3 Research Framework and Research Hypothesis

3.1 Prologue

From the previous chapter, it is studied that, although there are copious studies that have focused on different issues of quality management in the educational institutions of the world, still there are many issues in education which seems to have received less or no attention (Sahu, Shrivastava, & Shrivastava, 2013). However, the modern scenario of competition, not only with the global but local primary educational institutes has forced many existing and new primary educational institutes to change their approach towards providing better quality primary education to the students.

TQM is a complete and organized methodology available in support of perfections in school performance. Quality promoters had recognized some critical principles for effective TQM practices (Saraph et al, 1989); and also from literature review analysis as studied in chapter 2 in this paper.

3.2 Theoretical Research Framework

Irrespective of any discipline, theoretical research framework is essential for conducting research at the initial phase only. A theoretical framework is a conceptual exemplary of how a researcher uses the concept to theories or relates logical aspects of the relationships among various indicators that have been identified as important to the research problem. Further, it explores into how these indicators are created, spread, approved and adapted over space and time (Scott, 2001); (S.Kannan, 2009). Based on this philosophy, the present research looks at principals and teachers’ perception and adoption of the TQM indicator in the study, which eventually will solve quality issues faster and in a smooth way. In this chapter as discussed earlier various theoretical models describe the indicators of TQM which are relevant to this study.

The author, in this research defines TQM as the integrated practice of nine management processes, whose implementations are closely related and aimed at improving school performance and attaining job satisfaction of the teachers in the primary school.
3.3 The Researched Indicators of TQM

TQM can possibly upgrade internal performance as well as improve main concern result. In spite of studies suggesting a solid association between TQM practices and performance, there has been minimal observational exploration to examine recounted proof on the impact and the shared trait between TQM constructs and performance and efficiency. This research indicates the relationship, between education system in primary schools and TQM indicators, which increases the overall school performance and which, further helps to attain job satisfaction among teachers.

3.3.1 Customer Focus

Quality begins with customers and ends with customers (Sarkar, 2000). The objective of quality is to satisfy the customer by meeting their needs. Thus, the very first step is to recognise and describe the quality targets (Singh, 2000). Customer satisfaction is at the core of total quality management which is the result of several processes in the organization (Mandal, 2005). Customer requirements are moving targets, which have to be constantly examined, identified, and satisfied. Thus, according to the customer needs, appropriate products have to be designed, modified, produced and supplied (Singh, 2000). Developing a successful customer service system can be one of the most rewarding goals, you achieve for your company. According to (Mandal, 2005), customer focus means not only expressing what the customers want, but also manipulative internal system and processes within the organization where alarm for customers and customers’ needs get rooted in the organization’s processes and related activities.

An organization implementing TQM will be responsible for a quality product to the customer who will in turn increase productivity and decrease cost (Gopalan, 2014). Understanding your customer is critical to the quality process (Arcaro, Quality in Education, 1977). Webster defines a customer as “one that purchases a product or service” (Joseph & Berk, 1995). Education largely belongs to a human service enterprise which is more or less narrowed to a customer base. The broadest definition of a customer as defined by (Joseph & Berk, 1995), is the person, department, or organizational unit that next receives the value added product, service, or client. Thus, this definition makes us understand that at certain point in the process, everybody is
considered and treated as a customer. For a school, internal customers are the students, parents, teachers, administrators, staff, and school management which are within the educational system (Gopalan, 2014). Whereas the external customers are society, families, the military, employers, and higher education which are external to the school but use the output of the educational process (Joseph & Berk, 1995).

The author’s beliefs

- That to attain quality in education, an assurance to customer focus and a commitment to constructing an environment in which teacher and student can do their best is required.
- The customer must be placed at the centre of the TQM process, as customer focus is a part of the process that leads to continual improvement in the school and in turn results better performance and satisfaction.

### 3.3.2 Top Management Support

The term top management has gained currency in the last few years and has often been synonymously used with improvement, upliftment, and contribution. It is rightly said that, as the driver of any vehicle has to be perfect and good, similarly is the importance of top management who are the leading drivers of TQM activities. For a successful quality improvement implementation in any organization management’s role has been highlighted as one of the essential requirement (Crosby, 1979.; Ghobadian & Speller, 1994). TQM cannot be fully implemented if there is lack of commitment from top management (Hoffherr, Moran, & Nadler, 1994). As cited by (Mandal, 2005) that American Management Association has defined “Management, that can be used as guiding human and physical resources into dynamic organization units which attain their objectives to the satisfaction of those served and with a high degree of morale and sense of attainment on the part of those rendering services”. In general (Zabadi, 2013); and (Chowdhury & Paul, 2007) have argued that top management has an ability to create vision and promote change which is at the heart of successful implementation of TQM.

The principal reasons for the failure of quality improvement in an organization is due to indifference, and lack of involvement and commitment of the top management support (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005).
Further to support this, (Dale, B. and Cooper, G., 2000) emphasis that product and service quality delivers a significant professional opportunity which is the key professional strategy. TQM being considered as a strategic decision philosophy, thus without the support of top management team one can’t achieve quality. There is a strong relationship between the organization’s business achievement and the top management’s understanding of the TQM philosophy. Commitment of top management in TQM implementation will permit the employees to follow their direction and way of working.

Deming said that exclusive if the top administration can comprehend the organization as an unpredictable framework, they can effectively enhance the structures of the framework (Kumar, 2009). As it were, top administration need transformational initiative expertise. Then again, the part of centre administration in starting and systematizing little, incremental enhancements has been noted by (Frohman, 1997). However, the literature is silent about the role of middle management i.e. is the principal of the school in organisational transformation towards TQM. The literature review could not come across any study which identifies effective principal leadership styles which supports a transformational top leadership style in a school’s journey towards TQM.

Without total and demonstrated commitment of the top management team, principals and teachers of the schools, nothing much will happen and if anything does, will not be permanent. The management will have to take interest and cheer personally, lead the process, provide directions, and exercise transformational leadership (Magwaza, 2007). In TQM implementation some of the specific roles played by the top management as suggested by (Magwaza, 2007); (Oakland, 2001); (Mandal, 2005) includes:

- Should be both visionary and missionary.
- Accept for quantum change by the total quality management process to attain quality.
- Go through quality training and education.
- Assisting in development of policies and goals. Motivate to see strategic direction.
- To run the organization with a sense of competition for better performance.
- Listen to the employees and understand their behaviour.
- Build a relationship of trust and empower other educators to continuously improve quality.
- Providing required resources for improvement as per the changing needs of the customers.
- Providing appreciation and sincere recognition for those who contribute to the quality mission
- Invite Feedback and comments.

According to (Joseph & Blanton, 1998) and (Juran & Gryna, 1988), to demonstrate commitment to quality, the management should establish a quality council which would coordinate the company’s various activities regarding quality. (Njie, Fon, & Awomodu, 2008) suggests that, this can be achieved by training employees frequently and empowering employees for the quality of their work. Thus, employees’ empowerment and improved level of job satisfaction can be facilitated by top management support and commitment to the goal of customer satisfaction in TQM organization.

(Emerald, 2005), emphasized that, for a successful use of the management theories top management should not lose focus on their managerial duties to achieve long term goal, and has to actively participate in decision implementation. Finally, full involvement and commitment of the top management support in work process, follow-ups, and an atmosphere of free flow of information and communication will show path towards success of an organization.

Though the principles of TQM sprung from the business but, according to Deming’s philosophy, the quality management can be easily applicable to the school system (Ireh, 2014). Educational institutes that have adapted quality programmes show that TQM brings out the best in educational process and management (Bonstingl, 1992). The success of TQM is the responsibility of the top management support in the educational sector. Thus, the author in this study emphasises on the top management support to quality, and performance of the school.

(Tlhapi, 2011), believes that, the culture of the school will change if all the educators are ready for the quality transformation by actively participating and are prepared to change their attitudes where necessary. Subsequently, the culture of the school will
change. According to (Bonstingl, 1992); (Pineda, 2013); and (Ireh, 2014) school management must focus on

- Creating the environment in which students can best achieve their potential through the continuous improvement of products and services in the educational process and also teachers’ and students’ work together.
- To enable employees – teachers, administrators and other staff to improve their skills and performance.
- To eliminate problems that impinge on teachers and schools.
- Increase their job satisfaction.

Lack of adequate training for teachers and staff will result in lack of quality. Thus, to achieve quality, top management support is very important as they are accountable for every activity in the school who further, influences educators to perform best and turn schools into Total Quality Schools (Arcaro, Quality in Education, 1977); and (Ireh, 2014). The duty of top management support is to inspect how the principal guides the school, determines strategies and action plans, sets school values, performance expectations and how the school addresses its responsibilities to the students, parents and other stakeholders. It addresses distribution of plans for better process and how activities are measured and sustained (Manaf & Seng, 2010). Without concerted, evident, and constant dedication to making TQM principles and practices part of the deep culture of the organization, efforts are bound to fail.

### 3.3.3 Relation

The relationship an employee has with his or her supervisor is a central element to the employee’s affiliation to the organization, and it has been argued that many employee behaviours are largely a function of the way they are managed by their supervisors (SHRM, 2012). To have successful implementation of TQM in an organization employee’s relations within the organization is must. According to (Mohammed, Alharthi, Alharthi, & Saleh, 2014), a strong and good relationship between employees, with the administrators, management, customers, and within the departments will lead to positive results on organization. The concept of TQM emphasises on team work, continuous improvement and this requires involvement of all employees and a healthy relationship among all the employees of an organization, institution, or a company
Good communication and relationship with the employees enable faster flow of information, thereby increasing the process of continuous improvement towards quality.

Further, the major source of employee turnover is related to management issues which alone speaks to the multiple repercussions the employee / management relationship has on an organization. Developing operative communication practices and respecting employees’ work and opinions lead to better relationships between managers and their staff (Shrm, 2014). According to (Jaafreh & Al-abedallat, 2012); (Ho, Duffy, & Shih, 1999), Correlation examination on the evaluations given by two unique respondents from the same organization demonstrates that representative relations emphatically encourages the utilization of value information and reporting, the outcomes likewise show that worker relations and training have direct affect quality execution which, further, identifies with consumer loyalty. Professionals are encouraged to manufacture a steady domain with a solid accentuation on human and authoritative angles to advance viable TQM execution. Further, the human resource indicated, that includes employee training and employee relation were positively related to quality improvement. A TQM program will be successfully implemented depends on the collaboration and coordination among a firm’s workforce (Ho et al., 1999).

(Sisnuhadi & Nasir, 2013); (Kaynak, 2003) in their research analysed that infrastructure practices such as, management leadership, training, and employee relation have positive relation to quality data reports, product/service design, and process management practices which further have significant effect to organizational learning. (Terziovski & Samson, 1999); (Martinez-Costa & Jimenez-Jimenez, 2009); (Chiles & Choi, 2000). This findings are in line with past studies (Terziovski & Samson, 1999); (Martinez-Costa & Jimenez-Jimenez, 2009); (Chiles & Choi, 2000), that top management, customer focus, continuous improvement, involvement of employee, and supplier relationship facilitate a good environment for employees to develop their competencies (Sisnuhadi, 2014).

According to the report by (Shrm, 2014) Employees frequently associate their perception of their supervisor with their overall attitude toward the organization. These efforts indicate that management has a vested interest in their employees. Relationship with Immediate Supervisor For the third consecutive year, employees rated their
relationship with their immediate supervisor among the top five job satisfaction contributors. Employee’s relation with everyone in the organization either immediate supervisor or the middle-management indicated that, this aspect was very important to their job satisfaction.

Relationship of employee with immediate supervisor, senior management and between employees is considered as one of the top five contributors to employee job satisfaction as surveyed by (SHRM, 2012). Clearly, employees value their relationship with management, and they are looking for ways to make this relationship more effective, which, in turn, is likely to increase employee commitment, involvement, productivity, performance, and job satisfaction.

Fostering positive relationships encourages more constructive discussions ranging from exchanging ideas to providing feedback on performance. By strengthening this bond of trust, employees may be more likely empower through difficult times and stay with the organization longer, thereby reducing voluntary turnover and increasing job performance with their overall job satisfaction. According to (Oduwaiye, Sofoluwe, & Kayode, 2012), for effective performance of the students there has to be effective communication among all teachers, principal, administrators and the management. Virtually every teacher-student interaction within a classroom may be considering a customer-supplier interaction. This relationship is very important for effective teamwork as viewed by (Farah, 2013). Thus maintaining the relationship between student and teacher is a must to attain a quality school. Employers of a school can build a bridge between administrator, student, parents, teachers, and principal by imparting regularly training and involving them in strategy meetings and activities.

3.3.4 Empowerment

The term empowerment has gained much importance in last few years. Very largely the success of TQM depends on the efficiency and effectiveness of its employees in the organization for performing the process for improvement (Mandal, 2005). (Gupta & Valarmathi, 2009), further add that, the empowered employee is responsible not only for the process but is also accountable.

- By (Sarkar, 2000), “Empowerment means sharing with non-managerial employees the power and authority to make and implement decisions.
(Mandal, 2005), refers, empowerment as to giving chances to learn and rehearse new aptitudes, practice their choices and choices for critical thinking and utilization of regular assets ideally for their shared objectives. Empowerment does not come from training alone. Empowering employees without providing sufficient resources is dangerous which will resist the empowerment process.

To support this, (Gopalan, 2014), believes that managers, or higher authorities should understand that quality work will not be done unless and until they provide their employees with quality products to work with. Since workers and employees know more about their jobs than management does, their input is vital to improving the system. The manager is responsible to repetitively train employees in the approaches of TQM, involve them in management decisions, and pay attention to their suggestions for system changes, and accept to work to implement those changes.

For (Vaidya, 2010), “An empowered workplace is a safe climate for employees to work together, with freedom to take initiatives, to create, to solve problems and to take responsibility for completing tasks”.

Empowerment does not imply that principals give up force or that instructors should ceaselessly challenge power. Strengthening is characterized as instructor freedom, which means the educator is free from the "ridiculous control of unjustified convictions" (Rahim, 1988); (Vaidya, 2010).

Empowerment does not imply that principals give up force or that teachers must ceaselessly challenge power. Empowerment is characterized as teacher freedom, meaning the teacher is free from the "unwarranted control of unjustified beliefs" (Rahim, 1988); (Vaidya, 2010). Empowerment is the process of allowing or permitting an individual to think, behave, and take action and control work and decision-making in a self-directed way. It is the state of feeling self-empowered to take control of one’s own destiny (Vaidya, 2010). Lucas, Brown, and (Marks & Louis, 1997) defined teacher empowerment as —a function of the readiness of building-level administrators to share their autonomy with those whose commitment is necessary to make the educational programme function at the highest degree of efficiency.

Principals feel that the teachers lack the ability to make or take correct decisions and end up taking decision themselves. Decisions can be best made when the individual has
sufficient information to weigh the possible consequences of various choices. Principal plays paramount role in teacher empowerment. Empowerment can be either self-initiated or initiated by others (Vaidya, 2010). Teacher empowerment is giving powers to the teachers. Empowerment is the process of enabling teachers to set their own work related goals, make decisions and solve problems within their spheres of responsibility and authority.

It is the duty of the principal to create an atmosphere conducive to empowerment, exhibit empowerment ideals, and encourage all activities towards empowerment, and lastly all empowerment successes should be given a round of applause. The schools’ success is seen when the top management and principal apply the creative energy of teachers towards constant improvement. An effective approach to adopt constant improvement as a way of life is through empowerment and teacher leadership.

- Though the classifications of empowerment have developed from the corporate world, the concept of teacher empowerment is equivalent to employee empowerment in a business.
- Empowerment has entered into the domain of educational province too.
- The researcher felt that it was very important to deal with variables such as empowerment of teacher as it is very important for the growth of the teacher, school and also for the progress of the students.

The present study therefore seeks to explore the perception of principal towards empowerment, and further to see whether, and to what extent, the principal serves as a mediator in helping in the empowerment of primary school teachers.

3.3.5 Continuous Improvement

Continuous improvement of the entire organization constitutes the basics of TQM, which represents process of systematically defining and separating root-causes of performance deficiency delaying the improvement, refining and improving the products, services and organizational systems to produce gradual improvement towards total quality and value to the customer (Joseph & Berk, 1995); (Rapersad, 2005); (Sarkar, 2000); and (Mandal, 2005). Continuous improvement should be considered as something normal process in any organization to realize total quality. Moreover continuous improvement as defined by (Mandal, 2005), is the process to achieve better
performance and value creation in the organization. Thus, continuous improvement is not just a process of TQM but a culture to be introduced in the organization and pursued in all areas.

The commitment to total quality schools to continuous improvement refers to both incremental as well as breakthrough improvement (Mandal, 2005); (Arcaro, Quality in Education, 1977). The focus of continuous improvement concept to find the shortfalls in the organization and the sources of variations in administrative, manufacturing, teaching, and other service processes which can diminish from a quality output, thus improving the process to reduce undesirable outputs and generate customer satisfaction (Joseph & Berk, 1995); (Magwaza, 2007). In this context, the author confirms on using continuous improvement as a need in the educational area particularly for attaining quality in school. Thus, educational professionals must be firmly tied with the process to assess continuously to prevent problems from occurring; they must correct process problems as they develop and make improvements (Joseph & Berk, 1995). The never ending improvement cycle ensures that proper training, exposure of attaining conference and seminars should be focused by the principal and the management for the teachers to attain total quality school. The management should emphasise on recognitions and rewards for the success achieved by the teachers to motivate them for continuous improvement.

Continuous improvement is a heart of foundation of total quality schools. The systematic approach to quality management can only be achieved when everyone in the school works. (Joseph & Berk, 1995); (Mandal, 2005); (Sarkar, 2000) and other authors have noted the critical role of continuous improvement in quality management for any organization.

- Applies the quality wheel to every aspect of work.
- Encourages all improvements, both big and small.
- Develops new understanding and opportunity.
- Enhances value creation for customers.
- Reduces errors, defects variation, and waste and understand the long-term advantage of related cost-of-quality, and cost to service.
- Promoting faster response and lower cycle-time.
• Improving school’s overall performance and fulfilling corporate responsibilities to public and society.

3.3.6 Training

The culture of transformation of an organization into quality organization through total quality management has to be created. This transformation from detecting the defect to one based to preventing them will take years, and the organization is advised to have patience when embarking on this journey (Joseph & Berk, 1995). For attaining quality, the employees must be empowered, work continuously for improvement, have committed involvement, and for this, training which the most basic tool of TQM is should be provided to the employees. (Singh, 2000), states that, an environment of quality improvement can be created and maintained through the process of continuous education and training programme. To understand the concepts of total quality, all employees from the top to the bottom of an organization, should be given training to ensure their general awareness and understanding of quality concepts for continuous improvement philosophy (Dale, B. and Cooper, G., 2000) and (Dale & McQuater, 2001). Though training is one of the largest initial costs in a total quality initiative it, should be viewed as an investment in developing the ability and knowledge of an employee and helping them to realize their potential (Dale & McQuater, 2001); and (Bhat, 2002).

Training should be formally planned and provided on a regular basis as per their job skills requirement and suited to the operational conditions of the business. The Japanese firmly believe that better education makes for an improved employee (Dale, B. and Cooper, G., 2000). Education being similar to business sector, training all the employees from the top to bottom in educational institutes will definitely increase the quality of the school quality. To implement total quality in schools every employee from top to bottom - management, staff, administrator, and peons should be trained to begin aligning their thinking with the philosophy of TQM. This initial programme of training prepares them for work with the school management in terms of mission, philosophy, system, procedures and job skills (Dale, B. and Cooper, G., 2000). Several workshops should be conducted or attended by the teachers and principal in the school so as to be updated with new methodology of teaching procedure and technology. All education and training programmes should be reread for uniformity with quality
philosophies and practices. According to (Singh, 2000), an effective training programme should be relevant to process, people and culture that can make quality improvement materialise and the effectiveness of these training should be regularly assessed, and further, be defined in measurable terms. Finally to summarize, (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005) are of the opinion that, the training process will benefit everyone by

- Making awareness of what the training is all about.
- Emphasis on gathering thoughts, suggestions, and feedback.
- Employees must feel that the training will be of value to them.
- To adapt the programme and feel that they are going to be part of the change process.
- To adapt to what has been agreed upon and for that what changes are to be made in behaviour and attitudes.

3.3.7 Involvement

Involvement means that every employee is regarded as a unique human being, and each employee is involved in helping the organization to meet its goal. One of the keys to success of TQM is the involvement of middle managers (teacher). It is the heart of TQM and logic for this is that the people closest to a problem are in the best place to prepare decisions for improvement if they receive ownership of the improvement process. Involvement requires a commitment and better structure to the process of the development of the employees, with award and recognition that they are an asset that appreciates over time (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). A sense of ownership must be inculcated in the employees for the success of TQM implementation (Gupta & Valarmathi, 2009). For assuring and facilitating employee involvement according to (Sarkar, 2000); (Joseph & Berk, 1995) requires:

- Recognizing the values of each individual.
- Accepting human inspirations.
- Hand over people to positions in which they can be successful.
- Listening to employees.
TQM does not work without effective employee involvement and participation, at all levels of the organization which means that each employee is involved in running the business (Joseph & Berk, 1995). Part of the TQM approach is to ensure that everyone has a clear understanding of what is required of him or her and of each job’s relevance to the business as a whole. The more people recognize the business, the superior the role they can play in the quality improvement process (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). As (Wall and Martin) describe them, a key feature of autonomous work groups is that they provide for a high degree of self determination by employees in the management of their everyday work. Typically this involves collective control over the pace of work, distribution of tasks within the group, and the timing and organization of breaks; also participation in the training and recruiting of new members. Management needs to design strategies for developing and encouraging involvement. Quality circles and suggestion schemes provide the mechanism and motivation for encouraging and involving everyone in an organization, business in continuous improvement.

Employees involvement is not a replacement for management nor is it the final word in quality improvement. It is means to better meet the organization’s goals for quality and productivity at all levels of an organization (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). Employees involvement will result in improved quality, better performance, and thus resulting in job satisfaction (Gupta & Valarmathi, 2009).

As stated by (Sarkar, 2000), that Professor David Levine and George Strauss of University of California, Berkley highlighted some of the benefits of involvement as:

- Develops cooperation and communication
- Increases employee morale and commitment to the organisation.
- Involvement results in better decisions, as many often the workmen, staff, teachers have information which is more relevant to the business and the management.
- Reduces the need for supervisors as employees involved, supervise themselves more to increase their sense of power and dignity.
- Increases credentials and loyalty to the organization.
- Swapping the adversial mentality with trust and co-operation.
Involvement teaches the employees new skills and helps to train and identify leaders.

Since employees involvement as tool of TQM is succeeding in the business sector and has helped them to become more competitive, and education organization being similar to business sectors, it should be able to help the educators to improve their school quality and performance (Ireh, 2014). In this research, the author talks about the teachers’ involvement as indicator of TQM in education process, which has an impact in school performance and plays a vital role in enhancing quality of education. With support to the view point of (Bhat, 2002), the author summarize, that teachers acceptance to commitment of involvement as a quality philosophy will apt more to learn the quality tools and techniques and further use them in their academic processes in day to day course. Once the teachers see the benefits of commitment of involvement to quality they will be reinforced to drive a never ending cycle of improvement. However, the solid foundation required for long-term success can not be provided with reluctant and halfhearted involvement (Magwaza, 2007; Moran & Hoffherr, 1995).

3.3.8 Teamwork

A team can be defined as a group of people working together to achieve common objective or goals (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). The development of people and their involvement in improvement activities individually and through group activity is a key feature of TQM. Team building is a primary building block in the development of TQM, and should be encouraged within any organization. As (Makin, P., Cooper, C. L. and Cox, C., 1989) suggest, group of team building is the second most frequent form of change intervention. (Porras & Berg, 1978) estimated that 40 percent of all organizational change interventions are involved in teamwork. It is one of the essential TQM tools that can keep the wheel of quality moving. Teams have an unique capability to cumulative action for solving problems and to provoke for continuous improvement objective so as to accomplish their desired goals. Improvements are achieved through projects that the teams carry out by integration of the team working philosophy into everyone’s day-today job. Each member of the team will need to focus on how to relate to other do, build team spirit, motivate each other, maintain discipline, subordinates their individual interest and
opinions, share their history of experience to fulfill the objectives (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005).

Old-fashioned hierarchial way of management should be replaced by teamwork (Magwaza, 2007). Studying in team which gives better result for not only an individual or a student but for all the member of the team. To support this logic (Magwaza, 2007) says that, the people, closest to a problem or opportunity are in the best position to make decisions for the improvement of the situation. According to (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005) studying in teamwork benefits more as it

- Builds mutual trust, develop interpersonal skills and adapts to people’s need.
- Many heads are more knowledgeable than one.
- Solve problems faster as every member of the team has distinctive aptitudes that can be used.
- Better results are produced by interactions within the team which exceeds the contributions of each member.
- Teams provide the vehicle for better-quality communication, thereby increasing the probability for a successful solution.
- Promotes sound interpersonal relationships.

Usually teamwork among the employees has the power to maximise the output and values of an individual (Ross, 1999). Rather than focusing teamwork among the teachers and the administrators of the education institutes the author, intends to focus teamwork approach among the students so as to improve upon their results as well as to achieve the above mentioned benefits for working in teams as stated by (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). As a result the overall performance of the school will also increase which results in job satisfaction of the teachers. To achieve significant transformations in school advancement for quality education proper goals, decision-making policies, and motivation, teamwork are the vital components. Further, (Grundahl, 2010) states, for systematic thinking in a school management and among students, teamwork is a vital application. To get projected vision (Schmoker, 2001) emphasized the importance of teaming. By teaming among students, teachers can see their student’s individual expertise contribution to the success of the whole school.
The present study therefore seeks to explore the perception of principals and teacher towards teamwork, and further to see whether and to what extent, the teacher encourages students to study in team which helps in improving the school performance of primary school.

3.3.9 Feedback

Feedback is a process which makes self-regulation possible by managing itself towards its goals while interacting with environmental disturbance and describes ‘circular casual processes’ (Clemson, 1984); (Beckford, 2002). In an organization, the feedback system may be highly complex, containing large quantity of elements connected in number of ways and consisting of both positive and negative loops. Through feedback policy, two parts of an organization continuously interact with each other such that the output of one determines the next action of the other. According to (Beckford, 2002), ‘feedback’ means information drawn from the output side of a process which is compared with a target, the comparison being used as the basis for adjusting the input to the process. To support this (Yeap, 2008) says, that the feedback policy in an organization monitors and determines the corrective steps required for the next improvement stage. Consistently, by implementing the feedback policy, the employee and employer’s both can assist in the process of refining, designing and redesigning which leads to continuous improvement effort in the organization (Yeap, 2008).

The process of attaining required level of quality in an organization, for cost cutting and job satisfaction can be measured through proper implementation of feedback. The employees of an organization are encouraged to provide their collective opinions and feedbacks, which are important to establish the requirements for any continuous improvement effort (Yeap, 2008). The author attempts to discuss the application elements of TQM principle of feedback, for the scope of education process which focuses for continuous improvement by collecting quality feedbacks from students, teachers, and principals. To attain a quality school, the school must start implementing TQM principle of feedback philosophy to measure and analyse the performance of its service in education (Alani, Yaqoub, & Hamdan, 2015) which has often been practiced at the end of every semester or year. Further, according to (Johnson, 1993), feedback tools are a must for successful conflict
resolution. The analysis of the feedback helps for continuous improvement process as it provides the background for evaluating objectives, evaluate outcomes, and improve the teaching methodology and strategies that are critical to attaining and exceeding school performance which are goals of school to make a quality school.

The feedback, taken by the management, principals, teachers, students, and parents, helps to manage, inspect, and control the teaching improvement process by improving its content, mode, method of delivery, teaching, and assessment methods. Further, by examining feedback from the students the teachers work continuously in incremental steps and motivate the students to learn (Yeap, 2008).

By developing an effective feedback loop from student to process in the school, the continuous improvement of the entire educational process helps in improving the aptitudes of students, by develop curriculum more receptive to students and current technology development needs, by improving the effectiveness and efficiency of teachers and principals and lucid administrative operations (Hogg & Hogg, 1995). However, this improvement can only happen when both lecturer and student work together to identify, analyse and make improvements in teaching processes. In this study, the author wants to study the impact of feedback on the performance of the school and the teacher’s job satisfaction.

3.3.10 Process Management

Process is defined as “a systematic series of actions directed to the achievement of goals” (Bhat, 2002). Process refers to business, product design and production activities are the building blocks of all organization. (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005); (Bhat, 2002). Process management is the means for assurance, control of energy, planning, administering the activities necessary to achieve a high level of performance and transforming inputs like materials, money, information, and data into valuable outputs as information, products, service, and data for which the customer will pay (Singh, 2000). The feedback is provided in order to improve the desirable outcomes such as employee satisfaction and customer satisfaction (Besterfield, Berterfield, Besterfield-Michna, & Berterfield-Sacre, 2005). It is observed by Deming and Juran that majority of the quality issues are related with processes, very few are caused by the workers themselves. Since in many cases the
management or the owner is the only one performing the activity. Thus, rather than blaming the workers for which they do not have the control, the management should take the responsibility to continuously improve the process with which employee work.

According to (Singh, 2000; Bhat, 2002), an effective process management activities help to:

- Design process effectively.
- Prevent defects and errors.
- Eliminate waste and redundancy.
- Improve flexibility and faster customer responsiveness.
- Regular evaluation.
- Continuous improvement

Process management put emphasis on high level of coordination across an organization’s actions for efficiency improvement. Quality is the cornerstone of competitive edge. To move towards quality in this era of competition, the organization should emphasise on systematic way of managing and improving the process to ensure performance improvement. Accordingly to (Ahire & Dreyfus, 2000); (Elshaer, 2012); (Forza & Filippini, 1998) process management has positive impact on performance and the analysed data related to quality are used to identify and rectify quality problems immediately, which reduces reworks and waste and thus improves productivity, performances, and profitability.

TQM is process-oriented. It is important to understand that process management can be applied in academic which is similar to doing business and or manufacturing and product. Thus, to attain quality in school, a strategic quality process planning and top management support through commitment is required(Ismail & Citation, 2012). To speak about “quality in school”, the author in this research is clear about the idea and framework. Quality planning has to begin from the top management support towards every person within the school, involving principals, teachers, administrators, students and parents and creating better ways to integrate with them to establish good relationships as to provide higher quality teaching to students. Furthermore, top management and principal has to attain and conduct regular training, arrange seminars, conference for the teachers and administrators to gain information about the new pedagogy methods.
Process management has to follow series of TQM principles to attain quality goals. According to (Pheng & Hong, 2005) these TQM principles are as follows:

- Customer Focus
- Commitment
- Customer driven services
- Eliminate rework
- Teamwork
- Training
- Empowering and respecting people
- Top management support
- Ongoing process.

Based on the above TQM principles the author argues that the top management must emphasise the commitment from all the teachers, administrators and principals. Further, the management should provide all the necessary resources that reflects the TQM commitment in the school’s mission and vision statement.

### 3.3.11 Job Satisfaction

Job satisfaction is defined as “the result of pleasurable emotional state from the evaluation of the degree to which the environment of the organization fulfils an individual’s requirement” (Lofquist & Dawis, 1991). To this (Munshi, 2012), defines job satisfaction as “one’s own feeling or state of mind about the nature of their work”. Various factors such as supervision, organization policies & administration, salary & quality of life etc. have influence on job satisfaction. Job satisfaction is a delightful state resulting from the decision of employee’s job experiences (Akhtar, 2007); (Iqbal & Akhtar, 2012). (Vaidya, 2010) explains job satisfaction as an employees’ sense of achievement and attainment, which is largely supposed to be directly linked to productivity as well as to individual well-being. Job satisfaction means enjoying your own job by performing better, and being rightly rewarded for one’s hard work (Ngan, 2015).

Job satisfaction is believed to reflect an individual’s affective and/or cognitive assessment of his or her working conditions and job attributes (Weiss & Cropanzano, 1996); (Munshi, 2012). In support of this, the job satisfaction is a most interesting field for many researchers to study work attitude in workers (Koustelios, 2001). (Idris, 2011) is of the opinion that, to achieve the company’s target all employees must be committed for the improvement initiatives. The purpose behind the reward and
recognition in an organization is to provide the employees with specific autonomy which empowers them to take resolutions that affects their job profile, thereby making them responsible and accountable, which results in increasing the employee’s level of job satisfaction (Dimitriadess, 2000) and (Oluwatoyin & Oluseun, 2008). It is the responsibilities and the need of the management or the employers to keep employees from leaving their jobs and joining other organizations to work. (Munshi, 2012), believes that, the best way to retain employees is to arrange for opportunities to build up their careers and provide the job satisfaction.

There are varying definitions of job satisfaction, the author summarises job satisfaction to be the overall feeling of the employees about their existing jobs. In resemblance to this, (Spector, 1997) refers job satisfaction as “a knot of feelings assembled by evaluating their jobs” and further he identifies nine features of job satisfaction that are measured by the Job satisfaction

- Salary - amount and impartiality or equity of salary.
- Advancement - opportunities and justice in promotions.
- Supervision - impartiality and competence at decision-making tasks by one’s supervisors
- Welfare - insurance, retreat, and other peripheral benefits
- Rewards - sense of respect, recognition, and appreciation
- Operating procedures - policies, procedures, rules, perceived red tape.
- Colleagues - perceived aptitude and satisfaction of one’s colleagues
- Work profile – allocation of work
- Communication - sharing of information within the organization

Job satisfaction being the key element in total quality management, more research is done throughout the world in all walks of organization, be it industry, manufacturing, business, service sector, and education (Iqbal & Akhtar, 2012). The impact of job satisfaction on business and industry is researched more, still globally, research in the field of education is reasonable in number. (Usop, Askandar, Langguyuan-Kaditong, & Usop, 2013) believes that, a teachers who are dissatisfied with their job are less committed to their work and thus reduces their productivity. In his research finding he implies that
• Sufficient reading materials and journals should be provided to teachers.
• Teachers should be updated with new trends, technology and innovations.
• To provide adequate facilities for teachers to be used in teaching process.

This implies that, if the teachers are contented with their jobs, they will develop and maintain high level of performance and will be satisfied. Thus, teacher’s satisfied with their job increase their productivity. To support this (Nguni, Sleegers, & Denessen, 2006) strongly believe that teachers who are satisfied with their jobs are more dedicated and interested in allocating their time and energy for students’ achievement.

Zembylas & Papanastasiou, (2004) are of the view that teachers attain job satisfaction while teaching and when their perceived relationship between the wants and offering to them are satisfied. To attain better school performance, quality school or quality in any form in any educational system and process, it is important to understand factors affecting teacher’s job satisfaction which is the vital element (Perie & Baker, 1997); (Hui et al., 2013), and (Nguni et al., 2006). Since the principal’s leadership behaviour, decision making style, permitting teachers to share information with them, and involve them more in management decisions, are the positive factors that have a direct relationship with teachers’ job satisfaction which further increases teachers’ involvement and commitment to their teaching duties (Hui et al., 2013); (Stockard & Lehman, 2004); (Bogler, 2001); (Griffith, 2004)

Further, (Ngan, 2015) focused on finding out the relationship between indicators as staff’s benefits; leadership style; and working environment and their effects on job satisfaction of professors. Whereas, according to (Treputtharat & Tayiam, 2014) there were 6 facets of the school climate affecting the job satisfaction of teachers such as:

• Leadership
• Responsibility
• Unity
• Reward
• Success
• Performance standard
Thus, the school atmosphere and climate are important to cause job satisfaction as well as affect teaching efficiency. Therefore, the teachers’ job satisfaction was an integral indicator leading to effectiveness in school.

Various studies on intrinsic and extrinsic factors such as working environment include climate and culture of the school or university, prolonged working hours, quality in teaching and learning, relation with the employees, classroom and learning environment, safety and security, infrastructure, recognition, and communication with the principal were studied and were found as favourable working conditions that boosted teacher and professor job satisfaction. (Chen, Yang, Shiau, & Wang, 2006); (Zhou & Volkwein, 2004); (Giacometti, 2005), and (Tillman & Tillman, 2008) Summarizing the literature studied by various researcher, now the author in the present research focuses on the study of relationship among implementation of TQM indicators on job satisfaction of school teachers.

### 3.3.12 School Performance

Performance is a multidimensional perception, which can be measured in an organization, firm, educational institutes or at any system level (Kumar, 2009). According to (Swanson & Holton, 2001), performance is explained as the value of the productive result of an organization in the form of goods and service. As per results of (Easton & Jarrell, 1998) a firm that implemented TQM improves definitely for a long term performance. To achieve these targets and comparison to be “best among their sectors”, an organization has to develop its own policies and strategies systematically. The importance of strategies and objectives and their relation to organizational resources and firm performance have been recognized (Idris, 2011). Initially the performance was measured only in the manufacturing units but as stated by (Kumar, 2009); (Silvestro, 1997) TQM indicators are highly significant to the service sectors also and, the concepts of performance are developing and evolving in different ways in the service area.

The academia has started to explore Total Quality Management Service (TQM in the service sector) and the various researchers have attempted to measure the level of quality management practices in service organizations like hospitals, hotels, banks, colleges, etc. and they found that TQM improves the business performance and
customer satisfaction (Fitzsimmons & Fitzsimmons, 2004). To this (Idris, 2011) adds that, the ability to increase productivity is the result of TQM’s sustainable performance measurement in a systematic manner. To support this, (Jitpaiboon & Subba Rao, 2007) further, based on their results shows that, all TQM indicators are positively related to internal or external performance in some or the other way.

According to (Euske, Lebas, & McNair, 1993), performance measure is defined as the characteristics of output that are acknowledged for assessment purposes. The TQM dimension customer focus has a significant effect on quality performance issues by reducing warranty costs and scrap in the organization (Miyagawa & Yoshida, 2010); (Idris, 2011). A positive relationship between the adoption of high employee involvement and organizational performance was found by the study of (Phil & MacDuffie, 1996), whereas, Khatawala (1997), cited in (Idris, 2011) conclude that there is a positive significant effect of implementation on employee’s attitudes and job performance. The school is an academic organization and the measurement of the school performance is at the utmost importance for achieving quality in the school. School performance measurement helps the management for proper planning process in different departments of the school.

The cycle of never-ending improvement process to attain a quality school (Kumar, 2009), school performance measurement plays an important role in:

- Identifying and tracking progress of the students, against organizational goals.
- Identifying opportunities for improvement of teaching pedagogy.
- Comparing school performance against both internal and external standards.
- Identifying the job satisfaction of the teachers.
- To ensure that student requirements are met
- Helps teachers to monitor their own performance level
- To highlight quality problems and determine areas for priority attention
- For driving the improvement effort by the feedback from the school performance result

The poor school performance of primary school can be due to lack of vision, inadequate academic allocation of work to the teachers and principal (Oyewole, 2013). The author is of the opinion that, to attain the quality school and improve students’ academic
performance and thereby improve the school performance, management, principal and teachers are required to improve their administrative and academic performance in schools.

Quality and school operational results examine the school performance improvement in the areas of student’s satisfaction, human resources and the school operational performance. The school performance result also helps to examine and compare with the performance of the other schools. According to (Manaf & Seng, 2010), the main areas of school performance such as student learning results, stakeholder- focused results, school effectiveness and performance results are based on The Baldrige Education Criteria for Performance Excellence.

School performance indicators can then be further used to monitor the progress towards their vision and mission. (Peter Mortimore, 1992). School performance, which is the powerful tool helps the management to understand many of the developments, activities functioning within the schools. The author in this study is in support of the fact that the relation between TQM dimensions as top management support, feedback, continuous improvement, involvement, training, continuous improvement, empowerment and process management will bring some repercussions on the overall school’s performance and is significantly proven.

### 3.4 The Present Study

Several researches done in the western countries have shown that employee perceptions are correlated with desired organizational outcomes (Coyle-Shapiro, 1999). The need to understand perception of quality improvement characteristics is emphasized in this study because the success of any change effort depends heavily on the commitment and aspiration of the top management as well as of all the employees in an organization (Gunasekaran, 1999). The present study attempts to fill the research gap by examining the relationship between the TQM indicators, performance and job satisfaction in the education industry.

First the study is based on the premise that principal plays a significant role in determining school performance. Second, teachers encompass a variety of tasks and roles whose effective operationalization positively affects school performance and their
job satisfaction. Secondly, the perception of teachers is obtained in understanding the level of quality management practices in the school system. In this study, a total 26 principals and 393 teachers from 26 primary schools are surveyed from Ahmedabad City. Given the fact that the study investigated these factors, the conceptual framework is vital.

### 3.5 Research Hypotheses

Based on the primary key concepts from Deming Theory of Profound Knowledge and the core values and concepts of Malcolm Baldrige Quality Award which are signified in different categories of the education criteria for performance excellence, namely, top management support, strategic quality planning, customer focus and satisfaction, staff total participation, continuous improvement, information and analysis, and quality and operational results the theoretical framework of this research is based. Thus, the theoretical framework of this research is adapted to suit the local primary school context and the purpose of this study.

The TQM factors in this study were accepted from projecting studies or sources ((Saraph, Benson, & Schroeder, 1989); (Manaf & Seng, 2010); (E. Deming, 2000); (Prybutok & Cutshall, 2004); (Crosby, 1979)). On the basis of the results of the literature review and based on the theoretical models, the study hypothesizes the relationship between TQM indicators, and demographic factors on the school performances and job satisfaction. This results in the development of hypothetical research models which further have enabled the construction of hypothesis which are to be tested for the study.

The existing literature has also provided distinct views and approaches from different prospective into TQM practices and their implementation. Further, from above literature review, it was observed that several research studies have been carried on identification of TQM practices but studies on adoption of these practices in education field in India especially in primary schools are at nascent stage. Thus, it is concluded that there is enough scope to conduct a study which could answer some questions emerged from existing literature like:
What are some of the key TQM indicators applicable for education field in the primary school sector?
Which indicators are of highest priority level?
Is there any difference in the perception and adoption of the identified TQM indicators across primary schools of Ahmedabad district?

To answer these questions, following objectives were designed to carry out the present work.

- Is there a difference in perception of variables among principals and teachers across primary schools of Ahmedabad district?
- Does demographic factors (gender, teaching experience) have impact on the perception of variables among principals and teachers across primary schools of Ahmedabad district?
- Factors responsible for understanding, identification and suggestion on indicators of TQM that can be successfully implemented in schools to attain quality as viewed by principals and teachers.
- No of factors responsible for school performance and job satisfaction among teachers.
- Which factor has a positive impact on Total Quality Management (TQM)?
- To identify the direct and mediating relationship between the factors.

Based on the literature review presented in the earlier sections and the designed objectives of this study, following questions are articulated to accomplish the purpose of the study. Further, to examine the effect of TQM indicators, namely top management support, customer focus, involvement, continuous improvement, feedback, training, relation, empowerment, process management, and teamwork on the job satisfaction of the teacher mediated through the effect of school performance the following hypothesis were formulated.

Table 3-1: Research Questions and Hypothesis

<table>
<thead>
<tr>
<th>No.</th>
<th>Research Question</th>
<th>Sub No.</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1</td>
<td>Is there a difference in perception of variables among principals and teachers across primary</td>
<td>H1</td>
<td>There is significant difference in the perception of variables among principals and teacher across primary schools of Ahmedabad district.</td>
</tr>
<tr>
<td>RQ2</td>
<td>Does demographic factors (gender, teaching experience) have impact on the perception of variables among principals and teachers across primary schools of Ahmedabad district?</td>
<td>H2.1</td>
<td>Gender of principals and teachers have significant difference in the perception of variables across primary schools of Ahmedabad district.</td>
</tr>
<tr>
<td>RQ2</td>
<td></td>
<td>H2.2</td>
<td>Total teaching experience of principals and teachers have significant difference in the perception of variables across primary schools of Ahmedabad district.</td>
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<tr>
<td></td>
<td></td>
<td>H2.3</td>
<td>Current school teaching experience of principals and teachers have significant difference in the perception of variables across primary schools of Ahmedabad district.</td>
</tr>
<tr>
<td>RQ3</td>
<td>Factors responsible for understanding, identification and suggestion on indicators of TQM that can be successfully implemented in schools to attain quality as viewed by principals and teachers.</td>
<td>H3.1</td>
<td>There is significant difference between perceptions of principals and teachers for understanding the indicators of TQM that can be successfully implemented in schools.</td>
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<td></td>
<td></td>
<td>H3.2</td>
<td>There is significant difference between principals’ and teachers’ perceptions for identification of factors responsible for the success of schools.</td>
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<td></td>
<td></td>
<td>H3.3</td>
<td>There is significant difference between perceptions of principals and teachers for suggestions of factors for improvement in schools.</td>
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<tr>
<td>RQ4</td>
<td>No of factors responsible for school performance and job satisfaction among teachers.</td>
<td>H4</td>
<td>How many and what factors underlie school performance and job satisfaction among teachers?</td>
</tr>
<tr>
<td>RQ5</td>
<td>Which factor has a positive impact on Total Quality Management (TQM)?</td>
<td>H5.1</td>
<td>Top Management Support has a positive impact on TQM.</td>
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<td></td>
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<td>H5.2</td>
<td>Relation has a positive impact on TQM.</td>
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<td></td>
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<td>H5.3</td>
<td>Feedback has a positive impact on TQM.</td>
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<td></td>
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<td>H5.4</td>
<td>Customer Focus has a positive impact on TQM.</td>
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<td></td>
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<td>H5.5</td>
<td>Continuous Improvement has a positive impact on TQM.</td>
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<td>H5.6</td>
<td>Process Management has a positive impact on TQM.</td>
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<td>RQ6</td>
<td>H5.7 Involvement has a positive impact on TQM</td>
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<td>H5.8 Empowerment has a positive impact on TQM</td>
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<td></td>
<td>H5.9 Team Work has a positive impact on Process Management</td>
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<tr>
<th>RQ6</th>
<th>To identify the direct and mediating relationship between the factors.</th>
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<tr>
<td></td>
<td>H6.1 TQM has a direct relationship with Job Satisfaction</td>
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<tr>
<td></td>
<td>H6.2 TQM has a direct relationship with School Performance</td>
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<tr>
<td></td>
<td>H6.3 Job Satisfaction has a direct relationship with School Performance</td>
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<tr>
<td></td>
<td>H6.3 Job Satisfaction has a mediating effect on TQM and School Performance</td>
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### 3.6 Epilogue

The current study is envisioned to provide insights as to ‘why’ and ‘how’ impact of TQM indicators on the school culture exerts the school performance and further influence on teachers’ job satisfaction. Based on this discussions a conceptual framework and specific research hypothesis were framed. Summary of these hypothesis is seen in in table 3-1 and further, using the data collected through questionnaire in this study, the hypothesis will be analysed in chapter 5 and chapter 6. Specifically, this paper evaluates how TQM indicators relate to the job satisfaction of the primary schools of Ahmedabad district.