CHAPTER I

THEORETICAL FRAME WORK

1.0. INTRODUCTION

"The purpose of education is not to produce people who loiter for jobs, but to produce responsible citizens". - Sardar Patel.

Education is the learning process by which values, attitudes, information and skills are acquired and integrated. Education is bound up with human race. Its boundaries are as wide as those of life. Its implications are rich and varied. It is a continuous process that occurs from birth to death. It is imparted in oral and written form. The UNESCO (United Nations Educational, Scientific and Cultural Organization) has defined literacy in very clear terms that ‘literate is an individual who is able to read and write, understand the sentences of daily life’. It should aim at all round development of students. It should impart knowledge and information and also develop character and personality. It should broaden the out look, develop skill and abilities and prepare the students for life and world.

Dreze and Sen (2002) deem education and health as important ‘enabling factors’ to enhance development. Education is the cornerstone of economic, social and cultural development of a country. An appropriate education system cultivates knowledge, better skills, positive values and attitudes among the people, especially those who acquire it. Education is the main force which influences the quality of life. It has assumed more importance today than even before because in its present role, it is adding new dimensions to our present and future scenario.
Education is a unique feature that plays the most dominant role in the life of mankind. A man who is fully educated is the real human resource and is considered as an important, valuable and tangible asset to the country. The economic development of the country depends fully upon such real assets. For the reconstruction of the society, education can be modified and made realistic. The aim of the education is not only the acquisition of information but also the development of that best of mind and attitude, which will make us responsible citizens. Education itself is the basic human right and used as a tool to make sensitive about issues and problems. It uses culturlization, conditioning, re-conditioning, learning or re-learning techniques to bring people within the redline zone to change behaviour.

The Latin word ‘education’ means “bringing out the potentialities of the individual for self development”. It has a very wide connotation. In its fundamental sense it is life itself. In an operational context it assumes several forms like primary education, secondary education, vocational education and higher education etc., each of these forms of education performs specific functions and thereby serves specific felt needs of a society. Primary education is most crucial stage of human life. It is the milestone to build up the beautiful building of total education process, and over all development of personality of human being depends on primary education. Hence, the National Policy on Education, (NPE, 1986) strongly favoured strengthening of the primary school education.

1.1. PRIMARY EDUCATION

The first decade of this millennium aims at Education for All (EFA). Every child has a right to education besides others. Article 45 of the Constitution of India has stated as a Directive Principle that the State shall endeavour to provide free and compulsory education to all children up to 14 years of age within 10 years of
commencement of the Constitution. The National Policy on Education (NPE, 1986) gives priority to Universalisation of Primary Education (UPE). Also, it recommended ‘access to elementary education with success’, ‘promotion of equity’ and ‘improvement of quality’. Quantitatively, India has made phenomenal expansion in primary education. The number of primary institutions has risen to 6,42,737, the number of primary school teachers has escalated to 1,98,539 and the students’ enrolment in class I-V has gone up to 110,985,877 in the year 2000. National Policy on Education (NPE, 1986) forced to improve the inattractive environment of school, unsatisfactory condition of school buildings, lack of facilities and teaching materials etc.,

The Operation Blackboard (OB) scheme was launched in 1987-88 with the aim to improve the human and physical resources available in the primary schools of the country. The scheme provided at least two rooms, two teachers and essential teaching – learning materials to every existing primary school.

The District Primary Education Programme (DPEP) was launched in 1994, as a major initiative to achieve the objective of Universalisation of Primary Education (UPE). The programme takes a holistic view of primary education development and seeks to operationalise the strategy of UPE through district specific planning with the emphasis on decentralized criteria.

The Sarva Shiksha Abhiyan (SSA) launched by the Government of India to universalise elementary education through community ownership of the school system may remove many of the problems associated with primary and upper primary schools. The Indian Government has made a commitment to the goals of the 1990 World Conference on Education for All, held in Jomtien, Thailand. It has set a good of providing education of good quality to all primary school-age children. Improving
the quality of primary education and using available resources more efficiently are priorities that no State can ignore. Efforts towards Universalisation of Primary Education (UPE) increased the number of schools, number of students and drop-out rates are on the decrease, but the question arises about the variation in the quality of education among different schools. Success and failure of any system of education has direct affinity with the effective and efficient teachers to a great extent yet other factors also play an equal important role in effective teaching-learning process viz., adequate infrastructural facilities and teaching-learning materials, socio-economic back ground of parents, interested and capable students, efficient administrators, smooth and effective interaction among students, suitability of curriculum, involvement of the community, regular supervision of schools by the higher authorities, in-service training of teachers and work load of teachers etc.,

The nation has made impressive progress towards achievement of the goal of Universalisation of Primary Education (UPE) in the last five decades. There has been enormous progress in terms of increase in the number of institutions, teachers and students in primary education. But the quality in primary education is still lagging far behind in the system.

Commercialization, memorization, in sufficient teacher- student ratio, demotivation, no definite aims, one sided assessment, poor monitoring and evaluation, poor tie-up between schools and DIETs (District Institutes of Education and Training), poor infrastructural facilities, unplanned expansion of primary schools, lack of research / extension activities and innovations, unfulfilling the expectations of the stake holders, lack of inspiring text books are the reasons for declining quality in primary education.
1.2. QUALITY IN PRIMARY EDUCATION

Although there has been a massive expansion of primary education during the last five decades in India, the quality of primary education has been a crying concern as reflected in the reports of various committees appointed from time to time by Government of India. The global crusade to Universalize Primary Education and improve its quality is now very much on the world agenda especially in the developing countries. Globally, there is overwhelming concern regarding the quality and relevance of education.

The Education Commission's (1964-66) observation is very significant which is evident from the following lines. "Quantitatively education at all levels has shown a phenomenal development in the post independence period. But qualitative improvements in education have not kept pace with quantitative expansion and national policies and programmes concerning the quality of education could be implemented satisfactorily". The National Policy on Education (1986) states: "the new thrust in elementary education will emphasize two aspects – (i) universal enrolment and universal retention of children up to 14 years of age, and (ii) a substantial improvement in the quality of education".

The term 'Quality' has different meanings for different purposes. According to Juran (1980), Quality is ‘fitness for use’. Crosby (1984) defined quality as, ‘conformance to requirement’. Ishikawa (1985) ‘quality product is one which is most economical, most useful and always satisfactory to consumer’. According to Deming (1986) ‘quality should be aimed at needs of the customers, present and future’. Franklin (1992) argues that the narrower definition of quality as fitness for purpose derives largely from the manufacturing sector. Harvey and Green (1993) provide a heuristic framework for attempting to define quality by suggesting that it can be
viewed as excellence, as transformative, as fitness for purpose or as value for money. Besides ‘quality’ emphasis is on ‘the continuity’. Indeed, quality is a never ending journey (Navaratnam, 1997). The word ‘quality’ is an expression of standard of educational inputs, processes and outcomes. The Oxford dictionary defines quality as ‘degree of excellence’. It is drawn from Latin word ‘Qualis’ such as, of what kind. Quality is a term generally used about relative characteristic of an entity or a system with respect to time and space. The term is mostly used in comparative form either over a period of time or between two and more entities / systems. The quality education thus means degree of excellence achieved in learning through systematic instruction.

In education, perception of quality is around student’s quality. The parameters can be prescribed and the institutions can be rated on the basis of their performance indicators pertaining to quality parameters. Such as, examination results, employment opportunities, reputation, standing of the institute in society etc., According to Verma (2004 a), quality in higher education can be defined in terms of satisfaction level of stake holders viz., students, teachers, parents, politicians, potential, employers, promoters, funding agencies and the public.

Generally, quality means meeting the expectations of customers. However, quality of education is more than meeting the expectations of customers. Further, measuring customer satisfaction at an educational institute might be regarded by educators as one of the greatest challenge of the quality movement. The technological definition of quality involves matching the technical quality of the product with the technological requirements through quality assurance during the educational process.
Quality of education at primary levels has some targets which is more focusing on students and their desirable achievements in scholastic and non-scholastic areas. Quality education should help every student to acquire communication skills (understanding, speaking, listening, reading and writing), knowledge, appreciation, and understanding in Mathematics, Science, language and Humanities. It should also help every student to develop analytical thinking and self understanding and a feeling of self worth.

Quality in primary education is a multi-dimensional concept, which should embrace all its functions and activities teaching and academic programmes, staffing, students, buildings, facilities, equipment, management, technology, services to the community and the academic environment. To attain and sustain quality, certain components are particularly relevant, notably careful selection of staff and continuous staff development, in particular through the promotion of appropriate programmes for academic staff development, including teaching / learning methodology. The quality in education strongly depends upon the quality teacher, quality materials, quality instruction and quality management.

1.3. MANAGEMENT

Management is the organ of the organization. It is concerned with both objective and subjective phenomena. It is concerned with productivity, which implies effectiveness and efficiency. It is the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims. It is responsible for organizing the elements of productive enterprise—money, materials, equipment, and people – in the interest of desirable ends. Management education is the process of learning values, attitudes, information and
skills to achieve desired relations between resources and objectives. In the educational sector, its objectives can be characterized as follows:

i. Management arranges for the construction of schools in as many locations as is feasible.

ii. Management delivers inputs to the schools.

iii. Management establishes a system of top-down supervision in an effort to ensure that the inputs are correctly deployed according to central guidelines and

iv. Management is responsible for producing the results in student learning.

All the studies of Govinda (2002) related to Basic Education in India, in all its dimensions in the post – NPE, 1986 phases indicated that; (i) the poor and the disadvantaged have not adequately benefited, (ii) gender equity-still a long way to go and (iii) quality improvement- still to receive serious attention and hastens to underline its relevance to India. The challenges and opportunities emerging in the quality of education every where in the world are of increasing complexity, resulting from a number of factors: (i) the ever-widening horizons of education, (ii) the quantitative expansion of educational institutions, (iii) the rapidly changing economic, social, political, management and technological context of education, and (iv) the continuing significant change in social expectations from education as a service. The blockade coming in the ways of quality education have to be erased with the help of Total Quality Management (TQM).

1.4. TOTAL QUALITY MANAGEMENT (TQM)

The term Total Quality Control (TQC) was coined by A. V. Feigenbaum (1983), Japan, TQC was later become Total Quality Management (TQM). It is a corporate business management philosophy which recognizes that customer needs and
business goals are inseparable. TQM is both a philosophy and a set of guiding principles that represent the foundation of a continuously improving organization. The mission of TQM is to exceed customer’s expectations; use best in class practices; eliminate defects; eliminate wastes and motivate all employees. The initiatives of TQM are voice of the customer, bench marking, and control cycle time and employees involvement. The concepts of TQM are the customer focus, make it a good place to works, and create a work culture for minimum utilization or resources and top management must be involved in all decisions.

The concept of quality has a very interesting origin. The idea was first developed in the 1940s by an American, Mr. Edward Deming, who tested it on industrial process using statistical techniques. Although the concept was an American, it was post-war Japan that quickly learnt the lessons of quality control using the ideas of Edward Deming and his associates Joseph Juran and Philip B. Crosby. The Japanese initiated the quality revolution by introducing it in manufacturing and then covering other sectors. The USA (United States of America) which enjoyed the advantages of a monopoly market ignored the compulsions of quality because American business could sell what they produced without difficulty. In the 1970s, with growing competition from Japanese products and loss of markets, the Americans started reflecting on the critical importance of quality. Total Quality Management (TQM) soon became a fact of life in American industry and service segments which continues up to this day. We in India cannot afford to ignore quality for 30 long years like the Americans and not lose our access to global markets. The philosophy of TQM has its relevance in educational institutions too. Implementation of TQM has been a major change in educational institutions for the past few years. The National Policies on Education 1968 and 1986 have a considerable impact on evolving and introducing
innovative practices in the management of school education and particularly the primary education.

The management is defined as the process of planning, organizing, actuating and controlling an organization’s operations in order to achieve a co-ordination of the human and material resources essential in the effective and efficient attainment of objectives.

Quality management, according to Mr. Philip B. Crosby (1984), implies an operating practice where all the transactions of the company are accomplished completely and where relationships with employees, suppliers and customers are aimed at making those successful. The main features of TQM have been succinctly summarized by Hill and Taylor (1991): “Essentially, it is concerned with organizational improvement through the identification and solution of problems by groups of employees at various levels in the structure. This problem solving is usually supported by the development of the teams and a focus on corporate goals. However, the teams primarily identify with problems of specific relevance to their own functions in order to engender a sense of involvement in organizational affairs. TQM is a holistic paradigm which recognizes that all employees can make an impact upon the quality of goods and services provided”.

Sallis (1996) defined it as, “the philosophy of TQM is large scale, inspirational and all-embracing, but its practical implementation is small-scale, highly practical and incremental. Drastic intervention is not the means of change in TQM”. TQM is incremental and success oriented; it builds success on success.

Total Quality Management has also been termed as Continuous Quality Improvement (CQI) (Frazier, 1997). CQI is not merely a terminology; there are significant implications of the concept. Frazier (1997) suggested six-stage road-map,
namely prepare, assess, plan, deploy, sustain and break-through. Navaratnam (1997) offered a six-stage quality journey plan: (i) awareness and self-assessment, (ii) training and team building, (iii) quality planning, (iv) implementation process, (v) comprehensive evaluation and (vi) continuous improvement.

Navaratnam (1997) identified the students, employers, universities, parents, community and government as the customers and stake-holders of school education. Key inputs to schooling are curriculum, students, teachers, support staff, administrators, managers, facilities, and classroom and government policies. Key processes are curriculum development, accreditation, teaching, enrolment, financing or funding, administration, management, students support services, community services, commercial activities, human resource management, facilities developed and promotion and marketing. Similarly, key out puts are educated and training graduates, research findings and community services.

TQM emphasizes on academic management (management of admission, curriculum, instruction, examination and co-curricular activities), personal management (personal recruitment and induction, staff development, maintenance of personal records, management of staff unions, conducting staff meetings, management of staff welfare, job allocation and management), financial management (budgeting, resource mobilization, resource development and optimization, resource utilization, accounting and auditing), infrastructural management (construction and extension of building, utilization and maintenance of infrastructure, library, laboratory, audio-visual aids, hostel, sanitation, sports and games facilities and vocational education facilities), linkage and interface (parents, old students, immediate neighbourhood and the community, transport and health), student services (management of a student information systems, guidance and counseling facilities,
student amenities, incentives and other facilities, involvement and student participation in decision making) and managerial excellence or managing people (understanding self, communication-oral and written, leadership, group dynamics and team building, decision making, conflict management, management of motivation and time management of change).

Total Quality Management (TQM) is a continuous process and formulates action plans, attends customer complaints, finds defective designs, gives education and training, executes one's talents, improves industrial relations, promotes team spirit, understands people, gives importance to inspection, recognizes organizational intelligence, makes innovations and does continuous on-line evaluation.

Total Quality Management (TQM) plays a vital role and improves the following aspects in the educational system: barrier-free atmosphere, attending to complaints, using an appropriate tools, seeking alternatives, instituting the need based training, maintaining effective human relationship, evaluating the input, process and output, listing out the requirements, creating happier working environment, working an opportunity to direct interaction between the staff and experts and generating product development activities. It aims to yield the following: satisfying the customer's needs, breaking the out dated rules, supporting the system, fulfilling the expectations, enabling fit into a current trends, successing of automation, preventing fears, improving quality, improving customer service, improving work culture and sustaining the highest quality. The applicability of TQM in education drew significant attention of many authors such as De Cosmo et al., (1991), Sherr and Lozier (1991), and Bonser (1992). They pointed out that educational institutions have turned to TQM for many of the same reasons the business have instituted quality programmes.
Total Quality Management (TQM) increases the intensity, extensity and velocity and changing the configuration of educational institutions’ power. It refers to the basic elements that include accessing infrastructures, teaching methodologies and teaching techniques, managing the functions of the organization, organizing of service process, filtering the errors in the process of the system, evaluating the teachers’ and students’ performance and distributing quality to the students. It is the process of improving the basic things and managing teachers to enhance organizational performance.

Total Quality Management (TQM) ensures an effective and efficient development of new knowledge, stimulates new ideas for promoting teaching and learning, creates organizational culture that motivates, promotes and rewards teachers to create and share their teaching experiences, catalyzes teachers for taking challenges to promote quality in teaching and learning, improves students’ service and encourages teachers to perform multifunctional responsibilities.

Prof. John Oakland (1993) stated that Total Quality Management (TQM) is a way of managing to improve the effectiveness, flexibility and competitiveness of a business. Total Quality Management (TQM) can at best carry out the following aspects: problems at present and future, shrinking the risk of continuation of the present ills, commissioning of designing the process, taking its implementation, including the mechanisms, authorizing the learners to solve problems on their own, providing its participants and opportunity to feel the satisfaction of achievement, teaching good leadership and fellowship and creating co-operation among employees of educational institutions.
Total Quality Management (TQM) is the process of ensuring highest quality on a sustained basis throughout an organization through the involvement of people working for the organization. The procedure of quality management should involve goals formulation, detailed plan of action, effective implementation, technological perfection, educating all concerned with quality movement, ensuring team work, mobilizing adequate resources, periodical monitoring, sustained progress record and doing right things. The Total Quality Management (TQM) approach helps the school system to understand what the students want and to provide it, immediately on demand at the lowest cost. It makes easy to create an excellent environment for promoting progress and success for primary school system.

In the Total Quality Management (TQM) totally refers to the whole institution, all staff, all functions and all students. This means the involvement of all the personnel including the students. It is all the activities of the overall management function that determine the quality policy, objectives and responsibilities and implement them by means such as quality planning, quality improvement within the quality system.

1.4.1. QUALITY PLANNING

Educational planning is a relatively new concept being utilized in more sophisticated school systems. Quality planning is normally used to provide an analysis for the planning of quality related activities. It is identifying the problems in input like infrastructure, institutional capacity, finance and academic resources and process like instruction, teaching methodologies and administration and output such as standard of students and their achievement and the quality of teachers. It also includes stating the requirements and quality objectives, determining the measurement process, milestones and targets and defining the quality improvement in primary education.
1.4.2. QUALITY CONTROL

Quality control means checking a particular product (service) against standards and rejecting any products (services) that do not measure up to these standards. It involves operational techniques and activities aimed both of monitoring a process and at eliminating causes of unsatisfactory performance at relevant stages of quality loop in order to result in economic effectiveness. It attempts to supervise on re-engineering the practices of primary education system. Besides, it involves the technical use of applied statistics for improving the quality.

The objective of quality control function at teachers' level, headmasters' level and inspectors' level is to involve with operational techniques and activities carried both at monitoring a process and at eliminating causes of unsatisfactory performance. Thus quality control is concerned with the feed back of the comparative information in order to regulate the process. The entire process of quality control is centered on the basic idea that process limits are so set that the process be readjusted before the outgoing product reaches to a limit of rejection.

The head of the institution must be sure of the activities under taken by the members of the institution towards the institution's stated goals. This is the controlling function of the head which involves three main elements: (i) establishing standards of performance, (ii) measuring current performance, (iii) comparing the performance to the established standards and (iv) if deviations are detected, taking remedial action. Through the controlling function, the head keeps the institution on its chosen track. However, control is a more pervasive concept, one that helps head monitor the effectiveness of their planning, their organizing and their leading and make corrective action as and when needed.
1.4.3. QUALITY ASSURANCE

Quality assurance is described as, systematic, structured and continuous attention to quality in terms of quality maintenance and improvement. It is system based on the premises that everyone in an organisation has a responsibility for maintaining and enhancing the quality of the product or service. Vught and Westerheijden (1993) identified four common elements in the emerging approaches to the external assurance of quality in higher education namely: oversight by a system-wide coordinating body; the centrality of the use of a critical self-evaluation; the use of academic peers as assessors/evaluators and the publication of a final report. It is a continuance process of adopting various norms, mechanisms and procedures to maintain standards in educational and professional inputs; institutional infrastructure; monitoring the process and performance; and on the basis of that undertaking suitable corrective measures to improve academic and professional standards.

Quality assurance consists of inspection and testing, quality audit system and reliability. It tests the standard of the teachers, their teaching skills, and instructional quality, standard of the academic resources, and availability and utility of physical facilities. The main purpose of quality assurance should be to prevent errors or to identify and eliminate causes of problems for ever. Corrective activities need to be based on analyses of past data so that the causes of problems are determined and taken care of permanently. It can help the primary school system to get barrier-free atmosphere, seek alternates for defective designs make joyful working environment and generate product development activity.

1.4.4. QUALITY ASSESSMENT

Progress and success for a primary school, therefore can materialize only when a school system accepts the assessment and in creating the conditions to enable
head teacher, teachers and students to fit into ‘self-appraisal’. Quality assessment is to measure the infrastructure status, curricular aspects, teaching-learning process and evaluation methods, academic resources, organization, management and standards of students. The relevant data are collected and analyzed so that the root cause can be identified. A range of possible solutions in generated and a selection is made from the solution which best meets the objectives. The solutions are associated costs, benefits and other implications are estimated and plans for action are developed.

A number of factors influence and control the quality of education. They are:
(i) home / family back ground (outside school) factors, (ii) school related factors and (iii) individual related factors. The essential task of Total Quality Management (TQM) is to manage these factors efficiently by creating opportunities, releasing potential, removing obstacles, encouraging growth and providing guidance so that management can achieve their own goals by directing their own efforts towards quality.

1.5. TQM AND PRIMARY SCHOOL

Total Quality Management (TQM) comprises all those techniques and procedures employed in operating the educational organizational in accordance with the established policies. It provides a clear vision and mission of the institution and leads the entire team for fulfillment of the goal. In the field of primary education, some key factors have had direct impact or a positive impact upon the progress of school children. In fact any school can be metamorphosed into a good institution of learning through meticulous attention being directed to parameters such as discipline, dedication, teaching quality, co-curricular and extra curricular activities, value system etc.
Total Quality Management (TQM) aims to achieve the quality school system. It facilitates purposeful leadership, involvement of teachers in curricular planning, consistency among teachers, intellectually challenging teaching, work oriented environment, record keeping, positive climate, and resource utilization in the school system.

1.5.1. TQM AND PHYSICAL FACILITIES OF THE SCHOOL

Physical and infrastructural facilities improve the quality of teaching – learning process. Both the teachers and students feel motivated and satisfied with adequate infrastructural facilities and create positive environment of learning. (Anand, 1996; Yadav, 1998; Chopra, 1998; Katara, 1999 and Srivastava, 1999). But in some studies, it was found that physical facilities including classrooms, play ground, laboratory, seminar rooms, furniture, library, canteen, and drinking water, residential accommodation for staff, hostel, and blackboards were not adequate (Patra, 1998; Reddy, 1999; Rana, 2001; Sethi, 2001 Selvam & Ravivarman, 2005).

The National Policy on Education (NPE, 1986) was the second major initiative to bring out the improvement in the quality of education. Government of India in collaboration with different States launched several programmes to actualize the goal of NPE – 1986. It includes Operation Blackboard (OB) scheme for providing minimum two large all weather room with verandah along with separate toilet facilities for boys and girls, provision of atleast two teachers and one of them a woman, and essential teaching – learning material including black boards, maps, charts, laboratory equipments etc., in primary schools. Total Quality Management (TQM) is crucial for expanding access and improving learning in India’s schools. It helps the schools not only to increase the provision of education facilities but also to improve the quality of education.
1.5.2. TQM AND LEADERSHIP

In educational administration, the head teacher is the hub of both administrative and educative processes; s/he is not only to be a visionary but also a dynamic leader to develop a congenial organizational culture. S/he is in the centre of a web of interrelationships between teachers, students, parents and the school administration. On his/her ability and skills depends the success of an educational system.

Head teacher is primarily responsible for giving a sense of direction to the activities, integrating the plans of various activities at the institute level and controlling, evaluating the total performance of the staff and students. The actions of head teacher are as much guided by the freedom of action which he earns for himself through the acceptance by the students, faculty and community. The head teacher should accomplish the task through consultation with appropriate authority rather than only rules and regulations. To exercise of minimum authority and to guide the staff as well as students and to win their support for his roles and ideas provides sound base for development.

Total Quality Management (TQM) trains the head teachers in some attributes such as self-awareness can (understanding of one's administrative style and behaviour pattern), self control (the ability to control one's disruptive impulses and moods and to think before acting), motivation (the ability to pursue goals and work with commitment without thought of personal benefit), empathy (the ability to understand and appreciate the feelings and emotions of other stake holders of the school) and social skills (proficiency in managing relationships, finding common ground and building bridges ) in order to succeed in his endeavor.
1.5.3. TQM AND PRIMARY TEACHERS

In an ideal educational management, teacher is the authority. S/He has the power, freedom, right and responsibility to carry on academic programmes. The most important input or capital for an educational institution is its teachers and if the teachers are motivated to give their best to the students, the quality of education is bound to be high. Education can be imparted only by a teacher and never by a method. Because of lack of stress on this aspect of education, the vital part of education remains incomplete. An ideal teacher's business is not only to inform but also to inspire.

The Education Commission Report (1966) says, “Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant”. Magnificent buildings and equipments are no substitute for a great teacher. Dedicated quality teachers are the most important ingredients of quality education.

Promoting quality education is one of the best contributions that we can make to the future of the national government, and all such agencies should work together to develop innovative policies and expand the existing programmes to promote the recruitment, retention and development of quality teachers.

Total Quality Management (TQM) empowers the capacity of the teachers by making them as possessors of desirable personal qualities, users of effective methods, creators of a good classroom atmosphere, masters of teaching skills and professional decision makers who has not only mastered needed competencies but learned when to apply them and how to use them. The obligations of teachers are not confined to the classroom but extend, along with other avenues, to the promotion of an effective
functioning of the school and the maintenance of harmonious relations and constructive understanding between the school and the community.

The following attitudes help the teachers to utilize Total Quality Management (TQM) to improve their classroom instruction: (i) an open mind, (ii) a willingness to change, (iii) a willingness to learn some new thing, (iv) a willingness to carefully monitor/assess/evaluate the teaching-learning process, (v) a willingness to learn about some new instructional techniques and how to use them effectively and (vi) a willingness to try new innovative teaching and learning strategies.

1.5.4. TQM AND SCHOOL CLIMATE

Educational management comprises all those techniques and procedures employed in operating the educational organizations in accordance with the established policies. The school and classroom climate significantly affects the academic achievement of students. It improves considerably in terms of child friendly; activity based pedagogical inputs and facilitating teaching-learning process (Sinha, 1998 and Gyanani, 1998 and Nagpal, 1999). The congenial and healthy climate was found more in open climate institution than closed climate institution (Zaman, 1998 and Kashinath, 2000). The behaviour of the head teachers was found more impartial and cordial in open climate (Chopra, 1998).

In a system of education based on independency, both the children and the teachers should act without any restrictions. Management of the school consists of “facilitating the development of goals and policies basic to teaching and learning, stimulating the development an appropriate programme for teaching and learning, and procuring and managing personnel and material to implement teaching-learning".
Total Quality Management (TQM) builds open climate in the schools. The open organizational climate enables teachers to achieve their best for the benefit of the students. Independency does not only mean doing what we want, but also doing what others want, to actualize certain goals in education.

1.5.5. TQM AND CLASSROOM TRANSACTION

Teaching is a social act whereas learning is a self act. Even without a teacher, the learner can learn. So teaching must be a two-way process. There must be interaction between the teacher and the learner. Learners should respond to the teaching. If the responses are satisfactory and favourable then can safely conclude that teaching has become very effective and the learners are benefited by it.

The main thrust is to help the teachers to make the class room transactional approaches more contextualized to the local conditions characterizing school and community. In classroom, a combination of various approaches like lecture method, demonstration method, group discussion, simulated teaching and inquiry approaches should be used in teaching-learning process (Aggarwal, 1996; Bhattacharjee and others, 1999; Reddy, 1999 and Nath, 1999). But many studies have found that all these methods were not used in class room teaching. Only lecture method was frequently used while teaching students; Khader, 1996; Yadav, 1998; and Mishra, 1998 and Sethi, 2001).

Total Quality Management (TQM) aims to make an instruction as a quality commodity. It trains the teachers to the following features – (i) specification of instructional objectives and (ii) optimal sequencing of learning activities and choice of suitable instructional strategies.
1.5.6. TQM AND INSTRUCTIONAL MATERIALS

The teaching-learning materials, curriculum, text books, blackboard, eraser, chalk, table for teacher, teacher’s guide, dictionary, books apart from children’s text books or library, maps, globe, charts, flash cards, play materials, games and toys, games equipment, Science kit, mini tool kit, Mathematics kit, musical instruments, supplementary and self-learning materials are essential for the growth and development of teachers and students.

The new curriculum and text-books, prepared under DPEP (District Primary Education Programme), MLL (Minimum Level of Learning) and SSA (Sarva Shiksha Abhiyan) projects generated interest, awareness and also developed competencies among teachers. The materials have colourful pictures including games, activities, puzzles and action songs. (Jayalakshmi, 1997; Padhi and Khamari, 1998; Mishra, 1998 and Srivastava, 1999). The self learning materials made learning easy, permanent and effective (Aggarwal, 1996; Patel, 2000; Patra, 1998; Garg, 2000 and Makwana, 2000).

Total Quality Management (TQM) plans to make effective, efficient and quality instructional materials. These instructional materials help teachers to provide activities, promote learning experience and create interesting classroom.

1.5.7. TQM AND TRAINING

Indian primary schools face the problem of declining school quality. Therefore, one of the important interventions is to provide in-service training to primary teachers regularly for improving their professional competencies and quality of education. The National Policy on Education (NPE, 1986) also emphasized in-service education of all teachers within a span of five years.
Teachers’ professional competence and commitment determine the quality of education to a great extent. Delors Commission (1996) has rightly emphasized that “there is need to update and improve teacher’s knowledge. In-service education is as good as the pre-service education, even better for quality improvement”. Most definitions of professional development emphasize its principal purposes as being the acquisition of subject or content knowledge and teaching skills.

Professional development of teachers begins with initial teacher preparation but continuous learning requires regular in-service education programmes. Many research studies have acknowledged that in-service education plays a significant role for professional development and making them competent teachers. These programmes help them to gain confidence, update knowledge, content and new pedagogy of teaching (Sree, 1995; Joshi, 1997; Das, 1998 and Rajput & Walia, 2002). Many training programmes were organized for teachers under DPEP and SSA, the provision of 20 days training for all teachers every year.

Total Quality Management (TQM) promotes powerful in-service programmes. The in-service programme is a powerful means to bring the benefits of the new ideas into the actual teaching-learning process. Such programmes help in moulding better teachers by improving their knowledge, providing ways to help them develop their competence, empowering them to under take innovative practices and by instilling in them a desire to do a better job of teaching.

1.5.8. TQM AND MONITORING

Continuous monitoring of various input measures is of great significance in improving the quality of in-service education, curriculum material, transactional approaches, information and communication technology, community support, physical facilities and school climate. Monitoring of pupil’s progress, good academic
climate for efficacious levels of achievements, strong administrative leadership, conducive instructional business and activities for pupil acquisition of basic school skills which are the most tangible and indispensable characteristics of effective schools. Some studies supported this view and found positive impact and results due to the provision of inbuilt mechanism of monitoring and evaluation in Special Orientation Programme for Primary Teachers (SOPT), Programme Of Mass Orientation for School Teachers (PMOST), State wide Massive and Rigorous Training for Primary Teachers (SMART-PT) and DPEP projects (Patra 1998; Srivastava 1999; Rama; 2001, Udgata; 1998 and Garg, 2002).

Monitoring and evaluation is an integral part of Total Quality Management (TQM) process. It helps in improving the quality of the programme by way of knowing the strengths, weaknesses and outcome of the programme from time to time and also providing remedial measures accordingly.

1.5.9. TQM AND COMMUNITY SUPPORT

The involvement of community in the educational activity of the school was stressed in the National Policy on Education, (NPE, 1986) and Programme of Action (POA, 1992). The 73rd Amendment (1992) of the Constitution envisages establishing Panchayat Raj bodies at village, intermediate and district levels where each Panchayat at village level would constitute a Village Education Committee (VEC) for the administration of education programme. The major responsibility of the VECs would be to mobilize the community to ensure participation of every family in elementary education.

In India after the implementation of District Primary Education Programme (DPEP), community mobilization and involvement turned over a new-leaf. The School Management Committee (SMC), Village Education Committee (VEC), Parent
Teachers Association (PTA), Mother Teachers Association (MTA) took part in the welfare activities of the school in respect of school buildings, organization of cultural activities and local festivals (Zaman, 1998; Ahmed, 1999; Das, 1999; Rao, 1999 and Garia, 2002) survey work in relation to education, cent percent enrolment of the children within age group 6 to 14 years, ensuring cent percent attendance of the children and checking drop out, beautification of the school campus, providing water and sanitation facilities including latrine and urinal facilities, raising corpus fund for the welfare activities of the school, donating free text books and uniforms to poor students, repairing the school building and boundary wall, preparation and supply of teaching-learning materials, checking teacher absenteeism, rewarding the competent and committed teachers and donating library books and other reference books for the improvement of the library.

The family makes critical contributions to student achievement from preschool to high school. When parents are involved in their children’s education at home, they do better in school. And when parents are involved in school, children go further in school, and they stay in school longer (Henderson and Berla, 2002). Academic achievement has been evidenced to be influenced by parental behaviour (Wilson, 1976).

Community participation has been emphasized by all educational programmes and policy perspectives. Generally, we tend to believe that help rendered by the community in the activities both academic as well as non-academic of the school is called community participation. But this is not always true. Some times they just attend the functions; motivate the children on the need of regular attendance; help in the educational activities and they can seek advice of the school for other village
activities. This means, it is the process of mutual sharing. Community participation may be spontaneous at times and seems to be reluctant at other times.

The failure at times to grasp one another’s difficulties and the misunderstandings that arise from it can be eliminated through the Total Quality Management (TQM) process. The Total Quality Management (TQM) analyses and diagnoses the community involvement on school process. It plans to improve the congenial climate in schools for paving road to seek community support for improving the teaching learning process. To create the interest of the community in their school and to make a personal bondage of friendship between the community and school is very necessary and Total Quality Management (TQM) will help to create this healthy atmosphere.

1.6. EDUCATIONAL TECHNOLOGY

The term Educational Technology (ET) was recognized in 1967 with the establishment of the National Council for Educational Technology in the United Kingdom. The United Kingdom Association for Programmed Learning promptly added “Educational Technology” to its title in 1968.

The Definition and Terminology Committee of Association for Educational Communication and Technology (AECT, 1977) presented the following definition: “Educational Technology (ET) is a field involved in the facilitation of human learning through the systematic identification, development, organization, and utilization of a full range of learning resources, and through the management of these process. It includes, but is not limited to, the development of instructional systems, the identification of existing resources, the delivery of resources to learners, and the management of this process and the people performing them”.

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Instructional problems are analysed and solution sought through the application of knowledge about learning, learners and media resources. Instructional Technology procedures often result in the creation of new instructions by increasing its effectiveness and efficiency (Locatis & Atkinson, 1984).

The concept of Educational Technology (ET) means the sum total of all educational facilities, media, methods and techniques for optimizing learning. According to this Educational Technology (ET) is characterized by four main features-(i) the description of objectives to be achieved by the learner, (ii) the application of principles of learning to the analysis and structuring of the subject matter to be learned, (iii) the selection and use of the appropriate media for presenting materials, and (iv) the use of appropriate methods of assessing the performance of the learners to evaluate the effectiveness of courses and materials.

Educational Technology (ET) concerns the efforts to provide appropriately designed learning situations which bring to bear the best means of instruction. The means of instruction may involve modification of the learners' environment through techniques of presentation, arrangements of learning activities and organisation of the social and physical surroundings. Its major purpose is to facilitate and improve the quality of human learning.

Educational Technology (ET) implies an approach that makes use of pertinent scientific and technological methods and concepts developed in philosophy, psychology, sociology, linguistics, communication and related fields. The concept of Educational Technology (ET) encompasses a bipartite arrangement of 'technology of education' and 'technology in education'. 'Technology of education' is the base sector which deals with the study of principles, theories, concepts and methods in the instructional process, whereas 'technology in education' refers to the study of use of
different media such as audio-visual aids, television and computer to make the instructional process more efficient and effective. According to Grayson (1972) "Educational Technology involves the application of scientifically tested principles of learning to an instructional environment in a consistent and coherent manner. It incorporates the media and may also involve hardware materials and methods of instruction". This view has also been supported by Tickton (1970 & 1971), Carnegie Commission on Higher Education (1972), Saettler (1978) and Siebert (1982).

The five domains of Educational Technology (ET) are: (i) design (message design, instructional strategies and learner characteristics); (ii) development (print technologies, audio-visual technologies, electronic technologies and integrated technologies), (iii) utilization (media utilization-to bring learners into contact with learning resources and instructional system components), (iv) evaluation (problem analysis, measurement, formative evaluation and summative evaluation) and (v) management (project management, resource management, management of delivery systems and diffusion of innovation).

Educational Technology (ET) aims at maximizing and individualising learning and making it more relevant and productive. It widens the horizons of the classroom and the outside world. Therefore, the potential of Educational Technology (ET) could be explored towards excellence in education. It can be channelised towards communication of knowledge and skills from teacher to student.

1.6.1. EDUCATIONAL TECHNOLOGY IN NPE

Educational Technology (ET) has been given a specific place in the National Policy on Education (NPE, 1986) by the provision of a separate section titled, "Media and Educational Technology". It is interesting to note that in this major policy document, Educational Technology (ET) is equated to Media Technology which
forms only a part of Educational Technology. Thereby, Educational Technology (ET) is one-dimensional. On the contrary, these are several statements spread over different chapters in the NPE (1986) and POA (1992).

1.6.2. EDUCATIONAL TECHNOLOGY FOR PRIMARY SCHOOLS

Childhood years are significant for intellectual growth and personality development. It is the period of maximum learning and as such is crucial for education of the child. Every child is endowed with the built-in physiological as well as neurological mechanism for learning. This mechanism is, however, to be exploited therefore, felt imperative to make primary school an attractive place for children and to make its programmes interesting to them. Learning in the primary school should be made joyful and entertaining instead of making it dry and drab. Once children are inspired and motivated, they must take interest in learning from the tender age and that would bring down the present high percentage of wastage and stagnation at the primary stage. With a view to making learning interesting as well as effective, various media and materials should be used in the primary schools. They should be inexpensive and easily available. Education and entertainment can be well integrated through their use and children’s learning can be joyful activity. Educational Technology (ET) like films, television, radio programmes will not only serve the students living in far-flung areas but also make their education effective and interesting. This will help and reducing wastage and stagnation.

1.6.3. EDUCATIONAL TECHNOLOGY FOR EFFECTIVE TEACHERS

The teacher has to restructure the environment for effective learning and utilize Educational Technology in an integrated manner. Educational Technology (ET) seeks to integrate the relevant principle of psychology, sociology, linguistics,
communication and other allied fields. It attempts to incorporate the management principles and resource development, systems analysis and cost effectiveness. It comprises various media and materials ranging from a picture and chalk stick to computer and satellite. But teacher has to utilize them appropriately in right place, in right manner and in right time. These media and means are to clarify and reinforce the learning experiences and further the progress of the learner.

1.7. TQM AND ET

Schools in India have now realised the importance of Educational Technology (ET) in imparting effective education to the students. There is considerable hope and some positive evidence that Educational Technology can expand and improve education at all levels with special reference to the design and content of instructional materials, delivery, and assessment and feedback. The National Policy on Education (1986) envisage a dynamic use of Communication and Educational Technology for enhancing the institutional and learning inputs of formal and non-formal educational arrangements.

Educational Technology (ET), generally, means the application of technology to education in order to further the cause of the later. By and large, it means the use of radio, television, video cassette players, video / data projectors, audio-input devices, multi media networks, authoring systems, simulation / animation packages, graphics / statistics software, image enhancement packages graphic aids, display boards, 3 dimensional aids, experimentation, field trips, demonstrations Dramatics, programmed instruction, teaching machines and Computer Assisted Instruction (CAI), Video Assisted Instruction (VAI), team teaching, co-operative learning and such other technologies, techniques, strategies, activities which can help individuals to learn on their own.
Studies conducted in India and abroad reveal that the wise use of Educational Technology is one of the most important factors, to improve the quality of instruction. Teaching aids comprise the world of both audio and visual media, and involves learning experiences like providing concrete examples, conducting experiences like nature-study, field trips, participating in exhibitions, fairs, conducting demonstration in the class room etc.. Teaching aids have been found to be effective in developing clear concepts and better comprehension (Goel, 1985). The use of Computer Assisted Instruction (CAI), in education and improving teaching - learning strategies at formal levels can not be underestimated (Paul, 2003 and Raja, 2003). The use of Over Head Projector (OHP) in the classroom increased the interaction among the participants (Ramaswaminathan, 1999). Besides these, many studies supported that the use of equipment and teaching aids had increased the effectiveness of teaching. These aids had made teaching-learning easy, interesting and without burden (Jangira, 1994; Sree, 1995 and Yadav, 2000).

Total Quality Management (TQM) gives an unprecedented opportunity to enhance skills of teachers in instruction. It facilitates the teachers, with a comfort feeling of using technology and conversant with new technological tools, resources and approaches that ensure that all the pieces are put in place and apply them appropriately. It helps teachers to acquire knowledge on using the educational communication media and other technologies. According to the above discussions, this study has been taken by the investigator.

1.8. STATEMENT OF THE PROBLEM

Primary education is facing challenges as emphasis is shifting from advice to intervention, one time training to continuous learning and on the job training, and from national to international operations. There is an increasing emphasis on reducing
cost without compromising on quality. In this changing context, Total Quality Management (TQM) can be used to make conscious efforts to plan for high quality products which have the requisite characteristics to fulfill the needs of the user-industry and society. The need for inculcating Total Quality Management (TQM) culture in primary schools is recognized.

For understanding the relationship between Total Quality Management and Educational Technology in Primary Education, there are no reference points to start with. There is a hope that Total Quality Management (TQM) brings greater dividends to quality teaching and learning process. If the schools fail to maintain quality and standards in the present-day highly competitive world, the sovereignty of a nation will stand threatened. Total Quality Management (TQM) has thus come to acquire a pride of place in the management of the school. The primary facets of advantages emerge from the facts that Total Quality Management (TQM) in education enables teachers to understand and evaluate new technology options, enhance their intellectual capital, gain insights in their areas of operations, create a flexible and effective organizational structure and tap the potential of Educational Technology (ET). For achieving the excellence in teaching and learning process, the teachers should select Educational Technology (ET).

Total Quality Management (TQM) enables to optimize the classroom's value by promoting the attitude towards Educational Technology (ET) among teachers. Taking into account with these sentiments, the present study "The Attitude of Primary Teachers towards Total Quality Management in Relation to Their Attitude towards Educational Technology" was taken up.
1.9. NEED AND SIGNIFICANCE OF THE STUDY

The emphasis on quality in education is a matter of recent concern. It is obvious that quality in education may be determined with respect to how it develops individuals with exceptional qualities, consistency in process and criteria for evaluation, the value for men and materials involved in the educational process and how it brings out changes in the learners in terms of cognitive, affective and psychomotor domains of human development. It is the need of the hour to improve quality in primary educational system.

Total Quality Management (TQM) is being used for promoting quality in educational systems. In brief many trends such as students' enrolment, physical infrastructure, capacity and competency of teachers, motivation, training needs, instructional issues, institutional and organizational structure, academic accountability, competency outcomes, standardizing and adaption to learner-consumer demands, technological fluency are influenced by the Total Quality Management (TQM). Of late, Total Quality Management (TQM) as a management process is faced with newer challenges particularly owing to invasion into educational system that is being offered all rounds and working environment having become more volatile and complex.

If an organization is to survive and grow in the emerging competitive environment, everyone working in it should be pursuing value adding activities in classroom practice with prior defined goals and objectives. The platform for such activities is derived by the use of Educational Technology (ET) in a widespread manner. The proper application of Educational Technology (ET) with the operations of management can fuel the acceleration of excellence in education.
Total Quality Management (TQM) would have a liberalizing influence on educational systems, by making teachers sensitive to and ultimately capable of utilizing the resources and new technologies for improving the effectiveness of instruction. What is however common to most educational institutions in the world as of now, practice Total Quality Management (TQM) in the face of increased demand for enhanced teaching and learning process? It is our belief that attitude towards Total Quality Management (TQM) has to increase the attitude towards access of Educational Technology (ET) among primary school teachers. This research will carry out the practical analysis of "The Attitude of Primary Teachers towards Total Quality Management in Relation to Their Attitude towards Educational Technology".

1.10. SCOPE OF THE STUDY

There is an increasing emphasis on reducing cost without compromising on quality. In this changing context, Total Quality Management (TQM) can be used to make conscious efforts to plan for high quality products which have the requisite characteristics to fulfill the needs of the user-industry and society. The need for inculcating Total Quality Management (TQM) culture in primary schools is recognized. There is no such thing as a long-term, sustainable, competitive advantage without a sustainable effort for continuous improvement.

The essence of the strategy should be the establishment of a Total Quality Management (TQM) culture, through the realization of its three axioms-commitment, scientific knowledge and involvement. The interdependence of those axioms makes it easy to characterize the Total Quality Management (TQM) environment fully, as well as to define clearly and in brief what we mean by Total Quality Management (TQM):

"Total Quality Management is a culture; inherent in this culture is a total commitment
to quality and an attitude expressed by everybody’s involvement in the process of continuous improvement of products, processes and services, through the use of innovative scientific methods”.

There is a hope that Total Quality Management (TQM) brings greater dividends to quality teaching and learning process. If the schools fail to maintain quality and standards in the present-day highly competitive world, the sovereignty of a nation will stand threatened. Thus Total Quality Management (TQM) has come to acquire a pride of place in the management of the school. The primary facets of advantages emerge from the facts that Total Quality Management (TQM) in education enables teachers to understand and evaluate new technology options, enhance their intellectual capital, gain insights in their areas of operations, create a flexible and effective organizational structure and tap the potential of Educational Technology (ET). For achieving the excellence in teaching and learning process, the teachers should select and use Educational Technology (ET). Much reference material is not available to find out the relationship between Total Quality Management (TQM) and Educational Technology (ET) in primary education.

The Total Quality Management (TQM) as an approach and philosophy offers a significant opportunity for its adoption to improve educational quality in a holistic manner. Educational Technology (ET) is the basic necessity for teaching and learning. It is a tool to achieve instructional objectives. If the teachers practice Total Quality Management (TQM) and Educational Technology (ET), they will be in a position to fulfill the educational objectives and national goals. The present study is intended to identify the relationship between the attitudes of primary teachers toward Total Quality Management (TQM) and Educational Technology (ET).
1.11. OPERATIONAL DEFINITIONS OF KEY TERMS

The operational definitions of the important terms used in the present study are discussed and defined herewith.

1.11.1. ATTITUDE

Attitude is the predisposition of an individual to evaluate some aspect of his world in a favorable or unfavorable manner. The aspect of his world that he evaluates includes symbols, objects, ideas and people. Fishblin and Ajzen (1975) have noted, to separate the concept of attitude from behavioural intentions and actual behaviors, both of which are open to a variety of sources of influence.

1.11.2. PRIMARY TEACHERS

The teachers who are handling the classes from standard I to V in primary schools are called primary teachers.

1.11.3. TOTAL QUALITY MANAGEMENT (TQM)

The main features of Total Quality Management (TQM) have been succinctly summarized by Saylor (1992): "The Total Quality Management (TQM) philosophy provides overall concept that fosters continuous improvement in an organization. This philosophy stresses a systematic, integrated, consistent organization-wide perspective involving everyone and everything. It focuses primary emphasis on total satisfaction for both internal and external customer, within a management environment that seeks continuous improvement of all processes and systems".
1.11.4. EDUCATIONAL TECHNOLOGY (ET)

The word 'technology' is derived from the Greek word 'technique' meaning 'art of skill'. It is concerned with the development, application and evaluation of system, techniques and aids to improve the process of human learning.

1.12. OBJECTIVES OF THE STUDY

The study was designed and conducted for achieving the following objectives:

1. To develop and validate a tool for measuring the attitude of primary teachers towards Total Quality Management (TQM).

2. To develop and validate a tool for measuring the attitude of primary teachers towards Educational Technology (ET).

3. To study, whether there is any significant relationship between the attitude towards Total Quality Management (TQM) and Educational Technology (ET) among the primary teachers.

4. To find out, whether there is any significant relationship between Total Quality Management (TQM) and Educational Technology (ET) attitude scores of primary teachers with respect to Teacher variables.

5. To find out, whether there is any significant relationship between Total Quality Management (TQM) and Educational Technology (ET) attitude scores of primary teachers with respect to Institutional variables.

6. To find out, whether there is any significant difference between Total Quality Management (TQM) attitude scores of primary teachers with respect to Teacher variables.

7. To find out, whether there is any significant difference between Total Quality Management (TQM) attitude scores of primary teachers with respect to Institutional variables.
8. To find out, whether there is any significant difference between Educational Technology (ET) attitude scores of primary teachers with respect to Teacher variables and

9. To find out, whether there is any significant difference between Educational Technology (ET) attitude scores of primary teachers with respect to Institutional variables.

1.13. HYPOTHESES OF THE STUDY

Based on the objectives of the study the following null hypotheses are formulated:

1. There is no significant relationship between the Total Quality Management (TQM) and Educational Technology (ET) mean attitude scores among the primary teachers.

2. There is no significant relationship between the Total Quality Management (TQM) and Educational Technology (ET) mean attitude scores with respect to the following Teacher variables - (i) gender, (ii) age, (iii) religion, (iv) marital status, (v) experience, (vi) general educational qualification and (vii) professional qualification.

3. There is no significant relationship between the Total Quality Management (TQM) and Educational Technology (ET) mean attitude scores with respect to the following Institutional variables - (i) locale of the school, (ii) medium of instruction and (iii) type of management.

4. There is no significant difference between the Total Quality Management (TQM) mean attitude scores of primary teachers with respect to the following Teacher variables - (i) gender, (ii) age, (iii) religion, (iv) marital status (v) experience, (vi) educational qualification and (vii) professional qualification.
5. There is no significant difference between Total Quality Management (TQM) mean attitude scores of primary teachers with respect to the following Institutional variables - (i) locale of the school, (ii) medium of instruction and (iii) type of management.

6. There is no significant difference between the Educational Technology (ET) mean attitude scores of primary teachers with respect to the following Teacher variables - (i) gender, (ii) age, (iii) religion, (iv) marital status (v) experience (vi) general educational qualification and (vii) professional qualification and

7. There is no significant difference between the Educational Technology (ET) mean attitude scores of primary teachers with respect to the following Institutional variables - (i) locale of the school, (ii) medium of instruction and (iii) type of management.

1.14. METHODOLOGY IN BRIEF

In the present study, the survey method has been adopted. The sample of the study consisted of primary teachers of Thanjavur district in Tamil Nadu. The sample was selected by disproportionate stratified random sampling technique. Teachers' Attitude Towards Total Quality Management (TATTQM) and Teachers' Attitude Towards Educational Technology (TATET) were used in the present study for data collection. The data was collected by administering above mentioned two tools on individual teachers. On completion of the tools, scoring was done by the investigator and then the obtained data were analyzed by ‘r’ and ‘t’ test.

1.14.1. VARIABLES OF THE STUDY

The Teacher variables (gender, age, religion, marital status, experience, general educational qualification and professional qualification) and Institutional
variables (locale of the school, medium of instruction and type of management) were considered for the present study.

1.14.2. SAMPLE FOR THE STUDY

Population of the study consisted of primary teachers of Thanjavur district in Tamil Nadu. For the selection of sample, the stratified random sampling technique was applied. 619 teachers were selected from the primary schools located in Thanjavur district of Tamil Nadu State. They were divided into groups in terms of male and female, below 40 years of age and 40 years and above 40 years of age, Hindu and non-Hindu, married and unmarried, below 20 years and 20 years and more than 20 years of teaching experience, graduates and higher secondary graduates, diploma and degree holders, rural and urban school teachers, Tamil and English medium school teachers and Government and aided school teachers.

1.14.3. TOOLS FOR THE STUDY

The following two tools were employed in the study.

1. Teachers' Attitude Towards Total Quality Management (TATTQM).
2. Teachers' Attitude Towards Educational Technology (TATET).

Both the tools have adequate validity and satisfactory reliability.

1.14.4. STATISTICAL TECHNIQUES USED FOR THE STUDY

The following statistical techniques were used to analyse the data.

1. Correlation coefficient to find out the correlation among the variables and
2. 't' test to find out the significance of difference between the variables.
1.15. LIMITATIONS OF THE STUDY

The following points were the limitations of this study.

1. Thanjavur district is a backward area of Tamil Nadu.
2. The private management schools are limited in number.

1.16. DELIMITATIONS OF THE STUDY

Keeping in view the background of the problem and research design and resources available with the investigator the present study has been limited in this way.

1. The sample has been drawn from the primary schools in Thanjavur district of Tamil Nadu.
2. 619 primary teachers were considered as sample for the study and
3. Certain specific type of variables and types of schools were considered.

1.17. PLAN OF THE STUDY

The thesis has been organized in five chapters. The first chapter deals with the introduction to the study. In the second chapter a review of relevant literature found in India and abroad is presented. In the third chapter, the details about the construction of tools, data collection, organization, scoring etc, are presented. Chapter four deals with a detailed analysis of statistical data and their findings and the fifth and last chapter explains the important results of the thesis and also suggests valid recommendations for future requirements in this area.

1.18. CONCLUSION

In this chapter, conceptual frame work of the present study was made. The next chapter deals the review of related literature.