Education is one of the most crucial factors in empowering people with skill and knowledge and in giving them access to productive employment in the future. Educational quality is absolutely essential for the steady progress of a nation. Quality of education in every stage is thus a serious concern all over the world (Hanushek & Woesmann, 2007; Vegas & Petrow, 2008). This becomes all the more important in the age of globalization which ensures that only the fittest can survive. The changing global scenario and resultant major changes have had their implications in all sectors. The field of education is no exception to this. Therefore, it is inevitable to provide quality education and equip the learner with the ability to face the growing challenges of this complex world (Government of Kerala, 2003-04). The Education Commission, while describing the role of education in the social and economic transformation of India, has commented that the destiny of India is now being shaped in her classrooms (NCERT, 1966). As per the Human Development Index\(^1\) (HDI) of UNDP, 2011, India ranks 134\(^{th}\) with HDI value of 0.547, while the HDI value of the world in the same period is 0.682. This means, India stands behind 133 countries of the world, in terms of HDI value and is grouped among the countries with medium human development. In 1980 the HDI was 0.344 and it is reported to have an average annual growth rate of 1.56

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\(^1\) Human Development Index (HDI) is a composite index, measuring average achievement in three basic dimensions of human development – like a long and healthy life, knowledge and a decent standard of living (UNDP, 2011).
from 2000 to 2011. India’s Education Index\(^2\) was 0.232 in 1980 which has improved to 0.450 in 2011 (Chakravartty & Gupta, 2006; UNDP, 2011). Within India, when different states are compared, there is quite a disparity in the progress of education. Kerala stands miles ahead of the other states of India, in terms of, a number of important social development indicators, education being one among them (Government of Kerala, 2011). Kerala has attained this growth in education, not in a short period of time, but through the enlightened efforts of the rulers, from the very early times and the intellectual pursuit of the people, spread through several centuries (Menon, 2007).

On April 18\(^{th}\) 1991, Kerala was declared as a totally literate state (Government of India, 2008). The present literacy level in Kerala, as per the 2011 census, is 93.91 per cent. It also claims to have the narrowest disparity among male and female literacy. The level of disparity in literacy among different districts in Kerala is also very low (2.6 per cent)\(^3\). Kerala also has the lowest school dropout rate (0.81 per cent in 2006-07) when compared to other Indian states (Government of India, 2008). Kerala boasts wider distribution of schools, increasing the accessibility to education by having schools even in the remotest regions with more than 3/4\(^{th}\) of the schools in rural areas. Thus, educational accessibility is equitable, region wise and also gender wise (Government of India, 2008; Government of Kerala, 2010; George & Kumar, 1999).

The government and other educational agencies are in a relentless pursuit of improving the quality of education, and have been churning out quality improvement programmes and schemes. The initiation of technology

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\(^2\) Education Index, refers to the mean years of schooling, which is the average number of years of education, received by people aged 25 and older, converted from education attainment levels, using official durations of each level (UNDP, 2011).

\(^3\) Computed from the data on literacy of different districts in Kerala, as per 2011 census. (Government of India, 2011).
in various functions of the education department like payroll management through ‘Service and Payroll Administrative Repository for Kerala’ (SPARK) programme, common admission, via, ‘Centralised Allotment Process for Higher Secondary Courses’ (HSCAP), are contributing factors to the upgradation of quality in the educational department in Kerala (Government of India, 2008). The National Education Policies and schemes, sponsored by the Union Government, such as Minimum Levels of Learning (MLL), Universalisation of Elementary Education (UEE), District Primary Education Programme (DPEP), Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA), are all quality upgradation efforts of the government, which are expected to have remarkable impact on school education in the state (Government of Kerala, 2011). Improvements have also been introduced in the curriculum, through the introduction of continuous and comprehensive internal evaluation of students together, with the learner centered and activity oriented teaching methodology that intends to ensure better academic performance of students. The activity based, process oriented and learner centered pedagogy has been introduced in the schools from the 1\textsuperscript{st} standard onwards and it was continued in the higher secondary classes from the year 2005 (SCERT, 2006). The teachers have been equipped to handle the new methodology of teaching and learning. Clusters are formed as quality circles to pave way for serious academic deliberations and interactions among teachers. All these quality improvement initiatives could be brought under the broad spectrum of Total Quality Management (TQM). Nomenclature may be different, but the intention is nevertheless the same, which is, to satisfy the customers of education by constantly and continuously improving educational service, through the whole hearted efforts of everybody involved in the process. This is absolutely the true essence of total quality management.
Chapter 1

Earlier Studies

The application of total quality management as a panacea to the problems of achieving quality in education has been receiving a lot of attention worldwide (Blackiston & Sabatella, 1996; Chatson, 1994; Crawford & Shutler, 1999; Cunningham, 2007; Dheeraj, 2004; Doraiswamy, 2005; Edwards, 1991; Hill & Taylor, 1991; Kanji, Malek, & Tambi, 1999; Kaufman, 1992; Kwan, 1996; Murgatroyd & Morgan, 1993; Ngware, Wamukuru, & Odebero, 2006; Sallis, 2002; Sharples, 1996; Shejwalkar, 1999; Sherr & Lozier, 1991; Hansen, 1993). Literature, regarding quality assessment in education in different levels of schooling, is plenty across the world. Quality assessment studies at different school levels are numerous in India, detailing the process of quality efforts and signaling the flaws in the system to remedy (Dheeraj, 2004; Doraiswamy, 2005; Bagalkoti, Devi, & Hedge, 2006; Benjamin, 2012; Chakravartty & Gupta, 2006; Mukhopadhyay, 2001). A fruitful review of some of those studies, international, national and regional are made here.

Ngware, Wamukuru, & Odebero (2006) investigated the extent to which secondary schools practiced aspects of TQM. The study found that the Board of Governors and chairpersons in secondary schools were not providing the necessary leadership that would promote TQM practices, necessary for schools’ continuous improvement. However, some head teachers were providing the required leadership with a considerable number of school managements, empowering their employees. Majority of schools were not committed to strategic quality planning, though, they do promote human resource development initiatives. The application of TQM in higher secondary school education was studied by Handa (1992) and he found that the implementation of TQM is to be based on a target of zero defect, clear
understanding of the role and responsibilities of everyone, recognition of efforts and everybody rewarded from bottom to top, meeting customer requirements at lowest cost, first time and every time, effective team work at and across all levels and divisions, and everybody working for continuous improvement. A similar study by Williams (1993) on the concept of TQM and its application to higher education also argues that continuous quality improvement, staff and student participation, meeting customer needs and coordination, help to increase the quality of higher education systems, even if, these institutions are not market oriented. Yet another study was the one conducted by Jie & Idris (2009) for evaluating the general perception of post graduate students on TQM in Malaysian universities and its effect on determining the attractiveness of the place of study. The major findings were that the quality of service and student focus, positively affect attractiveness of the place of study.

A conceptual model based on Baldrige National Quality Award (BNQA) for implementing TQM in higher education and a research instrument with which one could measure the total quality management practices in an educational organization, was developed by Mahadevappa (2006) and the TQM model implied that the leadership of an educational organization has a direct impact on the system. Kaudpal (2004) did an experimental research study in validating a quality education model, developed by the researcher, for secondary schools following CBSE pattern in India. It was found that the quality education model significantly enhanced the academic performance of class IX students of Naval Public School, New Delhi. Attempt for measuring quality of education by Chakrabartty and Gupta (2006) contributed towards the formulation of a quality index in education by combining a number of quality parameters to form a single index using a
geometric mean approach. The investigator considered the percentage enrolment in government schools, pupil-teacher ratio, student-classroom ratio etc as the quality variables.

Rany(2008) aimed to find out the prevailing classroom management practices of teachers in the higher secondary level and compared it on the basis of gender, type of management of school, experience of teachers and qualifications. The study intended to develop a module on behaviour management strategies for teachers at the higher secondary level and to find out the effectiveness of self learning packages and in-service teacher training material developed. A basic experimental design, adopted, included a pre-test and a post-test. A classroom management inventory developed and standardized was administrated on 422 teachers at higher secondary level. The major findings were that the prevailing classroom management practices of teachers at the higher secondary level were not satisfactory at all. Male teachers, as well as, qualified teachers show better performance, with respect to, classroom practices of management strategies in the select four dimensions viz., advance planning before the beginning of an academic year, management of physical arrangements, evaluation management and instructional management. Teachers, working in private management schools, showed better performance than teachers in government schools.

Some other studies in higher secondary school education, related to, assessing the educational aspiration of students and assessment of the functioning of Parent-Teacher Associations. One such study on the educational aspiration of higher secondary school students by Vaidya (2006), found that the educational aspiration of students has increased in the society and boy students from urban areas, students from non-governmental schools, and students from science stream are found to have higher educational
Introduction

aspiration. A study, on the problems and functioning of PTA in higher secondary schools, was done by Swaminathan (2003), by assessing the structure, financial position, the role in school development activities, problems faced; and functioning of PTA as per the guidelines of the government and to assess whether there was homogeneity of agreement among the head master, parents, and teachers, regarding the functioning of PTAs, but found that the PTA was not functioning properly.

Studies, assessing educational quality and its association with teacher quality, teacher-pupil ratio, school materials and infrastructure and school expenditure, were also found. Such an interesting study was the one, done by Behrman, Khan, Ross, & Sabot (1997), which pointed out that cognitive achievements in mathematics and reading are correlated positively with student exposure to the teachers, teacher-pupil ratio and teacher quality and that quite surprisingly, neither the school materials nor infrastructure are significantly associated with cognitive achievement. Similarly, Das (1974) ascertained the impact of physical facilities of primary schools on the retentive power and effectiveness of educational programme and found that better physical facilities contributed to the attractiveness of the school, thereby increasing the retentive power of the school. The attempt of Heyneman & Loxley (1983), was to bring out the effect of primary school quality on academic achievement. This study was conducted in twenty nine countries and found that the variation in the test scores as a consequence of lower quality of primary education is higher in countries like Botswana, India, Thailand, Bolivia, Colombia and El Salvador, but it was lowest in countries such as Sweden, Japan, Australia and United States. Uline, Wolsey, Tschannen, & Lin (2010) explored the interplay between quality facilities and school climate, studying the effects of facility conditions on student and teacher attitude,
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behaviour and performance within the school. Teachers, on an average, gave more importance to the condition of school facilities and it was considered twice as important as student demographic variables and thirty per cent more important than salary. The findings hint that aesthetic aspects of physical learning environment play a prominent role in creating and sustaining a productive learning climate within the schools.

Harter (1999) enquired about the relationship between school expenditure, comprising of, payroll, purchased services, materials and other operating expenditures, and student performance and found that education expenditure does not produce increased achievement levels. Similarly, Manvikar (1983) assessed the relationship between components of expenditure and components of efficiency. The major findings were that the government and corporation schools were less efficient than private unaided and private aided schools and that the major part of the schools’ total expenditure (55-70 per cent) is incurred on teacher salaries and that the total expenditure is not significantly related to school efficiency.

Comparative studies on the achievement levels between public and private schools, rural and urban schools, and between schools in different geographical regions have been done by different researchers. One such study was done by Veeraraghavan & Arunkumar (1988), bringing out the difference in achievement levels of schools on the basis of, type of school, like, public school, missionary school, government run urban schools and government run rural schools. The study also analyzed, whether teacher effectiveness and motivation have an impact on school effectiveness. Major finding of the study were that, there was significant association between the type of school and school achievement. The government schools have been found lagging behind the other types of schools in achievement. It was also found interesting to note...
that, the presence of teacher effectiveness results in higher school achievement. Bhat (2006) compared the academic achievements in public and private elementary schools and the socio-economic status (SES) of parents of V and VIII class students enrolled in both type of schools. The socio-economic status and academic achievement, and school quality and academic achievement, were found positively correlated. The institutional expenditure and academic achievement were inversely correlated in public schools than in private schools. The quality components namely academic and non-academic manpower facilities and co-curricular facilities emerged as significant factors in determining academic achievement in private and public schools. However, two other components of school quality, namely, curricular facilities and infrastructure, were not found to be significant determinants of academic achievement in both private and public schools. Salim (1999) identified and analyzed the factors, causing differences in educational development between different regions. Besides bringing out the reasons for the differences in the educational development of two villages, the study identified that full promotion, inadequate commitment of teachers, lack of physical facilities and lack of interest of students in studies as the main reasons for the low quality of school education.

There are studies which show that the perception about quality varies among different stakeholders of education. Bagalkoti, Devi and Hegde (2006) assessed the students’ perception of quality in higher education and measured the influence of university education on students’ academic, social and personal growth. The study also found that the perception of quality changes from person to person, therefore, the society, government, parents, employers and students have their own perception about the quality of higher education.
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It was found that available facilities like employment information and career counseling, Information and Library Network (INFLIBNET) facility etc, were not effectively used. Moreover, teaching was a passive process and did not involve problem solving activities. A study conducted by Rajani (2009) about human resource development in higher education in Kerala, found that the quality of higher education in Kerala is poor and highlights the importance of introduction of human resource development practices in higher education in Kerala (Rajani, 2009). Research study on total quality management in higher education conducted by Viswanathan (2007) reveals the poor quality of higher education and suggests that, by introducing human resources practices in educational institutions the quality of teachers can be improved and thereby the quality of education (Viswanathan, 2007).

Research works, which have significantly brought out quality aspects of education in the primary, secondary and higher secondary levels, comprising of classes from standard I to XII and also in the higher education, have been included in the above review. Studies on the application of TQM in education and on the building of quality education models were also found and included in this review. However, a comprehensive study assessing quality management in higher secondary education in Kerala, after the special quality drive programme – Activity Oriented Learner Centered Curriculum in 2005 - could not be found. Moreover, so far, no study has made a comprehensive assessment of teachers’, students’ and parents’ satisfaction on higher secondary school education in Kerala. In this background, a pioneering and exclusive study on the application of total quality management in higher secondary school education in Kerala becomes inevitable. The present study is quite relevant and justifiable as it makes an attempt to fill this gap.
Statement of the Problem

Quality of education equips one to meet the challenges existing in the society in terms of competition and innovation, and therefore, it is considered desirable to apply the concepts of total quality management in education (SCERT, 2006). Of lately, the quality of education in Kerala is on the downhill of progress (Government of Kerala, 2004), even though, quantity-wise the progress is astounding, as evidenced through the study reports of NCERT and such other agencies and individual research endeavors. Studies on an all India basis, conducted by National Institute of Educational Planning and Administration (NIEPA) and other studies like the Mid term Assessment Survey (MAS), conducted in 1997, show that there is improvement in the average performance of students in language and mathematics over 1994 to 1997, but still, the mean score across the states is low and far below the expectations. The situation in Kerala is also not different. The percentage of students in Kerala, not achieving ‘minimum levels of learning’, is high. This is further confirmed through the surveys conducted by voluntary agencies like Kerala Sasthra Sahitya Parishat (NCERT, 1966; Kumar, 1998; RamaKrishnan, 1998; Prakash, Gautam, Bansal, & Bhalla, 1998). Parents and people in general are not satisfied with achievements made by government run schools and private aided schools. This is one of the reasons for the flight of students in search of quality to other schools and for the increasing number of uneconomic schools (Prakash, Gautam, Bansal, & Bhalla, 1998).

The above scenario called for a drastic change in each of the components of the system of higher secondary education, starting from the administration, right down to the individual schools. It is in this background, that the applications of the concepts of TQM in education are being experimented on a large scale in Kerala. The government has been taking
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initiatives for imparting training and education to teachers for imbibing the philosophy of TQM into them; significant changes were made in the curriculum and in the administration of the education system. Massive efforts are also being taken with respect to building infrastructural facilities. In 2004, following the “Total Quality”, envisaged by the educational authorities, a vision-mission statement was developed in a Training Need Analysis (TNA) Workshop and ever since it has been used in all official documents (Government of Kerala). The vision envisages a central agency of the state government to promote all round excellence in higher secondary education, by establishing appropriate philosophies, adequate institutional network, effective administrative systems, and well qualified, competent and motivated staff necessary to carry out academic and administrative responsibilities. The mission provides to serve as a professional institution in formulating and maintaining the standards of higher secondary education and in providing need-based, time-bound, effective and sustainable services to the students and teachers (www.kerala.gov.in).

Curriculum envisages the teachers to do lesson planning for achieving the curriculum objectives, and this is considered vital for delivering quality education within the available time span. However, it is alleged that only a few teachers engage themselves in the process of planning for classroom transactions and in its implementation. Another area of quality initiative introduced was in the method of evaluating students. The continuous and comprehensive evaluation of the learning process is introduced by applying activity oriented; student centered learning and evaluation strategies. There have been apprehensions among the teaching community with regard to the effectiveness of such quality initiatives and the negative impact it might have on their workload. The total quality encompassing involvement of everybody concerned, is met by building teams,
which function like ‘quality circles’, popularly called as ‘clusters’, where periodical academic deliberations and training are provided. It is desired that the teachers would actively participate in such endeavors. Observations throw light on the facts which are contrary to what is desired. It is doubtful that the agenda of quality improvement efforts in the higher secondary education in Kerala has struck with some amount of disapproval and reluctance to change from the part of the teachers and related authorities.

However, the fruits of such quality initiatives cannot be overlooked at any cost. Therefore, it is highly inevitable to evaluate the quality improvement initiatives of the government, leading to the successful implementation of TQM process in the higher secondary school education in Kerala. It is indispensable for our education system to achieve success in its quality pursuit with the whole hearted support of the teachers and other stakeholders. The satisfaction of the students, parents and other stakeholders are to be given prime importance, so that, they continue to enjoy the benefits of one of the worlds largest, reasonably priced, more or less free education, equitably provided to all sections of the society, whether rich or poor, to all types of castes and creeds. It is important to sustain the life of this unique system of education. These intriguing thoughts pose the following research questions regarding the implementation of total quality management through ‘Activity Oriented Learner Centered Curriculum’ and other quality initiatives in Kerala.

1. Does the process of continuous improvement in planning for classroom activities, as envisaged in the new activity oriented curriculum, as part of application of total quality management, work well?

2. Is the process of ‘continuous and comprehensive internal evaluation’ implemented, as envisaged?
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3. Are the clusters, formed for the purpose of training and educating the teachers, so as to enable them to deliver quality education, effective?

4. Are the teachers, students and parents of the higher secondary school education satisfied?

5. What similarities and dissimilarities are observed among the government, aided and unaided schools and among teachers teaching different subjects with respect to continuous improvement and teamwork?

Scope of the Study

The present study is confined to the assessment of the extent to which the characteristics of TQM are present in the higher secondary school education in Kerala, by eliciting the opinion of the teachers, students and parents in the government, aided and unaided higher secondary schools, coming under the Directorate of Higher Secondary Education, Kerala. The study specifically tries to assess continuous improvement present in teaching, teachers, evaluation and infrastructure, extent of teamwork among teachers and also the extent to which customer satisfaction has been attained. The study has also engaged in identifying the problems faced by the teachers in the implementation of TQM.

Objectives of the Study

The study has been designed with the following objectives in view;

1. Assess the continuous improvement in teaching, teachers, evaluation and infrastructure, as part of application of TQM in higher secondary school education in Kerala.
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2. Examine the team work among teachers, as part of application of TQM in higher secondary school education in Kerala.

3. Examine the customer satisfaction attained, as part of application of TQM in higher secondary school education in Kerala.

4. Identify the problems in the implementation of TQM in the higher secondary school education in Kerala.

Hypotheses

Based on the above objectives, the following hypotheses were formulated for the study.

1. The overall continuous improvement achieved, as part of application of TQM in higher secondary school education in Kerala, is moderate.

2. The continuous improvement in teaching, teachers, evaluation and infrastructure, as part of application of TQM in higher secondary school education in Kerala, is the same, irrespective of, the type of ownership of the schools, location of the schools and subject taught.

3. The overall team work achieved among teachers, as part of application of TQM in higher secondary school education in Kerala, is moderate.

4. The opinion of the teachers with regard to overall teamwork, as part of application of TQM in higher secondary school education in Kerala, is the same, irrespective of, the type of ownership of schools, location of schools and subject taught.

5. The overall satisfaction level of teachers and students achieved, as part of application of TQM in the higher secondary school education in Kerala, is moderate.
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6. The overall satisfaction of teachers in higher secondary school education in Kerala is the same, irrespective of, the type of ownership and location of schools.

Operational Definitions

The following terms are given definite connotations for unambiguous analysis and reporting.

Moderate Continuous Improvement is a condition that the summated mean score, of the opinion of the respondents with respect to the variables assessing continuous improvement, is equal to 3, i.e, the central value of the Likert-type scale of measurement.

Moderate Teamwork is a condition that the summated mean score, of the opinion of the respondents with respect to the variables assessing teamwork, is equal to 3, i.e, the central value of the Likert-type scale of measurement.

Moderate Satisfaction is a condition that the summated mean score, of the opinion of the respondents with respect to the variables assessing satisfaction, is equal to 3, i.e, the central value of the Likert-type scale of measurement.

Methodology

The study is descriptive in nature examining the application of TQM in higher secondary school education in Kerala. It is concentrated on the three important tenets of total quality management namely; continuous improvement, teamwork and customer satisfaction, and the opinion on these three tenets were elicited from the respondents, selected as sample. (Model given in page no: vii.)
The population of the study comprises of, the teachers, students and parents belonging to the government, aided and unaided higher secondary schools coming under the Directorate of Higher Secondary Education in Kerala. There were 760 government higher secondary schools, 686 aided and 461 unaided higher secondary schools in the state in the year 2010-11 totaling to 1907 higher secondary schools in all (Government of Kerala, 2011).

From the total number of schools in the state, about 1.5 per cent (30) schools were selected for the sample through a multi-stage sampling process. Schools were included in the sample proportionately from, government, aided and unaided sector. Thus, 13 schools were included from government, 11 from aided and 6 from unaided higher secondary schools. For getting a complete representation of the state (14 districts in all), it is divided into three zones, northern, southern and central. From each of these zones a district was selected and from each district government, aided and unaided higher secondary schools were selected proportionally. Thus altogether 10 schools were selected from each district (Table 1.1).

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<tr>
<th>Table 1.1 Selection of Sample</th>
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<tr>
<td>Government</td>
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<td>Aided</td>
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From each of the school selected, 10 teachers, 10 students, 10 parents were selected. Thus data were collected from 300 teachers, 300 students and 300 parents. The teachers who are having minimum five years experience and the students of the plus two classes and one parent of each student selected are included in the purview of the study.
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The present study has made use of both primary and secondary data. The teachers, students and parents were the source of primary data. Formal and informal interviews with the principals and managers of higher secondary schools and the officials of the Higher Secondary Directorate and SCERT were made to clarify the institutional views on many points. The secondary data were mainly collected from the published reports of the Directorate of Higher Secondary Education, the Directorate of Public Instruction, Economic Reviews of various years and other published reports.

The opinion of the teachers, students and parents were collected using a pre-tested structured survey schedule (given in Appendix 1, 2 and 3). The opinion of the respondents was marked on a five point Likert-type scale. The survey schedule was developed by considering the variables in the works of previous researchers and from the pilot study conducted by the research scholar. The survey schedule was modified on the basis of feedback from the pilot study conducted on 30 respondents.

Data collected were analysed using appropriate statistical tools and results were presented in appropriate forms. Percentage analysis and descriptive statistics were computed for identifying the nature of the data. The hypotheses are tested using Z test, one sample t test, one way analysis of variance (ANOVA) along with least significant difference test for comparison between more than two groups and independent t test for comparing between two groups and also correlation. The level of significance was fixed at 5 per cent. In order to identify the dimensions of the problems faced by the teachers in the implementation of new curriculum, factor analysis on a set of thirty six statements with the Principal Component Analysis as an extraction method and Varimax as Rotation method with Kaiser Normalization was performed.
Bartlett’s Test of Sphericity and KMO measure of Sampling Adequacy were performed to confirm the suitability of the data for factor analysis.

**Period of study**

The study sought the opinion of the teachers based on their experience for the last five year period ending on 31\textsuperscript{st} December, 2011. The parents and students of the plus two classes were asked to give out their opinion based on their experience in classes XI and XII.

**Limitations of the study**

The primary data were collected from the students, parents and teachers of the higher secondary schools and there is possibility of biased responses which is inherent in sample surveys. However, conscious efforts were made to cross check such contradictions at the source itself and minimize them to the extent possible.

**Organization of the Report**

The thesis is organized under eight chapters. The first chapter provides an introduction to the study. It includes a review of the literature, in the order of relevance to the present study and the research design. The second chapter describes the concept of quality with special emphasis on the quality of service especially education, the concept of total quality management and its application in the field of education. The third chapter unveils the history of school education in Kerala and evolution of higher secondary school education and also discusses the educational programmes of quality up gradation. The fourth chapter deals with the assessment of continuous improvement in teacher, teaching, evaluation and infrastructure. The fifth chapter examines the teamwork among teachers at school resource group level and at cluster level and also the overall teamwork among teachers in higher secondary school.
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education in Kerala. The sixth chapter examines the level of customer satisfaction, in the higher secondary school education, taking into account the satisfaction of teachers, students and parents. The seventh chapter deals with the identification of the problems of implementation of total quality management. The eighth chapter presents the major findings, suggestions and conclusion.