Chapter-2

REVIEW OF RELATED LITERATURE
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After having presented in Chapter 1 the rationale and theoretical framework of the problem, this Chapter is devoted to the review of studies which are directly or indirectly relevant to the problem at hand. An update account of related studies is indispensable for undertaking new research work. The review of earlier research work in the related area leads to the comprehension of what has been covered and what still remains to be explored. It is only on the basis of this comprehension that a new problem can chisel out. Findings of earlier studies also help the researcher in formulating the hypothesis. Anderson (2000) says, "Review of literature ensure that the research relates to and complements the overall field. It provides an indication of whether a research study is warranted and its probability of finding new and making a contribution. Review can be helpful because it indicates the methodologies that have been used by others in pursuit of knowledge in the discipline."

While reviewing the previous researches in the field of competency based - commitment oriented curriculum, it was found that although a number of studies are available with respect to training of teaching competencies as also with respect to innovative methods of Curriculum Development and Curriculum Implementation, there is paucity of research having direct bearing on the Competency based and Commitment Oriented Curriculum within the NCTE Curriculum Framework (1998). Considering that Competency based and Commitment Oriented Curriculum, which is focus of this study, is an innovative approach to a curriculum framework at the secondary Teacher Education stage, it was thought to be in the fitness of things to include these studies which have an indirect bearing on the
present study. Therefore research studies focussing on the effectiveness of innovative methods of Curriculum development and implementation such as instructional strategies, self-learning materials, value inculcation strategies etc. in the acquisition of knowledge, teaching skills, teaching competencies, behaviours, achievement and attitude towards teaching have also been included. Likewise, although the subject of school organisation remained the focus, studies conducted in other areas such as sciences and humanities have also been included in the review.

The comparison of the traditional approach with few innovative approaches such as integrated approach, problem solving approach, activity-based approach, and environmental approach in studies by Kushdil (1960), Patole (1967), Kamalakanthan (1968), Rajput and others (1980), Malhotra (1982), revealed that the traditional approach was ineffective. It is interesting to note that the term 'traditional approach' is used in these studies as a well demarcated and a clearly distinguishable teaching procedure, free from any ambiguity. This assumption is likely to be questioned. Further, in studies of this nature there is a very real need for removing, or at least minimising, what are generally known as the Placebo and Hawthorne effects.

Saini (1978) in a "Comparative Study of the Effectiveness of Programmed and Text Book Material Presentation of Sociological Concepts at the Secondary Stage" compared the effectiveness of programmed learning and the textbook method in the learning of sociological concepts. The population covered all the students of high classes in English medium schools. A sample of 270 was randomly selected from the Central Schools of Chandigarh for the purpose of the experiment. After statistical analysis of data with the analysis of variance, it was found that the main effect of the factor relating to models of teaching was found significant at both the levels of confidence, showing that the programmed text was more effective in regard to the sociological concepts than the textbook method.
Adinarayan (1979) investigated the effect of teaching strategy for developing appropriate skills required in students for conducting scientific investigations. It was found that students taught by the method of learning packages performed better than the control group taught by the conventional method. The Sample consisted of 100 students of standard VII in the age group of 11 plus. The effectiveness of learning through the packages did not differ from unit to unit when examined in terms of knowledge and development of skills. Both the teachers and the students had favourable reactions towards the learning packages.

Sahajahan (1980) designed and developed modules for teaching science to standards sixth and seventh students and found the modular way of learning more effective than the conventional method.

The objective of Sharma and Bhattacharjee's comparative study (1980) on the effect of the Summative Model of Integrating the Skills upon Teaching Competence of Student Teachers, Post Graduate Training College, Shillong was to compare the effectiveness of integrating the five teaching skills through the summative model upon scores on the Indore Teaching Competence Scale (ITCS) and the General Teaching Competence Scale (GTCS). The study proceeded with the help of null hypothesis that there would be no significant difference in the mean scores on ITCS and GTCS groups trained for integration of skills through the 'Summative Model' and the control group. In all 20 student teachers (for the academic year 1979) were selected from one training college in Shillong. They were divided into two equal groups (Experimental and Control). The groups were equated in terms of sex, age, qualifications, teaching subjects (method subjects) and experience. Five teaching skills (probing questions, reinforcement, stimulus variation, explaining and illustrating with examples) were selected and the experimental group of trainees was imparted adequate training in integrating the five selected teaching skills through the 'summative model'. A pre-test post-test parallel group design was followed. Pre-treatment and post-treatment observations were made for both experimental and control groups by using General Teaching
Competence Scale (GTCS) and Indore Teaching Competence Scale (ITCS). The study revealed that the experimental group did significantly better than the control group since t-values in all the cases were significant. The hypothesis was rejected. The significant education implication is that the 'summative model' of integrating teaching skills might be used as a training technique in the teacher training colleges.

Jarial (1981) studied the effectiveness of innovative verbal and non-verbal instructional material in the development of creativity of students. The findings revealed that creativity mean scores of the experimental group were significantly higher than those of the control group.

Pal (1981) the dissertation was formulated to prepare curriculum materials for 'would be teachers' in the area of relevant social skills for establishing closer contact with the community. The objective of this study was to select some skills for preparing the curriculum, to identify the social skills that were needed for developing closer contact with community, to prepare curriculum material for developing these selected skills, to try-out the curriculum material through the regular trainees, and to see its effectiveness in terms of their performance on the skills and their opinion towards the prepared curriculum. The study highlighted that teacher-education curriculum is not providing training in social skills. Modification in the attitudes of the community and in the behaviour of the students is possible only when the teachers are trained properly in social skills; because they are the key persons in bringing about any type of change in the whole community.

With a view to improve instructions in training colleges, Kulshreshtha (1982) studied the relative effectiveness of the mini-teaching and the microteaching approaches in training teachers. The objectives were to study the relative effectiveness of the micro-teaching and mini-teaching among teacher trainees across socio-economic status and intelligence and to further study the achievement status of students in Biology taught through the teacher trainees trained through micro and mini teaching.
approaches. Reactions of teacher trainees with regard to their experience of using micro and mini teaching approaches were also studied. Control groups and the experimental groups were formed. The experimental group was trained through training input material on teaching skills, and evaluation proformas for teaching skills. The collected data were treated by Mean, SD, ‘t’ Test. Major Findings of the study showed no significant difference between the mean gain scores on BGTC, which indicated that both the techniques (micro and mini) were equally effective. Besides, it was also found that intelligence did not seem to play any significant role in training the trainees with these two approaches. The pupils of teacher-trainees trained through mini-teaching scored significantly higher than the students taught by trainees trained through microteaching.

Hopper (1982) designed and developed modules for teaching certain units in Biology for Standard XI and found that all the three structured modular approaches of teaching, viz., self-learning, peer group learning and peer group learning with teacher intervention, were effective in terms of mean gain score in cognitive achievement. Self-learning approach was favoured by 62 percent of the students.

Prabhune (1984) conducted a study on the effects of using self-learning and discussion methods of instructions involving measurement of Higher Level Intellectual Skills and Abilities as Teaching Devices on the Development of Learners’ Scientific Attitude and Problem Solving Skills. By using the materials as a self instructional teaching device and also as a stimulus to group discussion, the author measured the changes produced in students with respect to the use of the scientific method, higher mental abilities and knowledge of the subject matter of given experiments in psychology. A series of experiments in psychology were written in the form of objectives, selection-type test items - each item measured some higher ability above the level of knowledge. A note on the scientific method and also on the expected higher-level behavioural outcomes at each stage of the scientific method was prepared for the use of students. Students selected for the experiment had to use the self-learning method.
and discussion method. Pre-test and post-test measure of higher abilities revealed the effectiveness of the development of instructional material and the use of self-learning and the discussion method of teaching at the B.Ed. level.

Natrajan (1984) conducted a study on Competency Based Programme in Teacher Education Curriculum. The major objectives of the investigator were (1) to study the relative efficacy of competency based teacher education in pre-service education programme of secondary school teachers, (2) to identify factors influencing competency achievement such as social status, economic status and level of education, and (3) to find out the relationship between an individual's self-esteem and competency achievement. Competencies were spelled out in behavioural terms for the units in elective subject, "Institutional Planning and Administration", of the B.Ed. course of the Madras University, and these were designed to identify both knowledge and performance competencies. Knowledge competencies consisted of knowledge about concepts, Knowledge about application of concepts, and Knowledge about specific examples about those applications. The competency list was validated by a panel of five educationists. For the experimental study, five treatment groups (ages 26-26 years) with 40 student teachers in each group were formed by random selection. The first group received instructions through the traditional lecture method with occasional dictating of notes. The second group learnt through small group discussions that were pre-planned. Source materials were supplied. The third group mastered the subject matter through the conduct of seminars followed by discussions with the researcher or one of the student teachers moderating the whole session. The fourth group was engaged in directed self-study, supported by resource centre and weekly discussions lead by the researcher. The last group studied by means of self-instructional modules that were based on a competencies approach. Students were permitted to proceed at varying speeds. The actual experiment lasted for five months. Validated criterion referenced tests were used for pre-test as well as post-test for all the groups. The major finding of the study were: (1) competency based instruction improved the
selected units in institutional planning and administration (2) The seminar method seemed to be an effective method as it compared favourably with the competency based approach. (3) The lecture method was effective as a group method (4) directed self-study did not compare well with other methods. (5) There was a significant relation between self-esteem and acquisition of competencies. (6) Attitude towards teaching method had a favourable correlation with acquisition of competencies. The study proved that teacher education could be made more effective through a competency-based approach.

Study of teaching competence by Syag (1984) of pre-service and in-service teacher's trained through different treatments of microteaching was based on the objective to find out the relative effectiveness of three different training approaches - peer feedback in the standard micro teaching group (SMT), peer-cum-audio tape feedback in the Modified Micro teaching group (MMT), and college supervisor feedback in the Traditional Student Teaching (TST). The researcher also attempted to find out the relative effectiveness of the three training approaches upon the competencies of skills of probing questioning, explaining and illustrating with examples of teachers, measured at different occasions during their pre-service and in-service stages; upon the attainment of examination marks of student-teachers, and upon the Student Teachers Attitude Towards Teaching (STATT) which were measured at different occasions during their pre-service and in-service stages. The sample of student teachers was drawn from secondary school trainees studying in the B.Ed class during two academic sessions, 1977-78 and 1978-79 in DAV College of Education, Abhor. 27 student teachers from each academic session were selected through a purposive sampling technique. On the basis of the percentage of marks, three parallel groups for each of the two academic sessions were formed. A pre-test - post-test parallel groups design with one control group was followed. There were two experimental groups and one control group. The first experimental group was exposed to the training approach of standard microteaching, the second to modified microteaching and control group to traditional student teaching approach.
The criterion variables such as general teaching competence, competencies in three selected skills and attitudes towards teaching, were measured on four occasions. The four occasions were: pre-test stage prior to training treatment, post-test stage - immediately after the treatment, post-test second stage - at the end of the B.Ed. course, and post-test third stage - after one year teaching experience in schools. In addition to these criterion variables, examination marks in skill in teaching were also one of the criterion variables. The data was analysed with the help of trend analysis and ANCOVA. The major findings were: Peer feedback in the SMT group and peer-cum-audio tape feed back in the MMT group produced equal effect but superior to that of college supervisor feed back in the TST group on the development of the general teaching competency, and the competencies in selected teaching skills; (2) when measured immediately after the treatment, all the three training approaches-SMT, MMT and TST produced a significant effect on the development of the general teaching competence and competencies in specified skills, (3) however, when the continuous measurement on general teaching competency and teaching skills competency were carried on upto 18 months from the termination of training treatment, none of the three training approaches helped to improve the level of performance. In other words, all the three training approaches, when implemented for duration of four hours (only practice time for each training), had helped to develop the general teaching competence and competencies in teaching skills among the student teachers. The consequent treatment in terms of the traditional teacher training programme did not helped to improve the general teaching competence and competencies in teaching skills in the three respective groups, but all the three groups continued to retain the post-treatment level of performance; (4) The simple interaction effect due to three levels of training treatments and four levels of occasions was significant in terms of the general teaching competence and competencies in selected skills; (5) The attainment of marks in the student teaching final examination was equal among the student teachers of the SMT group and the MMT group, the SMT group and the TST group, but the attainment of marks was significantly higher among the student teachers of the MMT group than
the student teachers of the TST group; (6) all the three training approaches - SMT, MMT and TST and their integration with three occasions did not produce a significant effect upon the development of the attitude of the student teachers towards teaching, when measured prior to treatment and at the end of the B.Ed. course. Further, the attitudes of the student teachers towards teaching declined significantly when measured after two years from the beginning of the training treatment. The author concluded that the microteaching approach should be made an integral part of student teaching programme, that the teacher training institutions may use either peer feedback and / or peer-cum-audio tape feedback during microteaching treatment, and that the instructional materials on various teaching skills should be developed.

Passi, Singh and Sansanwal (1986) studied the effectiveness of different training strategies such as Concept Attainment Model, Inquiry Training Model in terms of understanding, Competence, Reactions and Pupil Liking. The suggested educational implications of the study include (1) A student teacher should reasonably distribute his practice teaching by judiciously selecting models from the four families (Concept Attainment Model, Enquiry Training model, Peer Practice Feedback and Standard Model Treatment). The present emphasis on the Herbartion Model should soon be replaced by evenly distributed efforts over the selected models. This would require an improvement and vital distribution of lesson plans guides, lesson plans formats, worksheets, and other guide materials. (2) For the implementation of the models of teaching, the staffing pattern in teacher education should be changed significantly. The master teacher educator should prepare a variety of video models; and peer practice feedback in quadros in the college and peer feedback in school practice will weed out non-functional elements in the present training system.

Dave (1987) looked into the relative effectiveness of summative versus mini teaching models of microteaching, in terms of pupil’s liking, teacher's attitude and general teaching competence. The mini teaching model was
found superior to the summative integrated model in terms of development of general teaching competence and also in terms of pupil achievement.

Purohit (1987) in an experimental study ascertained the effect of microteaching feedback and interaction analysis feedback on attitude towards teaching, general teaching competence, classroom performance and classroom behaviour of teachers. Effectiveness of Microteaching and interaction analysis feedback over the traditional approach was also seen on pupil achievement. Attempts were also made to develop certain teaching skills among student teachers through feedback techniques. The experiment was conducted on 120 student teachers offering Hindi as the teaching subject. Besides, a sample of 600 students of class 6th, 7th and 8th were selected to study the effect of feedback. The data were collected with the help of teacher attitude inventory (TAI) developed by Ahluwalia, classroom performance ratings, observation of classroom, verbal interaction, achievement tests in Hindi; students' perception of teachers and micro teaching observation schedules. Data were analysed by applying descriptive statistics and employing the t-test for observing the significance of differences. The major findings of the study were: (1) microteaching feedback helped significantly in the classroom performance of language teachers; (2) There was no significant difference in microteaching feedback and interaction analysis feedback in bringing about attitudinal change; (3) both microteaching feedback and interaction analysis feedback produced highly significant gains in pupil achievement, gains in the case of interactional analysis were higher; (4) microteaching helped in the development of various instructional skills, and microteaching feedback appeared to invite more pupil response than interactional analysis feedback; and (5) The interaction analysis group of student teachers appeared to seek more pupil initiation than the micro teaching group of student teachers.

Dwivedi (1988) investigated the effectiveness of microteaching in the development of the psychomotor skills in biology practical. He found that skills relating to collecting, mounting, preserving, observation and
information locating are better developed by microteaching than by conventional teaching.

Kaur (1988) explored the development of professional competency of social studies and mathematics teachers as related to process and structure variables of educational environment in government in-service training centres. The relative impact of educational environment of two teacher educational institutions on the teaching effectiveness, teaching attitude, rigidity-flexibility, educational awareness, achievement and school results was studied among social studies and mathematics teachers exposed to in-service training and those not exposed to any such training. Comparisons across subjects, sex, exposure to training were also made. The effect of process variables on teacher achievement and school results as the measure of professional competency was examined. The study was advanced with the help of an experimental design on the sample of 480 trained graduate teachers, 240 in each group. Measures of central tendency and dispersion, analysis of variance, ‘t’ test and multiple regression equation were employed to analyse the data. Major Findings of the study revealed: (1) in-service education and training significantly contributed to the development of professional competency of social studies and mathematics teachers as related to process variables—that is, teaching effectiveness and educational awareness of teachers — and structure variables — that is, teacher attitude and rigidity – flexibility of teachers; (2) process and structure variables had a positive bearing on product variables, that is, achievement of teachers and school results of teachers; (3) achievement of teachers as a criterion measure of professional competency was positively correlated with only one of the process variables, that is, teaching effectiveness.

Manoharan (1988) took up a study on “Relative Effectiveness of Print Media” and found that when one learnt with three printed media together (news paper, magazine, folder) gains were for more than when learnt through a single medium. Another quite interesting finding was that young respondents (up to 30 years) gained significantly more than those in the middle age group (30 – 45 years).
Chaudhury (1989) in a study on teaching of concepts through the Concept Attainment Model and facts through traditional teaching: Competency in teaching skills of pre-service teachers, tried to find out if student-teachers had indirectly learnt the teaching skills during college based peer practice and school based practice teaching, and also whether there was any difference in their competency in the various teaching skills during teaching of concepts through the Concept Attainment Model (CAM) and the teaching of facts through traditional teaching. The sample comprised 10 female student teachers of Awash College of Education and Research, with science as one of the methods. They were trained in Concept Attainment Model. By employing the Process Appraisal Scale of Teacher Effectiveness (PASTE) developed by Bhalwankar (1981) and Bruce’s Concept Attainment Model the collected data were treated using mean, SD, and ‘t’ test. Result showed that (1) there was no significant difference in the competency of student teachers in stating the aims. However, few students showed improvement while teaching during traditional teaching, even though these skills were taught directly; (2) two student-teachers trained through CAM (Concept Attainment Model) had performed better in skill of questioning, and three student-teachers performed better in the skill of explaining; One had performed better in the skill of reacting, one performed better in the skill of stimulus variation; and two students had improved in the skill of evaluation; (3) two student teachers had improved in the skill of classroom management, and one had better content mastery.

In the syllabus of principles of education in the B.T. Course of Gauhati University programmed learning material was developed and tested for its effectiveness by Debi (1989). A criterion test was developed and used. The results revealed that (1) the PLM (Programmed Learning Material) was found to be effective as compared to the traditional method of teaching in achievement in ‘Principles of Education’, (2) PLM was found to be significantly more effective for both the higher-level and the lower-level objectives than compared with the class-teaching method, and (3) there was a significant difference between the post-test scores of the experimental group and those of the control group.
Pal (1989) investigated the effectiveness of curriculum development of the Academic Staff College (ASC) for orientation of teachers in the higher education sector. This study was conducted on 110 college / university teachers from four universities of the Madhya Pradesh attending orientation programme at ASC, Indore. The author found that 85 % participants favoured the orientation programme after appointment and felt that the programme should be a full time one and compulsory. Participants emphasised the need for greater coverage of methods and techniques of teaching, models of teaching, and classroom management.

Study by Kahlon, and Saini (1989) was concerned with examining the impact of teacher education on the teaching aptitude of graduates of Punjab Agricultural University. The relationship between academic achievement and teaching aptitude was also investigated. All the twenty students of the B.Ed. programme of Punjab Agricultural University participated in the study. The Researchers found the teacher education helps develop teaching aptitude ($t = 2.23; P = 0.05$), and that academic achievement has low positive correlation ($r = .2089$) with teaching aptitude.

Singh (1989) attempted to analyse the relative effectiveness of two training strategies in developing teaching competence and attitude towards teaching among student teachers. The sample comprised 34 B.Ed. students of School of Education, Devi Ahalya Vishwa Vidyalaya, Indore. They were selected randomly and divided into two experimental groups: E1 and E2. The pre-test and post-test design was used in the study. The tools used included Attitude Towards Teaching Inventory (ATTI), Micro-Teaching Theory Check Up (MTC) and Attitude towards Micro-Teaching (ATM), and Baroda General and Teaching Competence Scale (BGTC). The even group was administered ODP training strategy while E2 group was given the treatment of DPO training strategy. Major Findings revealed that both the training strategies were significantly effective in developing theoretical understanding of Microteaching, general teaching competence and attitude towards teaching. However, only the training strategy, ODP, was found to...
be significantly effective in developing favourable attitude towards microteaching among the B.Ed. students.

Asija (1990) studied the teaching competence as related to development of skills specific to teaching of Biology through microteaching among prospective secondary school teachers. The sample comprising of B.Ed. students of two academic sessions from the D.A.V College of education, Abhor was divided into the control and the experimental groups. The tools used to collect data consisted of opinionnaires, personnel information Performa, observation schedules, Baroda General Teaching Competence Scale, (BGTCS), Indore Teaching Assessment Scale (ITAS) and Ahluwalia Teaching Attitude Inventory (ATAI). The collected data was analysed by using ANCOVA and ‘t’ test. Results indicated the superiority of the Micro-teaching Versus the conventional training in developing six skills- the skills of demonstrating, drawing diagrams, blackboard – writing, probing questioning, using basic skills of Biology practical, and heuristic skills on the post-test as well as on retention test. The Experimental Group also showed a better performance of microteaching technique in developing the ability to use the learnt skills in an integrated form than that of the conventional training. Non-significant effects of microteaching as well the conventional training were observed on the attitude of prospective secondary school teachers towards teaching.

Arockiam (1990) studied whether the questioning skills of primary school teachers can be improved through self-learning. A self-learning package on questioning skills was prepared to train the primary school teachers. The sample of the study constituted of 90 primary school teachers in Dindigul Town. The pre-test-post-test-equivalent-group design was employed in the study. ‘t’ test showed that primary school teachers improved their questioning skills through the self-learning package and training on questioning strategy and that self-learning package on questioning skills was found to be effective.
Dutta (1990) compared the effects of integration training with those of microteaching and the traditional programme on the general teaching competence (GTC) and attitude towards teaching of student teachers. The sample comprised of 30 B.Ed students divided into three sub groups, viz. Control Group (C1), and Experimental Groups E1 and E2. Five criterion variables, i.e., age, sex, academic qualification, general teaching competency scores, and attitude towards teaching were considered in the study. The tools used included Baroda General Competence (BGTC), Rating Scale by Passi and Lalitha; Teaching Attitude Inventory of Ahluwalia and College records. Major findings of the study showed that (1) traditional training had a negative effect in developing attitude towards teaching; (2) The microteaching technique had a positive effect in developing attitude towards teaching. (3) Both microteaching technique and integration of skills through the additive pattern were found superior to the traditional technique and equally effective in developing general teaching competence; and (4) both microteaching technique and the additive pattern of integration were found more effective than the traditional technique and equally effective in developing aptitude towards teaching.

Singh (1990) examined the relative effectiveness of a few models of teaching. He found that MMT₂ (presentation of demonstration, followed by theory followed phase-wise demonstration and discussion) was significantly more effective than MMT₁ (presentation of theory followed by phase-wise demonstration and discussion) in terms of developing theoretical understanding. It may be mentioned here as reported by the author about half a dozen research studies had been done in this area even in the nineties.

Sinha's (1990) study centred around the problem of finding out the effectiveness of teaching based on instructional objectives as compared to teaching through the traditional method (Lecture method). The sample consisted of randomly selected 200 B.Ed. students of Patna Women's Training College, which was also randomly selected from among the...
colleges of education in Bihar. One hundred students each were randomly taken in the control and the experimental groups. Data were collected through a criteria-based achievement test and personal data sheet. The results were analysed using frequency distribution, mean, median, mode, SDs, ‘t’ ratio and ANOVA. Among other findings it was found that students taught through instructional objectives performed better as compared to the students taught through the traditional method and that the variables of age, income, habitation, marks did not contribute to these differences.

Srivastva (1990) conducted a study on “Programmed Learning (PL)” as a function of anxiety under different motivational conditions and found that PL as a teaching device is particularly useful for low and average achievers. Knowledge of results was a good motivator in itself. But the researchers found that if it was reinforced with praise by the teacher it contributed additionally.

Usha's (1990) study on Self – Instructional Film Strips was concerned with preparing and evaluating self-instructional filmstrips on Nutrition. It was found that on the recall test (Knowledge) those students got higher score who studied alone with the help of self-instructional filmstrips, that is understanding, application and skill – the gains score was found to be significant for all the three treatment. In order to assess the effectiveness of the Ausubel's Advance Organiser Model in developing the teaching competence of student teachers and their attitude towards teaching, Gupta (1991) conducted a study on a sample of 100 B.Ed. students drawn from Bijnore and Dhampur teachers' training colleges, who had offered Hindi as one of the teaching subjects. The tools used included Teacher Attitude Inventory of S.P.Ahluwalia, Teaching Competency Scale of NCERT, and Model Assessment Guide. 't' test revealed significant difference in the teaching competence between the experimental and the control groups of the student teachers. The effect of training with the AOM approach on the experimental group was visible through their high teaching competence both in the simulated condition, and in the real classroom situation. There
was a significant effect of AOM approach on the attitude towards teaching of the experimental group of student teachers.

Jeyamani (1991) studied the effectiveness of the simulation model in teaching Physics to Standard XI students through Computer Assisted Instruction (CAI) and found that group trained through this model performed significantly better than the control group.

Nandita (1991) examined the possibilities of integrating the value education to teachers in existing teacher education courses for providing value-oriented teacher education curriculum. The sample comprised fifty teacher trainees, randomly chosen. The existing courses for the B.Ed. programme were analysed. Four self-contained instructional modules were developed by the investigator. These were used on the sample and their effectiveness was assessed. Median and chi-square were used for data analysis. Major Findings revealed that (1) the existing courses for the B.Ed. programme in various colleges of education in Punjab had ample scope in terms of integrating values with various teaching subjects as well as activities, (2) various approaches, the chief among these being the ‘clarifying approach’, ‘the indirect contrived approach’, and the ‘integration through subjects approach’, could be used for providing integrated value-orientation through the existing curricula, (3) various types of activities, viz. intake activities, organisational activities, demonstrative activities and expressive activities, could be used to support integrated value-orientation among the students, (4) a variety of teaching materials, e.g., text books, journals, magazines, news papers, photograph sets, slides, cassettes, video and T.V programmes, films, etc., could be used for the integrated value-orientation of teacher-trainees, (5) teachers’s value-orientation was an essential input for the proper value-orientation of students. The modules prepared for value-orientation of teacher trainees were found to be quite effective.

Pandya (1991) in a study of the relative effectiveness of micro-teaching and the traditional techniques of teacher training in the development of
The problem undertaken by Satrusalhya (1991) is related to the study of implementation of co-curricular activities in the secondary schools of Cuttack District and the influence of these activities in developing healthy attitudes among the secondary school pupils and socialising children's behaviour. The random sampling method was used to select 100 schools out of a total of 843 in the Cuttack District of Orissa. From these schools, 500 teachers and 3000 students were selected randomly for the study. Questionnaire, and personal group interviews were used in the process of collecting data. The collected data were analysed qualitatively. The results revealed that there was difference in interest towards co-curricular activities between boys and girls. There were some common activities viz. sports and games, drama, debate, NSS, NCC, school Magazine, cultural activities, parents' day, literary work, first-aid, etc., in which both boys and girls were equally interested, and the provision for co-curricular activities available to the children was too insignificant to fulfil their adolescent needs.
Vyas (1991) evaluated the effectiveness of the programme of mass orientation of schoolteachers and found that performance of teachers covered under the programme was better than those who were not oriented.

Gor (1992) attempted to study the effectiveness of microteaching strategies for developing the teaching competency of teacher trainees. The effectiveness was assessed in respect to symbolic modelling and perceptual modelling, upon attitude towards profession (PTAT Part I), professional information (PTAT Part II) and interest in the teaching profession (PTAT Part III) of teacher trainees and in developing general teaching competency and attitude towards microteaching. Thirty-six teacher-trainees were selected to form two experimental groups and eighteen teacher-trainees were selected to form the control group. The groups were equated on the basis of IQ and Scholastic achievement. Instructional material was prepared in booklet form for four specific skills using the Advance Organizer Model. The statistical analysis with the help of ‘t’ test and ANOVA indicated that (1) The perceptual modelling approach (theory, demonstration and practice of microteaching skills) was significantly more effective than symbolic modelling (only theoretical knowledge specific microteaching skills) in developing the teaching competency of primary teacher-trainees, (2) The symbolic modelling approach and perceptual modelling approach were significantly more effective than the traditional approach in developing the teaching competency of primary teacher-trainees, (3) micro-teaching strategies produced a significant positive effect on attitude towards the teaching profession and interest in the teaching profession, and (4) specific microteaching skills developed well in simulated conditions significantly improved the teaching competency of the primary teacher-trainees.

Bhattacharya (1993) discusses the failure of traditional method of value orientation and inculcation of modern values. In the traditional value-oriented method emphasis has been given on literature, mass media, respect and worship of the model, speech and action of great men. In the
modernised society emphasis has been given on family, institution and society-oriented values, i.e., humanitarian to solve basic problems. Importance has been given to the sources of modern values i.e., convention, legislation, popular movement, and revolution. Lastly, stress has been given on the inculcation of humanitarian values for peaceful coexistence of modern society through 'attitudinal modernity along with institutional and technological modernity.

Sharma (1994) the study was conducted to see and compare the effectiveness of value analysis model (VAM) in developing value-analysis competencies (VAC) among B.Ed. trainees and school students when taught with or without the use of value-analysis model. An experimental design using pre-test and post-test with parallel groups has been used. The detailed description about various approaches, strategies, and models of value-based education has been provided. The significance of value-based education and the role of teacher have been highlighted. The finding of the study indicated the effectiveness of VAM over conventional method of teaching in developing VAC among the members of the both treatment groups, over control group under observation. The major values taken up are cooperation, dedication to teaching profession, nationalism, perseverance, and scientific temper. The educational implication of the study are also provided.

Kiruba (1996) the main objective of the study was to predict the influence of self-concept, belief in traditional Indian values, security and attitude towards teaching profession as well as interest in teaching with respect to B.Ed. trainees studying in colleges of education and institutes of advance studies in education. The study points out the significance and importance of these aspects in the determination of interest in teaching and attitude towards teaching profession. Though there was significant positive correlation between interest in teaching and attitude towards teaching profession it was found that the B.Ed trainees had higher self concept, belief in traditional Indian values and security in their attitudes towards teaching profession.
Sharma (£000) examined modular approach to science curriculum in value orientation of ninth grade teachers. The study was carried out in two phases on the topics relating to Biology. For collection of data the researcher used Scientific Knowledge and aptitude test (Chaterjee, 1964), Rokeach Value Survey (Rokeach, 1973), and self-developed Achievement test and Value identification test. It was found that the Modular approach as compared to traditional approach has a significant effect on orientation of scientific values.

In the proposals based on survey reports for reform in teacher education across the 1990s Sally Hudson-Ross & Peg Graham (2000) advocated partnerships among school and university participants as sites for collaborative inquiry (e.g., Goodlad 1990; Holmes Group1995; National Commission on Teaching & America's Future 1996). They reported that most of the researches in professional development schools and similar collaborations, focus on the relationships, content, and logistics of connecting schools and universities as very different institutions (Brookhart & loadman 1992; McIntyre & Byrd 1996) on the professional development of teachers and teacher candidates (e.g., Levine 1992, Darling-Hammond 1994, Abdal-Haqq 1998) and rarely is the lens turned to the work of university teacher educators (Wideen, Mayer-Smith, & Moon 1998).

Curriculum researchers' interest in higher education exhibits a rising trend. The percentages for four surveys reported sequentially are 2.8, 10.1, 14.8, and 16.6. This has shot up to 30.4 for the fifth survey. In fact, higher education is the second preferred area of curriculum research; as many as seven out of twenty-three studies in higher education are concerned with it.

The review of studies as presented above leads to emergence of following trends of results in relation to the present study:

i. As far as the development of teaching competencies, skills and behaviours are concerned the activity-based methods of transacting the
curriculum including the modular approach are superior to the traditional one in inculcating teaching competencies.

ii. The innovative approaches of curriculum improve not only the process of learning thereby facilitating academic achievement but also help in inculcating positive attitude towards teaching and learning among teachers and students respectively.

iii. Teaching through self instructional modules (student centred) is much better than the traditional class room teaching (teacher centred) almost in all areas of teaching and at all levels-junior high school, high school, senior secondary, college and professional level.

(a) At junior high level, modular teaching has been found to increase the achievement and retention among students to develop their interest in science and to enable the low achievers to cope with normal students to a considerable extent in all subjects.

(b) At the high school level, self-instructional packages both in the absence of teacher and under a teacher's supervision are more effective than traditional teaching in health education, arts and language including vocabulary, comprehension; that is greater is student's involvement greater are the gains in achievement in social science along with increase in confidence among students.

(c) At the College and professional levels, better results of these modules have been observed not only in the improvement of cognitive achievement, but also in developing positive attitude towards subjects and multicultural behaviour changes.

iv. Studies in integration of values and commitment related components in the curriculum are very few and yet need to be taken up at the teacher education level.