitchens (2000) conducted a study on “A relational study of the perceived collective efficacy of Northern Mississippi elementary teachers and selected school and teachers and selected school and teacher characteristics”.

Results of these data analysis showed that only the common planning time variable was significantly related to teachers’ collective efficacy. Teachers who indicated that they participated in common planning time reported significantly higher levels of collective efficacy than those who indicated that they did not participate in common planning time. Even though the reported teacher-efficacy was significant, Eta squared suggested that the effect size is minimal. No other individual variable or the combination of all variables was found significant when examined with reported collective efficacy levels.

Mishra (1991) studied the management patterns, costs and academic effectiveness of distance education in Indian Universities by purposive multi-phased sampling techniques from certain directorates of correspondence courses. The findings related to the academic effectiveness of distance education showed that the quantitative performance of distance education was comparatively lower than that of formal education and less satisfying.

Moreover, the percentage of students securing first divisions out of the total pass students ranged from 0 to 2.78 % and the third divisionary were maximum in distance education. However, a comparative picture of distance education and private system revealed that the performance of learners in distance education was better than that of the private system.
Jain & Pushpa Devi (1991) conducted an in depth study of the functioning of the Andhra Pradesh Open University by taking a sample of 500 students from the twin cities of Hyderabad and Secunderabad and also from counsellors, coordinators, etc.

The major findings included that most of the respondents felt that the University was not functioning satisfactorily. Study Centres were not very useful in solving the problems of the students. Course materials were not delivered to students in time. Audio - visual and library services were poor. The quantum of counselling to students was not sufficient.

Renu (1990) studied the success in distance learning system in relation to relation to some key learner variables and institutional variables and found that both these variables contributed positively to success of distance learning at the B.Ed level.

Success in distance learning system was found to be intimately associated with course material, two way interaction between tutor/organization and learner personal contact programme, assignment system and system of evaluation. The learners enrolled in B.Ed through correspondence programme have been found to give a good account of them in university theory paper. Contrary to popular belief, distance education has been found almost as effective as full time studies in colleges of education, as far as mastery of theoretical knowledge is concerned, as assessed at the end of university examination.

Maheswari (1976) explored the classroom verbal interaction patterns of effective and ineffective teachers. Two hundred teachers constituted the sample. The classroom observations were encoded by two raters. The study showed that effective teachers used the categories of accepts feelings, praise, uses student ideas,
questions, student responses and initiation, whereas ineffective teachers employed lecture, direction and authority categories in the classroom behaviour.

Jain (1977) conducted an investigation with a view to finding out how far the proficiency in teaching was a function of creativity, intelligence and interests on one hundred and sixty teachers. The study led to the conclusion that intelligence promoted proficiency in teaching and creativity showed a positive correlation with proficiency in teaching.

Curtis (1997) made a long term follow-up study of teachers. The 1965 output of students from three colleges of education were monitored at intervals of twelve years – in 1967, in 1972 and in 1977. This study showed that the teachers even after twelve years carried over the academic and professional knowledge they got from training institutions.

Mann (1980) conducted a study to identify the correlates of success in teaching on the secondary school teachers. The study came to the following conclusions: (1) The successful teachers had healthier attitude towards the teaching profession and allied aspects than unsuccessful teachers. (2) Both academic achievement and professional course achievement had positive relationship with success in teaching.

2.7 DISCUSSION

The researcher has reviewed studies and literature related to the study undertaken through various sources such as written literatures, e-resources, journals, etc., from various libraries, and selected studies related to the variables that are dealt in the present study. The researcher concentrates on the studies related to perception
on curriculum, academic performances, attitude, multimedia usage and teacher efficacy. Among the reviewed studies, the researcher has selected only about 106 studies which are related to the study undertaken.

From the review of literature the researcher finds that no studies have been conducted exclusively on the study undertaken now. Moreover the studies exclusively conducted on Indira Gandhi National Open University are very rare and no publications available in the recent past. Most of the studies conducted are from foreign resources and the variables are interchanged. The population of the studies varied from the students of primary school to the range of faculty members of secondary level, the sample number varied from 10 to 1500 to the great level. Statistical techniques used ranged from inferential analysis, t test, F test, relationship analysis, regression analysis, etc. Most of the findings arrived in the literature found are not on par with other researches. The findings of one study go contradictorily with the findings of another study; hence the area of present research has scope.

As no study has conducted exclusively on the present title and even most of the studies have been conducted on the various climates which are greatly differ from the population selected for the present research, the researcher has chosen the present investigation entitled as “An assessment of the efficacy of IGNOU B.Ed programme in the context of the academic and professional performance of teacher trainees”.

The next chapter deals with Methodology