CHAPTER III

REVIEW OF RELATED LITERATURE

3.1 STUDIES RELATED TO MODERN INSTRUCTIONAL STRATEGIES

3.2 STUDIES ON EXPERIENTIAL LEARNING

3.3 STUDIES ON LEADERSHIP QUALITY

3.4 STUDIES ON BUSINESS INTEREST

3.5 STUDIES ON ACHIEVEMENT IN COMMERCE
A literature review is a systematic explicit and reproductive method for identifying evaluating and interpreting the existing body of recorded work produced by researchers, scholars and practitioners.” Fink, (1998).

The research worker needs adequate familiarity with the work, which has already been done in the area of his choice. “In the field of education, as in other fields, the research worker needs to acquire up-to-date information about what has been thought and done in the particular area from which he intends to take up a problem for research” (Sukhia & Melhotra, 1981).

A review of related literature gives organized knowledge of a specific area of research to evolve and edifice of knowledge to show that the study would be an addition to the field. “A Survey of related literature is necessary for proper planning, execution and right concept of the problems and solutions. It provides guiding hypothesis, suggestive methods of investigation and comparative data for interpretative purpose.” (Good, 1959).

In the present study the purpose of the literature review was to comprehensively investigate the ideas, issues, and themes related to the Developing a strategy based on Experiential learning for enhancing
Leadership quality Business interest and Achievement in commerce of students at Higher Secondary level. For that the investigator collected as many studies as possible related to different aspects of the problem under investigation. The studies collected are given under the following heads.

3.1 Studies related to Modern Instructional Strategies

3.2 Studies on Experiential Learning

3.3 Studies on Leadership Quality

3.4 Studies on Business Interest

3.5 Studies on Achievement in Commerce

3.1 Studies related to Modern Instructional Strategies

Gaikwad & Tankhiwale (2014) designed and evaluated an interactive e-learning module in Pharmacology for effectiveness, acceptability and feasibility, with the aim of promoting active learning. A quasi-experimental single group Pre test Post test study was conducted with Fourth-semester students of the second professionals course selected using the non-probability convenience sampling method. It was found that the interactive E-learning module prepared was moderately effective and well perceived by the students.

Fathima, Sasikumar & Roja (2014), used some metacognitive intervention strategies be used to enhance the teaching competency of
graduate teacher trainees. It was found that there was a continuous improvement in all the dimensions of teaching competency by means of the applied strategies.

**Hosseini & Mohammed** (2014) conducted an experimental study to find the possible effects of Competitive Team Based Learning (CTBL) versus Group Investigation (GI) method of Co-operative learning on the language proficiency of Iranian EFL intermediate students. Seventy homogenous Iranian intermediate students were selected as the sample. The results of the study indicated the advantage of CTBL over GI in terms of its effect on improving the target group’s language proficiency.

**Matsuda et al.** (2013) in their study introduced an E-learning material that they developed using Three-Dimensional Virtual Reality (3D-VR) technology in Cyber ethics education. They verified the effectiveness of their method over conventional method and their method was found to be more effective than conventional method for Cyber ethics education.

**Ray & Chakrabarti** (2012) designed and implemented an effective e-learning strategy based on facial emotion recognition in which the learner’s affective state is identified using Biophysical signals which in turn explore the emotion of the learners during learning process. This produces a feedback that can be used to improve learning experiences.
From the analysis of results, this strategy was found to be more effective in comparison with the other existing systems.

Kenni, Akeju, & Rotimi (2012) conducted a quasi-experimental research on the effect of Concept Mapping instructional strategy on achievement in Nigeria Secondary schools. The population comprised of 168 Senior Secondary school Physics students. The study revealed that, Concept mapping instructional strategy contributed to achievement in Physics and there is significant effect of treatment on students’ retention of learned materials and students learning attitude.

Chang, Chang & Wong (2011) conducted a study to find the effectiveness of integrating Mobile technology with Project Based Learning strategy (PBL) in order to enhance the quality of the Ecological Environment Learning projects in schools settings. Fifty nine university students enrolled in an e-learning course in a Northern Taiwan University participated in the study. It was found that students have a positive attitude towards the proposed PBL e-learning system with mobile technology.

Saleh (2011) investigated the effect of Co-operative and Individualistic learning strategies on the academic performance of students in the general Chemistry laboratory through an experimental study. The findings revealed that the Co-operative learning strategy is more effective
than Individualistic learning strategy and the students in the co-operative group performed significantly better.

**Cooper, Lingo & Slaton** (2011) conducted a study to determine the effectiveness of instruction in the Paired Associates learning Strategy (PAS) on the ability of college students with Learning Disabilities (LD) to identify and recall important information. A single subject multiple probe research design was used. The sample consisted of nine college students who were identified as having LD. Results of the study indicated that the instruction using PAS improved students’ ability to identify important information from textbooks, create study cards and to recall that information in testing situations.

**Brill & Hodges** (2011) investigated the effectiveness of Peer Review as a learning strategy to foster the knowledge and skill attainment of adult learners preparing for professional practice including those students who were preparing for instructional design and technological practice. It was found that Peer review is an effective instructional strategy not only for developing instructional design and technology practice but also to address on-going concerns regarding the inadequate preparation of instructional design and technology professionals.

**Dow Su** (2011) conducted a study to design Information Communication Technology (ICT) courses related to experimental
Chemistry for junior college students and to find their learning performance after completing these courses. A quasi-experimental approach was adopted for the study. The results showed that, this ICT integrated learning has more significant effect on students’ learning performance.

**Victoria, Carmen & Lazaro** (2011) conducted a study to find students’ perceptions and their relation to the outcomes of Blended learning in higher education. The sample consisted of 1431 students of University of Granada. The results revealed that the use of Blended learning had a positive effect in reducing dropout rates and in improving exam marks. Moreover, the students’ perceptions on blending learning were interrelated with their final marks depending on the blended learning activities and on the students’ age, background and class attendance rate.

**Faisal** (2011) conducted a study on the Effectiveness of Mind Mapping Based Instructional Strategy on Achievement in English at secondary level. The result of the study showed that mind mapping strategy is more effective than the present method of teaching for the achievement in English and vocabulary skill of secondary level students and it is a clear evidence of the impact of experiential inputs.

**Geethu** (2011) conducted a study on the Effectiveness of Multi-Model strategy on Achievement in Mathematics at secondary level. It was
found that Multi-Model Strategy is more effective than the Activity Method on Achievement in Mathematics of Secondary Level Students.

**Dhanya (2010)** conducted a study on the Effectiveness of Integrated Instructional Strategies for Improving Handwriting in English among Upper Primary School Students. The results showed that handwriting in English of Upper Primary School Students has improved significantly as a result of the Integration of various instructional strategies.

**Lv, F., & Chen (2010)** conducted a study on the effect of metacognitive strategy training on students’ writing performance in the hope of finding an optimal teaching approach for English teachers of vocational colleges. This teaching approach really embodies the teaching idea “student-centered” and is targeted to foster students’ metacognitive strategy, monitoring and evaluating abilities in English writing.

**Coskun (2010)** conducted a study to investigate the effect of metacognitive listening strategy training on the listening performance of a group of beginner preparatory school students at a university in Turkey. Two beginner groups, a control group (n: 20) and an experimental group (n: 20), were chosen as the participants of the study. The experimental group received five weeks of metacognitive strategy training embedded into a listening course book, while the other group did not. At the end of the training, a listening test taken from the teacher’s manual of the same
course book was administered to both groups. The analysis of the test scores using t-test revealed that the experimental group did statistically better in the test. The findings of the study revealed that meta cognitive strategy training should be incorporated into the regular listening teaching program to help students become more effective listeners.

**Wong & Looi** (2010) conducted two case studies to find the effectiveness of Mobile Assisted Language Learning (MALL). The sample consisted of 40 students of Primary 2 class of Nan Chiou Primary school in Singapore. It was found that MALL has the potential of revolutionizing the language learning field by students’ use of mobile devices as personal learning tools to synergize formal and informal language learning spaces.

**Liu & Chang** (2010) conducted a research to investigate the effect of Computer Assisted Concept Mapping Learning Strategy on English as a Foreign Language (EFL) College learners’ English reading comprehension ability. The sample consisted of 194 fresh men who were enrolled in the English course. Through two-way ANOVA analysis, it was found that the Computer Assisted Concept Mapping Learning Strategy had greater reading benefit for the low level group than for the high level group. Also, it was found that, the Computer-Assisted Concept Mapping Learning Strategy enhanced learners’ use of other English reading strategies like listing, enforcing and reviewing.
Anitha (2009) conducted a study on the effect of cognitive coaching strategy on achievement in mathematics of students at secondary level. The results of the study indicated that teaching using cognitive coaching strategy is more effective than the present method on achievement in mathematics of student at secondary level. The cognitive coaching strategy can improve the achievements in a better pace.

Sibu (2008) conducted a study on the Effectiveness of Reflective Thinking Strategy of Teaching on Certain Cognitive and Affective variables among secondary school students. The findings revealed that reflective thinking strategy of teaching is more affective than conventional method of direct instruction for the achievement of cognitive variables, effective variables, and improvement in meta cognitive awareness and for dropping fear of success among secondary school students.

Nazeer (2008) conducted a study on the Effect of Self-Regulated Strategy Development Model in Learning Mathematics among secondary School Students of Different Achievement levels. The results of the study indicated that self-regulated strategy Development Model is more effective than the present method of teaching on achievement in mathematics of low, average and high achievers. It can empower the learners in rapid achievement.
Kym Tan (2008) conducted a study on the use of cognitive organisers as a self regulated learning strategy. This research investigates the use of cognitive organisers as a self-regulated learning strategy by gifted and talented science students in a Year 9 class at a metropolitan high school in Perth, Western Australia. Findings indicate the students' use of cognitive organisers to complete an academic task is dependent on the nature of the task and prior exposure to cognitive organisers aligned with the task rather than the students' learning approach. The immediate significance of this research is that it provides a model of factors that facilitate or hinder autonomous student use of cognitive organisers. Recommendations for classroom implementation of cognitive organisers are included.

Wilgis & Mc Connell (2008) conducted a small descriptive comparison study to find whether Concept Mapping Strategy can improve the critical thinking skills of Graduate Nurses during a hospital orientation program. Schuster’s Concept Map Care Plan Evaluation Tool was used to measure the critical thinking skills in concept maps. It was found that Concept mapping was a valuable teaching and evaluation strategy for this group.

Chang, Liu & Lee (2007) conducted a study to investigate the influence of gender and major on college learning English as a Foreign Language (EFL) learning strategy in Taiwan. A total of 1758 Taiwanese
College EFL learners took part in this research study. The participants completed two sets of self reported questionnaires, including background characteristics and strategy inventory for language learning. The study found that, statistically significant differences were found in the use of Cognitive strategies, Meta cognitive strategies, and Social strategies and overall strategies with regard to gender. Statistically significant differences were found in the use of six subcategories of language learning strategies and overall strategies with regard to major.

**Lawrence, Ashford & Dent** (2006) conducted a study on Gender differences in coping strategies of undergraduate students and their impact on self-esteem and attainment. This study sought to investigate differences in the coping strategies adopted by male and female first year students in a higher education environment and the extent to which such strategies had an impact on self-esteem and attainment. Results revealed significant differences between males and females in terms of engagement in coping strategies and academic attainment. Specifically, males exhibited greater ability to detach themselves from the emotions of a situation, were more inclined to demonstrate emotional inhibition or ‘bottling up’ of emotions and reported higher self-esteem. In addition, it was observed that females attained at a significantly higher level than males.
Sungur & Thekkaya (2006) investigated the effectiveness of Problem Based Learning and traditional instructional approaches in various facets of students’ self regulated learning, including motivation and learning strategies. Instruction to the control group with teacher centered, textbook oriented traditional instruction and experimental group with Problem Based Learning, in which students’ worked with ill structured problems. Results revealed that Problem Based Learning students had higher levels of intrinsic goal orientation, task value, use of elaboration learning strategies, critical thinking, meta-cognitive self regulation, effort regulation and peer learning compared with control group students.

Chung & Tam (2005) examined the effects of different approaches to teaching learners with mild intellectual disabilities to solve mathematical word problems. Students presented with worked examples and cognitive strategy instruction solved more problems correctly and generally outperformed students presented with conventional instruction in both immediate and delayed tests.

Santhoshkumar (2004) in his study made an effort to determine the impact of inductive thinking model on the learning of Physical Science with reference to knowledge, understanding, application and retention of information levels. The result showed that the inductive thinking model is superior to ordinary classroom practices followed in Physical Science
instruction like verbal illustration and demonstration with respect to levels of learning namely understanding, application and retention of information. But it is not superior with respect to knowledge level.

**Desai** (2004) conducted a comparative study of the efficacy of teaching through the traditional method and the multimedia approach in the subject of home science. The findings of the study show that the mean achievement of the experimental group was found significantly higher than that of the control group. From post-test to retention test almost equal reduction in performance was found in both the groups. The study has arrived at significant findings when caste, location, income, Std. XII examination marks, and IQ of the students were considered as co-variables. The students were found to have favorable opinions towards the multimedia approach. The study has found the relative efficacy of teaching through the traditional method and the multimedia approach in the subject of Home Science, particularly, Proteins.

**Palak** (2004) conducted a study on “Teachers beliefs in relation to their instructional technology practices”. The study investigated how teachers’ beliefs and factors relate to teachers’ instructional strategy practices. The results obtained from this research reveals that the instructional technology practices of teachers relate to their beliefs about
teaching and technology and the contextual conditions in their teaching environments.

Etsey (2004) conducted a study on the topic “Effects of comprehension strategy instruction in Ghanaian English language learners’ comprehension process and text understanding”. The results of the study indicate that English language learners can benefit from explicit comprehension strategies instruction; however, consideration must be given to particular issues related to English language learners, the selection of texts and the environment for instruction.

Mohini (2002) conducted a study of the effectiveness of vocabulary teaching strategies on retention and use in relation to certain variables. The results of the study showed that the performance of the experimental group was found better on all the tests. The new strategies of teaching of vocabulary had affected boys and girls similarly in case of retention; whereas, boys performed better in using vocabulary. The experimental group showed better retention as compared to the controlled one, but the subjects in the experimental group were found to have a significant loss of the known words and easy words. The strategy of communicative task proved to be the most effective for retention of vocabulary. IQ level interacts with retention and use of vocabulary. But the loss of vocabulary in higher IQ group was found more than that of the lower IQ group. In the
absence of treatment the high achievers in the controlled group lost significantly more words than their counterparts in the experimental group. The interest and motivation level of the students in the experimental group were observes to be high by the investigator and other teacher observers.

Varghese (2002) conducted a study to compare the effect of Mastery Learning Strategy with the Textbook oriented approach on certain variables like achievement in Physics, retention power, Science interest, Scientific attitude, achievement motivation and self concept of Standard IX students of Kerala state. The sample consisted of 156 students of Standard IX studying in various schools of Kerala. It was found that the Mastery Learning Strategy is more effective than Textbook approach in enhancing the variables under study.

Mahesh (2001) conducted a study entitled “A Study of the effectiveness of Instructional Strategies in General Science and Social Studies in Standard X of the National Open School”. The results shows that the instructional strategy using video lesson found to be more effective than printed lesson and Post- video instructional discussion has been found equally effective.

Mathew (2000) conducted a study on the topic ‘Effectiveness of self instructional materials and modern instructional strategies in minimizing learning disabilities of students in secondary schools”. Results
of the study indicate that self instructional materials and the modern instructional strategies are more effective in the achievement of Biology for Grade IX learning –disabled and non-disabled students.

**Maccini and Hughes** (2000) investigated the effect of Problem Solving strategy within a graduated teaching sequence (ie, concrete, semi concrete, abstract) on the representation and solution of Problem solving skills encompassing integer numbers for secondary students with learning disabilities. Results showed that Problem-Solving skills involving integer numbers dramatically improved by following instructions at concrete, semi concrete and abstract levels.

**Singh** (1999) conducted a study to explore the effectiveness of using Video instructional package on Environmental education. Experimental method was used. Pre-test Post-test design was used for conducting the experiment. The sample consisted of 240 students of Standard IX studying in Secondary schools of Surat in Gujarati medium. The study revealed that the developed Video instructional package was more effective in transacting Environmental education to the students of Standard IX.

**Guskey** (1994) in a study related to the difference between outcomes based education and Mastery Learning suggested that though these two are different educational concerns, their potential, if used in combination, is clear and concluded that the combination of a thought
provoking curriculum and effective instructional practices makes true improvements in learning possible.

**Cennamo, Savenye & Smith** (1989) conducted a study on the topic “Mental effort and video based learning in the relationship of preconceptions and the effects of interactive and covert practices”. The findings of the study showed that the learners who are provided with an interactive video lesson that includes practice questions and feedback recall significantly more information than learners who receives a television without practice questions and feedback.

**Zlotolow** (1989) conducted a study on, ‘Development of instructional strategy: Video grammar and an assimilative process’. The study investigated a prescriptive instructional strategy for teaching grammar to college students. A videotape using structural units and identified slots was designed to present the grammar concepts of nouns and noun phrases. The findings suggest that structural units approach to teaching grammar has potential to provide reinforcement for instruction and recall in short term memory.

**Koul et al.** (1985) reported that the students taught through Bloom’s Mastery Learning Strategy evidenced higher retention than those taught through conventional Method of Teaching. The results were found to be valid in case of both the immediate and delayed retention. Mastery
Learning Strategy could be found effective with students living in far flung and hilly area, in increasing their retention and learning, especially in a subject of science which required mastery in comprehension and application.

3.2 Studies on Experiential Learning

Mason & Arshed (2013) studied Teaching Entrepreneurship to University students through Experiential Learning activities. The investigation put forward how an Experiential Learning assignment that formed an important part of a first-year entrepreneurship course in a Scotch University. It is a case study of an experiential learning in which how the assignment was designed, what activities were undertaken by students and, using their learning reflections for evidence, identifies the learning outcomes and the effect on entrepreneurial intent, motivations and capabilities. If facilitated learning about the real world of the entrepreneur, something that would otherwise not have been possible, and had a positive impact on entrepreneurial intentions and attitudes.

Ernst (2013) published an article on the topic, Impact of Experiential Learning and cognitive outcome in Technology and Engineering Teacher Preparation. The study was designed to investigate and identify the impacts, if any, that experiential learning activities have on the cognitive achievements of Pre-service technology educators. This
research examined experiential learning extension activity implementation through a quasi-experimental design, which consisted of experimental treatment and control features to measure cognitive outcome but did not use random assignment. Participants in this study were enrolled in a technology and engineering education teacher education program. It was determined that pre-service technology and engineering educators who engaged in the organized experiential learning activities benefited in the form of cognitive outcome from the learning extension approach and structure.

Mulkerrin (2012) conducted a study on the result of a zoo-based experiential academic science program on high school students’ math and science achievement and perceptions of school climate. Pre-test-post-test two-group comparative efficacy design was employed. The sample for the present study was 11th-grade and 12th-grade students who participated in a zoo-based experiential academic high school science program \( (n = 18) \). Sampling technique was random. The data on achievement of science were collected from the beginning and ending of programme, referenced achievement test proficiency scores for math, and reading were also utilised to evaluate student achievement gain and programme effectiveness, school climate as measured by ending of program school perception survey. The results of the study indicated that (i) students’ who completed
the Zoo-Based Academic High School Experiential Science Program had statistically greater score compared to students’ who completed the School-Based Academic High School Experiential Science Program. Findings of the study also revealed that the Zoo-Based Academic High School Experiential Science Program and the School-Based Academic High School Experiential Science Program have shown a positive impact on student academic achievement and have proven to equally prepare students for post secondary success.

Driscoll (2011) conducted a study on Graduates’ perspectives regarding the impact of the integration of experiential learning in academic programs. The objectives of this study were (i) to determine the impact of experiential learning program on career/graduate school. (ii) To determine the influence experiential program on career development and decidedness; and (iii) to investigate the extent to which the experiential program enhances career/graduate school preparation. The finding of the study shows that student learning, and experiential learning had a positive impact on the development of their skills and abilities. The results indicated that the programs were able to positively enhance career/graduate school preparation by helping the participant’s transition from undergraduate student to employee/graduate student. The findings also revealed that the respondents preferred real-world, hands-on experiences.
Huisaman & Allison (2011) conducted a study on Experiential learning is an Exploration of situated and Service Learning. In this study two separate research studies explored two types of experiential learning, Situated Learning and Service Learning, used in a liberal arts university setting to further understand its importance in the learning process. The main findings of the study are limited to student reflection and connection of course objectives to be experiential experiences.

Celio (2011) studied The Effect of Participation in Experimental Learning Programmes on Personal and Civic Attitudes at Secondary school Students. The study was conducted on a sample of 571 Secondary school students. This study found that the students’ career development is influenced by participation in experiential learning.

Chavan (2011) examined Higher Education Students’ attitudes towards Experiential Learning in International Business by using qualitative and quantitative analysis. This paper presents a teaching model based on experiential learning in a large “International Business” unit. Preliminary analysis of two student evaluations determined the effectiveness of experiential learning to allow students to explore the relation between theory and practice. The cognitive and affective experiences of students learning were measured using a battery of 15 Likert Scale items which is prominent in this matter.
DiFrancesco (2011) conducted a study of The Role of Situated Learning in Experiential Education. It is an Ethnographic study of the knowledge-construction process of pharmacy students during their clinical rotations. The aim of the study was to explore learning through the social knowledge construction by pharmacy students engaged in experiential learning. A qualitative methodology was used in this study. The study conducted to explore what role it played in pharmacy students who participated in this study.

Mc Clellan & Hyle (2012) examined experiential learning dissolving classroom and research borders. The major outcomes of the study was the excitement and frustration of learning outside of the classroom and in a foreign context, the benefits and drawbacks of working within a research team, and meaning the logistics of research.

Matsuo (2011) examined the experiential learning process of Japanese IT professionals. The study examined how far IT professionals acquire job-related skills or expertise through the impact of experience. The semi-structured interviews were conducted with 10 high performing senior managers in consulting divisions. The major findings of the study was further research on the topic of knowing and knowledge in relation to experiential learning needs to be conducted.
Kolb & Kolb (2010) proposed an experiential learning framework for understanding how play can potentially to a unique ludic learning space conducive to deep learning. The case study suggested that play in a ludic learning space can promote deep learning in the intellectual, physical, spiritual, and moral zeal’s.

Varghese (2010) conducted a study on the effectiveness of Kolb’s experiential learning model on achievement in mathematics of students at secondary level. Findings of the study indicate that the students of secondary school belong to the four learning style categories proposed by David A. Kolb namely Assimilating, Accommodating, Converging, and Diverging. The achievement in mathematics of students taught using Kolb’s Experiential Learning Model is significantly higher than that of those taught using Activity Oriented Method. The objective-wise (Computation, Comprehension, Application, and Analysis) achievement in mathematics of students taught using Kolb’s Experiential Learning Model is significantly higher than that of those taught using Activity Oriented Method. The Kolb’s Experiential Learning Model is found better than the existing Activity Oriented Method among Boys & Girls and students in Government and Aided schools with respect to total achievement and objective-wise achievement. In all the different learning style categories namely Assimilating, Accommodating, Converging, and Diverging, the
achievement in mathematics of students taught using Kolb’s Experiential Learning Model is significantly higher than that of those taught using Activity Oriented Method.

Varghese Cheriyan (2010) conducted a study on effectiveness of Kolb’s experiential learning model on achievement in mathematics of students at secondary level. The objectives of the study were (i) to find out the achievement in mathematics of students taught using Kolb’s experiential learning model and activity oriented model. (ii) to compare the achievement in maths of students taught using Kolb’s experiential learning model and activity oriented method with respect to their learning style. The findings of the study exposed that (i) majority of the students belongs to accommodating and diverging learning style (ii) the achievement in mathematics of students taught using Kolb’s experiential learning is significantly higher than that of activity oriented method (iii) the mathematics interest of students taught using Kolb’s experiential learning model is significantly higher than that of those taught using activity oriented method. The Kolb’s experiential learning model found better than the existing activity oriented model among boys and girls.

O’connor (2010) conducted a study on Experiential Learning in an Indigenous context: Integration of place, experience and critically in educational practice. This study examined the current educational
challenges facing First Nation Students of northern Canada through examination of two experiential and place-based educational programs presently being implemented in both the public school system of the Yukon Territory and in two cree Nation reserve schools in northern Algebra. The method used here was case study. The major findings of the study were gain and place-based education as defined by the actual practioners in the modern educational system.

Beasley (2010) conducted a study on comparison of experiential learning activities available to juniors and seniors in secondary agriscience education and science education courses. An ex post facto or causal comparative research design was used in this study. A cluster sampling of schools with agriscience programs yielded a sample of 20 schools. The sample included 23 agriscience teachers, 35 science teachers, and 909 students. Data collected through questions related to formal and informal learning environments, another question inquired about service learning projects. Data were analysed by descriptive statistics including means, standard deviations, frequencies, t-test. Findings of the study revealed that approximately 58% of science teachers reported that service learning projects under experiential learning activities was more enjoyable in agriscience courses and science courses. Depending on the teaching
methods used by the agriscience and science teachers, the majority of the activities could have been experiential learning activities.

**Geist** (2010) had undertaken a curriculum development project on an experiential kindergarten science curriculum engaging students in the scientific inquiry process. In this curriculum, students explore through inquiry and practice the following basic skills: observation, communication, and measuring, classifying, predicting, and inferring. Researcher interest is integrating animals (frogs and butterflies) into the classroom as a learning tool guided this process. 23 students participated in this study. During explorations and activities students practiced science skills. To assess student’s progress a researcher developed rubric for teachers, which focuses on individual student’s inquiry practices during each lesson. The findings through observations revealed that students interestingly engaged and excited about what they were doing; also implementing this curriculum with this kindergarten classroom was very informative, and curriculum provided quality experiences for students.

**Mehra & Kaur** (2010) conducted a study on effect of Experiential Learning Strategy on Enhancement of Environmental Awareness among Primary School Students. The objectives of the study were: (i) To compare the mean gain on environmental awareness of the students taught through different instructional treatments (experiential Learning strategy and
traditional method). The design of the study was 2X2X2 factorial design (pre test and Post test). Experimental group students’ were exposed to experiential learning strategy and the students of the control group were taught the same topics by traditional learning method. The sample for the study was 120 students of IVth class of two schools of Ropar. Tools used for the study instructional materials 50 lesson plans, and environmental awareness test comprised of 132 items, and locus control test comprised of internal and external scale. Data were analysed by using percentages, means and SDs, and ANOVA. The findings of the study revealed that the students taught EVS by experiential learning strategy exhibited better environmental awareness than those taught by traditional learning method. Experiential learning helped to enhance awareness of the pupils regarding a particular subject and also to build their actual beliefs by real hands on experience.

Som Mat & Furquan (2009) conducted a case study on “Fostering Experiential Learning in Non Formal Education of Tourism Clubs in Secondary Schools”. It explores to encourage domestic tourism activities, to inculcated travelling culture among students, to minimize social problems among them and to promote racial integrity among the various races in the country. The study reveals the types of activities organized by Tourism clubs were varied and not necessarily travel-related.
Parcell & Franken (2009) discussed a commodity trading course which was made upon the principles of experiential learning and has shown successful outcomes. The results revealed that by having the students participated in an actual trading pool investment, they became more actively involved in their own learning process. Experiential learning was able to help students take an interest in their own learning and get involved with their course. Another outcome of the integration of experiential learning is the learner being able to identify specific parts of their experience upon which they can reflect the inputs in a better way.

Dhilwayo (2008) present a prospective entrepreneurship training model based on concepts of experiential learning which will enable the “Production” of small business owners or entrepreneurs which is not being achieved by the current methods, design/approach. It provides a model that integrates experiential learning into entrepreneurship education. The study showed that appropriate experiential training can truly be integrated into entrepreneurship education in Africa as in disciplines such as Engineering or Nursing.

Thomas (2008) considered a facilitator is to act intentionally when they are deliberate about what they are doing and can provide nationals for their section. A review of facilitation literature and the experiential education literature demonstrates the importance of both intentionally and
intensive process when facilitating. The study compared the importance of an emphasis on both intentionality and intuition in the presentation of facilitators for experiential education.

Rone (2008) felt instructional Pedagogies in learning contents from classrooms to board rooms are couched within experiential learning paradigms. The field trip is a teaching pedagogy that dress on experiential learning. The effectiveness of fieldtrip as an instructional pedagogy is assured and best practices for incorporating field trips into instruction are presented.

Davis (2008) conducted a case study on science professional development program based on Kolb’s experiential learning model. The purpose of this case study was to investigate how three science teachers who participated in the Rivers to Reef professional development course interpreted the learning experience and integrated the experience into their teaching practice. Descriptive qualitative case study was conducted over the course of 4 months. Three middle school teachers were selected from a purposeful sample process. Observation and Interviews were the primary tools used in the acquisition of data. Data analysed qualitatively. Major finding of this study indicates that the years of teaching experience of middle school science teachers significantly influenced by experiential learning for their professional development, what and how they learn from
the experience, and the ways in which the experience influences their teaching practices.

**Huckestein** (2008) conducted a study on Experiential Learning in School Gardens and Other Outdoor Environments: One of the objectives of the study was to create a plan for developing and implementing supplemental experiential learning programs in environmental science. A self-administered online survey was used to inquire about the use of experiential teaching methods using school gardens and other outdoor environments. The survey was sent to 273 K-5 science teachers in Virginia. The researcher chose to create the electronic survey instrument. The survey questions were primarily closed-ended questions and few open ended questionnaire. The responses were analysed by both frequencies and percentages. The findings of the study indicated that most common hands-on activity used by the science teachers for growing plants from seeds through experiential learning. Also this activity was most commonly used by fourth-grade teachers.

**Domesk** (2007) provides a concrete example of how experiential learning approaches can be implemented in order to most effectively net specific educational goals in international sustainability studies. The study presents a multidimensional international experiential program. It demonstrates how experiential learning offers an educational experience
that most effectively; connects the academic with the practice fosters an effective interdisciplinary curriculum hints students to work experience and job opportunities. The literature on experiential learning encourages that experiential learning approaches deserve greatest attention in theory and practice.

Steel et al. (2007) explored sense of themes and an issue stunning from the application of an experiential learning approach to postgraduate journalism education provides valuable experience that stimulate the real world of journalism practice.

Aboukinane (2007) conducted a study on “A quantitative study of creative thinking using experiential learning in an agricultural and life sciences course”. The study sample was 14 participants who consisted of mostly incoming freshmen, with the rest being sophomores, juniors and transfer students. The finding of the study showed that teaching and learning environments foster creativity among students through experiential learning in a better manner.

Bell (2007) conducted a study on Experiential Learning in journalism education- a New Zealand case study. The study explained with the production of Te Waha Nui set out to match what happens in the real world of newspaper production and identifies the range of challenges faced
by the students. It also revealed the relation between experiential learning in journalism and newspaper industry.

Arnold & Warner et al., (2006) conducted a study on experiential learning in secondary agricultural education classroom. The objectives of the study were (i) to determine agriculture teachers knowledge and familiarity with experiential learning in a secondary agriculture classroom (ii) describe how agriculture teachers use the Kolb’s model of experiential learning in their classroom (iii) determine the self perceived role of the teacher when using experiential learning in an agriculture education classroom. A qualitative approach was utilised to explore the use of experiential learning in agriculture classroom. Sample for the study were four agricultural education teachers selected purposively. The tools and techniques were semi structured interviews conducted with the participants. The collected data analysed by qualitatively using triangulation method. The findings of the study reveal that experiential learning offers quality experience, active engagement, reflective observation, and application useful for comprehensive understanding of knowledge and skills. Teachers commented that experiential learning requires to change their way of thinking and allows students an opportunity for self discovery learning. Also teachers recognised that multiple benefits
of experiential learning including increased subject matter retention among students, active engagements.

Schellhase (2006) conducted a study on the impact of Kolb’s Experimental Learning Theory in Athletic Training Education and the investigator found that there is significant development in improvement athletic training of student exposed to Kolb’s experimental learning. This article reviews research related to experimental learning theory and learning styles in athletic training education and other allied health professions. The study highlights the need to conduct more research on various learning styles and how experiential learning theory might be used to facilitate education in athletic training education programs and other related academic activities.

Ives & Obenchain (2006) conducted a pre-test- post-test study using measures of Higher Order Thinking Skills (HOTS) and Lower Order Thinking Skills (LOTS) in six 12th grade American Government classrooms taught by three experienced teachers over one semester. One of the three teachers implemented a curriculum in two classes based on Experiential Education (EE) Principles with guidance from investigations. Students in the EE emphasized classes’ demonstrated greatest gains in HOTS than the students in other four classes. These were no difference in the two groups of LOTS. The result suggests that EE instruction in high
school classes can promote HOTS more than traditional instruction does with no sacrifice in LOTS.

**Parmer** (2006) conducted a study on the effects of an experiential learning model of education on second grade students. This study sought to address the relationship between gardening as an experiential learning process, and fruit and vegetable knowledge, preference and consumption behaviour in an elementary school aged population. A total of 115 second grade students participated in the study. Participants were selected using a non-randomized, convenience type sampling method. The participants of this study took part in horticulture classes and gardening work experience 16-week period. Data were analyzed using SPSS, A mixed model ANOVA, t tests, Post- hoc tests, chi-square test. Findings of the study revealed that horticulture knowledge and environmental attitudes improved as a result of experiential learning and gardening experience. School gardens as an experiential learning increase fruit and vegetable knowledge, preference and consumption among children. These findings suggest that school administrators, classroom teachers and nutrition educators should work closely together to implement school gardens to allow for hands on learning opportunities as a way to influence dietary habits at an early age.

**Stavenga de Jony, Wieysha, & Herenhssen** (2006) were investigating the relationship between school-based (academic) and work
based (experiential) learning approaches of students in vocational education programs. The study identified two academic learning dimensions (constructive learning and reproductive learning) and three experiential learning dimensions. (Analysis, initiative, innersion).

**Pauleen, Marshall, & Ergot** (2004) used Experiential Learning Techniques to build and implement web based team learning assignments in knowledge management. Student worked on projects in virtual teams evaluated that 75% agreed or strongly agreed that experiential learning was a valuable way of experiencing and learning about a variety of communication channels in a team environment and 991 found that experiential learning to be more valuable than simply reading about something.

**Linghan** (2004) found that the more the team supported the experiential learning cycle through norms that focused their conversation on interpersonal diverging and test oriented converging, the better their performed, the more satisfied they were with their membership on the team, and the more they felt psychologically safe to take risks on the team.

**Mc Glinn** (2003) used experiential learning cycle in a teacher education programe, emphasizing the reflective component of the cycle to overcome students’lack of reflection on their leading. The investigator claims that the experiential learning model is effective in promoting
change and development is students self knowledge about their teaching practices by providing time for reflection.

**Cleave-Hogg & Morgan** (2002) designed an anesthesia simulation based on experiential learning for undergraduate medical students. The study supports the value of integrating the experiential simulation exercise in the anesthesia undergraduate curriculum.

**Hweng & Henson** (2002) conducted a study on a critical review of the literature on Kolb’s learning style inventory is a commonly used measure of learning styles on Kolb’s experiential learning model. The psychometric soundness of learning style inventory scores has been critiqued historically. This study reviewed the literature learning style inventory and evaluated the psychometric propositions of Kolb’s original and received several of the learning style inventory.

**Powell & Wells** (2002) conducted a study on the effectiveness of three experiential teaching approaches on student science learning in fifth grade public school classrooms. In this study the investigator compares the effect of three experiential science lessons in meeting the objectives of the colorodo model contents science standards. It uses Kolb’s experiential learning model as a framework for understanding the process by which students engage in learning when participating in experiential learning
activities. The study concluded that the model is very effective in environmental education.

Sprau & Keig (2001) introduce films in the history survey course based on experiential learning model. They recommend that the experiential learning model can best serve the students interest, so that studies are guided to require higher order thinking skills to deal with subsequent learning experiences.

Hitz & Scanlon (2001) conducted a study on academic achievement of students participating in a course directed by various experiential education methods versus those students taking a non-experiential, more teacher-centred course. The study was conducted over a three month period of time where 10th grade students were instructed by project based experiential learning method use in the Agricultural and Environmental Education programs. In this study some students were taught through the project based method and others through more traditional methods of classroom teaching. The finding revealed that (i) students in the traditional teacher-centred classroom scored higher on unit tests right after taking the test, however, more importantly is that the students in the experiential group showed a prolonged understanding of the subject matter. (ii) Finding also revealed that experiential learning not
only helps for students’ greater retention, but more positive attitude toward learning.

Terry (2001) published an article about experiential learning. The investigator explains the importance of Kolb’s experiential learning model. Translate learning style theory into the inversely teaching practice, namely classroom learning, assignment, essay research writing and examinations. The recommendation for practice can be adapted to recommend the style delineations of other theorist models. It focuses on university classroom group, easy research writing and examination experiences.

Healey & Jenkins (2000) applied the Sumicki and Dixon model to the teaching of geography course. In their view, two central practical applications of the experiential learning theory are relevant to different types of learning environment be it a lecture course or a seminar based course.

Krista (2000) acknowledged in his report that experiential learning style inventory is widely used to understand to stages of learning and the ways people prefer to receive and process new information. The model and self assessment are both based on Kolb’s experiential learning theory, emphasis the need for learner participation in educational activities.

Miettinen (2000) conducted a study about the concept of experiential learning and John Dewey’s theory of reflective thought and
retailer. The study concluded that Kolb’s electric method of constructive model of experiential learning. He concludes that. Kolb’s notion of immediate concrete experience is epistemologically problematic.

**Gopinah & Sawyer** (1999) developed a computer based enterprise simulation based on experiential learning in business course to bridge the gap between knowledge and its application and found that the recursive nature of experiential learning promotes strategy decision making and group behavior consistent with long-term strategy.

**Brock & Cameron** (1999) developed instructional sequences for a course based on experiential learning cycles and concluded that, there is great merit in following the four stage learning cycle. They highlighted that David Kolb’s experiential learning model and examine learning preference with in icon of the model.

**Travers** (1998) investigated the impact of experiential learning methods on students’ self-regulation of their own learning process in mathematics. The purpose of the study was to examine whether the treatment group taught mathematics through an experiential learning method demonstrated a higher level of self regulation than the control group, which was taught mathematics through a traditional lecture format. The results indicated that the experiential learning group demonstrated a higher level of self regulation. Students taught experientially were exposed
to a variety of situations from which to compare a new experience with previous ones. Thus developing the ability to critically evaluate what worked and didn’t work in a given learning situation.

**Vince** (1998) explains that experiential learning is important in management education. He considered the propositions of Kolb’s learning style model by adding psychodynamic and political illustrations of the complexity of experiential learning when unconscious forces and power aspects.

**Saundess** (1997) argues that a basic perception of the experiential learning process and the nature of cases and simulations on experiential activities will help instructors of business communication.

**Gardner & Korth** (1997) used experiential learning techniques to design a course in group dynamics, group development, and group effectiveness. They used the experiential learning cycle to develop transfer model enhances the learning process, re-inference the link between theory and practice, and facilitates the transfer of learning to the workplace.

**Munton** (1996) a study on the theories of education and learning argues that continuous training is important for improving the quality of day–care provision. Sound learning theory model is an approach to training day–care providers. The study fulfilled with the creation of conditions under which experiential learning can be implemented effectively.
Mabie & Baker (1996) conducted a study to investigate the impact of two types of agriculturally-oriented experiential instructional strategies on science process skills. The objective of the study was to ascertain whether participation in experiential instructional strategies would increase the science process skills of the students. A total of 147 students from fifth and sixth grades participated in this study. The data collection approach was qualitative in nature. Science process skills were observed both prior to the study and after the study. The findings of this study indicated that agriculturally-oriented experiential activities positively impact the development of science process skills. Also, study shows that participation in experiential activities assisted students in their ability to observe, communicate, compare, relate order and infer.

Dyer & Schumann (1993) developed an experiential learning laboratory class room in their marketing course and developed the knowledge/ experience integration learning model in a senior level marketing class. At the completion of the course, students reported an increased level of critical thinking ability and capacity to apply and connect theoretical knowledge with real-life business application.

Specht (1991) examined the effect of an experiential learning method in student learning in an undergraduate accounting course compared with another class conducted using a traditional lecture method.
The results showed that the experiential class demonstrated retention of knowledge over a six week period, whereas a significant decrease in the scores of the lecture class was deserved. The study also conducted that students in the experiential learning class room may have formed better understandings of the concepts, those successfully retaining knowledge better than students in the lecture class.

**Von Eschenbach & Raqsdale** (1989) investigated the effect of an experiential class room environment on children’s learning through the integration of mathematics and social studies. The findings support the contention that children leave better by doing. Children are more attentive to their learning, attain a deeper insight or meaning of the concepts and are able to apply the information.

### 3.3 Studies related to leadership quality

**Niesche** (2013) conducted as on faculty, counter – conduct and school Leader as a Form of political subjectively. The outcome of the study indicated that, a range of new schooling accountable have created a complex and often contradictory content in which school leaders work. For principles of low socio – economic status (SES) and disadvantages schools, they must balance the accountability performance and reporting requirements against other needs of their communities.
Huang, et. al. (2012) conducted a study on prosperity urban school leaders; what works? The result indicated that extent research, though limited inequality, increasingly demonstrates the critical connection between quality preparation experience, candidates leadership capacity, and their subsequent instructional and transformation leadership.

Prakash (2010) conducted a study on educational leadership. The result highlighted that educational leadership begins within the classroom; Education does not happen in isolation. It is created, generated and delivered within on social context. The role and function of leadership in education is primarily fair that of leading learning. It is essential for educational administrational to grant holistic atmosphere for students to learn and for future to be role models for students to become man of character and integrity.

Biswa (2010) conducted a study on Leadership quality development. The study found that the myopic view of the Indian education system needs instant reforms which is possible through visionary new age leaders and choosing a definite there of leadership to drive our education system and enable our society to be knowledge society and our country a super power.

Eva Justina (2008) conducted a study on leadership development strategies community organizing through participating action research. The
study purpose participatory action research for community building and community organization as one of the leadership development strategies, so that educational leaders are trained as per the demand of the time to become visionaries and provide a near prospective to the educational system of our country.

Ranjana (2007) conducted a study on women empowerment in educational management and developing leadership qualities in women and found out the attributers that makes an effective leader. The author states that though Indian women are as intelligent as men and are gifted with the right combination of emotional intelligence and spiritual intelligence, they lag behind they are not sufficiently, empowerment.

Moller (2007) conducted a study to identity the qualities and characteristics if successful leadership practices within the Norwegian secondary school. Findings demonstrated that successful leadership in the case school was almost entirely practices through collaboration and team effects. Results indicated that acting in accord with democratic values set the foundation for - recognizing leadership a successful in Norwegian schools.

Kileen & Zafra (2006) conducted a study on leadership of college students, Students envisioned themselves as a chief executive officer, vice president, middle level manager in an industry with a famine image
clothing manufacturing or a masculine image (auto manufacturing).
Although men and women perceived these as equally positive, women perceived them less possible and less facilitative of close relationship and gender relationships.

**Dheeraj (2006)** studied on developing student leadership skills towards total quality. The study revealed that we can help our students by establishing a supportive, released and respectful; learning environment; be warm and welcoming. Do not raise your voice when they ask for classification. Cultrate a spirit of co-operation and respect within the group Help participants to understand that everyone in the group is a student and that everyone is also a teacher:

**Harris (2006)** conducted a study on school leadership. The statistical reveals a wronging downward trend in the head teachers and principals across may educational system. The position is partly due to demographics but mostly. It is reaction to the challenging complexity and demands on those informal leadership roles in schools.

**Copland (2003)** noted that effective leadership in schools involved individuals both internal and external to a school. He also pointed that the leadership was a set of functions or qualities shared across a much broader segment of the school community that include administrators, teachers, and
other professionals and community members both internal and external to
the school.

Day et al. (2000) in their work on, “Leading Schools in Times of
Change” developed a model of ‘values-led contingency leadership’, which
included dimensions of values and vision, integrity, context, continuing
professional development, and reflection. They found that good leaders
were informed by and communicate, clear sets of personal and educational
values, which represented their moral purposes for the school.

Wafa, Ramaya, & Hoon (2000) in their study on leadership
behaviour and effectiveness among secondary school principals in Penang,
Malaysia found that (i) the leader behaviour of the principals did not have
an impact on their effectiveness as perceived by the teachers. (ii) There
was no significant difference between the teachers’ perceived leader
effectiveness of male and female principals. (iii) There was no significant
relationship between race, area of specialisation, and educational level of
the principals and their effectiveness. (iv) In general, female teachers
perceive their principals to be more effective than their male counterparts.

School Leadership” states that the distribution of leadership did not mean
that those in formal leadership positions, particularly the principal, can
abdicate their responsibilities. Distribution of leadership did not entail distributing the leadership functions in terms of delegation either.

**Hall & Lord** (1996) conducted a study on, “Multilevel information processing explanations of followers and leadership perceptions”. The study revealed that transformational leader was the leader who inspired people to excel and articulate meaningful vision for the organization. Leaders always try to build employee commitment in the organization.

**Sorenson & Machell** (1996) conducted a study on “Quality schools through quality leadership”. In this study, the investigator analysed the educational literature, replete with call or changes in the preparation program for school administrator. This paper contrast traditional administrator preparation program with one designed around the quality schools paradigm. The program emphasized administrator candidate selection, human needs, and the empowerment of others effective communication, development of human resources, organizational changes, effective planning and implementation of school upgrading. The program focuses on the role of administration as “stewards of themselves their communities and resources”.

**Lenkard** (1996) studied the “The leadership qualities and related factors which affect the attitude towards social life among the students of Stanford college”. The major objectives of the study were to (i) identify the
factors determining the leadership qualities (ii) identify the determinants of leadership qualities (iii) find out the correlation between the leadership qualities factors and attitudes towards social life among the students. This study consisted of a sample of 400 students. This study resulted that there is a correlation between the leadership qualities and attitude of students towards social life.

Spanbaver (1995) conducted a study on “Reorganizing community college Education through total quality Leadership”. It discusses the implementation of total quality leadership at Fox valley technical college. In Wisconsin, identifies twelve quality components of FVTC’s everyday management, highlights improvements in placement rates, student retention, employ satisfaction, accountability and costs attributable to total quality leadership.

Bulach & Malone (1994) conducted a study on the ‘influence of principal’s Leadership style on school climate and student’. Three survey instruments – The Leadership Behavioural Matrix, The Tennessee school climate inventory; and Group openness and Trust Scale- where administered to 20 principals and 506 teacher in 20 kentukky elementary schools. Using ANOVA procedures, comparison between school climate and leadership style revealed a statistically significant difference between leadership styles revealed a statistically significant difference between
leadership style and the involvement subscale of the school climate instruments. There were no significant difference for any of the other subscales of school climate or leadership style nor were there any significant differences between school achievement and leadership style.

Numkanisorn (1993) in his research on, “An Exploration of the Impact of the Principal Leadership Behavior on School Culture” concluded that the capabilities of principals to perform roles influenced student learning process aligned to school goals, school organizational structure and culture. He identified three types of roles played by school principals namely the roles of an instructional leader, a transformational leader and a transactional.

Leithwood & Stenbach (1993) conducted a study on “Total quality leadership: Expert Thinking plus transformational practice”. Total quality leadership is viewed as a combination of expert thinking and transformational leadership practice. The findings showed that school teacher may be highly expert thinkers but fail to act as transformationally as do their less expert colleagues. Transformational leadership theory is not sufficient for total quality leadership because it awards too little explicit weight to the mind of the leader.

Malloy & Janowski (1992) in their study on, “Perceptions and Meta Perceptions of Leadership: Components, Accuracy, and Dispositional
Correlates” found that social relations model to perceptions of leadership (e.g., amount of talking, friendliness, leadership), self and other perceptions appeared to be highly similar and in general quite accurate. It was apparent that good leadership practices would improve the student’s academic performance and teacher’s teaching abilities.

**Baile** (1992) investigated on leadership qualities of Assistant Associate Directors describes job responsibilities of assistant associate directors. Changes affecting libraries as a result of automation and their impact on management are discussed, and two studies of public and academic libraries that examined ratings of management skills and competencies by director and assistant directors are reviewed.

**Dulle** (1988) conducted a study related to future challenges of educational leadership. The author’s recounting of the findings of futurists is grouped under three trends, which will powerfully impact the future. They are: (i) entry of the post-industrial society into the information age, (ii) movement away from “the melting pot” of America towards an acceptance of cultural pluralism, and (iii) the shifting of demographics such as population, age, location and fertility in such a manner as to necessitate making the most of fewer human resources.

**Patresia** (1987) conducted a study titled “The effect of Social Leadership qualities and their implications on social perceptions among the
school children? This study had objectives of (i) to find out the social intelligence factors that influence the intelligence among intelligence quotient of the high school students. (ii) To identify the influence of leadership qualities and their implication on social perceptions among the school children. This study proved that the social intelligence factors have a positive influence on the intelligence on the intelligence quotient among the higher school students.

Viramani (1984) investigated on leadership styles and cognitive ability antecedents as performance correlates of educational leaders focused on heads of schools. The objectives of the study were: 1) to know whether leader’s traits were the ‘cause’ of leader’s styles and whether these in turn were the ‘cause’ of leader performance, both of the quantitative and qualitative kind, and (ii) to explore the possibility of existence of a new cognitive trait related with leadership processes. The major findings were:

1. The basic styles of heads of schools were not related to pass percentage/ first division percentage of students of their schools passing out of the Board examination.

2. Style flexibility of heads of schools was related to pass percentage of students of their schools passing out of the Board examination.
3. Style adaptability of heads of schools was not related to pass percentage / first divisioners percentage of students of their schools passing out of the Board examination.

4. Intelligence of heads of schools was related to their style flexibility.

5. Creativity of heads of schools was related to their style flexibility.

**Sergiovanni** (1984) conducted a study on “Leadership and Excellence in Schooling” and identified multiple dimensions of leadership termed as “leadership forces”. The leadership forces include technical, human, educational, symbolic, and cultural. An inclusion of the educational force was significant and illustrates early differentiation between the leadership of schools and that of other organisations described the educational force as “expert knowledge about matters of education and schooling”.

**Deshpande** (1983) conducted a study on leadership qualities among Junior college students in Vidarbha Region. Questionnaire for students, interview schedule for teachers and socio metric scale for selecting the mere the tools used. The major findings of the study were:-

1. Twenty four leadership qualities identified in the Junior college students.
2. There was no relationship between parent’s education and student leadership qualities.

3. The student leaders mentioned reading and games as their hobbies.

4. There was no significant relationship between parent’s economic status and student leadership qualities.

5. The percentage of leaders from various castes was nearly the same.

Ghosh (1965) investigated leadership characteristics in relation to political organization Leaders in traditional councils both at the village and caste levels, where men who were neither elected nor selected by the villagers. They were persons who commanded respect from their fellow men on account of their personal virtues. They were at the same time obeyed, feared, respected and probably liked. The decisions were almost always binding and rarely did they have to use the mechanism of social boycott to implement their decisions.

3.4 Studies related to Business Interest

Goutam & Vimlesh (2014) designed a study to determine educational and vocational interests of students of class VII to X. The aim of this investigation was to arrive at implications for their future curricula. A significant correlation was found in the preference order of girls of
classes VIII and X in the educational interest area, while a significant correlation was noted in vocational interest area.

Singli (2014) conducted a comparative study of vocational interest of secondary level students. In this research work, the researcher has tried to know and acknowledge the vocational interests of girls and boys of secondary students and to study the relationship between vocational interest and values of secondary level students. The findings of the study are that the girls were slightly more interested in literary, commercial, constructive, artistic, social and household fields but the boys were slightly more interested in scientific, executive, agriculture and persuasive fields than the girls.

Vijitha (2013) conducted a study on the effectiveness of generative learning model on achievement in commerce and business interest of students at higher secondary level. Findings of the study with regard to the total achievement in commerce point out that the students who learned through Generative Learning model have better achievement than those who studied through the conventional activity oriented method. The analysis of data with regard to the interest in between of students who learned through the application of Generative Learning Model (GLM) shows that the students who learned through the Generative Learning Model have more interest toward business than those learned through the conventional activity oriented method.
Gunderson & Margaret M. (2005) studied the influence of vocational education on students’ ultimate success. The study was focused to determine if vocational business education has influence on a student’s ultimate academic achievement high school graduation. This study consists of comparing students with no vocational/ business education experience to students with some degree of vocational, business educations. The results indicated that there was not statistically significant difference in grade point averages, standardized scores, absences and out-of-school suspensions. There was a statistically significant difference in in-school suspensions and withdrawals prior to graduation. All graduates who responded to the survey strongly agreed that vocational/ business education had a positive effect on their academic success.

Saraswati (1992) assessed the relationship between personality dimensions and vocational interests of pupils of standard X. The study was undertaken to investigate and find an answer to the questions to investigate and find an answer to the question whether various dimensions of personality of school students is related to their vocational interests. It was reported that the personality dimensions and the vocational interests of standard X students and academic achievement were not related either.
Bhargava (1991) investigated into the interests and difficulties faced by the students studying in vocational education stream. The major findings in this research work was that majority of students choose vocational education out of their interest while a smaller section joined it as they could not get admission in academic stream. Most of the students felt that vocational education was purposeful, interesting and important for enhancing employment and thereby leading to national development. The majority of parents opined that their wards were interested in vocational education and that it was better than pursuing academic education as it prepared them for employment and self-education.

3.5 Studies related to Academic Achievement in Commerce

Paul (2012) conducted a study on the area of challenge based learning strategy and stated that Challenge Based Learning strategy asserts students learn more and are more through active engagement when they are solving problems, especially authentic, real world one. The study explores higher secondary level student’s Effectiveness of Challenge Based Learning on the Academic Achievement in commerce and found that Challenge Based Learning is an effective instructional strategy on the Academic Achievement of commerce students at higher secondary level. Challenge based learning Strategy is also effective in developing skills of problem solving, creative thinking and decision making.
Roshan & Ara (2011) presented the summation of the proceedings of a workshop held in Jammu & Kashmir, Board of School Education on the significance of commerce education. The workshop highlighted that as far as entire business world is undergoing significant changes requiring advanced study and research there is a need for making student centered and strain free commerce curriculum and focused the need for restructuring the existing curriculum of the commerce.

Krishnamurthy & Amutha (2011) conducted a study entitled on “Higher secondary student’s achievement in commerce in relation to their emotional intelligence”, revealed that the higher secondary school student’s achievement in commerce is at moderate level. More over factors like, gender, locality and type of school make vital difference in the achievement of commerce students, whereas the factors like religion, family size and family income make no major difference. With regard to emotional intelligence, entire and sub samples fall in the category of average level of emotional intelligence, where Gender, locality and religion marks significant difference and type of school, family size and family income cause to significant difference. And it’s found that for both entire and sub sample wise of the higher secondary school commerce students, achievement is significantly related to their emotional intelligence.
Sajikumar (2011) conducted a study on “Effectiveness of certain behavior modification models on achievement in commerce among students at higher secondary level”. The study concluded that under suitable conditions, a considerable portion of the population can be brought to a level of achievement in the subject, interest in the subject and attitude towards the subject. The study suggested that by adopting behavior modification models in the classroom according to the needs of students, teachers can shape the instructions in a proper manner and to make it possible, it is desirable that in terms of behavior modification models, the teachers should have a fresh outlook at their teaching approach.

Arumugarajan (2008) conducted a study on “Abstract reasoning of commerce students studying in school”. In the study, it is said that the level of abstract reasoning ability of higher secondary commerce students is moderate, meanwhile the level of achievement of higher secondary commerce students is average. Also the study realized that with reference to abstract reasoning, there is significant difference between plus one and plus two commerce students at higher secondary level.

Vinayagamoorthy (2006) did a study on “Move with the world changes imminent in commerce education and curriculum” stated that commerce education is the backbone of business and that it should get updated with the changing trends, emphasize that if we should implement
the most modern skills blended with innovative teaching and best infrastructure on the institutions, we should ensure cost effective and professional excellence. Moreover opportunities should be provided to students to exhibit their skills, improve their communication skills, elicit their creativity, motivate leadership qualities etc. which all helps to make a better progress in their personality.

**Prabhuling & Dandin** (2005) presented a paper on “Commerce education and Industry interface” and pointed out that commerce education needs to be more competitive according to the corporate requirements in India and around the sphere. For marking the change there must be a skilled and applicable practical training exposure which is beyond the mere theory lessons and a valid conclusion is made by suggesting the best ones for managing the firms are none but the commerce students.

**Johnstone & Biggs** (1998) involved a study on “Problem Based Learning: introduction, analysis, and accounting curricula implications”. This study analyzes Problem Based Learning (PBL), a teaching method that may enable accounting educators to implement Problem Based Learning in their own curricula. The study concluded that Problem Based Learning is an appropriate means to implement in various curriculum transaction aspects of accounting discipline.
Aggarwal & Raj Rani (1997) did a study on “Effect of teaching strategies in relation to creativity on conceptual learning of Grade XI students of commerce”. The study found that advance organizer model and concept attainment model were found to be more effective than the conventional model in fostering concept learning and the advance organizer model and concept attainment model were significantly differing in the measures of concept retention while both were found equally effective in fostering concept learning.

Babu & Gnanaguru, Selvaraj (1997) conducted a study on “Teacher effectiveness and involvement in teaching of commerce at higher secondary level in Tamilnadu”. The study highlighted the effectiveness of teaching commerce. The study revealed that teacher effectiveness in teaching commerce was good and the involvement of teachers in teaching commerce and their effectiveness of teaching were found to be correlated significantly, in the higher secondary level.

Nancy (1993) in a paper on “Adopting commercial software in the accounting classroom: A focus on learning”, concluded that teaching students ‘how to learn’ must be the educational objective for accounting. The paper also provides an example for an accounting information systems class. Because “learning to learn” involves teaching students through
learning strategies, accounting educators need to find new ways to help students acquire these strategies in a versatile and dynamic environment.

Muthumanickam (1992) studied Academic Achievement of students of Higher Secondary Commerce Group in relation to their Reasoning ability, Socio-economic status and interest in Commerce. The study found that there is no statistical significant difference in the mean scores of boys and girls with respect to commerce achievement. The commerce achievement mean score of the subjects belonging to the government schools is found to be comparatively greater than that of the private schools and this difference in means between the two groups of students is found to be statistically significant. Subjects belonging to rural schools have secured comparatively greater commerce achievement mean score than those from urban schools and this difference in means between these two groups is found to be statistically significant.