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CURRICULUM EVALUATION


Objectives: To make an In Department study of the secondary school science curriculum and the science textbooks for Classes IX and X of Bihar, Orissa and West Bengal. Method: A questionnaire was developed as the “tool for evaluation of school textbooks and curriculum (Science Classes IX and X)”. This tool along with copies of syllabus and textbooks was sent to curriculum experts, subject experts, experienced teachers and others like the presidents, state boards of secondary education, the directors, state councils of educational research and training (SCERT), the directors and secondary education of respective states. The responses received from 18 experts of different states were analysed. Further analysis of these documents and finalisation of the recommendation were made in a four-day workshop. Twenty two experts from every discipline of science actively participated in the workshop. The response obtained from the field, syllabus and concerned textbooks were analysed. Findings: (1) Many concepts included in the syllabus and textbooks are repetitive. (2) Many unwanted materials have been included. (3) Children are not given a chance for “learning to learn”. (4) There is no scope for giving new information in the curriculum. (5) The whole curriculum of science for Classes IX and X has become mechanical, a process of passing information from teacher to students through textbooks. The study cites seven references.

EDUCATION OF THE MINORITIES


Objectives: To analyse the caste distance as perceived by: (a) Hindu SC respondents, (b) Christian SC respondents, (c) Non-scheduled caste (NSC) respondents. Method: Descriptive survey method as well as qualitative and quantitative approach was adopted for the study. The sample was taken 591 Hindu SC, 81Christian SC, and 474 NSC girls’ students using of probability sampling for the study. Bogardus Social Distance Scale used as tool for the study. Findings: (1) For the Hindu SC respondents were found to have closure proximity with their own caste groups. (2) The Hindu and Christian SCs’, the first
choice for marriage was with their own religious group. Five references were cited in the study.


**Objectives:** To study the dropout differences among tribes of Tamil Nadu, Kerala, Andhra Pradesh and Karnataka; (2) To find out the demographic variation among the dropout children in tribal area in South India; (3) To find out the reasons for the dropout children in tribal area in South India. **Method:** Descriptive survey method as well as qualitative and quantitative research were adopted for the study. The sample was taken 652 dropout children from 41 villages in Yelagiri hills in Tamil Nadu, Allapadi in Kerala, Araku valley in Andhra Pradesh and B.R. Hills in Karnataka, using probability sampling method. **Findings:** (1) Dropout children are very high in number in the interior and distant tribal villages. (2) Female dropouts are more in number than the male dropouts. (3) In Tamil Nadu, female dropouts are high compared to other states. In Kerala, percentages of rural dropout Children are more than the Kurumbar and Mudugar areas. In Andhra Pradesh, majority of the dropout children belong to Kondora, Bagatha and Porangi Parja. In Karnataka, the female dropouts are less in number than male dropout. (4) The percentage of dropouts is more in the age group of 11-15 years. (5) Economic necessity and parent’s compulsion, absence of Mid-day Meals schemes, improper provision of uniforms and textbooks lead to large scale dropouts in all the states. Ten references were cited in the study.


**Objectives:** (1) To study growth and development of Muslim minority educational institution after independence; (2) to ascertain the availability of educational facilities provided by the government; (3) to examine the cause that hinders the utilisation of educational opportunities/facilities; (4) to suggest measures to help the minority institution. **Method:** The descriptive survey method as well as historical method was used. Random sampling as well as stratified sampling was used. Tools like questionnaires, interview, and observation were used to collect data. The collected data analysed
quantitatively by using classification, tabulation and percentage technique. **Findings:** (1) The growth of Muslim minority educational institutions from primary to higher secondary has taken place in the last two decades, i.e. 1981 to 2001. The ratio of the number of Muslim minority educational institutions in Maharashtra State in comparison to Muslim population is not sufficient. (2) The Muslim community is not developed because of lack of enterprising leadership in education and because of this the Muslim educational institution could not avail the educational facilities provided by the government. (3) The Government officers of education departments are not familiar with rules and regulations of minority, if they know they do not cooperate properly. (4) Institutions are located in slum areas where the major part of the Muslim population lives. Their economical condition is very poor. They do not ready to spend on education. The study cities seventy seven references.

**EDUCATIONAL ASSESSMENT AND EVALUATION**


**Objectives:** To find out the different aspiration differences existing among the final B.Sc. agricultural girl students in various campuses of TNAU (Tamil Nadu Agricultural University). **Method:** Descriptive survey method was used for the study. A sample of 141 B.Sc. Agricultural female students from Coimbatore, Madurai, Chennai, using of probability sampling method for the study. A questionnaire was used as tool for data collection. **Findings:** (1) Majority of the students in all the colleges opted to pursue higher studies and seek employment after completion of their studies. (2) Most the students preferred M.Sc. in higher studies. (3) Financial situation was a barrier to continue their studies. (4) Very less students opted self-employment. There was no reference cited.


**Objectives:** (1) To find out the effect of school interventions on academic achievement in different categories of schools; (2) to assess
interrelationship between academic achievement and interpretations provided in different categories of schools. **Method:** Descriptive survey method as well as qualitative and quantitative approaches were adopted for the study. The sample was taken as 55 Headmasters and 550 students of Class IX from different categories of schools in the district of Phenkaní, Orissa, using probability sampling method for the study. The tools were used such as achievement test of annual examination. **Findings:** (1) All categories of school differed significantly from one another as regards the academic achievement of the learners. (2) There is no significant difference in school intervention score between government and non-government schools. (3) There is no significant relationship between academic achievement and school intervention in government and non-government schools. (4) There is marked relationship between academic achievement and school intervention in the schools managed by ST and SC Development Department. It concluded that there was no significant relationship between academic achievement and school intervention in the schools of Dhenkanai district. Ten references were cited in the study.


**Objectives:** (1) To identify the difference in the study habit between boys and girls; (2) to study the difference in the rural and urban school pupils’ study habits. **Method:** Descriptive survey methods as well as qualitative and quantitative approaches were adopted in the study. The sample was taken 200 pupils from Class X, Kurnool district in Andhra Pradesh, using probability sampling method for the study. **Findings:** (1) Urban pupils differed from the rural pupils in their study habits. (2) There was no significant impact of sex on the study habits. (3) There was no interaction effect of sex and locality on the study habits. Study habits need to be improved among the high school students. Nine references were cited in the study.


**Objectives:** (1) To study the receptive skills (reading and listening) in Tamil and English among the selected primary school children;
(2) to study and find out the effect of cognitive abilities in receptive skills in Tamil and English among the primary school children; (3) to study the influence of intervening variables (non-cognitive) such as personality traits, study habits, test anxiety failure tolerance, focus of control and self-concept or receptive skills among the selected primary school children. **Method:** Descriptive and narrative survey method was adopted for the study. Probability sampling (group at hand sampling method), Sankakiri educational district, Salem district was selected for the study. Qualitative and quantitative approach was adopted. The tools were used such as Computer Assisted Receptive skills Assessment package; Language Aptitude Test (Tamil and English); Group Test of intelligence (Nair and Amma in malgalang) (Tamil and English); Children’s Personality Questionnaire (Porter and Cattall); Study habits inventory in Tamil (Patel); Self-concept scale in Tamil; Locus of control Questionnaire in Tamil (Sarasen); and Future Tolerance Questionnaire in Tamil (Margaret Mc Clifford). The data were computed by ‘t’ test and product moment correlation for the study. **Findings:** (1) There was an interrelationship between the receptive variables such as reading and listening in Tamil and English language. (2) It was indicated that the growth and development was indicated of receptive skills such as intelligence, aptitude and scholastic achievement of the primary school children. (3) Cognitive abilities of the Primary School children enabled them to improve their reading and listening skills both in Tamil and English. (4) It was found out that not only the cognitive abilities but also some of the non-cognitive factors V12 failure tolerance focus of control study habits and certain personality traits influence the acquisition of receptive skills among the primary school children. The study cites two hundred twelve references.


**Objective:** To examine the effect of multiple true–false questions and essay on students’ performance in written examinations. **Method:** The study of sample (n=397) collected the final university examination consisted of a written examination and a practical examination from the undergraduate medical course at Melaka Manipal Medical College, Manipal. The written examination was of three hour duration and included two components essay paper and multiple true–false paper. The multiple true–false paper consisted of
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120 items. The essay paper consisted of case studies, critical thinking and short answer questions which the theory paper in physiology of three batches students. The statistical techniques applied for present study were Pearson’s correlation, ‘t’ test, one way ANOVA and chi-square test for finding the result. Finding: Statistically no significant difference in the performance in both components of two batches. In the third batches, essay marks are significantly higher than multiple true–false marks in the successful group while the unsuccessful group students done batter in multiple true–false questions than in essay. They finally concluded that multiple true–false items are not boosting student performance in written examinations. The study cites fifteen references.


Objectives: (1) To find out the extent of achievement of major Delhi school literacy project (DSL); (2) to identify the resources and utilisation of financial inputs. (3) to investigate the major problems faced by the participations of the project.(4) to identify the factors responsible for the strengths and limitations of DSLP.(5) to suggest measures for the improvement of the programme. Method: The study conducted a survey of 30 public schools of Delhi and purposive sampling method was used to choose 30 schools (15 active and 15 inactive schools) and a comparative study of various aspects of the programme and the factors responsible for the success or failure of the programme at these centres. The data were collected through Questionnaires, Interview Schedules and Evaluation Tests and the analysis of the data followed by both qualitative and quantitative techniques. Findings: (1) 16 out of the total 81 schools under DLSP implemented successfully literacy campaign and rest of schools were inactive.(2) The dedication and sincerity of the participants and effective measures for sustaining motivation were main factor for the success or failure of the programme at different centers. (3)In all the active centers, these two factors were visible in action, while at the inactive schools these two factors were missing. The study cites ten references.

Objective: To assess the Non-formal pre-school educational services provided at Anganwadi centers to the children, awareness of parents and level of utilisation of these services. Method: The Sample was taken from 15 Anganwadi centres, 15 Anganwadi workers and 30 parents, using stratified random sampling for the study. The data were collected through interview schedules, teaching methods, teaching aids, and observations. The quantitative and qualitative techniques were used in data analysis. Findings: The non-formal pre-school education was provided to children at centers and help of Anganwadi workers used two way interaction methods and takes the help of teaching aids for imparting education to the children. Indigenous material was used to make teaching aids like puppets, vegetables and fruits and most of parents were satisfied with non-formal education provided at Anganwadi centers but few weren't, as they felt that Anganwadi workers laid more emphasis on nutrition and health. The study cites six references.

EDUCATIONAL TECHNOLOGY


Objectives: (1) To find out the influence of computer-based multimedia programme on achievement in maths among high school students; (2) to find out the difference in achievement in maths between high achievers and low achievers from both relative retention of learning in mathematics. Method: Experimental method and quantitative method was adopted for the study. A sample of 62 students studying in Class IX, Madras were selected for the study. The probability sampling method chosen for the study. Attitude Scale used for data collection. Findings: (1) There is no influence of computer-based multimedia programme on the achievement in Mathematics among high school students. (2) There is no significant change in their attitude towards mathematics after learning Trigonometry through computer-based Multimedia and text-based self-study material. (3) There is no significant difference in achievement of mathematics between high achievers and low achievers for both experimental and control groups. (4) There is no significant difference in the retention of learning in mathematics between the experimental group and control group. Three references were cited in the study.

Objectives: (1) To assess the pupil’s performance in practice sessions and influence of the different instructional technologies availed on their performance in the TNPCEE; (2) to find out the relative effectiveness among different instructional strategies such as intranet with feedback from the teachers along with long term and short term entrance coaching programme; (3) to find out the pupils’ achievement of mastery learning in different subjects as measured by Tamil Nadu Professional courses Entrance Examination; (4) to evaluate the Computer Assisted Evaluation Package. Method: The study adopted Quasi-experimental design, qualitative and quantitative approaches were adopted for the study. The sample was taken 225 Maths students, 219 Physics students, 219 Chemistry students, 108 Biology students studying in Class XII from Tamil Nadu selected through probability sample technique for the study. The tools were used such as a website with a Computer Assisted Evaluation Package, and Achievement Test. Statistical applications like Analysis of Variance’s test; correlation co-efficient and Regression were used to analyse the data. Findings: (1)It was found that there was significant difference among the different instructional strategies, viz. internet, intranet with feed back from teachers along with long term and short term in entrance coaching programme. (2) It was found that there was significant difference in the performance of the students under the different instructional strategies in achieving mastery in subjects Mathematics, Physics and Chemistry. (3) It was found that self-evaluation did not result in mastery with regard to subjects, viz. Mathematics, Physics, Chemistry and Biology. The study cites one hundred thirteen references.


Objectives: (1) To study relative effectiveness among PBL (Peer-based Learning), ILMMP (Individualised Learning supported by Multimedia Presentation), IILMMP(Interactive Individualised Learning supported
by Multi Media Presentation) in terms of development of cognitive skills at different levels of knowledge, understanding and application among the students of Class IX as measured by post-test and retention test; (2) to study whether there is any significant difference among the instructional strategies, viz. PBL, ILMMP and IILMMP with regard to computer attitude and scientific attitude. **Method:** Quasi-experimental method was adopted for the study. Qualitative and quantitative approaches were adopted for the study. A sample of 108 girl students from Vellalar Matriculation and Higher Secondary School, Erode district in Tamil Nadu was taken, using probability sampling technique for the study. The Tools used for the study were an achievement test (Self-made tool), Criterion Referenced Test, Scientific Attitude Test (Bhasksrarao and Marlow Ediger), and Computer Attitude Scale (Niel Selwyn) used in the study. The ‘t’ test and ANOVA were used for data analysis in the study. **Findings:** (1) It is concluded that Interactive Individualising Learning supported by Multi Media Presentation (IILMMP) was found to be the most effective strategy among all the three different instructional strategies, viz. PBL, ILMMP and IILMMP in term of cognitive skills such as knowledge, understanding and application in realising the instructional objectives in Chemistry at Class IX. (2) PBL was found to be coming between IILMP and ILMMP in enhancing the retention of what have already been learnt. (3) It was inferred that irrespective of the difficulty level of the content, IILMMP was to be most effective one while ILMMP was the least effective one. (4) It was found that while the subjects of all the three experimental groups were identical in terms of their scientific attitude, the same was found to be non-identical in terms of their computer attitude. (5) The results of the study indicated that the enhancement of learning Chemistry was only due to the media effectiveness. Computer Mediated Multi Media Based Instruction can be introduced in education at all level for the successful realisation of instructional objectives. One hundred two references were cited in the study.


**Objectives:** (1) To develop prototype training model suitable for the DIETs in Tamil Nadu to insure training programmers; (2) to find out whether the prototype model fits in with the existing practices in the DIETs; (3) to study the functioning of the DIETs in the southern part of Tamil Nadu. **Method:** Normative survey method was used in
the study. The total sample sizes were 29 DIETs, 10 Principals, 110 Lecturers, 400 E Teachers. The data collected through Training Constraint Questionnaire, Structured Observation Schedule, Trainee Information Blank, Teaching Technology Observation Schools and Training Evaluation Questionnaire. **Findings:** (1) Valid model and technology lab were available in the DIETs. The in-service programme of DIET had inadequate infrastructure, less constraints teaching. One hundred thirty references were cited in the study.


**Objectives:** (1) To conduct a survey of the facilities for utilisation of ETV programmes in Delhi at primary school level; (2) to study the effect of ETV programmes on primary school children – Classes III and V in terms of their achievement in ETV lessons (EVS and Mathematics) and reaction towards ETV programmes; (3) to study the effect of intervention programmes. Post-telecast discussion to be conducted by teachers along with ETV programmes in primary school children in terms of their achievement of ETV lessons (EVS and Mathematics) and reaction to the ETV programmes ; (4) to study the attitude of class-teachers towards the quality of ETV programmes; (5) to make recommendations to administrations and producers on different aspects of ETV programmes. **Method:** The study approaches were employed on quasi-experimental research design, Pre- post-test control design used for the experiment which was conducted in schools without disturbing the school schedule. The purposive sample techniques selected and total number of sample was 40.The study was conducted in two phases – first comprised the status study of utilization of ETV facilities in primary schools; second aimed at investigation into effectiveness of the ETV programmes broadcast by Doordrashan. The tools used like Questionnaire for Headmasters and Teachers, Achievement test for Class III in EVS and Mathematics, Achievement Tests for Class V in EVS and Mathematics, Teacher Attitude towards Educational Television (ETV) Programmes – A rating scale, learner reactions towards ETV programmes – An Interview Schedule. Analysis of data has been done by using ANOVA. **Findings:** The ETV lessons in Mathematics and EVS (SC and SS) taught to students of both Class III and V significantly improved their learning achievement as compared to their counterparts taught through traditional method. The experiment also showed that ETV lessons
developed more favourable teacher attitude and learner reactions towards ETV programmes. The improvement in learning achievement has played an important role in developing positive social scale values and cooperation among students.


**Objective:** To study the television viewing behaviour of adolescents and its impact on their academic achievement. **Method:** The sample consisted of 48 adolescent (24 boys and 24 girls) along with their mothers selected randomly from government Telugu medium schools (8th, 9th and 10th standards) in Tirupati town. Adolescents TV viewing behaviour was collected from students as well as their mothers by using two tools ‘omnibus schedule for parents’ and ‘omnibus schedule for childrens’ (both developed by Anuradha and Bharathi, 1998). Academic achievement was obtained from school records. **Finding:** The mean Television viewing time for boys was 166.47 mnts (sd = 98.97) and the same for girls was 182- 89 mts ( s.d= 93-820). Adolescent did not differ significantly in their TV viewing behaviour according to sex, grade and type of family. The percentage of marks was found to be more for adolescents with cable connection than those without cable connection. The study cites ten references.


**Objective:** To assess the effectiveness of the Enneagram Educational Programme on the following competencies of emotional intelligence (E.Q) of students teachers: (a) emotional self-awareness, (b) emotional expression, (c) creativity, (d) interpersonal connections. **Method:** The pre-test and post-test control group design employed for this study. In this design the investigator involved two groups, the experimental group and control group, both of which were formed by random assignment and were administered pre-test of the dependent variable; one group received the special treatment and then both the groups were posted. A sample of 40 student teachers, from a B. Ed. College of Jharkhand State was selected at random. 20 student teachers of Bethesada B. Ed. College, Ranchi were selected randomly to form an experimental group and 20 student teachers of Ursuline Womens’
T.T. College, Lohardaga were selected randomly to form the control group for the study. The experimental group was given the intervention programmes namely, the Enneagram Educational programme for the duration of three months. The data were collected from the appropriate tools: (a) E.Q Map Questionnaire, (b) Interview schedule for the student teachers, (c) Reaction scale for the feedback of intervention programme. Thus, the data collected and were analysed with the help of suitable statistical techniques mean, standard deviation and Analysis of Covariance (ANCOVA). **Findings:** A significant difference found between the mean scores for Emotional Self-awareness, Emotional Expression, Emotional Awareness of others, creativity and interpersonal connections. The majority of response in the reaction scale indicated that after the interaction programme improvement has taken place in the student-teachers in their interpersonal skills and quality of life. As a whole, it can be concluded that the field of education, particularly the teachers training programme is a beneficiary of Enneagram educational programme. The study cites nine references.


**Objectives:** (1) To find out whether there is any significant difference between the Conventional Lecture Method and the Computer Assisted Instruction (CAI) as an individualised Instructional strategy in terms of their effectiveness in realising the instructional objectives in Biology at Class XI; (2) to find out significant difference among the different modes of Computer-based Instruction viz. Tutorial, Drill & Practice and Simulation in realising the instructional objectiveness in Biology at Class XI; (3) to find out whether there is any significant difference among the different modes of Computer-based Instruction (CBI), viz. Tutorial, Drill and Practice and Simulation in terms of their effectiveness in enhancing the retention of cognition as revealed by the learners’ performance in the retention test; (4) to develop syllabus based CAI package; (5) to assess the personality of the subjects of the control and experimental groups using Cattell’s 16 P.F Inventory with a view to study whether it has any influence on the media effectiveness in realising the instructional objectives.

**Method:** Quasi-experimental method as well as qualitative and quantitative approach were adopted for the study. The sample was
taken four groups of each having 35 students selected through probability sampling method. Cluster sampling technique was adopted in the study. The tools were used in the study such as Cattell's 16 P.F inventory for students, CRT developed by Raymond B and Achievement test. **Findings:** (1) Different modes of Computer-based Instruction, viz. Drill, Practice and Simulation were more effective than conventional lecture method in realising the instructional objectives in Biology at Class XI. (2) Effectiveness of the conventional lecture method and the different modes of the Computer-based Instruction, viz. Tutorial, Drill and Practice and Simulation were not influenced by the learner’s personality. (3) There was significant difference among the different modes of CBI (Computer-based Instruction), viz. Tutorial, Drill and Practice and Simulation in terms of their effectiveness in enhancing the retention of cognition as revealed by the learner’s performance in the retention test. There was significant difference among the different modes of Computer-based Instruction in enhancing retention of what have already learnt. Seventy five references were included in the study.

**ENVIRONMENTAL EDUCATION**


**Objectives:** (1) To compare the overall achievement of boys and girls on efficacy of Teaching Learning Materials (TLM); (2) to compare the overall achievement of urban and rural children; (3) to compare the overall achievement of children of FPS and NFE centres. **Method:** Describe survey method was adopted for the study. The sample was taken 1000 children 500 FPS and 500 NFE centres from the city of Khandwa and the adjoining areas of Khandwa district was adopted for the study. The tools used for the study were an Achievement Test. **Finding:** (1) The performance of boys was found better than that of the girls studying at NFE centres and formal primary schools. (2) There was found a significant difference in the scholastic achievement of children studying at the rural and urban areas of Khandwa district. (3) There was a significant difference in the performance of overall children studying at NFE centre.
LANGUAGE EDUCATION


Objectives: (1) To enable the students to understand and learn the vowel sounds; (2) to enable the students to have a correct and good exposure to spoken English; (3) to enable the students to pronounce the vowel sounds by facilitating them with the perfect role model; (4) to make the peer group pronounce the sounds correctly. Method: Experimental method and fifty students from the pre-service teacher education course were selected through purposive sampling techniques as sample for the study. Tools were used such as charts having the words and their respective transcription are used to administer the pre-test and post-test and for the oral practice. (2) Pre-recorded cassettes are used as perfect model for the students to do practice. The students have learned, from cassettes, the correct pronunciation of the words. (3) The researcher, both in the pre-test and post-test, used a three point rating scale. The students’ performance was evaluated based on the three point rating scale. Findings: The sounds are not found in the student’s mother tongue, i.e. Tamil. Adequate and proper exposure is not given to the students. Perfect model is not available for the students. The peer group’s mispronunciation influences the students. Six references were cited in the study.


Objectives: (1) To investigate the application of information and communication technology in teacher education with reference to certain selected variables; (2) to identify the information and communication technology needs, knowledge and skills among the teacher educators; (3) to develop a user-friendly prototype multimedia course wear package as a communication technology in teacher education (i.e. learning to learn with information technology) and produce it in a CD-ROM. Pupils taught through the interactive multimedia programme in English will have high or mean achievement than that of pupils taught through conventional method of teaching. Method: The study is an appropriate blend of positivist descriptive method with normative survey technique and
experimental method of study. The sample was taken 29 District Institutes of Education and Training from Tamil Nadu, 71 English teacher, educators and 200 teacher trainees, using of probability sampling method for the study. The tools were: (1) Questionnaire, (2) Attitude scale, (3) Interviews, (4) Diary analysis used for data collection. **Findings:** (1) Sixty-six per cent of teacher educators do not know the basic principles of computer. (2) It is unfortunate that the ICT practices have not seen the widespread application for teacher education. (3) Attitude of teacher educators towards ICT is quite positive. (4) It reveals that the focus of computer equipment problem had both quantity problem (not enough computers) as well as quality problem. Seventy-two references were cited in the study.


**Objectives:** (1) To find the relationship among language skills, language aptitude and verbal intelligence of the selected engineering colleges students; (2) to find the influence of socio-economic factors of family, influence of college environment and influence of personality traits in language skills of engineering college students; (3) to study the influence of pedagogical factors such as study habits locus control, learning approaches, learning styles, and learners’ effectiveness on language skills of the students. **Method:** Descriptive survey method and Quantitative approach was employed for the study. A sample of 135 Engineering College students from Coimbatore District was taken, using of probability sampling method for the study. The tools were used for the study as CALSAP(Computer Assisted Language Skills Assessment Package), Language Aptitude Test(Spelling)DAT, Language Aptitude Test(Error)DAT, Group Test of Intelligence in English (verbal) – Dr. Mrs. Ahuja, Socio-economic status scale-(Bhardraj Gupta), Family Environment scale (Bhatia and Chadha), College Environment scale (Arokiadoss), Study Habits Inventory (Patel), Learning Style Questionnaire (Grasha and Reichman), Learner’s Effectiveness Questionnaire (Arokiadoss), Personality Traits Scale (Cattell), Locus of Control Questionnaire (Crandall). ANOVA was used as a statistical technique for the study. **Findings:** (1) Socio-economic status, family environment and personality traits were identified as significant factors affecting the language skills among the selected engineering students. (2) The influence of pedagogical
factors such as study habits, locus control, learning approaches, learning styles and learners’ effectiveness significantly influenced the language skills of the students. The study cites one hundred seventy two references.


Objectives: (1) To prepare and validate the Modular Approach to teach Tamil Grammar at Class IX; (2) to study the effectiveness of the Modular Approach materials in terms of achievement of the students of Class IX; and (3) to study the habits of students. Method: Experimental method was adopted for the study. Qualitative and quantitative approach was used in the study. A sample of 80 students from Class IX was selected through probability sampling method for this study. The ‘t’ test and Product moment correlation were used in the study for data analysis. Findings: (1) Control group and experimental group students differ in their achievement in Tamil grammar and study habits. (2) There was significant relationship between the achievement and study habits. (3) The Modular Approach was effective in enhancing the academic achievement and study habits. The study cites eighty-two references.


Objectives: (1) To find out significant difference between the pre-test and post-test mean score in Communicative Skills in English; (2) to find out significance difference between pre-test and post-test in science students of control group. Method: Total sample size 100, using probability sampling techniques in the present study. The data were collected through achievement test. Findings: It showed the effectiveness of using conversation texts to teach English communication skills to the students at college level, using video-programmes. Role play were effective to improve communicative study. The orientation aims at teaching different language function in spoken and written English. Orientation course is necessary for the teachers. It can be made to assess the attitude of teacher at collegiate level. The study cites one hundred and fifty references.

**Objectives:** (1) To summarise the overall role of mother tongue as the medium of instruction in education especially in university education in Tamil Nadu and Sri Lanka from 1950; (2) to identify the opinion of different groups of people (University, College), students, teachers, parents with regard to mother tongue as the medium of instruction; (3) to identify above mentioned target segments opinion regarding mother tongue the effective learning, motivated learning, personality development, educational achievement and career guidance. **Method:** Historical approaches were used for the study. Normative survey was also used for the study. “Opinion of” the college, students, parents, public. Probability sampling method of 120 parents, 90 PG, 10 UG students and 60 teachers taken in present study. The data were collected through questionnaires, and filled by students, parents and teachers. **Findings:** Brief of the findings of the study showed that majority of the students of Jafna University were of the view that Tamil as the medium of instruction is essential in maintaining not only standard of education but also in improving effective learning, motivated learning, personality development, educational achievement, career guidance, international recognition and for general achievement. There was a greater significant association among the variables of student, teachers, parents and public. The study cites eighty five references.


**Objectives:** (1) To assess and analyse the creative writing skills of college students in English; (2) to find creative mobilisation technology for creative writing skills in English. **Method:** Descriptive survey method has been adopted in the study. Qualitative and quantitative approaches were adopted for this study. A sample of 1440 students was selected through the probability sampling technique. The data collected through Language Creative, Essay Paragraph Analysis Scale, Kuppusam’s Socio-economic Status Scale, Creative Mobilisation tech Questionnaire, Check-list to College Teacher, and Observation to Students. **Findings:** (1) Urban students had higher
creative writing skill. (2) Aided students had less creative writing skills. It suggested that students tend to make better progress in the conditions highlighted in the cross case analysis. The study cites one hundred references.


**Objectives:** (1) To identify and analyse the general problems of the students of higher secondary course in learning English as a second language in Thiruvarur district; (2) to study the availability of general facilities and curriculum experiences provided by the teachers for learning English language; (3) to study the problems faced by the students in writing essays, usage of phrases and idioms, understanding stress shift, using conjunctions and sentence pattern; (4) to study whether there is any difference in the problems faced by the students in pronunciation, learning grammar of sentence pattern, habit of hearing news, rectifying the errors of exercises, memorisation without understanding, remedial teaching on the bases of different variables such as sex, locality and type of management; (5) to study whether there is any significant relationship between the opinion of the teachers on the problems faced by the students in pronunciation, understanding grammar, using punctuation marks, mother tongue interference, guidance of parents and different variables such as sex, experience, locality and type of management.

**Method:** Descriptive normative survey approach was adopted for the study, which mainly focused on qualitative research. The Probability sample method was taken through which 285 boys and 285 girls were selected from higher secondary schools in Thiruvarur district. Stratified random sampling technique was adopted for comprehensive study. Major tools used in the study were Achievement test for the students; Questionnaire for the students; and Problem inventory for the teachers. The collected data were analysed qualitatively and quantitatively using basis statistics, ‘t’ test and chi-square. **Findings:** (1) Students of higher secondary in Thiruvarur district had some specific problems in learning English as a second Language. (2) Students faced the problems in writing essays, phrases and idioms, using conjunctions and sentence pattern. (3) There was significant relationship between the problems faced by the students in pronunciation, learning grammar, knowledge
of sentence pattern, habit of hearing news, rectification of homework, memorisation without understanding, remedial teaching and different variables regarding sex, locality and type of management.

(4) There was significant relationship between the opinion of the teachers on the problems faced by the student, in understanding grammar, using punctuation marks, mother tongue interference, guidance of parents and different variables such as sex, locality, experience and type of management.


**Objective:** To find out the usefulness of experience-writing strategies to ameliorate problems related to syntax. **Method:** The study used a design of experimental and control group, both group comparison with per-test and post-test of the study. The Sample was chosen 54 who had seventh standard children from two schools from Chandigarh followed through random sampling techniques. The tools used were developmental sentence scoring (Lee, 1974), a list of ten topics generated for write ups after knowing students experience of various situations and a series of ten pictures of situations used for the study. The statistical techniques used for computed data, using mean, SD, ‘t’ test, correlation and ANOVA to find out the result. **Findings:** The strategies improve syntax knowledge among children of seventh standard. The successful interventions always included frequent feedback to the students on the quality of their overall writing, strength and missing elements. The language experience approach is effective for reading and writing. The study cites seventeen references.

**MATHEMATICS EDUCATION**


**Objectives:** (1) To study the effectiveness of teaching concepts in mathematics through video-cassette; (2) to compare the effectiveness of teaching concepts in mathematics through video-cassette with that of traditional method; (3) to compare the effectiveness of teaching concepts in mathematics through video-cassette mixed with
discussion by giving pause often with that of traditional method; 
(4) to study the gender difference in achievement in Mathematics. 

**Method:** Experimental method (Equivalent group design) was adopted for the study. The sample was taken 45 boys and 45 girls, using probability sampling for the study. Achievement method was used as a tool for the study. **Findings:** (1) It implied that the increased level of academic achievement of experimental group was due to the teaching of Mathematical concept through video-cassette. (2) There was a significant difference between boys and girls in all groups. In all the girls’ performance were superior to boys. Ten references were cited in the study.


**Objectives:** (1) To study the contributing factors of academic achievement in mathematics; (2) to study the optimising variables of academic achievement in mathematics using linear programming approach. **Method:** Normative method is employed to describe and interpret the factors. It involves discovering relationship between the existing non-manipulated variables. The normative study to educational problem is one of the most commonly used approaches. For the purpose of the present study, 36 schools have been selected from in and around Chennai district by giving due representation to the management (11 Government schools, 2 Corporation schools, 12 private aided schools and 11 private unaided schools), type (10 boys, 17 Girls and 9 Co-educational schools) and board affiliation of the schools (28 schools belonged to state board and 8 to matriculation). In this study 900 students from Higher Secondary classes were selected randomly by giving due representation to the student related variables such as subject groups, sex, community parental education, etc. Different scales were used to collect data regarding Mathematics Information Processing Skills (MAPS) by Kenneth C. Bessant; Decision Making Skills (DMS) by Scott and Bruce; Attitude towards Mathematics (ATM) by Fennema Sherman; Academic Achievement Test in Mathematics (AATM) by the researcher. **Findings:** In the present study, it is observed that mathematics information skills, decision making skills and attitude towards mathematics have made a significant contribution towards the academic achievement. All the four factors of attitude to mathematics (Confidence, Usefulness, Success and Teacher) have made a significant contribution towards the maximisation of the
aggregate performance in mathematics. The study cites six references.


Objectives: (1) To make comparisons of girls’ achievement with that of boys in mathematics in the upper primary education in Addis Ababa; (2) to examine the extent of relationship between student performance in mathematics and school ownerships; (3) to examine the attitudes of both genders towards mathematics and pinpoint some of attitudinal stereotypic barriers to girls’ achievement in mathematics. Method: The research followed a multi-stage sampling procedure to select the main sources of data. On the basis of school ownership a list of all school operating in Addis Ababa with Class VI was prepared. The list was limited to co-educational schools and was used to select sample schools in the third stage of sampling process. All in all, 10 schools (five each from the government and non-government sectors) were selected based on a stratified sampling procedure. Finally, one section of Class VI from each school selected in stage three was chosen, and all its students participated in the study. Out of the total samples of 611 students from 10 schools, 302 were girls and 309 were boys. In terms of age, about 51.3 per cent of the respondents were under 13 years, 43.9 per cent of them were in the range of 13 and 15 years, and remaining 4.8 per cent were above 15 years. The researchers employed both objective and subjective instruments of data collection, and to maintain objectivity in data collection used a standardised mathematics test and documentary analysis. The statistical tools were used for study mean, standard deviation, Chi-square, and ‘t’-test. Findings: (1) The girls’ performance in mathematics in government schools may not be significantly different from that of non-government schools in the upper primary schools of Addis Ababa. (2) Majority of boys and girls agreed that parents did not favour sons against daughters or vice versa when it came to their schooling. More specifically, about 84.5 per cent of boys and 82.2 per cent of girls said their fathers had encouraged all children, irrespective of gender, to pursue their studies and perform well in school. Similarly, about 85.6 per cent of boys and 84.6 per cent of girls felt that their mothers had shown equal interest in their sons and daughters education. (3) Some of boys and girls believed that most mathematics teachers were biased against girls in their classroom activities. (4) A sizeable number of boys
(41.5 per cent) and girls (43.1 per cent) reported that their mathematics teachers were gender-neutral in classrooms. When the aggregate data were closely scrutinised, an overwhelming majority (57.8 per cent) of student believe that their mathematics teachers were gender sensitive in classroom activities.

**ORGANISATION AND MANAGEMENT OF EDUCATION**


**Objective:** To investigate the relationship between school effectiveness and some selected person and organisation related correlates. **Method:** A sample of 16 schools 110, teachers and 229 students of Dharwad city was taken. From each school 6-7 teachers and 10-15 students were selected. The data was collected from schools giving due consideration to the type of management and type of schools. The tools were used Behaviour in School Inventory Student’s Involvement Questionnaire (BSISIQ), Quality of Work Life Scale (QWLS), Leadership Qualities Questionnaire (LQQ), Organisational Health Inventory (OHI) and Parental Involvement Questionnaire (PIQ) for data collection. The statistical methods were One-way Analysis of Variance (ANOVA), ‘t’-test and correlation analysis used for analysing the data. **Findings:** (1) The students of high effective schools are more adjusted to school than the students of average and low effective schools. (2) Students of high effective schools are involved more in school activities then the students of average and low effective schools. The study cities fourteen references.

**PHILOSOPHY OF EDUCATION**


**Objectives:** To study the educational doctrines of Swami Sivananda; (2) to compare the educational thoughts of Swami Sivananda with those of other eminent thinkers. **Method:** Historical and survey method were used in the study. Primary and secondary sources were scanned, scrutinised and studied among print and non-print materials. More than 300 books authored by Swami Sivananda, his lectures in A/V Cassettes, CDs, VCDs, letters, websites and various
books written on him by other authors were taken into account. Personal visit to Sivananda Ashram, Yoga Vedanta Forest Academy and the Divine Life Society, Rishikesh, interviewing the authorities etc were done. Content analysis and interview schedule were used for this study. **Findings:**

Swami Sivananda conceptualised his educational philosophy as a perfect amalgam of idealism, naturalism, realism, empiricism, rationalism, pragmatism, voluntarism, evolutionism, phenomenalism, transcendentalism, immanentism, mysticism, pantheism, humanism, spiritualism, internationalism and world religions. He suggested that an overhaul and re-orientation of our educational system is overdue. According to him, education is an integrating process, manifestation of divinity in man, overhauling the whole being of individual, cultivation of character, development of personality, initiative, courage, spirituality moral and ethical notions, austerity, sympathy, tolerance, will-power, personal-aura, discrimination and Brahmacharya. He advocated that education should be aimed at enabling the students to be self-reliant, independent, assiduous, refined, courteous, self-supporting, optimistic, responsible, disciplined and a good citizen. Swami Sivananda pleaded that education should also aim at character formation with ethical – discipline, spiritual culture, bodily development, intellectual, vocational, technical upliftment, self-realisation and development of behaviour, personality, international understanding and world-brotherhood. He provided two-fold approaches for curriculum design: (a) Spiritual or Para education curriculum, (b) Apara education curriculum. He believed in friendly, lasting, sweet, cordial, parents-children like and spiritual relation between teacher and students. He favored enigmatic, aphoristic, relation, analogical, dialectical, temporising, regressive, imitation or persuasion, textbook and personal guidance methods of teaching.

Fifty three references were used in this study.

**PHYSICAL AND HEALTH EDUCATION**


**Objectives:** (1) To find out the effect of circuit training and procurers training on speed, agility, strength endurance, flexibility, resting heart rate, cardio respiratory endurance and maximum oxygen consumption; (2) to find out significant difference in leg explosive
power. **Method:** Experimental design was used in the study. Qualitative and quantitative methods were used for data analysis. Probability sampling method (the control group and the experimental Group I and experimental Group II consisted of 10 subjects’ respectively) was adopted for the study. The tools were used in the study were Standing Broad Jump Test, 50 Meters Run Test, Shuttle Run Test, Sit up Test, Sit and Reach Test, Resting Heart Rate Test, Cooper’s Twelve minutes Run/Walk Test, and Maximum Oxygen Consumption (VO₂ max) Test in the study. **Findings:** (1) The study clearly indicated that both circuit training and procures training for a period of 12 weeks had significantly increased leg speed, agility, strength endurance, flexibility, cardio respiratory endurance and maximum oxygen consumption and decreased the resting heart rate. (2) The study indicated that circuit training had improved leg explosive power, speed, agility and strength endurance to a greater degree than procures training. (3) The study found out that procures training had improved flexibility, cardio respiratory endurance and maximum oxygen consumption and decreased heart rate to a greater degree than circuit training. Eighty eight references were included in the study.


**Objective:** To compare the ‘Job Satisfaction’ of three groups of physical education teachers teaching in high schools of Himachal Pradesh in having good, average and poor sports facilities with respect to following factors: work conditions, salary, security, promotional policies, institutional plan and policies, authority, their competence and functioning. **Method:** The random sample of 210 high school physical education teachers from all the districts of Himachal Pradesh. The tools were used to collect data like ‘Job Satisfaction’ Questionnaire (English) by Kumar and Mutha, and a check-list was prepared according to seventh five year plan national sport policy. The statistical technique chi-square was used for the analysis of data. **Findings:** The majority of the teachers are satisfied with their job according to the job satisfaction components. They are satisfied with their work, work condition, salary, security, promotional policies, institutional plan and policies, institutional plan and policies, relationship with their co-workers, functioning of authorities (head) and their competence. The study cites eleven references.

**Objectives:** (1) To explore participation motives for playing badminton; (2) to compare the dimensions of motivation between players of different levels of participation, sex and regions of the country.

**Method:** The total sample was 523 badminton players (325 male and 198 female) collected through different region, i.e. east (69), west (257), north (109) and south (88) of the country and of different levels of participation, i.e. national level (71), inter-university level (235), junior national level (109) and national schools level (108), aged from 12 to 42 years. The subjects were selected during respective championships held during the session 2001-02 and 2002-03. All the participants completed Participation Motivation Questionnaire. The instrument developed by D.L. Gill *et al.* was adopted. Respondents were requested to indicate their preferences on a 3-point Likert type scale.

**Findings:** (1) Analysis of Participation Motivation Questionnaire identified nine factors: popularity, fitness/friendship, challenge/excitement, energy release, skills, team affiliation, miscellaneous, fun and feel good. (2) Badminton players of different levels of participation and regions of India rated reasons pertaining to improving skills, fitness, learning new skills and challenge as the most important reason for participation in badminton. (3) The reasons reported to be of least important for participation were getting out of the house, to be with friends and get rid of energy. (4) The male and female badminton players of different levels of participation do not differ in reasons of participation in badminton. (5) The male and female players of different regions of the country do not differ in their reasons for participation in badminton. (6) Badminton players of different levels of participation, i.e. national level, inter-university level, junior national level and national schools level differ significantly on four factors, i.e. popularity, fitness/friendship, excitement and team affiliation. (7) All the badminton players reported insignificant differences on factors related to energy release, skills, miscellaneous, fun, team spirit and feel good. (8) National school level players gave significantly more importance to popularity reasons followed by national level players. (9) Junior national level players rated fitness/friendship reasons as significantly less important than did the players of other participation levels. (10) National level players reported higher importance for excitement and team affiliation as reasons for participation in badminton. The study cites fifty five references.
Objectives: (1) To compare the status of senior national, junior national and international women football players on the selected psychological variables; (2) sketch group profiles of international, senior national and junior national women football players, and (3) to draw psychological profiles of individual women football international players. Method: The sample of the present study comprised of 325 female national football players of India. Keeping in view the purpose of the study they were divided into three groups senior national (N=160), junior national (N=150) and international (N=15) female football players. Four psychological variables associated with performance were Sport Competition Anxiety, Self-confidence, Achievement Motivation and Mental Toughness (consisting of four different categories namely: Handling pressure, Concentration, Mental rebound and Winning attitude). The data collected through the administration of four questionnaires, i.e. the Sports Competition Anxiety Test Questionnaire, Self-confidence Inventory, Sport Achievement Motivation Test and Mental Toughness Questionnaire. The data collected from those senior national and junior national players who reached in the quarter final league of 11th Women National Football Tournament held at Chennai from 8th to 24th June 2003 and 3rd Girls U-19 Football Tournament held at Haldwani from 26th September to 8th October 2003. The statistical methods like One-way analysis of variance and F-test, used for statistical analysis. Findings: (1) Senior national women football players had medium anxiety, medium self-confidence, moderate achievement motivation and average level of mental toughness. (2) Junior national women football players had medium anxiety, medium self-confidence, moderate achievement motivation and low level of mental toughness. (3) The level of anxiety of international women football players was significantly low as compared to the junior national women football players. (4) International women football players were significantly higher in self-confidence than the junior national women football players. (5) There was no significant difference in achievement motivation of international, senior national and junior national women football players. (6) International women football players had significantly high level of mental toughness as compared to senior and junior national women football players. The study cites one hundred forty six references.
Assessment of Specific Psychological Skills of Indian Badminton Players. Ph. D., Physical Education, Devi Ahilya University, Indore, Guide: Dr. S.K. Yadav.

Objectives: (1) To assess specific psychological skills of Indian badminton players (both male and female) of different levels of achievement, i.e. International, Senior, Junior and Sub-junior National; (2) to investigate the relationship between specific psychological skill scores and ranking points of Indian badminton players. Method: The sample of the present study comprised of 173 male and 152 female Indian badminton players. Keeping in view the objectives, the players were categorised into four main groups. In men/boys section: International (N=26), Senior national (N=33), Junior national (N=56) and Sub-junior national (N=58) and in women/girls section accordingly International (N=16), Senior national (N=42), Junior national (N=44) and Sub-junior national (N=50). The data were collected from International and Senior national Men and Women badminton players who participated in Senior National Badminton Championship held at Jamshedpur, Jharkhand from 31st January to 6th February 2005. The data from Junior and Sub-junior National boys and girls players was collected during Junior National Badminton Championship held at Panjim, Goa from 31st October to 8th November 2004, and Sub-junior National Badminton Championship held at Chandigarh from 10th to 16th October 2004 respectively. Athletic Coping Skills Inventory – 28 (ACSI-28) as suggested by Smith et. al. was administered to the players. One-way analysis of variance, Scheffe’s Test Product Moment Correlation were applied for statistical analysis. Findings: (1) International badminton players had higher mean values than senior, junior and sub-junior national men/boys and women/girls in specific psychological skills and its sub-factors except in goal setting/mental preparation in men/boys badminton players. (2) Senior national men/women badminton players had higher mean values than junior and sub-junior boys and girls in specific psychological skills and its sub-factors. (3) Junior boys/girls national badminton players had higher mean values than sub-junior boys and girls in specific psychological skills and its sub-factors. (4) Significant differences were found among international and junior national, international and sub-junior national in freedom from worry, international and sub-junior national in coachability, and international and sub-junior national, senior and sub-junior national in specific psychological Skills in men/boys badminton players. (5) Significant differences were found among international and senior national, international and junior national, international
and sub-junior national and senior and sub-junior national in confidence and Achievement Motivation, international and junior national, international and sub-junior national and senior and sub-junior national in specific psychological skills in women/girls badminton players. (6) Significant relationship was observed on Peaking under pressure, concentration, coachability and specific psychological skills in senior national men and freedom from worry and specific psychological skills in senior national women badminton players with ranking point. (7) Significant relationship was observed on confidence and achievement motivation and specific psychological skills in junior boys and concentration and specific psychological skills in junior girls with ranking points. (8) Significant relationship was observed on confidence and achievement motivation, coachability and specific psychological skills in sub-junior boys and freedom from worry and specific psychological skills in sub-junior girls with ranking points. The study cites ninety four references.


Objective: To construct selected specific skills tests namely, Dribbling Test, One Hand Side Pass Test, Reversed Wrist Pass Test, Behind the Back Pass Test, Overhead Shot Test, Jump Shot Test and Diving Shot Test in Handball. Method: The subjects were one hundred male inter-university level handball players, who participated in the all India inter-zonal inter-university Handball Tournament, held at Banaras Hindu University, Varanasi (U.P.) from 26th to 29th October, 2002 as the members of their respective university handball teams qualifying from their zonal competitions. A total of eight teams, four from each North – East and South – West Zone tournaments qualified for the All India Inter – Zonal Handball Tournament 2002 – 03. The Data were collected by administering specific skill tests to all the subjects. Analysis of variance, Pearson’s product moment correlation used for statistical analysis. Findings: (1) The multiple correlations yielded One Hand Side Pass Test, Overhead Shot Test and Behind the Back Pass Test. (2) The battery of skill tests developed by the researcher has the ability to predict the specific skills of handball players. (3) All the seven selected specific skill tests (Dribbling, One Hand Side Pass, Reverse Wrist Pass, Behind the Back Pass, Over Head Shot, Jump Shot and Diving Shot) showed highly significant relationship with handball playing ability. (4) The newly developed specific skill tests meet the criterion of scientific authenticity, i.e.
the specific skill tests were reliable, objective and valid. (5) The One Hand Side Pass, Overhead Shot and Behind the Back Pass are deemed to be meaningful in representing the specific skills of handball players. The study cites thirty nine references.

PSYCHOLOGY OF EDUCATION


Objective: To study the career of maturity of Higher Secondary students of Class XII. Method: Descriptive survey method as well as qualitative and quantitative approach was adopted for the study. The sample was taken 264 students from Class XII, from the Higher Secondary schools, Udumalaipetin and Coimbatore, using probability sampling for the study. The tools used were Attitude Scale and Competency Test. Findings: (1) There was no difference between rural and urban students in their career maturity and career competencies. (2) There was no difference between science and humanities students in their career maturity and career competencies. (3) There was no difference between in career maturity of FC, BC, and SC students. (4) There was no difference between the career maturity of boys and girls. (5) There was no influence of caste on their competencies. Nine references were cited in the study.


Objective: To find out correlation with the values of self-concept and independent variables such intelligence, creativity and achievement of rural and urban schools. Method: Descriptive school survey method as well as qualitative approach was adopted for the study. A sample of 510 girls students (230 rural + 280 urban), studying in Class IX, from Punjab, using probability sampling for the study. Tools were used: (1) Children self-concept scale (Ahluwalia, 1986), (2) Group Test of General Mental Ability (Jalota, 1972), (3) Creative Activities Checklist (Torrance, 1982), and (4) Academic Achievement Test. Findings: (1) Variable of intelligence and creativity to be positively significant with self-concept in urban as well as in rural. (2) No correlation found between the variable of achievement and self-concept. (3) It is revealed that variable of achievement
contributed 13.6% variance in predicting the self-concept of urban girls. (4) It is clear that conjoint effect of variable of intelligence creativity of achievement is higher in both the samples as compared to predicting the self-concept. Eight references were cited in the study.


**Objectives:** (1) To study the attitudes of high and higher secondary school teachers towards creative teaching and learning; (2) to compare the attitudes of male and female high and higher secondary school teachers from government and private schools towards creative teaching and learning; (3) to develop a Creativity Appreciation Training Programme (CATP) for high and higher Secondary school teachers; (4) to study the effect of CATP on the attitudes of high and higher secondary school teachers, both male and female, and from government and private schools towards creative teaching and learning; (5) to find out the opinion of high and higher secondary school teachers on CATP. **Method:** The experimental method of research has been employed. Single group pre- post-test design has been used to study the effectiveness of CATP. The population for the study is confined to high and higher secondary school teachers of Kohima and Dimapur Districts in Nagaland. Out of this population, a sample group of 400 teachers has been drawn by: (i) Stratified random sampling and (ii) Cluster Sampling. The tools employed in the present study are : (a) Torrance’s Opinionnaire on Creative Teaching and Learning, (b) A booklet entitled, Creativity Appreciation Training Programme (CATP), developed by the investigator to give a brief introduction about the various aspects of creativity to the participants. The contents of the booklet were finalised after per review. Mean scores, standard deviation and correlation were calculated, on the basis of which ‘t’ test was carried out to determine the significance of the experiment. **Findings:** (1) Teachers of high and higher secondary schools had a poor perception about creative teaching and learning. (2) Male teachers of high and higher secondary schools have a more positive attitude towards creative teaching and learning than the female teachers. (3) Teachers from private high and higher secondary schools were a more positive attitude towards creative teaching and learning than the government school teachers. (4) Trained teachers from high and higher secondary schools have a more positive attitude towards creative teaching and learning than
untrained teachers. (5) High and higher secondary school teachers having an experience of less than 10 years showed a more positive attitude towards creative teaching and learning than the more experienced teachers. (6) Teachers from government high and higher secondary schools have demonstrated a more positive change in their attitudes towards creative teaching and learning than teachers from private schools following CATP. (7) Creativity Appreciation Training Programme (CATP) has been well-received and appreciated by the teachers participating in the study. The Study cites thirty three journals for references.


Objective: To study the correlates and setup regression equation to predict the general indisciplined behaviour tendency, using total score on prolonged deprivation, total emotional maturity score and academic achievement as independent variables. Method: Descriptive survey method as well as quantitative approaches were used in the study. A sample of 472 students from postgraduate classes in different faculties of two colleges in Almora and Nainital, using probability sampling method was taken for the study. Tools were used as: (1) Prolonged Deprivation Scale (G. Misra and L.B. Tripathi 1984), (2) Emotional Maturity Scale (Y. Sing and M. Bharagava 1971), and (3) Academic Achievement. Findings: The variables of A. A. EMST and PDST were significant in predicting general indisciplined behaviour tendency among the university students. Fourteen references were cited in the study.


Objectives: (1) To assess the level of memory span of 12 to 13 year old adolescent, and personal variables on immediate memory span of the respondents; (2) to find correlation between intelligence and memory span. Method: Descriptive survey method was adopted for the study. The sample was taken 204 adolescents from eight schools, from Hisar city, using probability sampling method for the study. The tools used were: Memory Span Test, Schedule and School Environment Check-list. Findings: (1) There was no significant difference between male and female adolescents in memory span.
(2) There was higher correlation between school environment and memory span. (3) Memory and intelligence were significantly correlated (0.344). (4) Memory and intelligence were related to each other and 0.01 level of significance. Six references were cited in the study.


Objectives: (1) To study the achievement and retention of cognitive skills in Genetics among selected students of control group and experimental group; (2) to compare the achievements and retentions of the cognitive skills in Genetics between the control group and experimental group; (3) to study the influence of intervening variables (socio-economic status, language ability, reasoning ability, exposure to mass media and science programmes, study habit and interest in co-curricular activities) on achievements and retentions of cognitive skills in Genetics among the students of control group and experimental groups. Method: Quasi-experimental method was employed for the study. A sample of 70 boys and 97 girls from higher secondary schools of Coimbatore district was used for the study. The probability sample method was used for selecting the population. Tools used in the study were CAI–Software evaluation proforma: (1) Proforma to collect personal data, (2) Criterion Reference Test, (3) Test of Abstract Reasoning, (4) Test of Language usage. ‘t’ test was used as a statistical technique for the study. Findings: (1) The control group and experimental groups were able to retain significant amount of knowledge in Genetics due to Conventional Method of Teaching. (2) The reinforcement strategy employed in the study was more effective in terms of achievement in cognitive skills in Genetics. (3) Self-instructions methods (PIM and CAIM) employed in retention and cognitive skills in Genetics. (4) The intervening variables such as Socio-economics status, language ability, reasoning ability, exposure to mass media, study habit, science programmes and co-curricular activities did not influence retentions in cognitive skills in Genetics among the students in control group and experimental group. Two hundred and thirty-eight references were included in the study.

Objectives: (1) To study the influence of Psycho-social factors on receptive learning skill of teacher trainees; (2) to study the influence of cognitive abilities and non-cognitive abilities on receptive learning skill of the teacher trainees. Method: Descriptive sample survey method and quantitative approach was adopted for the study. A sample of 207 teacher trainees from DIET, Perundurai, and Erode district was selected through probability sampling technique for the study. Tools used in the studies were: Computer Assisted Receptive Skill Assessment Package, Language Aptitude Test-English (Ravi 2002), Language Aptitude Test – Tamil (Ravi 2002), Group Test of intelligence (Dr. G.C. Ahuja, 1971), Study Habits Inventory (Patel), Learning Style Questionnaire (Grasha and Teichman, 1975), Personality Trait Scale (Catell), Self-concept – Tamil (Milligan 2000), Failure Tolerance (Ravi 2002), General Anxiety (Ravi 2002), Institutional Environment Scale (Arockiadoss, 1999), Socio-economic Status Scale (Bhardraj and Gupta), ANOVA, Chi-square test were analysed the data for the study. Findings: (1) The study indicated that the personal characteristics, i.e. age, sex did not influence the receptive learning skills of the teacher trainees. (2) There is no significant difference in mean score in reading and listening in English between the teacher trainees who possess differential receptive learning skills. (3) Institutional environment, faculty environment, academic environment, religion, culture, socio-economic status, learning style, anxiety influenced the receptive learning skill of the teacher trainees. Personality trail, self-concept, locus, failure of tolerance did not influence it.


Objectives: (1) To study the cognitive process of teacher trainees of B.Ed. course; (2) to find out the correlation, if any, between cognitive process and sex, locality, management and type of college of teacher trainees; (3) to find out the correlation, if any, between cognitive process and hemisphericity and personality of the teacher trainees; (4) to find out the interaction, effects, if any, of sex and locality, sex
and subject and sex and management on cognitive process of teacher trainees. **Method:** Descriptive normative survey method and quantitative approach was adopted for the study. A sample of 654 teacher trainees of B.Ed. using probability sampling method was taken. The tools used in the study were the cognitive process test, SOLAT test and Scale of Introversion–Extroversion. **Findings:**

1. There was significant relationship between the cognitive process and sex, locality and management. The women teacher trainees are at a higher level than the men teacher trainees; the urban teacher trainees are at a higher level than the rural teacher trainees; the teacher trainees studying in the government colleges of education are at a higher level than the teacher trainees studying in the private colleges of education in their cognitive processes.
2. There was significant relationship between cognitive process and hemisphere dominance. The right hemisphere dominant teacher trainees are at a higher level than the left hemisphere dominant teacher trainees in their cognitive process.
3. There was significant relationship between cognitive process and personality types. The extrovert teacher trainees are at a higher level than the ambivert teacher trainees in their cognitive process.
4. There was no interaction of sex and locality, sex and subject of specialisation and sex and management of the colleges of education on cognitive process of the teacher trainees. Fourteen references were included in the study.


**Objectives:**

1. To study the listing behaviour of the B.Ed. Optional-I English teacher trainees through Listening Self-assessment;
2. To study the relationship between the components, viz. attention, empathy, respect, response, memory and open mindedness with listening comprehensions among the B.Ed Optional-I English teacher trainees in pre-test;
3. To study whether the B.Ed optional-I English teacher trainees differ in pre-test and post-test of listing behaviour through listening self-assessment;
4. To identify verbal behaviour teacher trainees through Flander’s Interaction Analysis Category System. **Method:** Experimental method single group design was used in the study. The sample consisted of 77 pre-service teachers of B.Ed College. Data had been collected through listening self–assessment, Listening Comprehensive Test, Flander’s Interaction Analysis Category System and Observation Schedule. **Findings:** There is no
significant difference between the pre-test and post-test scores of listening behaviour through Listening Self-assessment. The significant mean difference between pre/post-test listening behaviour through listening self-assessment with reference to the components of empathy, Respect in special English at revealed that the effective use of the attention activating strategies to facilitate listening comprehension among the B.Ed. Optional-I English teacher trainees Flanders system. Effective strategies could be used to develop English by at B.Ed training.


Objectives: (1) To find out the learning style of students in Classes XI and XII; (2) to find out the relationship of learning style with achievement of students; (3) to see the learning style of higher secondary students in terms of their sex, classes and type of school. Method: The sample consisted 160 higher secondary students from private and government schools. The tools used in this study for data collections were Felder’s Learning Style Inventory by Barbara A. Soloman, Cronbach’s alpha test, and ‘t’-test was used for data analysis. Findings: The learning style of higher secondary students was found to be good and there was no significant difference in the learning style of higher secondary students in terms of their class and type of school. There was significant difference in the learning style between boys and girls studying in higher secondary schools and the correlation is higher between learning style and achievement which indicates that higher the achievement scores, the better the learning style among higher secondary students. The study cites twelve references.


Objective: To find out the effect of cognitive style, intelligence and classroom climate on process outcomes in science. Method: The sample size was taken 1,000 persons and selected through proportionate stratified sampling technique and considering other factors like sex, locality of students and management category of schools. For data collection the tools used were the following: (1) Group Embedded Figures Test (GEFT) by Otlman, et al, 1971,
(2) Standard Progressive Matrices Test (SPMT) by Raven, 1958, (3) Scale of Classroom Climate by Usha and Aruna, 1999), (4) Test of process Outcomes in science by (Usha and Aruna, 1999). The statistical techniques used in this study were means, Pearson’s product moment coefficient of correlation and three-way ANOVA with 3×3×3 Factorial Design. **Findings:** The cognitive style and intelligence have significant positive correlation with process outcomes in science, while the classroom climate has no significant effect on process outcomes in science. The study cites thirteen references.


**Objective:** To find out the emotional, social and educational adjustment of elementary school children of single parent and intact parent families and family structure affects the development of children. **Method:** The random sample of 100 students studying in Classes VI, VII and VIII were taken from six elementary schools of Kurukshetra District where as subjects were selected by the techniques of purposive sampling. Out of 100 students, 50 were taken from single parent families and 50 were taken from intact parent families. The tool was Adjustment Inventory for School Students (AISS) by A.K.P. Sinha and R.P. Singh (1993) used in the study. The data analysed by mean, Standard Deviation (SD) and ‘t’ test. **Findings:** The emotional, social, and educational adjustments of elementary school children of single parents have severed problems rather than intact families and affect their development. The study cites twenty one references.


**Objective:** To find out adolescent girls with high, moderate and low emotional intelligence differ on various types of deprivation. **Method:** The random sample of 100 IX Class adolescent girls studying in four Hindi medium secondary schools of Varanasi city. The tool measures deprivation by Deprivation Scale by Pal, Misra and Pandey. The statistical analysis of data was done by mean, S.D. and ‘t’ test. **Findings:** The girls having low emotional intelligence perceive various deficiencies more in their environmental factors likes, social isolation, insufficient housing, and other infrastructural facilities, economic
insufficiency, meager educational opportunity, unavailability of reasonable share of pleasant emotional experiences, lack of warmth and parental care in comparison to the girls having high and moderate level of emotional intelligence. The study cites ten references.


Objectives: (1) To find out the relationship between the deprivation and academic anxiety among girls having different levels of emotional intelligence; (2) to evaluate the relationship between the academic anxiety and different areas of deprivation. Method: The sample of 100 adolescent girls, age group 13-17 years were selected from different secondary schools of Varanasi city. The tools were used for data collection: (1) Deprivation Scale (D-Scale) by S.K Pal, K.S Misra and K. Pandey, (2) Academic Anxiety Scale (A.A.S) by S.K. Pal, K.S. Misra and K. Pandey, (3) Emotional Intelligence Test by K. Pandey. Findings: (1) The deprivation and academic anxiety are positively correlated in case of more emotionally intelligent girls compared to low emotionally intelligent girls. (2) The social deprivation and academic anxiety are positively correlated in case of emotionally intelligent girls due to their greater understanding of emotional behaviour of their own and others. The parental deprivation and academic anxiety for more emotionally intelligent girls is positively correlated which could be due to the lack of support from parents in academics which leads to greater academic anxiety among them. The study cites twelve references.


Objective: To study the influence of printed media on children. Method: The random sample of 100 children (50 males and 50 females) in the age group of 6 to 8 years were taken from Panchrukhi block of Kangra district of Himachal Pradesh. The children irrespective of caste, creed and economic status were selected. A self-structured interview schedule was used for data collection. The statistical tools applied were percentages and chi-square. Findings: The male children as compared to females spent less than one hour in reading
newspapers and magazines. They preferred to study magazines related to general knowledge and also were interested in studying books related to crime and detection while females were studying story and drama books. The study cites five references.


**Objective:** To examine the difference in the personality traits of high and low emotionally intelligent students-teachers. **Method:** A sample of 78 student-teachers studying in Ewing Christian College, Allahabad was selected for study. The test of emotional intelligence and personality inventory were used for collecting data and these tools were developed by K.S. Misra. The statistical method used in the study for analysis of data were mean, SD, and ‘t’ test. **Findings:** Student-teachers with low emotional intelligence are more uneasy and worried about future unhappy feeling and failures; are less cautious, irregular and like to take more rest, restrain others, have lack of energy and feel tired and uninterested and conform to the opinion or accepted path taken by most people. Student-teachers with high emotional intelligence are more competent and have more self confidence, hard working, help others constructive way, more motivated, energetic and full of enthusiasm and turn away from accepted or given path or opinion. The fifteen personality traits like experimentive vs conservative, emotionally stable vs excitable, spiritual vs materialist, social vs self-centered, adaptive vs rigid, inquisitive vs non-curious, relaxed vs tense, affectionate vs undemonstrative, self-critical vs happy-go-lucky, group dependent vs autonomous, humble vs assertive, more analytical vs less analytical, forthright vs crooked, dominant vs submissive, conscientious vs unscrupulous are not different in case of student-teacher with high and low emotional intelligence. The study cites two references.


**Objectives:** (1) To study educational aspiration of higher secondary school students; (2) to study the main effect and interaction of family, school based and personal factors on educational aspiration of higher
secondary school students; (3) to find out the relation between educational aspirations of higher secondary school students and their educational achievement, self-concept, motivation and socio-economic status. **Method:** The sample consisted 480 of higher secondary students; boys 240 and girls 240 from four higher secondary schools. They were selected by stratified random cluster sampling technique. The research tools used included Educational Aspiration Scale (From-P) by Dr. V.P. Sharama and Dr. A. Gupta, Socio-economic Status Scale by Dr. Pallavi P. Patel, Achievement Values and Anxiety inventory by Prayag Mehta and the Piers-Harris Children’s Self-Concept Scale by Dr. Kishor Shah. It was tabulated with percentage, Mean, Standard Deviation, Correlation and ANOVA (F-test). **Findings:** (1) Mean score of Educational Aspiration of higher secondary students was 28.07 (Range 0 to 40), it indicated the awareness towards education was increased in the society. (2) Boys had higher educational aspiration in comparison to girls. (3) The students from urban area had higher educational aspiration than rural students. (4) The students from non-governmental school had higher education aspiration than the students form government school. (5) The students form science stream had higher educational aspiration than the students from stream. (6) So far as Classes XI-XII others were concerned it makes no significant difference regarding educational aspiration of higher secondary students. (7) Gender, area and socio-economics status of the students have a significant group effect on their educational aspiration and type of schools; stream and standard of students do not have a significant group effect on their educational aspiration. (8) Educational Achievement, Self-concept and Achievement Motivation of the students had a significant group effect on their educational aspiration. (9) A positive correlation was found between educational aspiration and socio-economic status, educational achievement, achievement-motivation of the students. (10) A negative correlation was found between educational aspiration and self-concept.


**Objectives:** (1) To compare the academic performance of students in respect of different learning styles; (2) to study the effect of ecological correlates on the academic performance of girls students; (3) to study...
the interactive effect of mental ability and learning styles on academic performance of girl students; (4) to study the interactive effect of ecological correlates and learning style on academic performance of girls. **Method:** A sample of 500 girls from Class XII of 16 Government Sr. Secondary schools of Baran, Bundi, Jhalawar and Kota District in Rajasthan was taken. Under the ecological category the investigation has opted the area (urban/rural) and the level of parent’s education, their occupation and income. The tools used include Learning Style Inventory by K.K. Rai and K.S Narual, Mental Ability Test by S. Jalota, SEs Scale by R.A. Singh And S.K. Saxena and academic performance marks obtained by the students in board examination. The statistical techniques used were Mean, Standard Deviation, ‘t’ test and ‘F’ test for data analysis. **Findings:** (1) The environmental, emotional, sociological dimension of learning style does not affect significantly the academic performance of girls. (2) Residence as urban/rural and ecological correlates have significant affect on the academic performance of girls. Parents’ education, occupation and income do not affect significantly the academic performance of girls. (3) The environmental dimension of learning style preference does not affect the academic performance where as mental ability influence the academic performance of students. (4) An ecological factor namely, residence and its interaction with environmental has found significantly contributing towards the better learning style of academic performance.


**Objectives:** (1) To study academic achievement in relation to socio-economic status of the selected sample of school going children; (2) to study the extent up to which academic achievement of the children are affected by their anxiety level; (3) to study academic achievement with respect to achievement motivation of school going children; (4) To compare the data on academic achievement, socio-economic status, anxiety level and achievement motivation between Muslim and non-Muslim school children. **Method:** The incorporated method and procedure opted for investigation. Various tools/
questionnaires, were used such as Socio-economic Status Scale by Dr. Beena Shah; Comprehensive Anxiety Test by Dr. Harish Sharma, Dr. Rajeev Lochan Bhardwaj and Dr. Mahesh Bharagava (1992). Achievement Motivation Scale by Dr. Beena Shah was administered for collection of the data. The Data were tabulated and statistical treatment to the data was given using simple product moment coefficient of correlation, t-test, and skewness through computer. 

**Findings:** Significant positive relationship has been witnessed between socio-economic status and academic achievement, negative relationship exists between anxiety and academic achievement, positive relationship between achievement motivation and academic achievement of Muslim and non-Muslim children. Both Muslim and non-Muslim children have significant inverse relationship between socio-economic status and anxiety. Socio-economic status goes along with higher achievement motivation. The academic achievement of non-Muslim children has been found superior in comparison to their Muslim counterparts. The non-Muslim children have less anxiety in comparison to Muslim children. On the measure of achievement motivation, non-Muslim children are found to be superior to Muslim children. The study cites one hundred seventy seven references.


**Objectives:** (1) To study and find out the difference in the family environment of adolescent children of working and non working mothers; (2) to study and compare the academic achievement of adolescent children of working and non-working mothers. **Method:** The present study was conducted on a sample of 415 adolescents selected from the government and private senior secondary schools of the U.T., Chandigarh, within the age group of 14-17 years. The technique of stratified random sampling was used for the selection of the sample. The tools used were Family Environment Scale (FES) by Moos and Moos (1986) and Battery of Achievement Tests by Anand (1971) for data collection. The statistical tools used mean, standard deviation and ‘t’ test were used for data analysis of this study. **Findings:** The family environments of adolescent children of working and non-working mothers were significantly different. In respect of academic achievement also children of working mothers were much better than the adolescent children of non-working mothers. The study cites eight references.

**Objectives:** (1) To study the perceived parental behaviour dimensions such as loving, dominating, rejecting, protecting, punishing, and disciplining; (2) to study the differences in the perception of parental behaviour regarding boys and girls. **Method:** The sample was consisted 170 boys and girls, age group below 15 years, studying in an institution of Pauri Garhwal, Uttaranchal. The tool used for data collection was P.C.R.Q by R.A. Singh (1981) and statistical techniques like mean, S.Ds, and 't' test was applied for analysis of data. **Findings:** Parental behaviour changes with respect to the gender of a child. Boys perceived their parents as more dominating in comparison to girls while perception on loving variable is nearly the same and both boys and girls perceived their fathers as more disciplining than mothers. On the other hand girls perceived mothers as more loving and less dominating.

### Science Education


**Objectives:** (1) To define metaphysics, epistemology and axiology within the scope of philosophy of science; (2) to establish a relationship between the concepts of philosophy and philosophy of science.; (3) to develop programmes on certain topics in metaphysics of science, epistemology of science and axiology of science; (4) to study the effect of orientation to philosophy of science on student-teacher’s perceptions of teaching of science in relation to subjects offered at graduation level; (5) to find out the effect of orientation to philosophy of science on student –teacher’s perceptions of science in relation to gender. **Method:** The sample consisted of 40 student-teachers as an experimental group as well as 40 student-teachers as a controlled group. The data collected through scale for philosophical orientation of science teacher (SPOST) and scale to measure perception of science teacher (SPST), and in-depth interview. The data analysed by both qualitative and quantitative method. **Findings:** (1) The gender and sub-discipline of science studies were rendered ineffective to show
any bias either on the orientation to philosophy of science or on the perceptions of teaching of science. (2) The student-teachers discovered interest, motivation and thrill in the subject of ‘science’ which they once believed to be information-loaded dry and fix focused. (3) The student-teachers in the experimental group were demonstrated effective and academic involvement in the serious side of scientific inquiry.


**Objectives:** (1) To analyse the syllabus of M.P Board under different dimensions of the content of the senior secondary chemistry syllabus; (2) to find out the areas, which have been neglected or proper consideration have not been given. (3) to give recommendations to the syllabus developers to make necessary revision in the syllabus; **Method:** Descriptive survey method as well as quantitative approach was adopted for the study. **Findings:** It has been found that dimensions D1, D2, D4 and D5 have been given place on desired level. However, D3 and D6 should be included in the syllabus. It is suggested that syllabus developers should take note of this and effect the change in the syllabus as per the findings. Four references were cited in the study.


**Objectives:** (1) To assess the achievement motivation of higher secondary students in Physics and achievement in Physics; (2) to find out whether there is any significant difference between mean scores and achievement scores of boys and girls and in Tamil medium and English medium; (3) to find out the nature of relationship between the components of achievement motivation and achievement of higher secondary students in Physics. **Method:** Descriptive-Normative survey method was employed in the study. The sample was taken 530 students studying in Physics in the second year of higher secondary school, in Cuddalore district in Tamil Nadu, using probability sampling method for the study. Tools were used such as
Achievement Motivation Inventory (Prayag Mehta, 1969) and Academic Achievement for the study. **Findings:**

1. The mean scores of achievement related motivation was higher for girls than boys.
2. There was no significant difference between the students studying in Tamil medium and the students studying in English medium.
3. There was no significant difference in achievement mean scores in Physics between (a) Boys and Girls, (b) A group and B group, (c) Tamil medium and English medium. (4) The positive correlations were found between the achievement related motivation and achievement marks in Physics in respect of (a) girls, (b) students studying in Tamil medium. This study can be extended in other districts. Nine references were cited in the study.


**Objective:** To find out gender difference in achievement problems related to mechanics under Indian conditions. **Method:** Descriptive survey method, qualitative and quantitative approaches were used for the study. The sample taken 25 boys and 25 girls of Classes V, VII, IX of D.M. School, Bhubaneswar, and using probability sampling method for the study. Tools used a questionnaire to the students. **Findings:**

1. There existed large difference in achievement in mechanics. (2) In Class IX the 't' value was 0.09 and D value was 0.02 which showed there was almost negligible difference in achievement in mechanics by boys and girls. (3) It found drastic change in achievement in mechanics that occur for girls but such remarkable change existed for boys. Eight references were cited in the study.


**Objectives:** (1) To find out the result of self-evaluation of science student-teachers; (2) to find out various degrees of effectiveness of science student-teachers. **Method:** Experimental method and qualitative approaches were adopted for the study. The sample was taken 18 science student-teachers from B.Ed College of Bhavanagar
in Gujarat, 15 male and 3 female, using probability sampling method for the study. The Likert method scale was constructed by the investigation. Statistical technique: Mean and Standard Deviation were used to analyse the data. **Findings:** (1) It found that the science Student-teachers are moderately effective in examination about her/him self as a reflection science student-teachers. (2) The science student-teachers are moderately effective in self-examination about reflective teaching. It has been widely used in education as the preparation of classroom teachers. Reflective teaching is an emerging area in the field of education, which can be undertaken in all the teacher college is given as further suggestion. Several references were cited in the study.


**Objectives:** (1) To determine the effect of peer tutoring and traditional instruction of learning outcomes, viz achievement in science of students with high and low intelligence; (2) To compare learning outcomes in science of high and low intelligence groups of students; (3) To study the learning outcome of students in science at knowledge and comprehension category of objectives; (4) To study the interaction effects of the instructional treatments intelligence. **Method:** A sample of 108 students (54 high intelligence and 54 low intelligence) were randomly selected. Ninety five per cent of the students were from middle and low socio-economic status Muslim families and their average age was 13 years. Raven’s advanced progressive matrices (RPM) used to determine the intelligence of the students. Achievement test was developed on 6 units from the science syllabus of Class IX of SEBA, Guwahati, Assam, viz. organisation of the living body at different levels, population and community, our universe, periodic classification of elements and chemical bonding. The final draft of the achievement test comprised 115 items; 53 items were developed at knowledge category and 47 items were developed at comprehension category. Reliability of the test was 0.88. The test was used as pre-test and post-test. Lesson plans were developed on the above mentioned topics for teacher directed instruction. Six units tests were developed on the units mentioned above for formative evaluation and formed the basis for peer tutoring. The experimental study employed a pre test /post control group with one experimental group design. The 2 2 2 factorial design and ANOVA was employed for analysing the data. **Findings:** (1) Peer tutoring exhibited better gain
in achievement in science compared to those taught was traditional instruction. (2) It was found two important aspects: Together we (students) can achieve better; and learning by teaching which help them. The study cites thirty one references.

SECONDARY EDUCATION


Objectives: (1) To assess the contribution of PTA towards the enhancement of quality of teaching-learning process in the Higher Secondary schools of Thanjavur district; (2) to study the structure of PTA organisation at the schools; (3) to assess the financial positions of the Parent Teacher Association; (4) to assess whether Parent Teacher Associations are functioning as per the guidelines of the Government; (5) to study the role of Parent Teacher Associations with regard to school development activities; (6) to study the general problems of PTA; (7) to find out if there is any agreement among headmasters, parents and teachers about the functioning of PTAs.

Method: Descriptive normative survey method was adopted for the study. The sample was chosen through probability sampling method from 84 headmasters and PTA presidents, 164 parents, 84 teachers from 84 HSSC in Thanjavur. The tools were used as: (1) Questionnaire to HMs; (2) Questionnaire to teachers; (3) Questionnaire to parents; (4) Interview schedule. Findings: (1) Executive committee meetings are not regularly conducted as per the norms in many schools. (2) The parents of this district did not have sufficient knowledge about the rules of the PTA. There is a significant relationship between the type of schools and the appointment of the PTA teachers as per the norms. There is significant relationship between the locality and explanation of PTA from every teacher. One hundred thirty references were cited in the study.


Objective: To develop and validate quality education model for secondary schools following the CBSE pattern in India. Method: The
present study followed experimental method. The total sample size was two hundred students from CBSE schools from Class IX and probability sampling techniques were used in the study. The data collected through questionnaires. **Findings:** The quality education model developed by the researchers has significantly enhanced the academic performance of Class IX students of Naval Public School, New Delhi. (1) The model has significantly improved the performance of Class IX student in science subjects. (2) The model has significantly improved the performance of Class IX in Mathematics. (3) The model has significantly improved the performance of the students of Class IX in Social Science and English. The quality education model for secondary Schools, which is easy to follow and implement will be able to assure quality education the secondary schools affiliated to the CBSE. One hundred thirty six references were cited in the study.


**Objectives:** (1) To find out the significant difference, if any, in achievement in history of Higher Secondary students with right, left and integrated hemisphere dominance; (2) to find out the correlation, if any, between hemisphericity and achievement of Higher Secondary students in history. **Method:** Descriptive normative survey method was adopted in the study. A sample of 300 students studying History at Class IX in Higher Secondary schools in Thanjavur District in Tamil Nadu, using stratified random sampling technique was adopted for the study. The tools used were Style of Learning and Thinking Test and Achievement Test. **Findings:** (1) There was significant difference in achievement between the students with right and integrated hemisphere dominance. (2) There was no significant difference in achievement in history between the students with left and right and left and integrated hemisphere dominance. (3) There was significant correlation between right and integrated hemisphere dominance and achievement in history of the students. It inferred that the right hemisphere dominance contributes more to the achievement than the integrated hemisphere dominance. The study suggested for further study that by activating the right hemisphere of the brain, the achievement of the students in history subject can be improved. It can be implemented in other subjects also. The study cites ten references.

**Objectives:** (1) To study the profiles of high and low achievers at higher secondary level, in Coimbatore district; (2) to find out the factors which are responsible for high achievement and inhibit achievement among higher secondary students; (3) to find out whether there are achievement differences among the higher secondary students in variables like locality, medium of instruction, educational qualification of parents, caste and gender; (4) to find out whether there is any significant difference in the achievement among the higher secondary students. **Method:** Descriptive, normative, qualitative and quantitative approaches were employed. A sample of 1,260 students, 630 male and 630 female from higher secondary schools (Government, Matriculation, and Aided) was taken for study. The sample was selected through probability sample method. The statistical technique: t-test and Karl Pearson moment correlation were used for the study. The tool was used such as HSAPI (Higher Secondary Achiever Profiles Inventory). **Findings:** (1) it was found that even among lower achievers, girls were poorer than boys. (2) Matric schools high achievers had better learner characteristics than high achievers of aided schools. (3) Low achievers in Government schools tend to have poor profiles than the low achievers of aided schools. (4) High achievers belonging to BC had the conducive atmosphere than MBC, SC and OC. (5) Educational qualifications of parents did not influence the learner characteristics of high achievers. (6) Educational qualifications of parents influenced the learner characteristics of low achievers. (7) High achievers were from the following groups: (a) Mathematics, Physics, Chemistry, Botany, (b) Mathematics, Physics, Chemistry, Computer Science, (c) Mathematics, Computer Science, Commerce and Accountancy.

**SPECIAL EDUCATION**


**Objectives:** (1) To study the awareness of primary school teachers; (2) to study attitude low vision in children at primary level; (3) to
study competency low vision in children at primary level; (4) Whether there is significant relationship between awareness attitude/awareness and competencies and attitude and competencies towards low vision among children. **Method:** The survey method was used in the study. A sample of 324 teachers from 50 aided and 36 municipal schools were taken. The probability sample technique was used in the present study. The data collected through: (1) Low vision Awareness Rating Scale, (2) Low vision Attitude Scale, (3) Low vision Competency Assessment Rating Scale used in the study. **Findings:** The study found out that there was a positive correlation between awareness, and attitude, awareness and competency, attitude and competency in primary school teachers. The result be an implication to the policy makers that, while planning educational programmes to the teachers for should be an environmental building particularly in the form of creating awareness, developing positive attitude and their promote competency in primary school teachers to deal with low vision children. The study cites one hundred and sixty references.


**Objectives:** (1) To identify the number and percentage of students with reading, writing and spelling difficulties in English; (2) to study the intelligence, personality-based difficulties; (3) to study awareness of the study in reading, writing, spelling; (4) to study the awareness of parents and teachers towards the learning difficulties of the students. **Method:** Descriptive survey method was employed for the study. A sample of 2,380 students from Classes VI and VII from 243 parents, 32 teachers 66 manuals were taken for the study, using of probability sampling technique. The data collected through Reading Disabilities Diagnostic Test, Writing Disabilities Diagnostic Test, and Spelling Disabilities Diagnostic Test. The statistical techniques were 'F' test, Correlation/Multiple Regression employed in the present study. **Findings:** (1)The study revealed that 2380 students of Classes VI and VII, 243 students were identified as students with learning difficulties in English. (2) Most of the students with learning difficulties had low level and intelligence. (3) It was found that boys experience more learning difficulties than girls. (4) Parents' occupation influences reading difficulties. (5) Rural students had more learning difficulties. (6) No parent had any awareness in education. (7) There was a significant relationship with parents attitude.

**Objectives:** (1) To make an intensive study of the areas which are important in studying the visual efficiency of low vision children and develop materials for each of the identified areas of assessment; (2) to explore relationship between visual acuity and visual efficiency of low vision children; (3) to explore the relationship between age and visual efficiency of low vision children; (4) to study the effect of training in improving the visual efficiency of low vision children.  

**Method:** Descriptive survey method as well as qualitative and quantitative approaches were used for the study. The sample was taken 138 low vision children form various parts of Tamil Naidu, using of probability sampling method for the study. The tool used Instructional Material by researcher for the study. **Findings:** (1) There was no significant relationship between visual acuity and visual efficiency of skills of low vision children. (2) Age group played a vital role in the visual efficiency skill of low vision children. (3) the boys had better visual efficiency skill than girls. (4) It revealed that a strong relationship between visual efficiency and visual efficiency skill. Nine references were cited in the study.


**Objectives:** (1) To study the impact of parental education on attitude towards mentally retarded children’s general aspects; (2) to study the impact of parental education on attitude towards nutrition of mentally retarded children; (3) to study the impact of parental education on attitude towards the health of mentally retarded children. **Method:** Case study was adopted for this study. The sample was taken 100 parents of mentally retarded children from a marwadi city, using of probability sampling method for the study. The tools were used such as attitude scale. **Finding:** There was an association between educational level and attitude of parents towards health of the mentally retarded children. Fifty-four per cent mentally retarded children were from semi-urban, thirty-six mentally retarded form urban and ten per cent mentally retarded from rural area were found out in the study.

**Objectives:** (1) To develop diagnostic test and study the errors committed by the children with arithmetical difficulties in addition, subtraction, multiplication and division; (2) to study significant difference if any in the effectiveness of among different instructional strategies (CATL, MSTL, SGTL and CT) on the post-test and retention test achievement of CAD; (3) to study significant difference if any in the post-test and Retention test achievement of CAD taught through different instructional strategies (CATL, MSTL, SGTL and CT) with regards to sex, family income, parents’ educational qualification, and family size; (4) to study significant relationship if any between span of attention and span of memory of CAD in post-test and retention test achievements. **Method:** Experimental design (Pre-test, Post-test Retention test) was used in the study. Qualitative and quantitative approach was followed in the study. A sample of 254, comprising of 127 boys and 127 girls were taken from secondary school children from Chennai corporation schools. The sample was selected through probability sampling method. Tools used in the study were achievement test, mental ability test, questionnaire for functional assessment, diagnostic test in arithmetic, Sneller’s chart (Visual screening), Audio-meter (to assess attention), Memory Drum (to assess memory). **Findings:** (1) There was significant difference post-test performance of learners than pre-test by using instructional strategies such as CATL, MSTL, SGTL, CT retention test and achievement of CAD. (2) There was no significant difference retention test performance to learners in CATL group due to the variation in the background variables such as sex, parent’s educational qualification, family income and size of the family. (3) There existed positive relationship between retention test scores of children with arithmetic difficulties and their span of attention. (4) There was significant relationship between retention test scores and span of memory. (5) There was significant positive and high correlation between achievement and span of attention.

**TEACHER EDUCATION**

Objectives: (1) To identify various activities of students during leisure time; (2) to assess the facilities available to the students in the school to carry on different leisure-time activities; (3) to determine the role of teacher in guiding students for better utilisation of their leisure-time. Method: Descriptive survey method, qualitative and quantitative approach were employed for the study. The sample was taken 100 students from Classes X to XII of five schools and 50 teachers from Delhi, using of probability sampling method was selected for the study. The tools used: (1) A questionnaire for the students, (2) A check-list for the teachers. Findings: (1) Only 50% students were satisfied with their leisure time at home and 20% were unsatisfied. (2) It was found that most common leisure activities of the students, either in school or at home, were reading, games and sports, listening radio, watching television, cooking, music, etc. Students showed interest on reading short stories, comics, games and sports and science but not books relating to religion and adventure. Teacher should guide their learners to spend the learners’ leisure time in good way in schools. Teacher trainees can also be acquainted with the leisure time activities.


Objectives: (1) How to make a design of different modalities for creative activity structures? (2) Whether the creative activity-based structures can be organised through different modalities in classroom situation? (3) To find out whether there is any effect of the creative activities upon pupils’ development. Method: Experimental methods as well as qualitative approach were adopted in the study. The sample was taken Classes III, IV and V of D.M. School from RIE, Bhubaneswar which consisted of 40 students of V-A, 30 students of IV-A and 30 students of III-A, using probability sampling for the study. The tools were used such as Achievement of Oral test, Achievement Written Test. Findings: (1) There was significant difference between the pre-test and post-test results. (2) By organising creative activities through various modalities the development of various abilities in primary school children could be ascertained. (3) Creative activities can act as an aid to assess the development of cluster of interrelated competencies and abilities among the learners from time to time. Four references were cited in the study.

**Objectives:** (1) To study the impact of factors such as qualification, experience, socio-economic status of teacher, total number of students and the locality of schools on the efficiency of the Principal as an administrator and as a teacher; (2) to study the relationship between the results of the school and the efficiency of the principal as an administrator and as a teacher. **Method:** Descriptive casual comparative design was employed for the study. Qualitative and quantitative approaches were followed in the study. A sample of 91 principals was taken from 200 schools in Coimbatore District, using probability sampling method for the study. A questionnaire was used to collect the data from schools. **Findings:** (1) It is found that there is a significant difference in the efficiency of a principal based on educational qualifications. (2) It is observed that there is a significant difference in the performance of a principal as administrator based on the experience. (3) Teachers with more than 21 years experience proved to be better and shared good results as principals. (4) More P.G. teachers in the schools seemed to enhance the efficiency of principal. (5) There is no significant relationship observed between efficiency of the Principal as an administrator and as a teacher as far as results are concerned. (6) Socio-economic status did not influence the efficiency of the principal. (7) Efficiency of a principal as a teacher in rural areas seemed to be reasonably better than the urban areas. The study cites one hundred fifteen references.


**Objectives:** (1) To study the teaching aptitude of prospective teachers; (2) to study the guidance aptitude of prospective teachers; (3) to study the management aptitude of prospective teachers; (4) to study research aptitude of prospective teachers; (5) to compare these aptitudes sex wise. **Method:** Two hypotheses were formulated and tested in the light of the objectives of the study: (a) Prospective teachers do not differ significantly with respect to teaching, guidance management and research aptitude; (b) No significant differences
exist in educational aptitudes of male and female prospective teachers. A sample of 140 B.Ed. students, 64 males and 76 females, were selected by accidental method. R.P. Gupta’s differential aptitude test for four-fold educational activity was used to measure the aptitude of prospective teachers for teaching guidance management and research sectors of education. **Findings:** (1) Prospective teacher of both the groups (male and female) have higher aptitude for teaching than the other three aptitudes. (2) Male prospective teachers are better in guidance and management aptitude than in teaching and research. (3) While comparing the differences of mean of both the groups no significant difference was observed.


**Objectives:** (1) To find out the difference in the emotional intelligence of male and female teachers; (2) To find the difference between student teachers of arts and science faculty; (3) To find the relationship between emotional intelligence and academic achievement of students teachers. **Method:** In the light of objectives the following hypotheses were formulated: (1) there is no significant difference between emotional intelligence of male and female students and teachers, (2) there is no significant difference between students and teachers of arts and science faculties, (3) there is no significant relationship between emotional intelligence and academic achievement of students and teachers. A sample of 302 students teachers studying in four colleges of education in Kolnapur district, using simple random sampling, Descriptive survey method was employed. Emotional Intelligence Test (EIT) and academic achievement score were used as research tool in the study. Data were tabulated and analysed using appropriate statistical techniques such as t-ratio and product moment coefficient of correlation. **Findings:** (1) There is no significant difference between emotional intelligence of male and female students teachers. (2) There is no significant difference in the emotional intelligence of students’ teachers of arts and science faculty. (3) There is no significant relationship between the emotional intelligence and academic achievement of student teachers. The study cities twenty one references.

**Objectives:** (1) To study the interpersonal communication skill of prospective teachers; (2) to study the communication behaviour of prospective teachers during classroom teaching; (3) to compare and contrast the pre-dominant classroom communication behaviour of teachers corresponding to the components of their interpersonal communication skills. **Method:** The descriptive survey research techniques were adopted for the study. Sample for the study consisted of 298 prospective teachers from four different universities, i.e. Banaras Hindu University, Mahatma Gandhi Kashi Vidyapeeth, Purvanchal University and Deendayal Upadhyaya Gorakhpur University through purposive sampling. The prospective teachers in the sample belonged to different gender (male and female), disciplines (art and science), level of education (graduation and post-graduation) and level of scholastic achievements (first division and second division). Interpersonal Communication Inventory (ICI) and a classroom ‘Observation - Schedule’ were used for collecting data. In addition to these tools a personal data sheet was also designed to collect personal information of prospective teachers related to their institution, scholastic achievement, level of education, etc. Statistical techniques used are mean, standard deviation, t-test and test for proportion for data analysis. **Findings:** Over the component ‘self-concept’ significant difference was found between the total scores of interpersonal communication behaviour of male and female prospective teachers, between art and science prospective teachers and between the graduate and post-graduate prospective teachers. No significant difference was found between the first and second division holders. Over the component “difficulties in coping with angry feelings” significant difference in the total scores of interpersonal communication behaviour was found between male and female prospective teachers. No significant difference was found between art and science, graduate and post-graduate and between first and second divisional holding prospective teachers. Over the component “good listener” significant difference was found between art and science prospective teachers whereas no significant difference was found between male and female prospective teachers, graduate and post-graduate, between first and second division holders prospective teachers. "Clarity of expression" no significant difference was observed in any of the sub-groups. However, no significant difference was
observed between art and science graduates, graduate and post graduate and first and second division holders. In the overall communication behaviour of prospective teachers in the classroom, no significant difference was observed between male and female prospective teachers, between art and science background prospective teachers. However, significant difference was observed between graduate and post-graduate and between first and second division holding prospective teachers. This study cites one hundred sixty three references.


Objectives: (1) To identify the high achievers and low achievers; (2) to compare the level of aspiration of high achievers and low achievers; (3) to compare the level of aspiration of high achievers and low achievers; (4) to study the impact of scholastic achievement. Method: The sample consisted of 495 students studying in standard from five intermediate colleges of Agra city, drawn by stratified random sampling procedure. The tools used Career Maturity Inventory by Dr. Nirmal Gupta, Level of Aspiration by Dr. M.A. Shah and Dr. Mahesh Bhargawa, Marks obtained in high school examination conducted by U.P. Board Allahabad were recorded for the assessment of scholastic achievement. The obtain data were tabulated in terms of frequencies and mean, standard deviation, ‘t’ test were computed to analyse the data. Findings: (1) The high achievers and low achievers were found significantly differing from each other regarding their career attitude and career competence as high achievers were found more mature towards vocational maturity. (2) The high achievers and low achievers did not differ from each other regarding their level aspiration as both were equally aspiring. (3) No difference was found between high achiever boys and girls regarding career attitude and career competence but low achiever boys were mature significantly in comparison to low achievers girls regarding their career attitude and career competence. (4) No difference was found between boys and girls in respect of level of aspiration. (5) It was found that scholastic achievement has a great influence on vocational maturity but no impact on level of aspiration. The study cites seventy-two references.
TEACHER EDUCATION: PRE-SERVICE AND IN-SERVICE


Objectives: (1) To study the status of Pre-primary education in general as found in Balwadis and Anganwadis in Thanjavur district; (2) to study the infrastructural facilities available in Pre-primary schools in the district.; (3)to ascertain whether teachers incharge of children are fully qualified to handle the classes; (4) to find out the views of the parents about the Pre-primary education and the extent to which the parents help their children in their progress; (5) to study the attitude of the teachers towards Pre-primary education.

Method: Descriptive survey method was employed for this study. A sample of 165 Pre-primary schools comprising both approved and unapproved schools, 330 teachers and 495 parents were selected as sample for the study using the random sampling technique. The size of the sample taken for the study of Balwadis/Anganwadis was 275. The tools were used in the study such as Questionnaire to the teachers; Questionnaire to the parents; Questionnaire to the Teachers of Balwadis/Anganwadis; and Check-list to the Correspondents of Pre-school.

Findings: (1) Nearly all the teachers of the Balwadis and Anganwadis (run by the government) have been trained. (2) Nearly 69 per cent of the sample who were working in Pre-primary education run by private agencies are untrained. (3) Nearly 69 per cent of the sample had not undergone any refresher course. (4) Regarding the relationship between the teachers and the management 73 per cent of the teachers and above expressed the fact that they maintained good relationship with the management. The managements also encouraged them to qualify themselves for higher degrees. (5) From the sample collected it was evident that the infrastructural facilities such as the availability of classrooms, space for play, accommodation and water facilities were satisfactory. But other facilities such as toilet, seating, electricity, play materials books and pictures TV/Radio were inadequate. (6) There were no marked differences in the results obtained with regard to locality such as Panchayat, Major Panchayat and Municipality. (7) Majority of the respondents did not feel that the present curriculum is activity-based. Nearly 50 per cent of the teachers feel that the present curriculum is capable of fulfilling the aspirations of the child. (8) Majority of respondents irrespective of the locations had a moderate attitude
towards Pre-primary education. Sixty seven references were included in the study.


**Objectives:** (1) To study the relationship between the quality of working life and quality of life; (2) to analyse quality of working life differential among urban and rural school teachers; (3) to compare the urban and rural teaching environment on the basis of job satisfaction criteria like teaching and welfare facilities, job characteristics and leave welfare policies; (4) to analyse the various dimensions and characteristics of job with respect to the length of service. 

**Method:** Using non-probability sampling techniques, 200 teachers were selected for the study from government schools, both rural and urban areas in Punjab. The tools used for data collection were Scale of the quality of working life in School and Questionnaire for quality of working life used for study. The statistical techniques like Factor analysis, Chi-square, correlation and ‘t’ test were used to analyse the data. 

**Findings:** Urban teachers feel that their income is adequate for their needs and they are highly paid whereas rural teachers think their income is not sufficient. They feel insecure. They get less than they deserve. They are underpaid and can barely live on their income. The pay scale is same for urban and rural teachers. Regarding opportunities for promotion, urban teachers lay emphasis on promotion based on ability, in contrast rural teachers believe that there is limited opportunity for promotion. Urban teachers feel that their principals/heads act as their friend and guide and they keep teachers informed about the activities and happenings regarding the policy issues. The urban teachers are satisfied with their family life but rural teachers are more dissatisfied because there are family pressures, time constraint, and inconvenience of location. As a result of these their working hours increase leading to dissatisfaction in their working life. Most of the rural teachers think that urban teachers get more facilities in terms of teaching aids, infrastructure facilities such as well-equipped classrooms, well-built science labs, well-maintained playgrounds, good working conditions. The environment is pleasant in their school and conducive. The study cites one hundred and fifty nine references.

Objectives: (1) To examine the similarities and differences between old pre-services teacher education syllabus and newly introduced pre-service teacher education syllabus started by B.S.E, Orissa for elementary level teacher education programme; (2) to find out to what extent the newly introduced syllabus conforms to the existing/recent guidelines (framework) prescribed by the NCTE for elementary level teacher education programme; (3) to examine the views of the teacher-educators on new syllabus from the point of view of its implementations. Method: The approach of the study was descriptive survey method and the purposive sample of 372 (147 in DIETs and 225 in ST Schools) were selected from Orissa. The data collected through the use of self-developed questionnaire. Chi-square test was used for data analysis. Findings: An imperative need to raise at the entry point the standard of teachers in Orissa and incorporate in their syllabus new and more challenging components such as multi-age/multi-grade teaching methods, application-oriented information and communication technology besides courses on inclusive education and action researches. The needs and challenges of multicultural placement too deserve to be a part and parcel of teacher education programme. On the other side the teachers, teacher educators and curriculum planners of the country from the point of preparation, implementation and evaluation of teacher education Syllabi. The study cites twenty five references.

TEACHER EVALUATION


Objectives: (1) To study and compare working conditions of primary school teachers in rural and urban settings of Haryana; (2) to suggest remedial measures to improve the working conditions of teachers. Method: Descriptive survey method was employed for the study. The sample was taken 40 primary schools, 180 teachers from the districts of Ambala and Sirsa in Haryana, using probability sampling method for the study. The tools were: (1) School Information Schedule; (2) Teacher Working Condition Questionnaire; (3) Teacher Professional Anxiety Scale; (4) Interview Schedule for Teachers; (5) Observation Schedule used for data collection. Findings: (1) Fifty per cent of
infrastructure facilities were available in the schools. (2) Sufficient instruction materials were not available in rural as well as urban schools. (3) The proportion of teachers teaching students between 41-80 was higher in rural schools where as proportion of teachers teaching students up to 40 was higher in urban schools. (4) A majority of teachers 2-4 hours on organisation of various co-curricular activities. (5) Majority of teachers experience average level of anxiety in the profession and not much variation was between rural and urban teachers on this aspect. (6) Urban teachers were found more worried about their frequent transfers than their rural counterparts. Nine references were cited in the study.


**Objectives:** (1) To elicit the views of teachers for the effective implementation of team teaching in schools. (2) To study the effect of variables such as sex, nature of school, teaching experience and the educational qualifications of the teachers on their attitude towards team teaching. **Method:** Descriptive survey method as well as qualitative and quantitative approach was used in the study. The sample taken was of 100 teachers working in different schools, using of probability sampling for the study. Teacher Attitude Scale was adopted for the study. **Findings:** (1) There is significant difference in the mean attitude scores of male and female teachers towards team teaching at the upper primary level. (2) There is significant difference in the mean achievement scores of teachers of the government and private towards team teaching. (3) There is significant difference in the mean attitude of scores of the teachers with diploma and degree towards team teaching at the upper primary level. (4) There is a significant difference in the mean attitude scores of the teachers with below 10 and 10 plus years of teaching experience towards the team teaching. The study cites five references.


**Objectives:** To find out whether there is any significant difference in the mean scores of work motivation in terms of sex, subject teaching,
employment, type of management, locality of the school and type of school. **Method:** Descriptive-Normative survey method was adopted in the study. A sample was taken of 100 teachers from different higher secondary school from Dindigul district in Tamil Nadu, using probability sampling for the study. Work Motivation Questionnaire (WMQ) was adopted as tool for the study. Qualitative approach was adopted in the study. **Findings:** There is no significant difference in work motivation among postgraduate teachers in terms of their subject teaching (science vs language), employment (both husband and wife employed vs only husband employed), locality of the schools (rural schools teachers vs urban school teachers) and type of school (boys schools vs urban schools vs co-ed schools). Ten references were cited in the study.


**Objectives:** To study whether there is any significant relationship between the level of life satisfaction of the teachers and their job satisfaction. **Method:** Descriptive survey method was adopted for the study. Four hundred teachers were selected through probability sampling from secondary schools in Rayalessma area of Andhra Pradesh for this study. Job satisfaction scale was used as tool for the study. **Findings:** There is a significant relationship between the level of life satisfaction of the teachers and their job satisfaction. Fifteen references were cited in the study.

**VALUE EDUCATION**


**Objectives:** To find out the difference imparting values by the parents (whose children studying at secondary level) and teachers (who are handling the classes at the secondary level). **Method:** A sample of 40 teachers (20 male and 20 female) and 40 parents (20 male 20 female) from both rural and urban areas were selected at random sample. The survey method was used. The subjects were provided a list of 40 values in three alternatives, viz. most important, important and less important, and were asked to mark their
preference for each in the given preferences. The data provided by the parents and teachers were analysed. **Findings:** (1) All categories of teachers and parents gave more importance to only 5 values, namely worthiness, sympathies, discipline, equality and caring. (2) Hundred per cent of teachers gave priority to open mindedness, practicality, academic bent of mind, self-reliance, forgiveness, obedience and creativity. (3) Hundred per cent of parents gave priority to the values namely honesty, truthfulness, cleanliness, dutymindedness, love, kindness, spirituality, humanity aesthetics morality, punctuality, cooperation and objectivity. (4) There was light difference ranging from eighty one per cent to ninety seven per cent in the preference of values of teachers and parents, viz. empathy food organisational capacity, leadership, appreciation, optimism, friendliness, tolerance, being fair and frank, protest against wrongs, loyalty, patriotism, sociability, intellectual efficiency, self-control, self-awareness, self-esteem, self-confidence, justice, dependability, purity of thought, civic scene, charity, accountability and rationality. (5) The difference in the values was observed between rural and urban teachers as well as parents, male and female teachers as well as parents, educated and uneducated parents above 40 years and up to 40 years age group of parents and teachers, rich and poor parents, parents having small and big families and teachers teaching arts and science subjects. The study cites twenty references.

**VOCATIONAL EDUCATION**


**Objectives:** (1) To find out the vocational preferences of the study; (2) to find out the relationship of vocational preferences with intelligence and achievement. **Method:** Descriptive survey method as well as qualitative approach was adopted for the study. The sample was taken 200 intermediate students of 4 intermediate colleges of Agra, using probability sampling method for the study. The tools were R.K. Tandon’s Group Test of Intelligence; Thurston’s Interest Schedule; and Achievement Test used for data collection. **Findings:** The students preferred administrative jobs than job related music and artistic. (2) Highly intelligent students prefer to go to jobs related to the area of Physical Sciences. (3) Average and below average intelligence groups did not differ significantly in any of the area.
(4) The level of intelligence influenced the vocational preferences to a great extent. (5) Achievement and intelligence had good correlations with the area of physical science and executive jobs. (6) Achievement got negative correlation with the area of computation and business. Thirty two references were cited in the study.


**Objective:** To study the effects of personality intervention and career intervention programmes on vocational indecision among boys.  

**Method:** Based on unselected sample of 1,000 male students belonging to Class X from fourteen public schools in Delhi. Out of the total sample, 758 subjects emerged as decided and rest of 242 were grouped undecided and again 242 undecided group were assessed by tools, within this group 50 subjects were absent when tools were used according to respectable variables. The tools used for study included the vocational indecision scale (VIS) by Kathuria (1974), Self-confidence Inventory (SCI) by Agnihotri, Scheier and Cattell’s Neuroticism Scale Questionnaire (NSQ) (1961), prepared by Kapoor and Kapoor (1974) and the Assertiveness Items published in Eysenck and Willson’s book *Know Your Own Personality* (1975). Data were analysed through mean, median, standard deviation (S.D.), standard error of mean (SEM) and ‘t’ test used for the pre and post measures.  

**Findings:** (1) The undecided group subjected to career intervention or personality intervention programmes indicating a significantly greater decrease in vocational indecision as compared to the control groups any condition whether the students were ‘low’ and ‘high’ on personality. (2) The Personality intervention programmes were found to be more effective than career intervention programmes in terms of reducing vocational indecision among students. The study cites twenty six references.

**WOMEN EDUCATION**


**Objectives:** (1) To study the attitude of parents towards women education; (2) to find out the correlation, if any, between the attitude
of parents towards women education and their economic and social status. **Method:** The data collected through descriptive normative survey method and analysis by both qualitative and quantitative approach. A sample of 300 parents was selected for the study using random sampling technique. The tools used for data collection in the study: (1) Scale of attitude of parents towards women education, (2) Personal data sheet for this study. **Findings:** (1) All categories of parents in the sample had favourable attitude towards women education. The rural and urban parents differed in their attitude and the urban parents were at a higher favourable level than the rural parents in their attitude. (2) There was no significant correlation between the attitude of parents towards women education and their economic and social status. The study cites eleven references.
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