CHAPTER 2
REVIEW OF LITERATURE AND RESEARCH
METHODOLOGY

This chapter sets out to discuss some of the major developments of secondary school education and secondary school teacher education in Southern Rajasthan. The chapter addresses the missionary role in education, the major educational policies, and the challenges facing secondary education in Southern Rajasthan. This is important because it helps to trace the origin of formal education and also to contextualize the status of teacher education and secondary school teaching in Southern Rajasthan.

2.1 REVIEW OF LITERATURE

This chapter also addresses international policy discourse on gender and secondary school education. The role of the chapter is that of offering some background information to the contextualized challenges facing teacher education and secondary school teaching in Southern Rajasthan. The chapter also helps to locate this study within the broader international discourse with particular reference to gender and secondary teacher education and secondary schooling:

Emerson, P. M. & McGough, B. (2017) ‘Limited human capital investment is a common characteristic of low-income countries despite the fact that estimated returns to educational investment in low-income countries are generally higher than those in high-income countries. Empirical evidence suggests that income and credit constraints can only account for a part of this underinvestment. Recent experimental evidence shows that families' misperceptions about the returns to education play a role in their low-investment levels. This paper builds a heterogeneous-agent model of human capital and growth that incorporates an adaptive learning mechanism to capture the way agents form perceptions about returns to education. We find natural conditions guaranteeing existence of stable equilibria. Along transition paths, agents' misperceptions about returns to education depress realized returns, which serves to reinforce and perpetuate low human-capital investment. If human capital investments have both private and public returns, we find multiple stable equilibria, including those which are characterized by low investment and low returns.'
(ASER 2016) ASER is the largest annual household survey in rural India that focuses on the status of children’s schooling and basic learning. Facilitated by Pratham, the survey is carried out by volunteers from local partner organizations in almost all rural districts of India. ASER 2016 reached 589 rural districts. The survey was carried out in 17,473 villages, covering 350,232 households and 562,305 children in the age group 3-16. Every year, ASER finds out whether children in rural India go to school, whether they can read simple text and whether they can do basic arithmetic. In 2005, 2007 and every year since 2009, ASER has also included a visit to one government school in each sampled village. Since the implementation of the RTE Act in 2010, school visits in ASER have included indicators of compliance with those norms and standards specified in the Right to Education Act that are easy to measure. In 2016, ASER visited 15,630 government schools across rural India.

(ASER, 2014) ASER is an annual household survey to assess children’s schooling status and basic learning levels in reading and arithmetic. One government school in each sampled village is also visited. The survey is facilitated by Pratham but carried out by a local organization or institution in each district. This year 243 DIETs have partnered with ASER. The rest of the partners are colleges and universities as well as NGOs. 96.7% of children (in the age group 6-14 years) are enrolled in school in rural India. This is the 6th year in a row that enrollment rates have been 96% or above. Visit to a government school on any random day in September, October or November shows that about 71% of enrolled children are attending school on that day. However, there is a lot of variation in daily attendance across states. But there is a great deal of variation across states in levels and pace of growth over time.

The states shown here were the states where the % of out of school girls (age 11-14) was higher than 10% in 2006. Except for Rajasthan and UP, the figure has dropped close to 5% for many states. And it is staying low. Bihar has the steepest decline from 17.6% in 2006 to 5.7% in 2014. Of all children enrolled in Std. V, about half cannot read at Std. II level. Reading is a foundational skill. Without being able to read well, a child cannot progress in the education system. For children enrolled in government schools in Std. V, apart from a decline in reading levels between 2010 and 2012, reading levels over time are “low” and “stuck”. Reading levels in Std. V in private schools are also not high. The gap in reading levels between children enrolled in government schools and private schools seems to be growing over time.
Teaching from the grade level text book is not helpful for these children unless they can read and understand. Need to start from the child’s level. Need to use appropriate methods to help them progress. Grouping by level & not by grade can make teaching efficient and effective for acquiring these basic skills quickly so that further progress can be made on the foundations that are built.

Without basic skills in place, it is difficult for children to cope with grade level content. Knowing numbers and operations is needed before tackling higher content. Therefore, teaching from the grade level textbooks, leaves many children behind. Special focus, time and attention is needed to help children in Std. III-V and Std. V-VIII learn the basic and foundational skills in maths. With strong foundations they can progress further.

(Gupta, 2013) Commerce education provides an in-depth knowledge of trade and aids to trade as well as trains the people to work in different functional areas of business. It is recognized as one of the critical elements of the national development due to its vital importance in fostering trade and industry. Commerce education is one of the oldest branches of Indian higher education system. It is regarded as the base of many streams of education such as management, accounting, insurance, banking, taxation, finance, marketing and business law in India. But nowadays commerce education is competing with these new streams for its existence, as these branches are following practical based or skill oriented pedagogy. Moreover, in the present scenario, due to globalization and advancement of information technology, competitive marketplace is emerging and education systems are changing. In this age of internationalization, there is a need to transform the conventional system and practices of commerce education and to provide global competitiveness to commerce students by adopting specialized, industry oriented, technology supported, practical based, multifaceted, "problem posing" or knowledge centric commerce education. Reflecting on this, the present study is a venture to identify and address the challenges evolving in the dynamic world of commerce education and to suggest some innovative practices in commerce education for the improvement of its content and quality.

(Hans, V. Basil, 2013) Higher education in India today is in a transformative stage, both in structure and content. Conventional concept of education in general and higher education in particular is changing – albeit slowly – largely due to globalization and the advancement of new technologies in information and communication. Financial viability and social mobility in and through higher education has improved. Perhaps this is only a
glittering scene. On the one side of the ocean (of knowledge) we have those possess and profess the virtues of higher education. On the other side there is a vast section of population that either has no access to higher education or has found fewer returns from investing/innovating in the field of higher education. For a vast populated and socially diverse emerging country like India higher education becomes all the important to supplant physical capital with social capital to achieve faster economic growth along with social cohesion, cultural ‘development’ and ethical uprightness in all fields. While there is a growing demand for access to higher education, the challenges in providing quality higher education is by no means small-lack of wherewithal being primary. While size seems to be the focus by planners and entrepreneurs in the field, quality has suffered due to massification, commoditization, and poor demonstration. Failed strategies and low incentives continue to bane serious students, researchers and teachers. Even some educational philosophers and philanthropists do not “walk the talk”. There is mismatch between knowledge, skills, enterprise and equity both ex ante and ex post. How then can India – the ancient seat of learning – claim to be the knowledge power-house today? At this juncture the present paper is an attempt to study the problems and challenges in advanced studies and research in India and explore ways of addressing them. We prefer a holistic and integrated approach by students, teachers and policy-makers of higher education and not only intellectual and commercial propositions. 

(Havaldar, 2012)vi The growth of management institutions in India in last 15 years has been rapid. Data on number of business schools established in India from 1995 suggest a ‘mushrooming’ growth in terms of numbers and often at the cost of quality. India has 2000 B-Schools, awarding MBA degrees, or an equivalent and often, more valuable post-graduate diplomas (like those given by IIMs). It is heartening to find two management institutes from India, the Indian Institute of Management, Ahmedabad (IIMA) and the Indian School of Business, Hyderabad, are placed 11th and 13th in the global ranking of 2011 by Financial Times. This study addresses various issues associated with different categories of management institutions operating in India. Some of the major issues are: the quality of the faculty, students and facilities; pedagogy and recognition; research outputs, executive training, and placement and brand equity. These issues are then analysed with respect to different categories of business schools in India: (1) top 30 government and private B-Schools, including (IIMs), (2) university departments of management studies, (3) private autonomous B-Schools approved by All India Council
of Technical Education (AICTE), (4) university affiliated private colleges, (5) private institutions not affiliated to any universities nor approved by THE AICTE, (6) private institutes in collaboration with foreign universities. There is a need to contemplate what India will need in 2025. Management education in India in 2011 is not what it was in 1950s. Top management institutes’ future should not be what we can learn from Harvard Business School. It should be what they can learn from us.

(Abbi, 2012) has reviewed the education scenario in India. The paper reviews progress of school education in India using latest government records and recent published studies. The findings showed that primary school enrolment has come close to being universal and current attendance rates as well as literacy rate have risen encouragingly in recent years. There is an improvement in education development index, enrolment, and student-teacher ratio. The imposition of two percent-cess for education is a witness to increased commitment of Government to school education. The author has found the spurt in development of private schools. It was found that there was positive effect of private school in enrolment.

(Karuppannan, 2012) Training has an important role to play and it is expected to inculcate positive changes in knowledge, skills and attitudes. Employees training tries to improve skills so that employee is better equipped to do his present job or to prepare him for a higher position with increased responsibilities. Organizations should provide opportunities for continuous development of employees not only in their present jobs but also to develop the capabilities for other jobs also. Organization must grow along with the employees, because organization should adapt itself to the changing environment. Training and Development programmes are necessary in any organization for improving the quality of work of the employees at all levels particularly in a world of fast changing technology and environment. This thesis analyses the employees’ attitude toward training programmes conducted in Vellore District Cooperative Bank in India. The study concludes that 98 percent of respondents expressed that trainings improved the work efficiency and 96 percent of respondents favorably accepted that trainings are essential for organizational development. Majority (95 percent) of the respondents felt that training is essential for all employees and same level of employees expressed that training should be made compulsory in all Co-operative Banks. Among the personal factors, Age and Education have no influence on attitude towards training, but there is a significant relationship exists between experience of the employees and training.
The objective of this paper is to test the unconditional convergence (β and σ convergence, Barro and Sala-i-Martin, 1995) across 15 major Indian States from 1980-81 to 2010-11, and to explore the proximate reasons for the growing regional inequality. The present piece of work also carried out the convergence test (both β and σ convergence) in the Information and Communication Technology, i.e., ICT. The result shows that tele-density has gone up significantly in India, especially in the underdeveloped regions. However, even after five and half decades of planning, regional inequality still is a major issue. In fact, the reform regime has seen more of this evil. But, the reforms in the telecommunication sector have had a positive contribution towards reducing regional inequalities, even though reforms in other sectors have negative impact on reducing regional inequalities. Given the structural differences across the states, some degree of inequality among the States is indispensable. This inequality depends on the factors like; available of productive resources to the respective States, its optimal utilization, transfer of resources from the rich States to the poorer ones, either through the market forces or through the policies of transfers and grants by the center, and the policies of the respective States to enrich their resources. On the other hand, the reforms in the telecommunication sector have raised the tele-density of the relatively poorer states than their richer counterparts. By using the Panel Co-integration technique, the present study concluded that, States those are primarily endowed with qualitatively better human resources (human capital) and have adopted an appropriate policy towards improving the quality of these resources have a better growth rate over their counterparts. Similarly, States having higher tele-density and have a proactive ICT Policy grow faster than the others. However, the impact of a favorable ICT policy has a comparatively better impact on the growth (the long-run elasticity of human capital to growth is 0.65, whereas the same for tele-density is 0.78). Thus, the policy suggestion for the states, particularly poorer ones, is to improve the accessibility of the service of the telecommunication sector to all. This could be done by enhancing the quality of their telecommunication sector through the provision of better telecommunication infrastructure to the remote areas. Additionally, the States need to improve the human resources by effectively raising their spending on education, especially on IT education and health so that the telecommunication infrastructure can be effectively and efficiently used towards the growth of an aspiring economy.
Integrated Child Development Services (ICDS) programme continues to be the world’s most unique early childhood development programme, which is being satisfactorily operated since three decades of its existence. The programme provides package of services, comprising supplementary nutrition, immunisation, health check-up, referral services to children below six years of age and expectant and nursing mothers. Non-formal pre-school education is imparted to children of the age group 3-6 years and health and nutrition education to women in the age group 15-45 years. High priority is accorded to the needs of the most vulnerable younger children under three years of age in the programme through capacity building of caregivers to provide stimulation and quality early childhood care. In this backdrop the paper considers the ICDS has performance well in our socio-cultural system during last few years to ensure children’s right for survival, growth, protection and development and their active participation in environment where they live, grow and develop. On the basis of ICDS programme it is to discuss in this paper about role played by anganwadis throughout the country for improvement of health and nutrition status for children in rural areas especially and in particular to analyze the performance of the anganwadis in view of funds allocated through five year plans and finally to paper will conclude the project implementation progress in order to bring the universal health and education in rural areas for the growth of development and made some suggestions in implementation of the ICDS and anganwadis role performance to carry out the project in an effective and efficient manner with the cooperation of the government, semi governments and other stake holders to achieve the millennium development goals of Government of India.

“The Fate of the Nation is decided in the Classroom”. A remark made by the Education Commission of India. Quality which not only works in business but also in education can be achieved by doggedness, changing attitude and by training every staff member. TQM which is applied in education faces new challenges due to various changes in nature of administration and student, large and multileveled classroom, technologically advanced, the new style in educational content and the way of delivering the lecture. TQM tools can bring changes in educational manner which can be imparted in schools and colleges which results in increase quality of teaching for all the stakeholders especially the principal customer “THE STUDENT.” The purpose of this
study is to highlight the need of TQM which can be used to transform the education system in India.

(Raju & Singh, 2011) have studied the educational development in India at elementary level—an interstate perspective. According to them educational development in different dimensions measured with the help of a number of indicators when analyzed individually do not provide an integrated and easily comprehensible picture of reality. Therefore, authors have used appropriate composite index, which can optimally combine development in different dimensions. Another issue was identification of indicators that were independent and collectively measure the educational prosperity of a State/UT. Broadly seven dimensions have been identified for this purpose. Some sub-components, which together reflect the main component/dimension, were also identified. The data of 7th All India School Education Survey (7th AISES) conducted by NCERT with reference date of 30th September 2002 has been used in this study. As the reference date coincides with the initiation of implementation of SSA interventions in many states, this study may be served as a baseline for assessment of SSA interventions. Data on the aspects which were not covered under the 7th AISES were taken from SSA, DISE and Achievement surveys conducted by NCERT. A composite index is given by Narain while measuring socio-economic development of states in India was used in this study. On the basis of this index, various States and UTs were compared with respect to systemic quality in the field of elementary education. Kerala stands first when elementary education as a whole is considered. Though, Tamil Nadu was on top position at primary level education, very strong upper primary level education of Kerala pushed the state to fore front at elementary level. The states which were lagging behind at elementary level were Bihar, Jharkhand and Nagaland. The dimensions where these states were lagging behind were identified so that administrators put focused efforts in those weak areas.

(Ramakrishnan, 2011) Financial literacy has assumed greater importance in recent years especially from 2002 as financial markets have become increasingly complex and the common man finds it very difficult to make informed decisions. Financial literacy is considered an important adjunct for promoting financial inclusion, financial development and ultimately financial stability. Financial development is widely recognized as an important determinant of economic growth (Levine, 2005). It can be argued that limited financial literacy serves as an important barrier to demand for services: if individuals are not familiar or comfortable with products, they will not demand them. Financial Inclusion
comes with potential dangers. Recent experiences in the microfinance arena have shown that poor people take loans that they have no capacity to service. Farmers have also taken loans that they have not been able to repay. Many have been driven to suicide because of debt problems. Unless financial literacy goes hand in hand with financial inclusion, instead of helping the poor, they will be put into more trouble. Another example is the mortgage crisis, in the U.S., which has led to global crisis. Financial education primarily relates to personal finance, which enables individuals to take effective action to improve overall well-being and avoid distress in financial matters. Hence improvement of financial knowledge of households is necessary for them to participate continuously in financial markets. Financial literacy plays a vital role in the efficient allocation of household savings and the ability of individuals to meet their financial goals. Financial literacy thus goes beyond the provision of financial information and advice. It is again a major issue for finance markets as it both drives and distorts investment behavior. It empowers the common person and thus reduces the burden of protecting the common person from the elements of market failure from a regulatory perspective. Financial literacy can make a difference not only in the quality of life that individuals can afford, but also the integrity and quality of markets. It can provide individuals with basic tools for budgeting, help them to acquire the discipline to save and thus, ensure that they can enjoy a dignified life after retirement. Financially educated consumers, in turn, can benefit the economy by encouraging genuine competition, forcing the service providers to innovate and improve their levels of efficiency. This paper would look into various aspects of financial literacy in both developing and developed countries and try to provide a suitable model that would be helpful for Indian conditions.

(Blom, Andreas and Saeki, Hiroshi, 2011) Skill shortage remains one of the major constraints to continued growth of the Indian economy. This employer survey seeks to address this knowledge-gap by answering three questions: (i) which skills do employers consider important when hiring new engineering graduates? (ii) How satisfied are employers with the skills of engineering graduates? And (iii) In which important skills are the engineers falling short? The results confirm a widespread dissatisfaction with the current graduates-64 percent of employers hiring fresh engineering graduates are only somewhat satisfied with the quality of the new hires or worse. After classifying all skills by factor analysis, the authors find that employers perceive Soft Skills (Core Employability Skills and Communication Skills) to be very important. Skill gaps are
particularly severe in the higher-order thinking skills ranked according to Bloom's taxonomy. In contrast, communication in English has the smallest skill gap, but remains one of the most demanded skills by the employers. Although employers across India asks for the same set of soft skills, their skill demands differ for Professional Skills across economic sectors, company sizes, and regions. These findings suggest that engineering education institutions should: (i) seek to improve the skill set of graduates; (ii) recognize the importance of Soft Skills, (iii) refocus the assessments, teaching-learning process, and curricula away from lower-order thinking skills, such as remembering and understanding, toward higher-order skills, such as analyzing and solving engineering problems, as well as creativity; and (iv) interact more with employers to understand the particular demand for skills in that region and sector.

(Ramakrishnan, 2010) Education is one of the most important 'Fundamental Right' of the citizens of a nation. It is a dialogue between the past, present and the future. It is an important investment in human capital essential to economic growth The Elementary Education system serves as the base over which the Super-structure of the whole education system is built up. It is observed that complete Literacy has not been achieved even 63 years after independence, and this has far reaching socio-economic impacts. The fact that almost half of our women are illiterates speaks of serious gender discrimination within the system Women's education plays a very important role in the overall development of the country. It not only helps in the development of half of the human resources, but in improving the quality of life at home and outside. There is considerable evidence for the claim that access to education helps to empower women. Education appears to improve women’s ability to process and utilise new information, although more rapidly for certain issues than others. It increases the likelihood that women will look after their own, as well as family, well-being. It may lead to a greater role for women in decision-making and a greater willingness on their part to question male dominance in the home and community. Further it may lead to a greater role for women in decision-making and a greater willingness on their part to question male dominance in the home and community. Educated women also appear less likely to suffer from domestic violence Enrolments in schools have improved substantially in recent years but the retention rates continue to be poor, and only a fraction of enrolled students completes even the Primary classes. Completions of Middle and Secondary levels are still lower. Wide regional variation exists even within this sub-standard performance of the Basic Education system.
While few states have performed moderately, others have done abysmally, and continue to do so. As with India as a whole, many states have large rural-urban differences in female literacy. There are several reasons for the low levels of literacy in India. Factors like poverty, presence of a wide child-labour market, absence of assured employment after schooling, and infrastructural problems are identified as responsible for the ills plaguing the elementary education system in India. Providing incentives for attending schools, making the schooling process attractive to the children, streamlining the middle and high school curriculum to make it more vocational and job-oriented, and providing better infrastructure for the schools are some of the policies likely to improve the scenario. This paper tries to analyse the current trends, patterns and interacting factors affecting the quantitative and qualitative aspects of School Education System in India with a special focus on Women's education that can lead to their empowerment.

(Sunder, 2010) The number of institutions and enrollment in higher education continue their rapid growth, but the quality of this education remains uncertain. A small number of state-subsidized institutions attract a thin top layer of talent from each year’s cohort. High selectivity of admission to these elite institutions provides a screen valued by potential employers. Domestic and foreign demand for the services of these few thousand students has created an inflated reputation of the overall quality of India’s higher education. The number of such graduates remains small relative to the population and the demands of India’s economy for educated manpower. Reliable estimates of value-added by higher education, beyond the screening value of admission to elite institutions, are needed to assess colleges and universities, and to guide educational policy. Graduate education—the seed farm of higher education and scholarship—continues in an alarming state of disarray with respect to both quality and quantity. Pressed by budgetary constraints, the government appears to have decided on profit-oriented privatization of higher education as the solution. Political and business classes, with significant overlap between the two, see higher education as a source of lucrative private returns on investment. There is little theoretical or empirical evidence that supports the prospects of success of a for-profit model in building quality higher education. Some recent proposals hold promise of radical reform and renovation, including regulatory restructuring. It remains unclear whether the government has the wisdom, determination, financing, and power to push reforms past the resistance from entrenched faculty and from the political and business classes.
The concepts formulated by Total Quality Management (TQM) founder, W. Edwards Deming, have been suggested as a basis for achieving excellence in schools. It is an opportunity to conceptualize a systematic change for schools. In this article, he discusses the framework for transforming schools using Deming’s 14 TQM principles.

The higher education sector in India is opening up. Government wants to increase the gross enrolment ratio from around 12% at present to 30% by 2020 and will need around 800 additional universities. For this, government is promoting private investment in higher education by allowing the setting up of private universities. The Lovely Group of Jalandhar, a Family Managed Business, sensed this opportunity well in time and started with a small Management and IT Institute in 2001. The sharp business acumen of the members of Lovely Family and clear vision for business resulted in the establishment of Lovely Professional University in 2005, which has now become the largest university in India in terms of number of students in a single campus. They have successfully replicated and combined the Lovely Sweets model of low cost, differentiated quality products and world class professional practices learnt from auto companies Maruti and Bajaj in the management of Lovely Professional University. The professionalism at LPU is reflected in the systems and processes being used to manage the affairs of the university. All kinds of innovative management practices (e.g. 360-degree appraisal, matrix organisation structure, benchmarking, fishbowl style of management, quality circles, etc.) used by modern day corporate can be witnessed in LPU in one way or other.

The government has set up committees to review the quality of primary schools at regular interval of time, which has suggested measures to enhance the excellence in education. Since education is the state subject, the implementation of recommendations of various committees was the responsibility of respective State Governments. This is perhaps the main reason for existing disparities in the quality of primary education among the states and union territories.

This paper examines the response of higher education to globalization in India and discusses the major challenges that the globalization brought to higher education. The study used data over twenty-five years, 1981/82-2004/05 and applied Ordinary Least Square (OLS) analysis with inclusion of various functional variables that may contribute to the higher education in the post reform period. A regression model is developed by using the perspectives of the heterodox model which does not conclude that
the non-significant variables necessarily imply that the hypothesized causal links are invalid. The study reveals that the relationship between globalization and higher education was fragile revealing a gap between what the country has achieved on globalization and what it has achieved on higher education. The study cautions the policy makers that if they let present condition continue, it will be imminent that the capacity of higher education to produce right people would get jeopardized. It is therefore suggested that the government should ensure right allocation and correct appropriateness of budget on higher education. A fair controlling policy should be devised to monitor quality of education and training provided in the private sector. A compliance policy should be enforced to ensure a strong network and congenial interface between the institutions of mediocre and of excellence and also between the higher education institutions and industries, so that the application oriented education and employability could be effectively offered to meet out the challenges of globalization.

(Gereffi, G. and Wadhwa, Vivek and Rissing, Ben A. and Ong, Ryan, 2008) This article challenges the commonly cited statistics for engineering graduates in the United States, China, and India. Their research shows that the gap between the number of engineers and related technology specialists produced in the United States versus those in India and China is smaller than previously reported, and the United States remains a leading source of high-quality global engineering talent. Furthermore, engineering graduates in China and India face the prospect of substantial unemployment, despite high corporate demand for their services; this raises questions about the quality of recent graduates. The United States, however, also confronts problems in its continued ability to attract and retain top engineering talent from abroad because of visa uncertainties and growing economic opportunities in their countries of origin. They argue that the key issue in engineering education should be the quality of graduates, not just the quantity, since quality factors have the biggest impact on innovation and entrepreneurship.

(Mukherjee, 2008) This paper presents an overview of the contemporary issues and challenges of Indian higher education, and looks in particular at ways in which potential foreign participants can legitimately play a role in the sector. It does not seek to make a case for increased foreign participation, but presumes it to be a medium-term outcome of the process of India's integration into the global economy. Section I presents a brief overview of higher education in India today. Section II discusses important systemic challenges (access, equity, quality) and argues that these problems stem from the lack of
public investment and a flawed regulatory structure, resulting in the rapid and unregulated growth of private provision. Section III maps the existing government perspective on foreign and private participation and attempts to show that there has been an increasing dissonance in the government's view of foreign institutions. This signals a growing public debate that can be successfully leveraged by potential entrants. Section IV concludes by briefly suggesting that in the final analysis, meaningful foreign participation hinges on the regulatory system's ability to successfully balance two conflicting objectives - building a world-class educational system, and ensuring that education remains a non-commercial activity that embodies national values and priorities.

(Kingdon, 2007) has presented an overview of school education in India. The study revealed that India’s educational achievements in international perspective, was relatively better than its South Asian neighbours - Pakistan and Bangladesh, in certain educational indicators. India lags behind the other countries with which it is increasingly compared, such as BRIC (Brazil, Russia, India and China) economies in general and China in particular. Further, the assessment of schooling access, enrolment, school attendance rates and schooling quality, learning achievement levels, school resources and teacher inputs is done. The study has also examined the role of private schooling in India and relative effectiveness of unit cost of private and public schools. It was concluded that learning achievements in both primary and secondary schooling are very low, signaling poor-quality schooling. The findings suggested that there is need for evaluation of quality of education and relative cost-effectiveness for evidence-based policy-making.

(Chand & Choudhary, 2006) have conducted the study on ‘Shiksha Sangam: Innovations under the Sarva Shiksha Abhiyan (SSA)’ at IIM, Ahmadabad. Government of India has launched the SSA in 2001-2002 in partnership with the state and local-self-governments to universalize and improve quality of elementary education in the country. They have used the secondary data of 13 states of India. Authors have concluded that SSA played an important role in reducing the number of out-of-school children.

(Shah, 2006) The paper tries to capture the research and understanding along with innovations and policy reforms in assuring quality school education to all, with a particular focus on the poor. It begins with quantitative and qualitative narration of the two most fundamental problems in the education of the poor: Access and the quality. The problem of access is of can't afford; and the problem of quality is 'not worth the time, particularly of the poor.' The access problem is further compounded along the gender,
caste, and physical and mental disability lines. The quality of state schools is particularly low. Recent research documents the flight of the poor from state schools to 'budget' private schools. On the one hand, governments are incapable of improving state schools, largely due to the power of teacher unions, and on the other hand, their regulatory systems are stifling private initiatives, condemning most private schools to illegal/informal status where they are unable to access formal capital to expand. The continuing decline of the quality of the state education system has led, by default, to one of the highest levels of privatization of education in the developing world. The proportion of students in private schools in urban areas of many states in India is higher than that in any developed country. Private 'edupreneurs' are serving as safety valve to the failing state education systems. In any efforts to assure quality education to the poor, their role must be understood and appreciated. The first four sections then deal with the problems of access and quality and the duality of private edupreneurs. The last section suggests possible solutions through the use of technology and recent local experiments in innovations and policy reforms. It is hard to escape the conclusion that the role of the government in education is to liberate the supply side, fund the demand of the poor, and monitor the access and quality of education. Let the private initiative and entrepreneurship - for profit and non-profit - govern our schools. Scholarships, education vouchers, and loans would offer the same freedom of choice to the poor as the rich enjoy today. An unshackled and competitive market for education would prepare students to lead a productive and meaningful life.

(Besley, Timothy J. and Pande, Rohini and Rao, Vijayendra, 2005) xxvi This paper uses household data from India to examine the economic and social status of village politicians, and how individual and village characteristics affect politician behavior while in office. Education increases the chances of selection to public office and reduces the odds that a politician uses political power opportunistically. In contrast, land ownership and political connections enable selection but do not affect politician opportunism. At the village level, changes in the identity of the politically dominant group alter the group allocation of resources but not politician opportunism. Improved information flows in the village, however, reduce opportunism and improve resource allocation.

(Mathew, 2005) xxvii This empirical study aimed at examining the sources, effects, and the coping strategies of occupational stress among special educators in India. The Government policies are tailored to enhance the education of children with disabilities, but very few of these policies focus the special educators who take care of students with
disabilities. These educators have largely been clubbed together with teachers of regular schools. Therefore, the issues of special educators have always been a neglected field in India. Of the 21 million disabled population of the country, 12 million are children with various disabilities, according to Census of India 2001. To meet the educational requirements of these children the country has around 3200 registered special schools. The number of special educators in each school varies according to the student strength. And the level and nature of stress experienced by this population have hardly been the focus of study. Hence, here an attempt is made to study the nature and levels of occupational stress experienced by teachers of special schools. The geographical area of the study was two districts, Calicut and Malappuram, of the state of Kerala, South India. 35 special educators, who had more than two years of teaching experience, were randomly selected for the study from the schools in this geographical area. The methodology adopted was both quantitative and qualitative. To collect the quantitative data, the occupational Stress Indicator, developed by Cooper, et. al., (1988) was used. The Indicator evaluates occupational stress by analysing five key factors: i) Sources of stress, ii) Individual characteristics, iii) Locus of control, iv) Coping strategies, and v) Effects of stress. To collect qualitative data an unstructured personal interview was used. The quantitative results revealed that the sources of stress spread from: i) school structure and climate, ii) home/work interface, iii) relationship with other people, iv) intrinsic job factors. The common effect of stress on special educators was found to be health related problems - both physical and mental - and job dissatisfaction. There was no organised method to redress the problem rising from occupational stress. As a result, the most commonly used coping strategy was social support, task strategies, and home/school relationship. While the qualitative data confirmed the findings of the quantitative data, it pointed out some other issues, which the quantitative indicators did not cover. The sources of stress as repeatedly reported in the qualitative interviews were that of low salary - due to the subcontracting by the Government to NGO's, job insecurity, work overload, and high teacher-student ratio. The results point to the need of Government policies targeting specifically to the special educators if there has to be tangible improvements in the quality of life of the children with disabilities.

(Veetil, 2005) Government schools in Delhi are not providing quality education to the masses since many years, and this phenomenon has not escaped the eyes of experts, activists, and policy makers. However, there seems to be a general perception that the
main, and sometimes even the sole, source of this problem are the low levels of government expenditure of education. And to prove their case supports of this view cite educational expenditure to GDP ratios in India in comparison with that of some other nations. Though there may be reasonable arguments to increase the level of government expenditure on education, such hijacking of public debate to focus on 'the level of expenditure' often overlooks more important issues. Contrary to common perception the level of per student expenditure on government schools in Delhi is reasonable, ranging from Rs.6000 to Rs.12000 p.a. There are a number of organisational deficiencies which do not create checks and balances for appropriate utilization of fund. Moreover, the division of these funds among social groups and for different purposes is also questionable. Though, female literacy lags significantly behind male literacy, about 15% points, extra resources provided for female education are insignificant. And in some schemes such as the one run for 'street children' and 'child labourers' large amounts are budgeted year after year without a single Rupee being spent. Also government schools catering to richer regions of Delhi seem to be spending more per child as compared to the poorer counterparts. The paper also proposes an education voucher model, which may have the potential to address some of the issues raised in the paper. Trends in expenditure under some schemes have been studied in relation to the purpose of expenditure. The issue of government expenditure on education is a complex one, and public space should be utilized to discuss them as they are, rather than reducing discussion to dogmatic wars aimed at increasing the levels of expenditure. Though, one may agree or disagree with the methods and findings of the author, hopefully the paper highlight the complexity of the issue at hand, and the need to understand the institutional deficiencies and allocative inefficiencies in government expenditure on education.

(Campbell, Kyriakides, Muijs, & Robinson, 2004) refer to teachers’ job competencies as the impact that classroom factors (e.g. teaching methods, teacher expectations, classroom organization and use of classroom resources) have on students’ performance. In addition, they also look at teachers’ efficacy as the power to realize socially valued objectives agreed for teachers’ work especially, but not exclusively the work concerned with enabling students to learn. According to them, four issues flow from this definition: the contexts and conditions for which students are enabled to learn can differ; students differ; the content of which objectives for learning are achieved can differ; and the values underlying learning and effectiveness can differ.
(Kothari, 2004) has discussed the challenges of elementary education in India. The study was conducted by NIEPA to explain the elementary education scenario in India using secondary data sources such as Census, the NSS, NCERT and NFHS surveys. The overall development was assessed with respect to gender, age, rural-urban divide, expenditure groups, village amenities, and health status of children. The study has concluded that India was classified in the medium human development category.

(Khuluse, 2004) This research examined the role of school management teams (SMTs) in facilitating quality education in schools. The study made use of questionnaires to establish the perceptions of SMTs towards quality education they facilitate in their schools. This study was undertaken to investigate the challenges that are encountered by school management teams in facilitating quality education in schools. With regard to management, the research investigates the roles of school management teams such as building trust to support quality education, developing an enabling school culture and climate, demonstrating appropriate leadership. From the review of literature on the role of school management teams, the study provides a comprehensive exposition of what school management entails, especially as far as curricular management, visioning and strategy formulation, is concerned. Against this background, the study investigates the role of SMTs in secondary schools in the Insuze - Noodsberg Ward in Ndwedwe Circuit. On the basis of empirical work, the study makes recommendations regarding the role of SMTs. The recommendations made are a contribution towards improving SMTs and leading them in a process which can truly enhance them to perform their roles of facilitating quality education in schools.

(Austin & Freebody, 2003) Therefore, one of the objectives of this study is to examine ideas and comments on quality instruction in relation to school effectiveness and improvement. This study is also a demonstration of what actually happens in the real world of secondary school education in Nigeria. The main aim of this research study is to identify ‘best practice’ quality teaching strategies that creates improved scholarship because without quality instruction the motivation for quality learning will not be there.

(Banerjee, Cole, Duflo, & Linden, 2003) Apart from providing the primary education to masses in India, its quality has been a major cause of concern for the Government. “Among several development indexes used to measure societal growth, the most important for us are those proposed for measuring quality of education”.

41
(Biggs, 2003) asserts that the very best teachers are lifelong students, people who still know how little they really understand about life and how much they have left to learn about all the important questions.

(Biggs, 2003) study on quality of good teaching highlights that “good teaching is getting most students to use the higher cognitive level processes that the more academic students use spontaneously. Teaching works by getting students to engage in learning-related activity that help them attain the particular objectives set for the unit or course, such as theorizing, generating new ideas, reflecting, applying and problem-solving.”

Given that learning is regarded as the central issue of the twenty-first century, the most powerful, engaging, rewarding and enjoyable aspects of our personal and collective experiences need to be backed up with the services of highly qualified teachers.

(Grover & Singh, 2002) “The expansion of primary education in India over the last decade has been phenomenal. But, by all accounts, the expansion of the Indian education system has led to deterioration in the quality of education” (Grover & Singh, 2002). Good management plays an important role in academic achievement of schools. The key function of school management is to supervise administration system. Enrolment of students, appropriate curriculum, schedule the classes, allocation of teachers to each class, is also part of school management. It enables all the staff in the school to contribute most efficiently to its purpose in the performance of their duties. School management makes the necessary arrangements for teachers’ training, refresher courses, skill up gradation seminars and orientation programmes to enhance teachers’ learning and expertise, better teaching methods. This helps the teacher in teaching by making the topic more interesting and simple so that student can easily understand and learn the subject. It promotes individual development in various ways and means, encourages mutual confidence and understanding among teachers and students.

(Reiger & Stang, 2000) argued that teachers need to be curious, imaginative, empathetic, interesting, friendly and hardworking in order to be effective in the classroom, thereby creating a learning environment that enhances and strengthens the learning disposition of the students.

(Bernard, 1999) In all aspects of the school and its surrounding education community, the rights of the whole child, and all children, to survival, protection, development and participation are at the centre. This means that the focus is on learning
which strengthens the capacities of children to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes; and which creates for children, and helps them create for themselves and others, places of safety, security and healthy interaction.

(Drèze, Jean and Kingdon, Geeta Gandi, 1999)xxxix This paper presents an analysis of the determinant of school participation in rural north India, based on a recent household survey which includes detailed information on school characteristics. School participation especially among girls, responds to a wide range of variables, including parental education and motivation, social background, dependency ratios, work opportunities, village development, teacher posting, teacher regularity and mid-day meals. The remarkable lead achieved by the state of Himachal Pradesh is fully accounted for by these variables. School quality matters, but it is not related in a simply way to specific inputs.

(Morais, Neves, & Afonso, 1999)xli argued that the loss of teachers in the teaching profession is rarely distributed evenly across the teaching force. Attrition has been noted to be highest in geographical locations where living conditions are extremely poor, harsh or expensive. Attrition rates are also said to be higher in the early years of the teaching career. Teachers early in their careers may have less stable family lives and have less commitment to teaching. Differential rates of attrition for teachers can also be clustered around specific subjects, with higher attrition for those subjects in demand in other jobs.

(Miske & Dowd, 1998)xlii A study of village-based schools in Malawi found that students with higher rates of attendance had greater learning gains and lower rates of repetition, a finding consistent with many other studies.

(Ross, Hannay, & Brydges, 1998)xliii investigated district influence on the implementation of site-based decision-making focused on restructuring the role of secondary school department heads in a Canadian school district; their study did not explore the consequences of change for classroom practice or student learning. Interestingly, they found that a strong district presence manifested in the reform vision and actions of a multi-stakeholder (district officials, teacher union, principals) steering committee played a significant role in the implementation of a decentralized reform effort that emphasized teacher empowerment! District support for schools included setting and communicating the vision, protecting funding, providing guidance, facilitating inter-school sharing, public recognition of school-level change efforts, adapting existing
standard operating procedures as needed (e.g. teachers’ contract), and assisting schools with processes for monitoring and reflection on progress collaboration.

(Figlio & Stone, 1997) has developed multinomial logit sector selection model to measure differences in students of mathematics of public and private schools. The data from the National Educational Longitudinal Survey (NELS) administered by the U.S. Department of Education’s National Center for Education Statistics (NCES) was used. The result shows that the private schools may have a number of advantages over public schools. This study has employed uniquely detailed local instruments and jointly models selection into religious and nonreligious private high schools, relative to public high schools—improving instrument power in predicting private sector attendance to roughly three times that of prior studies. With adequate correction, religious schools were modestly inferior in mathematics and science, while nonreligious schools were substantially superior. However, minority students, particularly in urban areas, benefited from religious schools. Other factors that may make both religious and nonreligious private schools attractive include possibly better retention rates, increased security and discipline, and greater opportunities for a variety of specialized school-day and extracurricular activities.

(Frazier, 1997) Quality management provides a connection between outcomes and the process by which outcomes are achieved. If, as many people realize, the cause of failures in education is a problem in design, quality management may be regarded as an ideal systemic process for managing change in public education.

(Carron & Chau, 1996) A study in India, however, sampled 59 schools and found that of these only 49 had buildings and of these, 25 had a toilet, 20 had electricity, 10 had a school library and four had a television. In this case, the quality of the learning environment was strongly correlated with pupils’ achievement in Hindi and mathematics.

(McCormick, 1996) are captivated by their subject matter drawn out of themselves by their teaching, which will catch their excitement like the wake of a passing train. The very best teachers do not tie students down; they pull students along. They are as corny as it sounds—visionaries. He made clear that quality teachers are the teachers who inspire students to compete against themselves, to take on tasks that seem to exceed their grasp, to discover and develop their real mettle as thinkers. At the same time, the very best teachers also seem to be the ones who never stop learning themselves; they are the folks
who never quit reading new books, listening to new voices, or discussing new ideas, and whose quest for understanding is never finished.

(Morris, 1996) xlvii “Organization theorists have long argued that school districts suffer from uncertain goals and indeterminate technology, a difficult environment for identifying appropriate innovations. Moreover, reformers and governing agencies push districts into adoption with legislation, court orders, and administrative restrictions and pull them in with rewards of funding and other resources. Such innovations may or may not be well suited to the problems they are expected to solve or well received by those they are intended to aid.”

(Perkinson, 1995) xlviii identified four overriding problems in education. They are: 1) an inadequate emphasis on academic subjects, 2) a lack of standards, 3) poor teaching, and 4) an absence of leadership. Most important, reformers called for excellence and equity so that all students would receive the same high-quality education.

(Creemers, 1994) xlix model of educational effectiveness, argued that it is the school factors that create the conditions in which effective teaching and learning occur. Therefore, teachers’ behavior could be affected by the school factors. However, he additionally believes that effective instruction is the basis for a theory of educational effectiveness.

(LaRocque & Coleman, 1990) li studied district ethos and school accountability in a sample of ten British Columbia school districts. The sample included a mix of high to low performing districts. Their findings on district goals and accountability processes, particularly the personal leadership and involvement of superintendents, in the higher performing districts were quite consistent.

(Louis & Miles, 1990) lii identified four district-level approaches to school improvement varying in terms of the uniformity of process and outcomes intended: innovation implementation, evolutionary planning, goal-based accountability, and professional investment. A key finding from this and similar research on the district relations to school-based improvement processes is that districts vary in approach and that the variation is associated with district leader conceptions of change process.

(Floden, 1988) liii surveyed district policy influence on the instructional decisions of fourth grade mathematics teachers in 20% of the districts (8 schools per district) across five states. They compared teacher responses in districts that emphasized central priorities and
control versus support for autonomous curriculum decision making. Regardless of approach, the indicators of district policy influence were weak.

(Height & Stones, 1966) argued that a good teacher is a man or woman of exceptionally wide and lively intellectual interest. A good teacher is an interesting man or woman. As such he or she will make the work interesting for the students, in just the same way as he or she talks interestingly and writes an interesting letter. Much teaching consists in explaining, we explain the unknown by the known, the vague by the vivid. One of the most important qualities of a good teacher is “humor”. Many are the purposes it serves. The most obvious one is that it keeps students alive and attentive because they are never quite sure what is coming next. A teacher with a poor memory is ridiculous and dangerous. A good teacher is a determined person. It is very difficult to teach anything without kindness.

2.2 Summary of Reviewed Literature

Table 2.1 presents the summary of above review of literature.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Author’s Name &amp; year</th>
<th>Title</th>
<th>Source</th>
<th>Findings &amp; Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Emerson, P. M. and McGough, B.</td>
<td>Learning About Education</td>
<td>SSRN</td>
<td>This paper builds a heterogeneous-agent model of human capital and growth that incorporates an adaptive learning mechanism to capture the way agents form perceptions about returns to education. Researchers found natural conditions guaranteeing existence of stable equilibria.</td>
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<tr>
<td>2.</td>
<td>ASER, 2016</td>
<td>Annual Status of Education Report</td>
<td>PRATHAM</td>
<td>The survey was carried out in 17,473 villages, covering 350,232 households and 562,305 children in the age group 3-16. Every year, ASER tried to find out whether</td>
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</table>
3. **ASER, 2014**  
Annual Status of Education Report  

*PRATHAM*

The survey is facilitated by PRATHAM but carried out by a local organization or institution in each district. This year 243 DIETs have partnered with ASER. The rest of the partners are colleges and universities as well as NGOs. 96.7% of children (in the age group 6-14 years) are enrolled in school in rural India. This is the 6th year in a row that enrollment rates have been 96% or above.

4. **Gupta, 2013**  
Evolving Commerce Education: The Way Ahead  

*SSRN*

The present study is a venture to identify and address the challenges evolving in the dynamic world of commerce education and to suggest some innovative practices in commerce education for the improvement of its content and quality.

5. **Hans, V. Basil, 2013**  
Higher Education in India – Assailing Challenges;  

*SSRN*

The present paper is an attempt to study the problems and challenges in advanced studies and research in India and explore ways of addressing them. They prefer a holistic and
<table>
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<th>Author, Year</th>
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<th>Source</th>
<th>Description</th>
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<tr>
<td>6.</td>
<td>Havaldar, 2012</td>
<td>Management Education in India: The Present Status and Future Directions</td>
<td>SSRN</td>
<td>These issues are then analysed with respect to different categories of business schools in India: (1) top 30 government and private B-Schools, including IIMs, (2) university departments of management studies, (3) private autonomous B-Schools approved by All India Council of Technical Education (AICTE), (4) university affiliated private colleges, (5) private institutions not affiliated to any universities nor approved by AICTE, (6) private institutes in collaboration with foreign universities. There is a need to contemplate what India will need in 2025.</td>
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<tr>
<td>7.</td>
<td>Abbi, 2012</td>
<td>An Assessment of Gender Disparity and Quality of Education in Navi Mumbai</td>
<td>Social Inclusion and Women: health perspective and issues</td>
<td>The paper reviews progress of school education in India using latest government records and recent published studies. The findings showed that primary school enrolment has come close to being integrated approach by students, teachers and policy-makers of higher education and not only intellectual and commercial propositions.</td>
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</table>
universal and current attendance rates as well as literacy rate have risen encouragingly in recent years. The author has found the spurt in development of private schools. It was found that there was positive effect of private school in enrolment.

| 8. | Karuppannan, 2012 | Training and Development: A Study of Employees’ Attitude on Training In Vellore District Cooperative Bank | SSRN | This thesis analyses the employees’ attitude toward training programmes conducted in Vellore District Cooperative Bank in India. The study concludes that 98 percent of respondents expressed that trainings improved the work efficiency and 96 percent of respondents favorably accepted that trainings are essential for organizational development. Majority (95 percent) of the respondents felt that training is essential for all employees and same level of employees expressed that training should be made compulsory in all Cooperative Banks. Among the personal factors, Age and Education have no influence on attitude towards training, but there is a significant relationship exists between experience of the employees and training. |
| 9. | Sahoo, 2012 | Role of ICT in Economic Growth and Regional Inequality in India | SSRN | The objective of this paper is to test the unconditional convergence ($\beta$ and $\sigma$ convergence, Barro and Sala-i-Martin, 1995) across 15 major Indian States from 1980-81 to 2010-11, and to explore the proximate reasons for the growing regional inequality. The result shows that tele-density has gone up significantly in India, especially in the underdeveloped regions. However, even after five and half decades of planning, regional inequality still is a major issue. |
| 10. | Shashidhar, R. and Maiya, Parampalli Sadananda and Ramakrishna, V, 2012 | India’s Integrated Child Development Scheme and its Implementation: Performance of Anganwadis and Analysis | International Journal of Sustainable Development | On the basis of ICDS programme it is to discuss in this paper about role played by anganwadis throughout the country for improvement of health and nutrition status for children in rural areas especially and in particular to analyze the performance of the anganwadis in view of funds allocated through five year plans and finally to paper will conclude the project implementation progress in order to bring the universal health and education in rural areas for the growth of |
development and made some suggestions in implementation of the ICDS and anganwadis role performance to carry out the project in an effective and efficient manner with the cooperation of the government, semi governments and other stake holders to achieve the millennium development goals of Government of India.

<table>
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<tr>
<th>11</th>
<th>Shroff &amp; Dave, 2012</th>
<th>Total Quality Management a need in education system</th>
<th>Indian Journal of Research, 1(10), 166-168</th>
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<tr>
<td></td>
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<td>TQM tools can bring changes in educational manner which can be imparted in schools and colleges which results in increase quality of teaching for all the stakeholders especially the principal customer “THE STUDENT.” The purpose of this study is to highlight the need of TQM which can be used to transform the education system in India.</td>
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<tr>
<th>12</th>
<th>Raju &amp; Singh, 2011</th>
<th>Educational Development in India at Elementary Level An Interstate Perspective</th>
<th>Indian Educational Review</th>
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<td></td>
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<td>According to them educational development in different dimensions measured with the help of a number of indicators when analyzed individually do not provide an integrated and easily comprehensible picture of reality. Therefore, authors have used appropriate composite index, which can optimally</td>
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<tr>
<td>13</td>
<td><strong>Ramakrishnan, 2011</strong></td>
<td>Financial Literacy - The Demand Side of Financial Inclusion</td>
<td>SSRN</td>
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</table>
| 14 | **Blom, Andreas and Saeki, Hiroshi, 2011** | Employability and Skill Set of Newly Graduated Engineers in India | World Bank Policy Research Working Paper Series | These findings suggest that engineering education institutions should: (i) seek to improve the skill set of graduates; (ii) recognize the importance of Soft Skills, (iii) refocus the assessments, teaching-learning process, and curricula away from lower-order thinking skills, such as remembering and understanding, toward higher-order skills, such as analyzing and solving engineering problems, as well as creativity; and (iv) interact more with employers to understand the
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<th>Author(s)</th>
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<th>Abstract</th>
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<tr>
<td>15</td>
<td>Ramakrishnan, 2010</td>
<td>Empowerment by Women’s Education</td>
<td>Ramakrishnan, 2010</td>
<td>It is observed that complete Literacy has not been achieved even 63 years after independence, and this has far reaching socio-economic impacts. The fact that almost half of our women are illiterates speaks of serious gender discrimination within the system. Women's education plays a very important role in the overall development of the country. This paper tries to analyse the current trends, patterns and interacting factors affecting the quantitative and qualitative aspects of School Education System in India with a special focus on Women's education that can lead to their empowerment.</td>
</tr>
<tr>
<td>16</td>
<td>Sunder, 2010</td>
<td>Higher Education Reforms in India</td>
<td>Sunder, 2010</td>
<td>There is little theoretical or empirical evidence that supports the prospects of success of a for-profit model in building quality higher education. Some recent proposals hold promise of radical reform and renovation, including regulatory restructuring. It remains unclear</td>
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whether the government has the wisdom, determination, financing, and power to push reforms past the resistance from entrenched faculty and from the political and business classes.

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<th>Author</th>
<th>Title/Source</th>
<th>Summary</th>
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<tbody>
<tr>
<td>17</td>
<td>Lunenberg, 2010</td>
<td>Total Quality Management Applied to Schools, <em>Indian Journal of Commerce</em></td>
<td>In this article, he discusses the framework for transforming schools using Deming’s 14 TQM principles.</td>
</tr>
<tr>
<td>18</td>
<td>Vij, 2010</td>
<td>Transforming Education, Transforming India: The Lovely Journey, <em>Proceedings of 13th Annual Convention of Strategic Management Forum</em></td>
<td>All kinds of innovative management practices (e.g. 360-degree appraisal, matrix organisation structure, benchmarking, fishbowl style of management, quality circles, etc.) used by modern day corporate can be witnessed in LPU in one way or other.</td>
</tr>
<tr>
<td>19</td>
<td>Mohan, 2009</td>
<td>Primary, secondary education is state’s responsibility, <em>Deputy Governor of RBI</em></td>
<td>Since education is the state subject, the implementation of recommendations of various committees was the responsibility of respective State Governments. This is perhaps the main reason for existing disparities in the quality of primary education among the states and union territories.</td>
</tr>
<tr>
<td>20</td>
<td>Selvam, 2009</td>
<td>Response of Higher Education to Globalization, <em>SSRN</em></td>
<td>This paper examines the response of higher education to globalization in India and</td>
</tr>
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<td>Globalization: Empirical Evidences from India</td>
<td>discusses the major challenges that the globalization brought to higher education. The study used data over twenty-five years, 1981/82-2004/05 and applied Ordinary Least Square (OLS) analysis with inclusion of various functional variables that may contribute to the higher education in the post reform period. The study reveals that the relationship between globalization and higher education was fragile revealing a gap between what the country has achieved on globalization and what it has achieved on higher education.</td>
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</table>

| Gereffi, G. and Wadhwa, Vivek and Rissing, Ben A. and Ong, Ryan, 2008 | Getting the Numbers Right: International Engineering Education in the United States, China, and India | This article challenges the commonly cited statistics for engineering graduates in the United States, China, and India. Their research shows that the gap between the number of engineers and related technology specialists produced in the United States versus those in India and China is smaller than previously reported, and the United States remains a leading source of high-quality global engineering talent. They argue that the key issue in... |
engineering education should be the quality of graduates, not just the quantity, since quality factors have the biggest impact on innovation and entrepreneurship.

<p>| 22 | Mukherjee, 2008 | Contemporary Issues and Opportunities for Foreign Participation | SSRN | It concludes by briefly suggesting that in the final analysis, meaningful foreign participation hinges on the regulatory system's ability to successfully balance two conflicting objectives - building a world-class educational system, and ensuring that education remains a non-commercial activity that embodies national values and priorities. |
| 23 | Kingdon, 2007 | The progress of school education in India | Oxford Review of Economic Policy | The study revealed that India’s educational achievements in international perspective, was relatively better than its South Asian neighbours - Pakistan and Bangladesh, in certain educational indicators. It was concluded that learning achievements in both primary and secondary schooling are very low, signaling poor-quality schooling. The findings suggested that there is need for |</p>
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<th>#</th>
<th>Authors</th>
<th>Title</th>
<th>Journal/University</th>
<th>Details</th>
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<tbody>
<tr>
<td>24</td>
<td>Chand &amp; Choudhary, 2006</td>
<td>Shiksha sangam: Innovations under the Sarva Shiksha Abhiyan</td>
<td>DCWC Research Bulletin</td>
<td>Authors have concluded that Sarva Shiksha Abhiyan (SSA) played an important role in reducing the number of out-of-school children.</td>
</tr>
<tr>
<td>25</td>
<td>Shah, 2006</td>
<td>Private Education for Poor in India</td>
<td>SSRN</td>
<td>The paper tries to capture the research and understanding along with innovations and policy reforms in assuring quality school education to all, with a particular focus on the poor. It begins with quantitative and qualitative narration of the two most fundamental problems in the education of the poor: Access and the quality.</td>
</tr>
<tr>
<td>26</td>
<td>Besley, Timothy J. and Pande, Rohini and Rao, Vijayendra, 2005</td>
<td>Political Selection and the Quality of Government: Evidence from South India</td>
<td>Yale University Economic Growth Center Discussion Paper No. 921</td>
<td>This paper uses household data from India to examine the economic and social status of village politicians, and how individual and village characteristics affect politician behavior while in office. Education increases the chances of selection to public office and reduces the odds that a politician</td>
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<td></td>
<td>Author(s)</td>
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<tr>
<td>27</td>
<td>Mathew, 2005</td>
<td>An Exploratory Study on Occupational Stress and Coping Strategies of Special Educators in South India</td>
<td>SSRN</td>
<td>The results point to the need of Government policies targeting specifically to the special educators if there has to be tangible improvements in the quality of life of the children with disabilities.</td>
</tr>
<tr>
<td>28</td>
<td>Veetil, 2005</td>
<td>Government Expenditure on Elementary and Secondary Education in Delhi from 1993-94 to 2003-04</td>
<td>SSRN</td>
<td>Though, one may agree or disagree with the methods and findings of the author, hopefully the paper highlight the complexity of the issue at hand, and the need to understand the institutional deficiencies and allocative inefficiencies in government expenditure on education.</td>
</tr>
<tr>
<td>29</td>
<td>Campbell, Kyriakides, Muijs, &amp; Robinson, 2004</td>
<td>Assessing Teachers Job Effectiveness: Developing a Differentiated Model</td>
<td>SSRN</td>
<td>According to them, four issues flow from this definition: the contexts and conditions for which students are enabled to learn can differ; students differ; the content of which objectives for learning are achieved can differ; and the values underlying learning and effectiveness can differ.</td>
</tr>
<tr>
<td>30</td>
<td><strong>Kothari, 2004</strong></td>
<td>Challenge of universalization of elementary education in India.</td>
<td><em>Journal of Educational Planning and Administration</em></td>
<td>The overall development was assessed with respect to gender, age, rural-urban divide, expenditure groups, village amenities, and health status of children. The study has concluded that India was classified in the medium human development category.</td>
</tr>
<tr>
<td>31</td>
<td><strong>Khuluse, 2004</strong></td>
<td>The role of School Management Teams in facilitating quality education in schools</td>
<td><em>SSRN</em></td>
<td>From the review of literature on the role of school management teams, the study provides a comprehensive exposition of what school management entails, especially as far as curricular management, visioning and strategy formulation, is concerned. Against this background, the study investigates the role of SMTs in secondary schools in the Insuze - Noodsberg Ward in Ndwedwe Circuit. On the basis of empirical work, the study makes recommendations regarding the role of SMTs. The recommendations made are a contribution towards improving SMTs and leading them in a process which can truly enhance them to perform their roles of</td>
</tr>
<tr>
<td>32</td>
<td>Austin &amp; Freebody, 2003</td>
<td>Schooling the child</td>
<td>SSRN</td>
<td>This study is also a demonstration of what actually happens in the real world of secondary school education in Nigeria. The main aim of this research study is to identify ‘best practice’ quality teaching strategies that creates improved scholarship because without quality instruction the motivation for quality learning will not be there.</td>
</tr>
<tr>
<td>33</td>
<td>Banerjee, Cole, Duflo, &amp; Linden, 2003</td>
<td>Banerjee, Cole, Duflo, &amp; Linden. (2003). Improving the Quality of Education in India: Evidence from Three Randomized Experiments</td>
<td>Quarterly Journal of Economics</td>
<td>Apart from providing the primary education to masses in India, its quality has been a major cause of concern for the Government. “Among several development indexes used to measure societal growth, the most important for us are those proposed for measuring quality of education”.</td>
</tr>
<tr>
<td>34</td>
<td>Biggs, 2003</td>
<td>Teaching for Quality Learning at University</td>
<td>The Society for Research into Higher Education &amp; Open</td>
<td>He asserts that the very best teachers are lifelong students, people who still know how little they really understand about life and how much they have left to learn about all the important questions.</td>
</tr>
<tr>
<td>35</td>
<td>Biggs, 2003</td>
<td>Teaching for Quality Learning at University.</td>
<td>The Society for Research into Higher Education &amp; Open University Press 15 (2), 25-28.</td>
<td>He studies on quality of good teaching highlights that “good teaching is getting most students to use the higher cognitive level processes that the more academic students use spontaneously.</td>
</tr>
<tr>
<td>36</td>
<td>Grover &amp; Singh, 2002</td>
<td>The Quality of Primary Education: A case study of Madurai and Villupuram District in Tamil Nadu, India.</td>
<td>Harvard Graduate School of Education</td>
<td>Enrolment of students, appropriate curriculum, schedule the classes, allocation of teachers to each class, is also part of school management. It enables all the staff in the school to contribute most efficiently to its purpose in the performance of their duties. School management makes the necessary arrangements for teachers’ training, refresher courses, skill up graduation seminars and orientation programmes to enhance teachers’ learning and expertise, better teaching methods. This helps the teacher in teaching by making the topic more interesting and simple so that student can easily understand and learn the subject. It</td>
</tr>
</tbody>
</table>
promotes individual development in various ways and means, encourages mutual confidence and understanding among teachers and students.

| 37 | Reiger & Stang, 2000 | Reiger, R. C., & Stang, J. (2000). Education productivity; Labor productivity; Motivation (psychology). | *Employees Training of Education, 121 (1), 62-64* | It argued that teachers need to be curious, imaginative, empathetic, interesting, friendly and hardworking in order to be effective in the classroom, thereby creating a learning environment that enhances and strengthens the learning disposition of the students. |
| 38 | Bernard, 1999 | The child-friendly school: a summary | *New York: UNICEF* | This means that the focus is on learning which strengthens the capacities of children to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes; and which creates for children, and helps them create for themselves and others, places of safety, security and healthy interaction. |
| 39 | Drèze, Jean and Kingdon, Geeta Gandhi, 1999 | School Participation in Rural India | *SSRN* | The remarkable lead achieved by the state of Himachal Pradesh is fully accounted for by these variables. School quality matters, but it is not related in a simply way to specific inputs. |
| 40 | Morais, Neves, & Afonso, 1999 | Teacher training processes and teachers’ competence—a sociological study in the primary school. | Teaching and Teacher Education, 21, 415-437. | They argued that the loss of teachers in the teaching profession is rarely distributed evenly across the teaching force. Attrition has been noted to be highest in geographical locations where living conditions are extremely poor, harsh or expensive. |
| 41 | Miske & Dowd, 1998 | Miske, S., & Dowd, A. (1998). Teaching and learning in Mangochi classrooms: Combining quantitative and qualitative information to study twelve primary schools in Malawi. | SSRN | A study of village-based schools in Malawi found that students with higher rates of attendance had greater learning gains and lower rates of repetition, a finding consistent with many other studies. |
| 42 | Ross, Hannay, & Brydges, 1998 | District-level support for site-based renewal: A case study of secondary school reform. | The Alberta Journal of Educational Research, 44 (4), 349-345. | Investigated district influence on the implementation of site-based decision-making focused on restructuring the role of secondary school department heads in a Canadian school district; their study did not explore the consequences of change for classroom practice or... |
student learning. Interestingly, they found that a strong district presence manifested in the reform vision and actions of a multi-stakeholder (district officials, teacher union, principals) steering committee played a significant role in the implementation of a decentralized reform effort that emphasized teacher empowerment.

43. Figlio & Stone, 1997

Are private schools really better?

Research in Labor Economics, 23, 115-140.

The result shows that the private schools may have a number of advantages over public schools. This study has employed uniquely detailed local instruments and jointly models selection into religious and nonreligious private high schools, relative to public high schools—improving instrument power in predicting private sector attendance to roughly three times that of prior studies. Other factors that may make both religious and nonreligious private schools attractive include possibly better retention rates, increased security and discipline, and greater opportunities for a variety of
specialized school-day and extracurricular activities.

<table>
<thead>
<tr>
<th>Page</th>
<th>Author, Year</th>
<th>Citation</th>
<th>Reference</th>
<th>Text</th>
</tr>
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<tbody>
<tr>
<td>44</td>
<td>Frazier, 1997</td>
<td><em>A roadmap for quality transformation in education.</em></td>
<td><em>Boca Raton: St. Lucie Press.</em></td>
<td>Quality management provides a connection between outcomes and the process by which outcomes are achieved. If, as many people realize, the cause of failures in education is a problem in design, quality management may be regarded as an ideal systemic process for managing change in public education.</td>
</tr>
<tr>
<td>45</td>
<td>Carron &amp; Chau, 1996</td>
<td>The quality of primary schools in different development contexts</td>
<td><em>SSRN</em></td>
<td>In this case, the quality of the learning environment was strongly correlated with pupils’ achievement in Hindi and mathematics.</td>
</tr>
<tr>
<td>46</td>
<td>McCormick, 1996</td>
<td>There’s no substitute for good teachers.</td>
<td><em>U. S. Catholic, 61</em> (6), 46-49.</td>
<td>The very best teachers do not tie students down; they pull students along. They are as corny as it sounds—visionaries. He made clear that quality teachers are the teachers who inspire students to compete against themselves, to take on tasks that seem to exceed their grasp, to discover and develop their real mettle as thinkers. At the same time, the very best teachers also seem to be the ones</td>
</tr>
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who never stop learning themselves; they are the folks who never quit reading new books, listening to new voices, or discussing new ideas, and whose quest for understanding is never finished.

<table>
<thead>
<tr>
<th>Page</th>
<th>Author, Year</th>
<th>Source</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Morris, 1996</td>
<td>Institutionalization and the reform process: A System dynamic perspective.</td>
<td>Moreover, reformers and governing agencies push districts into adoption with legislation, court orders, and administrative restrictions and pull them in with rewards of funding and other resources. Such innovations may or may not be well suited to the problems they are expected to solve or well received by those they are intended to aid.</td>
</tr>
<tr>
<td>48</td>
<td>Perkinson, 1995</td>
<td>The imperfect panacea: American faith in education.</td>
<td>He identified four overriding problems in education. They are: 1) an inadequate emphasis on academic subjects, 2) a lack of standards, 3) poor teaching, and 4) an absence of leadership. Most important, reformers called for excellence and equity so that all students would receive the same high-quality education.</td>
</tr>
<tr>
<td>49</td>
<td>Creemers, 1994</td>
<td>The Effective Classroom</td>
<td>The model of educational effectiveness, argued that it is</td>
</tr>
</tbody>
</table>
the school factors that create the conditions in which effective teaching and learning occur. Therefore, teachers’ behavior could be affected by the school factors.

<table>
<thead>
<tr>
<th>50</th>
<th>LaRocque &amp; Coleman, 1990</th>
<th>Quality control: School accountability and ethos</th>
<th><em>Education policy for effective schools</em>, 168-191.</th>
<th>Their findings on district goals and accountability processes, particularly the personal leadership and involvement of superintendents, in the higher performing districts were quite consistent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Louis &amp; Miles, 1990</td>
<td>Improving the Urban High School: What Works and why</td>
<td><em>New York: Teachers College Press.</em></td>
<td>They identified four district-level approaches to school improvement varying in terms of the uniformity of process and outcomes intended: innovation implementation, evolutionary planning, goal-based, and professional investment. A key finding from this and similar research on the district relations to school-based improvement processes is that districts vary in approach and that the variation is associated with district leader conceptions of change process.</td>
</tr>
</tbody>
</table>
2.3 RESEARCH GAPS AND PRESENT STUDY

Most studies have focused on analyzing data such as enrolment, attendance, repetition, dropout rates, effect of government programme and policy in India. Other authors have studied the academic achievement of secondary and higher secondary students in mathematics, language and school factors or socio economic factors. This study aims to go beyond an analysis of those indicators. There are hardly such studies which have considered type of school as one of the important factor along with school and socioeconomic factors affecting the academic achievements of students. Research gaps identified after review of literature can be summarized as follows:

1. Literature on research on school education in southern Rajasthan is silent.

2. Researcher could not find any study which has taken perceptions of both students and teachers regarding quality of school education.

3. Very few studies were there which have made a comparison on results on the basis of school type, school area, age of respondents etc.

Quality of education is a cause of concern; therefore, a detailed study to measure the perceptions of teachers teaching in both primary and secondary schools and students studying in secondary government and private schools has been undertaken in Southern Rajasthan by the researcher. The researcher wishes to take up this study to ascertain the status of quality of school education and study the different aspects of quality of school education. The study focuses on school education in southern Rajasthan as the prior literature is silent regarding quality of school education on southern Rajasthan and it is need of the hour to deeply analyze the various aspects of education and minutely identify differences between quality of education in rural areas and urban areas and in government schools and private schools. The primary objective of the thesis is to explore the perception of school teachers and students regarding quality of school education.

2.4 RESEARCH METHODOLOGY

Research is the sincere contribution to existing knowledge and discovery new information through scientific and analytical approach. Business Dictionary defines research as “Systematic investigative process employed to increase or revise current knowledge by discovering new facts. It is divided into two general categories: (1) Basic research is inquiry aimed at increasing scientific knowledge, and (2) Applied research is an effort
aimed at using basic research for solving problems or developing new processes, products, or techniques.”

According to Clifford Woody “It is an academic activity which comprises of defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deduction and research conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis”

Thus, research can be understood as original contribution to existing knowledge through a detailed study carrying some specific objectives. For the present study, following research methodology has been followed:

2.4.1 Research Design

According to Best (1981) the design of study explains the size of the samples and how they are selected, the variables and the control employed. According to Kothari (2004), research design is a plan, a roadmap and blueprint strategy of investigation conceived so as to obtain answers to research questions; it is the heart of any study. The sources and methods of gathering data, the reliability of the instruments selected or constructed and the statistical procedures used in the analysis. The present study was planned as an empirical research. It aims at investigating quality of school education using the perceptions of students and teachers.

2.4.2 Research Objectives

The main objective of the study is to analyze and measure the quality of education in the schools of southern Rajasthan.

1. To explore the perceptions of teachers regarding quality of education in schools.
2. To explore the perceptions of students regarding the quality of education in schools.
3. To ascertain whether demographic variables play an important role in perceptions about quality education.
4. To find out whether quality of education is different in government and private schools.
5. To put forth suggestions towards betterment of quality of schools education.
2.4.3 Research Hypotheses

\( H_01: \) There is no significant difference between perceptions of male and female teachers.

\( H_02: \) There is no significant difference between perceptions of teachers working in schools of rural and urban areas.

\( H_03: \) There is no significant difference among perceptions of teachers of different age-groups.

\( H_04: \) There is no significant difference between perceptions of teachers working in government and private schools.

\( H_05: \) There is no significant difference between perceptions of male and female students.

\( H_06: \) There is no significant difference between perceptions of students studying in schools of rural and urban areas.

\( H_07: \) There is no significant difference between perceptions of students studying in government and private schools.

2.4.4 Sample

The investigation is an empirical study. The universe of the study was all the teachers and students belonged to school education in southern Rajasthan. The sample for the present study constituted the teachers and students, selected purposively from the institutions of around 53 schools from the rural areas, urban areas of Southern Rajasthan. The Schools selected were of different types:

1. Medium of instructions (English, Hindi)
2. School Type (Boys school, Girls school, Mixed school)
3. Syllabi Followed (State Board/National Board)
4. Type of Management (Government and Private)
5. Place of work (Rural, Urban).

In all 500 students were contacted but due to non-response and defective responses, the final sample reduced to 436 students. Similarly, in all 200 teachers were approached but
due to non-response and defective responses, final number of complete questionnaires was 147. The sample distribution is shown in Table 2.2 and 2.3.

Table 2.2: Category wise Distribution of the sample

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Category</th>
<th>Whole Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Teachers</td>
<td>147</td>
</tr>
<tr>
<td>2.</td>
<td>Students</td>
<td>436</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>583</strong></td>
</tr>
</tbody>
</table>

Table 2.3: Gender-wise, Area-wise and School Type-wise Distribution of Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Students</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>270</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>166</td>
<td>86</td>
</tr>
<tr>
<td>Area</td>
<td>Rural</td>
<td>196</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>240</td>
<td>100</td>
</tr>
<tr>
<td>Types of School</td>
<td>Government</td>
<td>203</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>233</td>
<td>47</td>
</tr>
</tbody>
</table>

2.4.5 Data Collection

The subjects were asked to read the information carefully after a brief explanation of the test by the investigator. They were requested to give their free, frank and genuine opinion by ticking any one of the categories in their options column.

For conducting this research, the following methods for collecting data and information will be adopted.

- **Primary Data:** Interviews have been conducted in order to collect the specific primary data from teachers and students. For this, two separate questionnaires were prepared – one for teachers and one for students. The sample of 436 students comprised of both boys and girls, rural and urban areas of school and government
and private schools. It was taken care of that the selected students were of little maturity level, therefore, mostly the students were between 9th and 12th standard.

The questionnaire for students contained 41 statements beside some demographic information. These statements were related to the overall management of school. Respondent students were requested to fill in their opinion about various aspects of facilities available in the school, quality of teaching and teachers, library facility, laboratory equipment, co-scholastic activities, learning methods, assessment patterns, communication in and outside the classroom, teaching aids etc. These responses were measured on 5-point Likert Scale ranging from “Strongly Agree” (1) to “Strongly Disagree” (5).

The questionnaire for teachers contained 25 statements beside some demographic information. These statements were related to the overall management of school. Respondent teachers were asked to fill in their opinion about various aspects of leadership at schools, their participation in management of school, work satisfaction, facilities, communication with students and principal, opportunities for research, growth and learning etc. These responses were measured on 5-point Likert Scale ranging from “Strongly Agree” (1) to “Strongly Disagree” (5). In all 147 questionnaires were received.

- **Secondary Data:** To collect secondary data, annual reports, journals, school magazines, facts regarding performance appraisal system and other information have been used.

2.4.6 Pre –testing

The questionnaire was pre–tested on 5% of the sample size to examine the various aspects of the study. As a result of pre–testing some new points were added and some points were dropped which were deemed relevant for the study. Final questionnaire was prepared after pre-testing on samples for improvement and validity of the data.

2.4.7 Analysis of Data

The present study has been carried out in the schools of the Southern Rajasthan using Questionnaire cum interview approach. For this, two separate questionnaires were prepared – one for teachers and one for students. Questionnaires were designed based on the study of the literature and modified based on the discussions held and the testing done
with the practitioners. Some research tools and techniques have been used to analyse percentage, chi-square, z-test, F-test, and ANOVA.

**2.4.8 Chi Square Test:**

The Chi Square test is an important test amongst the several tests of significance developed by statisticians. As a non-parametric test it can be used to determine whether categorical data show dependency or the two classifications are independent.

Chi square test is used to test for independence of two attributes or in other words to test whether the two attributes related to anything have any association. Assumption of independence of each other or no association between the two attributes is made. To calculate Chi Square value following formula is used –

\[ \chi^2 = \sum \frac{(O - E)^2}{E} \]

Significance of independence or association is tested using calculated chi square value. Significant value of Chi Square shows significant association between the two attributes.

**2.4.9 ANOVA**

When comparison of means of more than two samples is required, a different statistical technique is required. This technique or test is known as one way analysis of variance or one way ANOVA.

The first step in this test would be to calculate the sum of squares, which is further split into two components:

i. Sum of squares between the classes and

ii. Sum of squares within the classes

Then the results are tabulated as follows:

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>Mean Sum of squares</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Samples</td>
<td>SS(_1)</td>
<td>MSS(_1)</td>
<td>MSS(_1)/MSS(_2)</td>
</tr>
<tr>
<td>Within samples</td>
<td>SS(_2)</td>
<td>MSS(_2)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Calculated F-ratio is compared with that given in the F-table at d.f. between the classes and at d.f. within the classes, at desired level of significance. If the calculated value is greater than the tabulated value, null hypothesis (H₀) is rejected and alternative hypothesis of significant difference between means is accepted.

2.4.10 Z Test

A Z-test is a statistical test used to determine whether two population means are different when the variances are known and the sample size is large. The test statistic is assumed to have a normal distribution, and nuisance parameters such as standard deviation should be known for an accurate Z-test to be performed.

The basic Z score formula for one sample hypothesis testing is:

$$z = \frac{\bar{x} - \mu}{\sigma/\sqrt{n}}$$

Where \(\bar{x}\) = sample mean; \(\mu\) = population mean or neutral mean and \(\sigma\) = standard deviation of the sample and \(n\) = sample size.

Z score formula for two sample testing is:

$$Z = \frac{(\bar{X}_{1,2})}{\sqrt{\sigma_{x_1}^2 + \sigma_{x_2}^2}}$$

Where \(\bar{X}_{1,2}\) = Mean of first sample; \(\bar{X}_2\) = Mean of second sample and \(\sigma_{1}\) = standard deviation of first sample and \(\sigma_{2}\) = standard deviation of second sample

2.5 LIMITATIONS OF THE STUDY

However, every effort has been made to present the facts objectively and draw conclusions logically. The main limitation faced by the researcher was the lack of efforts by the school’s management and staff to help in feeding accurate information and providing the proper data to complete the research in required time frame.

Besides, some more limitations are as follows:

- This research is empirical in nature but limited to southern Rajasthan only.
- Some teachers and students hesitated in filling information about school management. Therefore they did not cooperate with the researcher.
The accuracy of the findings of study depends upon the correctness of the responses provided by the respondents.

The study is limited to the quality of school education only.

Time, money and efforts constraints were other limitations of the study.

2.6 CHAPTERIZATION

The thesis is organized as follows:

Chapter One “Introduction” instigates with introduction of quality in school education, development of school education in India, importance of school education etc. The chapter also provides major policies, strategies and interventions for education and learning in India, constitutional provisions for education and five-year national development plans. It also discusses strategic approaches to education along with the issue of quality.

Chapter Two “Review of Literature and Research Methodology” provides an insight on research methodology used in the study. It includes the research objectives behind conducting the research and its process. Review of literature has also been mentioned in this chapter. It also mentions the methods of data collection and the details pertaining to the related statistical and analytical tools and techniques used in the present study. This chapter aims at providing systematic plan for directing research work.

Chapter Three “Quality Education in Southern Rajasthan” begins with demographic characteristics of Rajasthan. It provides historical background of education in Rajasthan. Then it proceeds with some statistics on literacy, number of different types of schools, number of enrollments in different schools etc. the chapter also elaborates various schemes and efforts made by state government to promote elementary and secondary education in Rajasthan.

Chapter Four “Data Analysis and Interpretation - I” contains data analysis and pictorial presentation of data obtained from the questionnaire for teachers. Framed hypotheses have been analyzed on various parameters. All the questions answered by teachers have been presented here, after categorizing, in the form of tables and graph, keeping a comparative perspective.

Chapter Five “Data Analysis and Interpretation – II” contains the analysis and graphical presentation of data obtained from the questionnaire for students. Selected
objectives and hypotheses were tested using z test. All the questions answered by students have been presented here, after categorizing, in the form of tables and graph, keeping a comparative perspective.

Chapter Six “Conclusions, Findings and Suggestions” includes main findings, overall research results, suggestions, and scope for future research.
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4. The Primary Teacher
5. Prathmik Shikshak
6. Indian Education Review
7. School Science

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