CHAPTER VII SUMMARY

7.0 INTRODUCTION

The task of building an enlightened, strong and prosperous nation rests on the shoulders of its children who are to be cherished, nurtured and developed with tenderness and care. Education has always played this important role and has thus emerged as a natural characteristic of human societies. It has contributed to the shaping of the destinies of societies in all the phases of their development and has itself never ceased to develop. It has been the torch-bearer of humanity's most noble ideals. In this sense as an agent for social change, Education necessarily reflects its main ethos, aspirations and concerns. (NCF, 2000).

Perhaps the single most important characteristic of our times is that for the first time in man's history, the world has become knowledge-based, largely science and technology based. (Kothari, 1986). The main implications of the phenomenon of globalization, typical of our times, is the emergence of 'learning societies' and this gives to education a role and significance as never before in history. Today, Education while not losing sight of its traditional goals (reading, writing, arithmetic, skill development) will also have to equip individuals to live effectively in such a 'knowledge society'- i.e. acquire relevant knowledge and inculcate and interpret new values that will in turn guarantee them the ability to keep pace with the evolution of their environment (NCF, 2000).

School education is acknowledged as an important segment of the total educational system expected to contribute significantly to the individual as well as the national developmental processes (NCF, 2000). The task of building an enlightened, strong and prosperous nation ultimately rests on its future citizens i.e. the children of today, who are to be cherished and nurtured with tenderness and care. It is through Education that every child gets equipped with the skills and competences essential for a future successful life, making a significant contribution to the economic and social upliftment of the nation as well.

The conventional division of Education according to stages - i.e. Primary, Secondary and Higher Education is necessary for the inculcation of desirable study habits in

accordance with the corresponding age of the learner. The Primary stage is more concerned with the tools of learning; acquisition of the fundamental skills of learning and the cultivation of an attitude necessary for future acquisition of knowledge. The subsequent stages would rely on this foundation for more refined and complex intellectual processes.

It thus entails that Elementary Education is the base or foundation of learning for all citizens: consisting of basic knowledge and skills for life which is obtained at the Elementary level. Provision of Basic Education for All continues to be a matter of grave concern in India as also in other developing countries. The country's commitment to the same is made clear in its various policy statements including the NPE 1986 which explicitly mentions the focus of efforts in this direction as "The new thrust in Elementary Education will emphasize two aspects:

- 1) Universal enrolment and retention of children up to 14 years of age.
- 2) A substantial improvement in the quality of Education.

7.1 IMPORTANCE OF PRIMARY EDUCATION

The initial seven or eight years of schooling can lay the foundation for the development of personality, attitudes, social confidence, habits, learning skills and communication capabilities of pupils. The basic skills of reading, writing and arithmetic are acquired at this stage; values are internalized and environmental sensuousness sharpened. The right kind of outlook towards life and society needs to be cultivated at the initial stages of school life so that children could grow up as productive and socially useful citizens of the country (NPE, 1986).

Psychologists believe that the Primary stage is the most important growing period for academic achievement and that all subsequent learning in the school is affected and a large part determined by what the child has learned by the age of nine. Thus, the standard and quality of Primary Education needs to be maintained to lay strong foundation for further Education and also national development.

Sustained research on the impact of Education on the social and economic development of a population has yielded two significant findings - Education leads to broad economic and social benefits both for the individual as well as for society and that these benefits are the greatest once Primary Education has been universalized. Studies have also proved that economic and social benefits of Education are greatest when a country's population has achieved a critical 'minimum' level of Education (PROBE, 1999). Research shows that increasing enrollment in Primary Education, followed by secondary Education has been responsible for sustained high levels of economic growth in East Asian export led economies. This, accompanied by an equitable distribution of benefits has led to visible improvement in the living conditions of these people. Studies conducted within India, too prove that Primary Education has significant benefits and a critical minimum level of Education has a strong positive effect on economic growth; affects productivity in agriculture positively and has visible positive social outcomes as shown by the national Family Health Surveys – reduced infant mortality rates, improved nutritional status of children, lower fertility rates and an overall qualitative improvement in the living conditions of the population (PROBE, 1999).

All the above mentioned indicate that Primary Education deserves our emphasis and attention.

7.2 PRIMARY EDUCATION: THE PRESENT NATIONAL SCENARIO

Over the years, literacy rates have shown a significant improvement in India.

• While in 1951 the total literacy rate was 16.67%, the same rose to 52.21 % in 1991 and in 2001 it was 64.8%.

The scenario for Primary Education too has been quite promising.

- There has been a substantial expansion of Primary and Upper Primary Schools during the post-Independence period. In accordance with the latest reports 66,147 Elementary schools have been opened to enable more student enrollment.
- Supplementing this is the introduction of a large number of non-formal Education centers, alternative and innovative programs for children unable to avail the facilities of the formal system.
- Over a period of time, infrastructural facilities and other facilities have significantly improved due to initiatives both by the Central and State Governments.

- The number of Primary and upper Primary school teachers too increased noticeably (3,10,506 additional teachers have been employed in 2004-2005). The qualifications for these teachers was generally 10 years of general Education followed by pre-service training (1-2 years). Today, with an increased availability of higher secondary school graduates and graduates, many have now increased their requirement with pre-service training a compulsory requirement for recruitment. Over these years, the number of female teachers too has significantly increased for both Primary and Upper Primary levels.
- Enrollment trends countrywide have been promising. The Gross Enrolment Ratio in 1950-51 was 32.1% and the same rose to 82.5% in 2002-03.
- Primary Education has been given great importance ever since the inception of the
 first Five Year Plan from then on till date there have been several efforts aimed at
 realization of this long cherished goal. Today, in the Tenth Five Year Plan the
 allocation for Primary Education is Rs.28, 750 crores which is an indicator of the
 seriousness attached to the subject.

7.3 THE WAY FORWARD......CHALLENGES ET AL

Some of the challenges facing the country in the Tenth Plan were revising the target of enrolling of *all children in schools* from 2003 to 2005 as about 8.1 million children were still out of school as on September 2004 and thus the targets for enrollment and retention needed to be consequently revised.

About 12 million children who were enrolled in Non-formal Education needed to be mainstreamed into the regular schools; the issues of high drop-out and good quality Education needed to be seriously addressed; teacher related issues like vacancies, absenteeism, untrained teachers and ineffective training had to be addressed urgently. Adequate teaching-learning materials and provision of other joyful learning conditions in schools had to be ensured if we were to meet the targets envisaged in the Tenth Five Year Plan.

Over the years, literacy rates have shown a significant improvement in India. The total literacy rate improved significantly from 52.21 per cent in 1991 to 64.84 percent in 2001, a quantum jump of 12.63 percentage points in a decade. The country is expected to

achieve the Tenth Plan target of literacy rate of 75 per cent by 2007 through the combined efforts of the ongoing elementary and adult education programmes.

7.4 RATIONALE OF THE STUDY

The need to focus the study on primary schooling in Municipal School Board schools was felt for a number of reasons. They are enumerated as follows –

Primary Education is referred to as the base or foundation of learning for all citizens consisting of basic knowledge and skills for life which is obtained at this age, 6-14 years. There are obvious and evident justifications for the increased investment in Education—especially Primary Education—first, an educated populace is essential for modern societies to function and especially so in this era of information explosion and globalization; second an educated population makes better use of the fruits and is more productive than an uneducated one; lastly, schools and their curriculum play a crucial role in transmitting social and national values thereby promoting social and national integration. Macroeconomic models, across the globe, indicate that Primary Education plays a very significant role in laying the solid foundation that later culminates into enhanced economic growth, poverty reduction and improved living standards among its people. Especially with respect to social outcomes of Education, the National Family Health Surveys (1992-93) indicate a very strong positive relation between Educational levels and fertility levels child mortality rates and the nutritional status of these young school going children. (PROBE, 1999)

The above discussion indicates that for all these societal effects to be visible a 'critical threshold' of schooling is essential and thus the government's role in making Primary Education compulsory so that the benefits of Education accrue firstly to the child, his immediate family and then to society at large. The support extended by the Government in all aspects is the outcome of Education being made a fundamental right in Article 21A of the Constitution. It also centers on the issue of social equity and national development. In the absence of Government support, these parents would be required to shoulder the responsibility of educating their children which would be an enormous economic burden on them, which in all probability they would find difficult to shoulder. Thus, government financial support is absolutely essential to enable this student population to attend school. This would in the long run enable social equity, improve productivity and consequently the economic scenario and the entire Indian population would benefit.

Looking to its long-term significance, Universalisation of Primary Education seems an appropriate decision. However, this has been a long pending Constitutional promise to the nation. Enrollment rates and literacy rates are indicative that much progress has been made in the direction of translating a fundamental right into reality.

The quantitative expansion of the system appears quite impressive but despite this the goal of Universalisation appears elusive. This experience has made it clear to Educational planners that linear expansion of facilities alone would be insufficient to bring all the children within the fold of Elementary Education. The 'qualitative' aspect too would have to be critically reviewed. Not only this, several new challenges were emerging as a consequence of the impact of science and technology and the changing socio economic scenario and Education needed to be responsive to these contemporary realities. Vital inputs have been provided for improving school environment, facilities and strengthening the Teacher Education Programmes in order to ensure enrolment, quality and retention.

The researcher wishes to take up this study at this point of time, to ascertain the status of Primary Education as it is now and study the quality of the existing Primary Education scenario in the light of efforts made for UEE by 2010 AD. The rationale for focusing the study on Primary Education in Vadodara is that it has been a pioneer in the field of Primary Education and is an important cultural and Educational part of the Gujarat State. Going by the Constitutional Directive, the State is committed to universal elementary Education and the government is obliged to translating this right into reality. The present study is confined to studying the status of formal primary schools under the MSB of Baroda city.

According Primary Education of good quality is the central goal of Indian Education Policy. The issue of quality needs to be addressed not only for this system but for any system because quality implies the effectiveness of the concerned system and its capability to measure up to its predetermined objectives. The test of any Educational system is best judged by the achievement of its students because achievement is the end product of all educational endeavors. In this study, quality is understood as a conglomerate of several factors, how these function and what results these produce because it is these results which are an indicator of quality. It is pertinent to mention here that through this study an attempt has been made to view the different inputs and then

study the outcome of schooling which would reveal the quality of the present primary school Education system.

Organization variables are significant because it is within these that the learning processes take place. It thus follows that though not lavish, a congenial atmosphere is necessary if we expect children to come to school and be present for all the school hours. Effective transaction of the curriculum and other inputs are possible only if the school atmosphere is conducive to learning. Giving due consideration to this, 'Organizational variables' was taken up as one of the vital inputs and a significant determinant of quality. The school environment, condition of classrooms, facilities such as electricity, library, playground, urinals, laboratories, drinking water facility need to be explored and their status ascertained. In a policy paper on Primary Education issued by the World Bank (1990), it was highlighted that student's learning is greatly influenced by family background and school inputs. It therefore becomes even more essential to collect information about these.

Together with organizational variables, other significant determinants of quality which need due consideration are the human and instructional resources and significant process variables like the actual time spent on subject matter of the lesson — especially when we consider the fact that in the existing scenario with severe shortage of staff and a financial crunch, the administrative work is often done by the academic staff themselves. It would be worthwhile to know whether or not academics suffers due to this additional administrative workload; whether continuous monitoring of student progress is done keeping in mind that in this system a single teacher is trained to teach all the curricular subjects and conduct extra activities in addition to the above; whether the subtleties of language teaching can really co-exist with the rigors of science and math teaching - does not the discipline itself demand a unique methodology and can the teachers of this system be expected to conform to the demands of different disciplines at the same time? - does such an arrangement affect the quality of teaching?

The textbook is the single most important instructional aid in the Indian classroom and most definitely in the schools under study – it needs to be looked in with detail whether or not the textbook is a reflection of the objectives laid down by the MSB; whether or not this important instructional aid is supplied to the children on time and a careful study too needs to be done regarding the difference aspects of the textbook and how far it is in

accordance with the laid down objectives as also the competencies specified for each grade as a prerequisite for promotion to the next.

The number of teachers present in the school has direct bearing on the organization of teaching activity and consequently affects the quality of the teaching – learning process. In the case of very few teachers present, they would be over burdened and may even in certain cases have to resort to multi-grade teaching. Also significant is the fact that although there may be one teacher per grade, the teacher – pupil ratio may be very large in which case the teacher may not be able to accord attention to each student or his individual progress. Besides, teachers in these schools face enormous challenges – overcrowded classrooms, multigrade teaching, administrative workload and poor community involvement.

The researcher also feels the need to find out more about the academic and Professional qualifications of the teachers, their years of experience and the frequency and nature of their in-service training programs. It would also be necessary to find out whether the headmasters have had any training related to institutional planning and management because this too would ensure smooth management of all activities within the particular school and thereby affect quality.

International experience reveals that in order to develop sustainable basic skills in Language and Mathematics about 4-6 complete years of instruction are needed. When children drop out after 1-2 years, the sustainability of the learning automatically reduces and ultimately the learning becomes redundant. Families aware of the importance of schooling can contribute significantly towards their child's achievement in school. International evidence shows that student enrollment, attendance and completing various levels in school were affected due to the above Studies show that a supportive family environment is significantly co-related with children's achievement. The positive effect of regular attendance on academic achievement and the role played by parents to ensure this, was noted by Dave (1991) for grade I students, in nine States. The researcher felt that it was important to elicit the views of the community members (here parents) regarding the quality of primary schooling and to what extent did their children benefit from the existing facilities because their views would have a significant bearing on both enrollment and retention of children in the system in future.

The researcher was also keen to know the status of retention i.e. the number of students enrolled and the number that discontinued at the end of that academic year. And, if at all the drop-outs were desirous of continuing after some time period, what were the necessary remedial actions taken to bring them on par with the other students and thereby restore them to their expected levels of learning?

It follows that mere assessment of the status of existing facilities may not be sufficient to give a clear picture of the quality of primary school – it is the efficiency with which these factors are put together, that determines quality.

While the facilities accorded may be uniform, these represent only one dimension of the curricular inputs provided in the schools. Student learning is largely influenced *also* by the actual curricular transactions and thus each classroom becomes a unique learning environment depending on the manner in which the instructional processes are visualized, designed and organized by individual teachers (Govinda & Varghese, 1991). Organization of classroom teaching may vary depending on the methodology required and considered appropriate for certain chosen subjects, specialization of teachers in the subjects taught, availability of sufficient number of teachers, additional duties conducted which are subtracted from instructional hours, etc. These and related issues were considered to have a significant bearing on the quality of the education provided and thus *observation of instructional processes* was taken up.

Finally, quality of school education has to be seen in terms of student academic achievement i.e. the extent to which students have learnt what they had to, at the end of each grade – here the same may imply as to how well have the competencies been mastered at the conclusion of each grade?

A more comprehensive evaluation would ideally cover cognitive, affective and psychomotor areas of pupils' growth and would employ different tools and techniques of evaluation to capture different dimensions of pupils' growth at the primary stage. However, this study has restricted itself to the study of student academic achievement in chosen areas such as literacy and numeracy and in non-cognitive areas it has focused on the nature of activities designed and the extent of student participation therein.

The rationale behind the selection of Mathematics and Language is as follows – Learning is a complex process of discovery and enquiry facilitated by Language. Language is an unmistakable mark of personal identity and is essential for aspects such as interpersonal

relationships, understanding and interpreting social situations and thus is the primary instrument of thought. Language learning is an active process that begins at birth and continues ever since. Students learn language to communicate their thoughts, feelings and experiences as also to learn other subjects.

Thus, language, thinking and learning are interrelated. Students use language to test relationship with prior knowledge, experiences and beliefs; examine new ideas; establish connection, question and reflect upon these ideas and thereby determine different courses of action. Language development is integral to their success in every area of their school life and even in the future if they wish to extend their knowledge, skills, strategies and interests. Keeping this importance of language development in mind, the researcher decided to assess the extent of achievement in the 'specific language of instruction' in the concerned schools.

Mathematics too, is a vibrant subject connected to the real world at every level. At the Primary level, students should develop a sound knowledge of core mathematical concepts, which they would use to understand more advanced topics in the future. They should see the usefulness and applicability of mathematics in real life situations as also its relationship with other subjects in the curriculum. A complete study of the subject in future must necessarily enable every learner to relate the subject to the immediate environment as also to the development of his thinking and reasoning skills. Keeping the above in mind, it is necessary to determine the understanding of students of basic mathematical concepts and thus in addition to the achievement test to assess literacy, an achievement test to assess 'numeracy' was also designed and implemented.

In addition to the above, in today's modern and technologically advanced world, the knowledge and skills most required are that of problem-solving, meaningful organization and interpretation of data, the abilities to evaluate and make future predictions on the basis of this data....the skill of appropriate communication for the effective dissemination of knowledge......all this is indicative of the important role played by the two subjects – Mathematics and Language and hence their inclusion in the study.

Finally, any conclusive statement on 'quality' would be possible only from the active Functionaries and the immediate beneficiaries. Hence, their views regarding the present functioning and suggestions for improvement needed to be considered and they too constituted a significant source of data for this study.

It is against this backdrop that the researcher proposes to take up this study to ascertain the status of the present scenario and whether or not we are actually progressing towards a long pending goal or still far away from achieving it.

7.5 STATEMENT OF THE PROBLEM

A study of the Quality of Municipal Corporation Primary schooling in Vadodara City.

7.6 OBJECTIVES OF THE STUDY

The Objectives of the present study were:

- 1. To study the status of Municipal Corporation Primary Schools in terms of facilities available.
 - Infrastructure facilities
 - Teaching Materials
 - Enrollment and retention at the end of the academic year (2004-2005).
- 2. To Study the status of Municipal Corporation Primary Schools in terms of Human Resources
 - Qualification and experience of teachers.
 - Type and duration of in-service training availed by teachers.
 - Frequency and nature of teacher appraisal programmes.
- 3. To study the teaching-learning process in the schools through
 - Analysis of the text book,
 - Organization of the time-table,
 - Mode of classroom transaction -Methods adopted by the teachers,
 - -Teaching aids used by the teachers,
 - Evaluation mechanisms,
 - Remedial classes conducted for weak students.
- 4. To study the outcome of schooling through
 - Students academic achievement (Math and Language),
 - Participation in different co-curricular activities.
- To study the views of Administrative Officers, Headmasters, Teachers, Students and Community Members regarding quality of Primary Schooling.

7.7 OPERATIONAL DEFINITION OF TERMS

Municipal Corporation Primary Schooling

The study restricts itself to the schools under the Municipal School Board of Vadodara City.

Primary Schooling refers to the schooling in the Primary Grades, which comprise

Primary Grades

Lower Primary (Std. I-IV)

Upper Primary (Std. V-VII)

The Study however restricts itself to the Upper Primary Classes i.e. Std. V, VI, VII.

Quality

Quality refers to the present condition of things, how these function and what results these produce. To understand and analyze quality, the 4 quality indicators adopted for the purpose of this study were

- Infrastructural facilities
- Human Resources
- Teaching Learning Processes
- Achievement in Math and Language (Gujarati, Marathi, Sindhi, Hindi).

Achievement

For the purpose of this study, an assessment of the outcome of Primary schooling (achievement) was meant to connote -

- Measurement of literacy and numeracy skills in the learners, in all the medium of instruction (Gujarati, Marathi, Sindhi, Hindi) for Classes V, VI, VII, for the academic year 2004-05.
- Participation in various co-curricular activities for the academic year 2004-05.

7.8 DELIMITATION OF THE STUDY

The study has been delimited to

- The Municipal Corporation schools of Vadodara city only,
- The academic proceedings during the academic year 2004-2005,

- The chosen seven schools wherein in-depth observation was conducted for capturing the different aspects of primary schooling.
- The Primary grades and therein specifically Stds. V, VI, VII only,
- The teaching-learning processes and academic achievement in the two subjects i.e. Language and Mathematics,

7.9 APPROACH ADOPTED

As mentioned earlier, 'quality' of Primary Education is understood as a conglomerate of several factors (related to input, process and output) which collectively determine 'quality'. While quantification seemed necessary for certain aspects, mere quantification often seemed inadequate to capture certain other dimensions. For dimensions such as teaching —learning process, its conducting and other going — ons in the every day conducting of curriculum, only a closer observation would unravel certain facts and thus enable a clearer and holistic picture.

Thus, both quantitative and qualitative approaches were employed keeping in mind the nature of data that was being collected.

7.10 NATURE OF DATA

The following data, both quantitative and qualitative, were required / collected to achieve the objectives.

Quantitative data included the infrastructural facilities available in the schools; the presence and extent of use of teaching-learning materials; the enrolment and retention of students at the end of the academic year; the qualification and experience of teachers; the type and duration of in — service programs attended by teachers; the academic achievement of students (literacy and numeracy).

Qualitative data was required and collected mainly through a critical analysis of the prevalent text books, the daily and annual curricular and co-curricular activity organization, participation of students, mode of classroom transaction, methods adopted by teachers and finally the views and opinions elicited by different functionaries and beneficiaries of the Primary Education system.

7.11 SOURCES OF DATA

The data required for this study were available from various sources.

For objectives 1 and 2, data was collected from all the existing Primary schools, run by M.S.B., of Vadodara city. There were a total of 126 schools during the period of data collection and each one was visited for the required data.

For objective 3, data was collected from a few different data sources The curriculum as practiced in the school, in terms of curricular and co-curricular activities, was closely observed.

For analysis of the textbooks, the textbooks of Std. V, VI, and VII were closely analyzed keeping in mind the prespecified objectives for each grade. For the other components of objective 3, data was collected on visiting the schools regularly and observing the actual manner in which the teaching – learning process was conducted i.e. the mode of classroom transaction, the methods adopted by the teachers, the teaching aids employed by the teachers, the manner and frequency of evaluation and finally the remedial classes conducted to identify and remedy the learning difficulties encountered by learners.

For objective 4, data was collected by means of achievement tests conducted in the subjects of Mathematics and Language (Hindi, Gujarati, Marathi, Sindhi) for grades V, VI, VII. Also, the participation in different co-curricular activities was seen – i.e. the type of activities conducted in the course of the year and the extent of participation of students in the same.

For objective 5, the views of the functionaries of the system (Administrative officers, Headmasters, Teachers) and Beneficiaries (students and their parents) were elicited regarding quality of the existing scenario.

Thus, the data required for the study was collected from four main sources.

- Official Documents.
- School Functioning.
- Functionaries
- Beneficiaries

7.12 OPERATIONAL FRAMEWORK OF THE STUDY

The present study has been carried out in two distinct but related stages.

They are -

• Collection of quantitative information pertaining to quality indicators:

In this stage, all the primary schools in Vadodara city, under the Municipal Corporation School Board were visited. Details with respect to their infrastructure and available facilities were collected. When collated, it presented a comprehensive picture of the existing scenario with respect to all these schools. This stage provided the background that enabled the investigator to conduct the following stage.

• Identification of Representative schools:

The data collected from all the schools provided a comprehensive canvas for understanding the various aspects regarding these schools, i.e. the available facilities and their functioning. Once these characteristics were determined, a few schools were purposively selected and it is in these schools only that a detailed study was conducted regarding the various input and process variables, the status of functioning and student achievement.

Assessment of the outcome of schooling had been confined to

- Measurement of literacy and numeracy skills in the learners, in all the medium of instruction (Hindi, Gujarati, Marathi, Sindhi) and for classes V, VI, VII.
- Student participation in different co-curricular activities conducted in that academic year (2004-05).

7.13 PROJECT IMPLEMENTATION.

Population and Sample of the Study-

All the schools in Vadodara city under the Nagar Prathamik Shikshan Samiti, the Functionaries (Administrators, Coordinators, Principals, and Teachers) and Beneficiaries (Students, Parents) constituted the Population of this study.

It was from this population that the sample was selected, the details of which are as follows –

Selection of schools for the study.

A detailed analysis of the scenario enabled the investigator to identify some schools. The 126 schools which were visited were classified on the basis of their medium of instruction i.e. Gujarati, Hindi, Marathi and Sindhi.

Once all the schools in Vadodara city were visited and a clear picture of the scenario had emerged, from each medium of instruction 2 schools were selected, purposively. This selection was done in such a way that these schools would be fairly representative in terms of the available human and material resources and other conditions characterizing the primary education scenario in the city.

As mentioned earlier, the schools that would be fairly representative were selected as the sample schools and consequently 2 schools were selected from each medium of instruction. Since, for Sindhi medium of instruction only 1 school was functioning at the time of data collection, that school alone was selected.

The schools were selected keeping in mind some characteristics namely-

- One of the selected schools (Marathi medium) was adjudged the best school in Vadodara City (in terms of functioning and academic achievement of the students) by the Nagar Prathamik Shikshan Samiti,
- Two of the selected schools were in communally sensitive areas. The surrounding
 areas being sensitive, the attendance of the students was often affected due to this
 proximity,
- Two schools were specifically selected keeping in mind their infrastructure Both
 these schools have in addition to the school building, an assembly ground and a
 sports ground too. Both these schools house the Office of the CRC Coordinators
 and are comparatively better equipped than most Nagar Prathamik schools in terms
 of infrastructure and other facilities,
- The sixth school was especially selected due to its ambience this school is located in a busy marketplace area. In addition to the commotion of the constant traffic, there is a very strong smell of non-vegetarian items sold in the market place which

the students have to endure throughout the day. The school does not have any provision for a playground – only a very small area where the morning assembly was conducted.

 The last school was chosen as it was the only school offering Sindhi as medium of instruction in Vadodara City.

Thus, all the schools were purposively selected keeping in mind the special characteristics they had. Because all the Nagar Prathamik schools would have some or the other of these characteristics, these schools were chosen as the representative schools and the second phase of study conducted there.

Selection of Learners, Teachers, Functionaries, Beneficiaries.

• Selection of Learners.

In keeping with the objectives of the study, learners in grades V, VI, VII constituted the sample. As mentioned earlier, 2 schools were purposively selected from each medium of instruction i.e. Gujarati, Hindi, Marathi and Sindhi and it was from within these schools that the student sample was selected. Herein too, there existed some variations. In some of these schools each grade was divided into 2 sections. Then, any one section was selected at random and all the learners in this selected section constituted the sample of learners. A total of 685 students constituted the student sample.

Selection of teachers

Now that the sample of learners was determined, teachers teaching these students were identified. The teachers from the selected schools constituted the sample of teachers. Thus, teachers of grades V, VI, VII of the selected sections from the two schools each from the four mediums of instruction (seven schools totally) finally comprised the sample of teachers. A total of 50 teachers constituted the sample of teachers.

• Selection of Parents (Community members)

Parents constituted the beneficiaries of this system and consequently their opinion would be of great importance, regarding the performance and attainment of their

children. Keeping this in mind, the parents of the sample of students identified in the study were identified. However, finally it was only their availability, readiness and willingness to respond that determined their inclusion in this study.

Selection of Functionaries

Persons involved in the conducting and the functioning of the entire machinery were involved namely the DEO, the Administrative Officer and the CRC Coordinators. Their views were necessary to understand the organization, functioning and smooth management of the Primary Schooling system which was the focus of this study.

7.14 TOOLS - INSTRUMENTS FOR DATA COLLECTION

For acquisition of relevant data required for the study, the following tools were prepared for data collection

- School Information Schedule,
- Observation Schedule,
- Paper pencil Test,
- Interview Schedule,
- Informal Discussion

The following tools were constructed to acquire data relevant and necessary for the study. (A set of these tools have been appended in the Appendix section).

SCHOOL INFORMATION SCHEDULE

This tool was designed to collect information regarding the location of the school, the infrastructure, availability of facilities (such as a library, T.Aids separate toilets for girls and boys, playground, sports items, etc.) the mid day meal program, the annual and daily lesson planning of teachers, enrolment and retention patterns, extent of involvement of parents, availability of funds for teaching related activities, frequency of staff and parent – teacher meetings for appraisal, imparting of computer education in schools, remedial teaching done if at all, the examination pattern, and finally suggestions for improvement of the quality of the existing scenario.

OBSERVATION SCHEDULE

The next tool for data collection was an observation schedule.

This tool was employed for observing the manner in which the teaching – learning processes were conducted in the actual classroom situation. The tool focused on dimensions such as –

Actual teaching duration, lesson introduction mode, teaching strategies used, student behavior patterns, extent of pupil participation, pupil responses, teacher explanation, teaching aids used, audibility, visibility in classroom, home assignment given/checked, manner of class summarizing.

Also,

The manner in which extra-curricular activities were arranged in the time-table and conducted was observed and the nature and extent of student participation noted.

PAPER PENCIL TEST

For the purpose of this study, an assessment of the outcome of primary schooling was determined via

- Participation in various co-curricular activities and
- Basic literacy and numeracy skills.

The Paper – pencil test was an instrument to assess student achievement in two areas - language and mathematics and was used to measure the literacy and numeracy skills among these learners. The minimum levels of learning specified for each grade (here, Std. V, VI, VII) served as the benchmarks for evaluating student performance.

The measurement of performance was done at such a stage when students were expected to have acquired the prescribed competencies i.e. at the end of the academic year. It is also necessary to be mentioned here that out of the prescribed competencies for each grade, selected competencies were taken up and student performance with regards to these competencies only was assessed.

Selection of competencies was done after consultation with the Municipal School Board Evaluation Committee members – they were senior and experienced schoolteachers and it was with consultation with them that the competencies were decided. On their recommendation, certain competencies were selected over the others and consequently selected for the achievement test as a suitable indicator of the students' learning outcomes.

Further details regarding the construction of this tool are given at a later stage in this chapter itself.

INTERVIEW SCHEDULES

Unstructured Interview schedules were developed in order to collect reactions from different categories of functionaries and beneficiaries of the Primary Education System under MSB in Vadodara city. The interviews were unstructured to give the researcher ample opportunity to probe wherever required and collect data relevant to the study.

The main areas covered in each Interview Schedules are listed below –

• Interview Schedule for Principals of Schools.

Necessity of Balwadi - need to make it compulsory, Annual and Lesson Planning, Textbooks used in MSB schools, The prevailing system of evaluation, Inspection conducted in the schools, Conducting of extra curricular activities, Training programs - relevance and effectiveness, Parental Involvement in school activities, Opinion as Administrator regarding the present status of functioning.

• Interview Schedule for Teachers of Schools.

Necessity of Balwadi, need to make it compulsory, Annual and Lesson Planning, Textbooks used in MSB schools, The prevailing system of evaluation, Conducting of extra curricular activities, Teaching of various subjects; difficulties faced and their causes, Training programs – relevance and effectiveness, Parental Involvement in school activities, Opinion as Teacher regarding the present status of functioning.

Interview Schedule for Administrators

Necessity of Balwadi, need to make it compulsory, Qualification of Teachers, Inspection conducted in the schools, the prevailing system of evaluation, Training programs – relevance and effectiveness, Special initiatives for quality enhancement.

• Interview Schedule for Parents.

Necessity of Balwadi, need to make it compulsory, Textbooks used in MSB schools, The prevailing system of evaluation, Conducting of extra curricular activities, Parental Involvement in school activities, Reasons for sending child to school, If decision to discontinue, probable reasons.

Interview Schedule for Students.

Reasons for liking or disliking school, Reasons why learning is interesting or disinteresting.

INFORMAL DISCUSSION AND DAILY NOTE-TAKING

These two instruments were also used to collect information related to the study.

7.15 DATA ANALYSIS

The nature of data in the study demanded both quantitative as well qualitative analysis - Factual information related to infrastructure, teaching-learning materials, achievement test scores, extra-curricular activities conducted, training programmes and time-table were analyzed quantitatively using frequency and percentage analysis.

- The information collected through observation, interviews, informal discussion and daily note taking were qualitatively analyzed – this involved both an ongoing analysis as well as analysis at the end of the data collection. The data analysis techniques used were Data structuring, Data reduction, Conclusion drawing and summarizing,

The process of Triangulation was employed to verify data collected from various sources.

7.16 MAJOR FINDINGS OF THE STUDY

The major findings of the study are -

STATUS OF INFRASTRUCTURAL FACILITIES.

- While a majority of the schools were of a pucca structure (93. 18 %) and also that in
 most cases there were sufficient number of classrooms for each grade, (71. 59%), the
 schools were in busy localities and the classrooms were not too well ventilated –
 thus, both the classroom and surrounding ambience were not found to be too
 conducive to learning.
- While certain essential facilities like Electricity and the Mid day meals were provided
 to most of the schools, there were other facilities which were important but the
 provision was found lacking, namely the presence of a Library, books, school
 playground and sports equipments.
- In most of the cases it was found that the Library was not a very functional one although Teachers did get the benefit of Reference books to aid in their daily teaching.
- The school playground was a facility which was found to be lacking in most cases with many cases coming to the fore where there no playgrounds at all, only a very
 small ground or enclosed structure where usually the morning assembly was
 conducted. The availability of sports equipments too was found to be rare.
- The important facility of Sanitation was found to be present in almost all the schools. The schools having the facility of sanitation however did not always have separate sanitation facilities for boys and girls. It was found that only 53.41% schools had separate facilities among the schools which reported having sanitation.

STATUS OF TEACHING MATERIAL.

The study revealed that

- While certain inputs appeared to be prevalent in the schools under study, there were accompanying factors which needed attention.
- A majority of schools functioned in accordance with the time-table (86.36 %); did have Library (57.95 %) and scientific apparatus; did circulate the school text books

within three months of commencement of the academic year and also provided Reference books to their Teachers - 63.64 % schools responded that these were made available to all teachers.

- But, in these very schools it was found that while there was provision for a Library, the Library books were not circulated among students due to an apprehension regarding its maintenance; while scientific apparatus was reported in a large percentage of schools (65.91 %), the system of storage and maintenance of these apparatus was an area that needed to be looked into.
- The schools reportedly had sufficient number of classes for each grade but did not have separate Activity rooms.
- The data with relation to essential facilities revealed that while these facilities were
 present, their condition and maintenance was in question. The class blackboards were
 in a state of disrepair and very often they were simply painted on the wall which was
 not too conducive for writing as it did not have a very smooth surface.
- In all these schools, the number of classrooms was adequate and very rarely was any case of multi-grade teaching found.
- The schools had been provided with Computers in order that Computer literacy was ensured. However, although all the schools did have the computers, there was a dearth of trained teachers to teach the subject and so these machines were predominantly nonfunctional except for cases where an outside agency offered services such as the NGOs. This problem was taken care of by training teachers via the In-Service training programmes which attempted to impart functional computer literacy to the teachers so that instruction as well as some of the academic duties could be done with the help of computers. Despite these efforts, the percentage of usage was found to be very minimal.
- Thus, while funds are being sanctioned and utilized, a regular follow-up is required to ascertain whether or not the facilities provided are being maintained properly or not. In the event of this not happening very regularly, the facilities gradually deteriorate and then become a barrier to the effective conducting of the instructional process.

QUALIFICATION AND EXPERIENCE OF TEACHERS.

The data with respect to Teacher qualification revealed that

- A very large population of Teachers was Secondary school certificate holders after which the required P.T.C. certification had been obtained (95. 03 %) The Table also revealed a very small percentage of teachers were graduates with an advanced professional training i.e. B.Ed (04. 52 %) and the number of teachers with a post-graduate qualification was miniscule i.e. 0.45 %.
- The data with respect to teaching experience revealed that a small percentage of teachers had experience ranging from 1-10 years (12.63 %) and with increasing teaching experience the percentage increased significantly the largest population (43.77 %) was found to have a teaching experience of more than 25 years

ENROLLMENT AND RETENTION AT THE END OF THE ACADEMIC YEAR

With respect to enrollment and retention it was found that –

- The largest number of students were in the lower primary grades and the number gradually decreased as one progressed to the upper primary grades.
- There was also a visibly positive trend that could be seen i.e. the number of girl students in each class was more than that of the male students indicating the gradual awareness in society for the education of the girl child.
- With respect to enrollment it was found that there was a general increase in the trend of enrolment in the grades I-IV and from the upper primary stage, the enrolment showed a gradual decrease.
- The retention in these grades also show a decreasing trend implying that after completion of the lower primary education, either students were forced to discontinue, shifted residence or were enrolled in Private schools as was often found to be the case.

IN-SERVICE TRAINING AVAILED BY TEACHERS

- Conscious efforts were made by the concerned Authorities to provide rich inputs to the Functionaries as well as the students, thereby continuously ushering in meaningful and desirable changes to enhance the overall quality of the system.
- Training programs were conducted to attend to both academic and academic related areas. Also, skills expected of Teachers in contemporary times; issues of concern to Officials and Teachers in this system specifically and issues of future relevance to students were all taken up periodically and attended to.
- Duration of these programs was found to vary in accordance with the requirements of
 the program. Generally, these Training Programs were of duration of three to four
 days and sometimes when the training was imparted for topics such as Gender
 Sensitization or other value added topics, the duration of the programs was of one
 day only.
- The noteworthy fact was that a majority of these Training Programs were conducted during the on-going academic year and the teachers of other grades were assigned the duty of attending to the school students.

FREQUENCY AND NATURE OF TEACHER APPRAISAL PROGRAMMES.

The data analysis of the status of human resources in the schools under study revealed that

- There was a proper organization of academic work with annual planning and lesson
 planning done with regularity also, a well maintained supervision mechanism
 where the documents and the quality of the instructional processes were supervised.
 Remedial action was taken to rectify the situation in case of gross and glaring
 evidences.
- Writing of planning books was compulsory and was followed by all the teachers -86.36 % responded that this was done on a regular basis. Regarding the preparation and following of time table, it was found that 81.81 % respondents replied that the time-table was prepared and followed as framed.

Teachers were assigned additional duties which they themselves professed as being a
disturbance in the conducting of their academic duties. More than 90% teachers
opined that duties other than academic duties came their way during the course of the
academic session.

ANALYSIS OF THE TEXT BOOKS – LANGUAGE AND MATHEMATICS.

The data analysis revealed that

- The school Textbooks were periodically revised and necessary updations were made, the content was organized systematically with ample examples provided for better understanding.
- The noteworthy elements were the inclusion of the latest information in connection
 with some of the topics; the attempts to correlate specific topics with other
 disciplines and also Life-skills and the attempts at continuous formative evaluation
 for student self assessment via intermittent self-testing exercises.
- Thus all attempts were made to make the text books relevant, updated, correlated and well presented both with respect to mechanical and content aspects.

ANALYSIS OF THE MATH TEXTBOOK

- Revisions were done periodically. The Math textbook of Std.V revealed that revisions were done as frequently as 2000, 2001, 2002, 2003.
- The overall content organization was from simple to difficult topics; the chapters began with a brief recapitulation of the previous topic, often with a short exercise for self-evaluation. Each new concept was introduced along with a detailed explanation, solved examples, and often alternative methods of solving the same problems were also shown. Following these were related assignments for self-evaluation.
- Activities were suggested alongside the newly introduced topics for teachers to design meaningful activities in case of concept clarification.
- There were intermittent evaluation exercises in the form of a short test for the purpose of formative evaluation these tests were however only at the application level without any higher order questions being posed.

- The content was analyzed into sub-topics with the corresponding MLLs stated alongside. For certain topics, relevant, current and additional information were provided.
- The layout was found to have appropriate headings and subheadings with topics and subtopics highlighted. The printing was in black and white and the diagrams and pictorial representations were clear, appropriately placed and labeled.

ANALYSIS OF THE LANGUAGE TEXTBOOK

- The textbooks showed frequent revisions for example the Language textbook of Std.VI showed revisions done frequently (1998, 1999, 2000, 2001, and 2002).
- The organization of the content was in terms of listening, speaking, reading and writing skills; each unit (prose/poetry) began with a brief introduction to Author/poet followed by a brief summary of the following poem or prose piece, exercises for self-evaluation and self study exercises, related exercises given for knowledge enrichment and also guidelines given to the teachers for designing of meaningful student activities.
- In the initial grades, Language was introduced with a brief section on proper pronunciation, intonation and manner of reading - this input was however not repeated in the future classes.
- The textbook attempted a co-relation between the topics and related information.
- The presentation was found to be with appropriate headings and subheadings with topics and subtopics highlighted. The printing was in black and white and the diagrams and pictorial representations were clear, appropriately placed and labeled.

However,

 Despite the noteworthy attempts made to make the text books relevant, updated, correlated and well presented both with respect to mechanical and content aspects – it was found that these Textbooks were crammed with awesome information, concepts and vocabulary.

- The Language textbook focused mainly on the language structures and other
 mechanical aspects the nature of the text was far too formal and removed from the
 spoken form; there was no attempt to include colloquial forms (used in daily
 conversations) from the different dialects with the assumption that children would
 learn to communicate only through rote memorization and repetition.
- The Maths textbook revealed excessive accumulation of facts and although examples, applications, teacher activities and student self-assessment exercises were provided, there was lack of correlation with daily life experiences.
- Although in very rare instances, there were typographical and factual errors in the books.

ORGANIZATION OF THE TIME-TABLE,

- The curricular load was maintained at a minimum in the lower grades and gradually allowed to increase with increase in age. The noteworthy feature was that the initial instruction was done in the child's own mother tongue, a feature recommended for effective future instruction to happen.
- There was also inclusion of extra-curricular activities such as Art, Music, SUPW and Physical Education interspersed with academics so as to take care of the monotony of classroom teaching.
- The time table organization seems to have considered many psychological and academic truths, but, the limitation of adequate Staff and other trained persons defeated all well thought out efforts.

MODE OF CLASSROOM TRANSACTION

- The Maths lessons were introduced by recapitulation of previous knowledge primarily and also by referring to the Teaching Learning Materials made by teachers for the various topics. Observation of the Language classes revealed that the Teaching Learning Material was used to relate to, during the introduction phase.
- It was only in rare circumstances that a relevant activity was done to introduce the topics.

- During the Mathematics Instructional process, the strategies most predominantly used by the Teachers were explanation of concepts with the available TLM materials, followed by solving of numerical problems (96%).
- The students were mostly passive and were assigned the task of writing solved
 mathematical numericals and language answers from the blackboard. They were
 often found to be assigned the task of memorizing facts and definitions from the
 textbook.
- The same was seen even in the Language classes. The most dominant Teacher activities were reading from the textbook, explanation of concepts while the students were asked to write the answers from the blackboard. It was also found that students were very rarely asked to do any reading, thus, the skills of reading and speaking were rarely catered to.
- The use of audio-visual aids for teaching mathematics was very rare and the usage of available TLM for the explanation of concepts too was rare.
- Although the concepts were related to previously taught concepts in Maths, topics
 were not related to the immediate environment –in Math, only in 8% of times were
 concepts found to be correlated to the immediate environment and in Languages the
 same was found to be 34%. Thus, the teaching of subjects was done in isolation and
 not integration thereby rendering the teaching meaningless and irrelevant to the
 learner.
- With respect to student behavior patterns in the class, the most prominent behavior exhibited by students was doing assigned work and copying from the blackboard.
- Very few students in the Mathematics classes (20 %) and Language classes (10 %)
 were found to ask any questions or had any queries. However, the data also revealed
 that these students very rarely were distracted or engaged in mutual play indicating a
 rather passive atmosphere.
- In both the subject classes, the student participation was found to be moderate.

 Questions were posed to the students and a chosen few students answered these questions with the larger student population not being able to answer them. In each

class there were a few students who were academically brighter than the remaining students and other than them the classes were predominantly passive.

- Very few pupil responses showed a good understanding of the content being taught.
- Teacher's explanations were found to be easy to understand and very rarely were difficult terminologies used.
- Regarding the usage of teaching aids it was found that the blackboard was the most predominantly used instructional tool and only under rare circumstances were some other teaching aids used. In some rare instances it was found that the tape recorder was used in the language class for the lower primary classes. The Teaching Learning Material made by the teachers were also used by them during the teaching-learning sessions although not too frequently.
- Since the classrooms were not too big and neither was the student population too large, the audibility in the classrooms was found to be satisfactory. The visibility too was satisfactory since the student population was less, they were seated near the windows and thus, visibility was satisfactory. Otherwise, in most cases, the rooms were not too well lit and the classrooms were quite poor in visibility.
- Home assignments were given to the students but they were rarely checked by the
 teachers. The assigned work was generally checked by student monitors mainly for
 the regularity of the work done and not so much for the quality of work submitted.
 Thus, there was no regularity in checking and identifying learning disabilities
 through the homework.
- All the classes were concluded by a quick recapitulation done mainly through consolidation of main points both in the Maths and Language classes the other recapitulation strategies were problem solving and questioning. The probabilities of these occurring were more so in the Language classes (50 %) than in mathematics (32 %). But whatever be the strategy employed, recapitulation was done after each class to consolidate the just taught content matter.

EVALUATION MECHANISMS,

- The above Evaluation pattern was indicative of a comprehensive evaluation pattern which took into account all aspects of the student's development.
- While giving importance to academic areas, it also gave importance to non-academic areas and these were activities designed meaningfully in accordance with the respective grades.

However,

The evaluation pattern was not a formative one with regular evaluation not being done to ascertain student progress in different learning areas at frequent intervals. Thus, the diagnosis of learning difficulties and their remedying was not an ongoing process.

STUDENTS' ACADEMIC ACHIEVEMENT (MATH AND LANGUAGE)

The data analysis of the achievement revealed that

- The overall pass percentage was found to be less than 50% in most of the cases and in certain cases it was 0% as well.
- Very few cases recorded pass percentage more than 50%. Thus, the overall fail
 percentage was very high indicating very poor student academic performance in the
 two areas taken up for the study literacy and numeracy.
- While in the lower classes, the performance in Mathematics was found to be better
 than in Language, in the higher grades i.e. Std. VI, VII the students fared better in
 language than in mathematics. There was a gradual decline in the performance of
 mathematics in the higher grades.
- There were instances where all students in certain grades had failed in a given subject indicating no learning having taken place at all.

MATHEMATICS

- A closer look into the performance revealed that the students of these standards did not understand very fundamental concepts of Mathematics.
- The areas that needed attention were modulus values; mathematical addition of negative and positive numbers with consequent change of signs thereafter; graphs and their implications, constructing numerical statements, etc.

LANGUAGE

- There was need for more writing practice as the students although expressive orally were not able to write and thus fared poorly.
- Also students were not able to do the grammar related questions and their knowledge
 of Idioms and phrases needed attention. They had little knowledge of Synonyms and
 Antonyms and the questions related to these questions were mostly left un-answered.
- Thus, their knowledge of language structures was limited and consequently their expression was poor.

REMEDIAL CLASSES CONDUCTED FOR WEAK STUDENTS.

- The Remedial classes were conducted at the end of the academic and at the very beginning of the new academic year.
- Students from the different grades whose academic performance were below the expected level were then given remedial classes in a Bridge Course which consisted of academic inputs in all the subjects and with the aim of overall improvement in the learner's academic performance. On satisfactory performance only were these students promoted to the next grade in case of very poor performance these students were detained in the same grade (albeit, very rarely).
- These Bridge Courses were conducted in all the Samiti schools to raise the academic performance of poorly performing students and thereby bring them on par with the others in the same group.
- This program was beneficial to the students but was only done once at the end of the year and was not a periodically conducted exercise.

PARTICIPATION IN DIFFERENT CO-CURRICULAR ACTIVITIES.

- The analysis of data with relation to participation in different co-curricular activities
 revealed that the academic planning did take into consideration the importance of cocurricular activities and both the time-table and the co-curricular organization
 revealed that such activities were indeed incorporated on a regular basis.
- However, not all activities could be conducted sometimes due to lack of trained staff and at other times due to the unavailability of related material. Also, for the Competitions, participation was limited to only a few students ultimately as the requirements stated that only a few students per school could participate in these competitions and so a majority of students were unable to participate in these competitions.
- The school Principals and Coordinators wanted that the Report cards should be
 designed in such a manner that it would reflect different aspects of the students'
 achievements curricular and extra-curricular.

VIEWS OF FUNCTIONARIES AND BENEFICIARIES.

- Both Functionaries and Beneficiaries were in favor of pre-school experience and parents wanted that there should be provision of Balwadi for all.
- Teachers felt that translated versions of the textbooks were often found lacking with respect to translation of difficult terminologies and thus extra reference material was required.
- A majority of the Principals felt that the existing teacher qualifications were appropriate while 32.95 % felt that the existing teacher qualifications needed to be upgraded. They wanted teachers to be allotted teaching subjects according to their individual specializations.
- 35.23 % of the respondents opined that sudden and strict supervision would help to ensure quality while 53.41% respondents felt that the existing system of supervision needed no change as it was satisfactory.

- A large percentage 55.68% were of the opinion that monthly tests should be introduced to ensure regularity in the students' work and formative evaluation would enable detection of learning disabilities.
- Some of the major reasons that emerged for student absenteeism were students engaged in other activities (68.18%), school situated in a communally sensitive area (36.36%) and also that school was far from place of residence (26.14%)
- Some of the other responses to the issue of student absenteeism evoked such answers
 as students were not interested in their studies, harassment as a result of being a
 Muslim student and absenteeism due to parental ignorance of the benefits of
 education.
- It was interesting to note that as per the understanding of the Teachers, being a girl child was not a barrier to education. Also, Teachers disagreed that school distance was a major barrier and neither was disinterestedness any obstacle to learning these were positive observations and reflected well on social attitudes, availability of schools within reachable distances and teaching practices.
- Parents were frequently called to the schools (54.55 %) and regular PTA meetings were organized (46.59 %).
- Parents, in general were unhappy regarding their child's academic achievements, the remedial classes conducted and also the quality of food served to their children.
- A majority of parents strongly supported their child's education despite all challenges and thus, voiced concern regarding the present system of schooling and the quality therein.
- Majority of the children said that they liked going to school and most students were happy with the teaching in the schools.

7.17 DISCUSSION OF MAJOR FINDINGS

In our continued commitment to ensuring access for all, the quantitative aspects have been repeatedly emphasized with the consequence that very often the qualitative aspects were ignored - and this has been true at both the National and International Primary Education scenarios. However, experience has proved that the quantitative aspects although very important should not be the only consideration – the qualitative aspects need serious attention as well.

The entire process of Education enables children to develop creatively and emotionally and acquire the skills, knowledge, values and attitudes necessary for responsible, active and productive citizenship. The instrumental role played by Education namely social, economical, cultural and the corresponding objectives would be better achieved if Education is of an acceptable quality.

It was in keeping with the same i.e. the issue of quality, that the two most recent United Nations international Conference Declarations focusing on Education gave some importance to its qualitative dimension as well. The Jomtien Declaration in 1990 and, more particularly, the Dakar Framework for Action in 2000 recognized the quality of Education as a prime determinant of whether *Education for All* is achieved. More specifically than earlier pledges, the second of the six goals set out in the Dakar Framework commits nations to the provision of Primary Education 'of good quality' Moreover, the sixth goal includes commitments to improve all aspects of Educational quality so that everyone can achieve better learning outcomes, 'especially in literacy, numeracy and essential life skills'. In 1990, the World Declaration on Education for All recommended that Education together with being accessible should also be more relevant to the learner and focused on quality as an imperative for achieving the fundamental goals of Education.

The Dakar Framework for Action declared that access to quality Education was the Right of every child. It affirmed that quality was 'at the heart of Education' – a fundamental determinant of enrolment, retention and achievement. Its expanded definition of quality set out the desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation). (UNESCO, 2005).

Thus, the quality of Education provided would be a major determinant in admission, retention, regularity in attendance and Community involvement in any Primary Education program.

7.18 A SYSTEMIC VIEW OF QUALITY

Every educational institution is a dynamic system by itself and may be defined as an organized whole comprising a set of interdependent, interrelated and interacting synergetic elements or sub-systems. These sub-systems work in independence as well as in interdependence to achieve systemic goals. The whole is not merely a sum of its parts but a holistic representation of the characteristics and an outcome of systematic and meaningful functioning of the individual parts. The educational system is one such open system —open and sensitive to environmental influences (here, society) and both deeply influences and is influenced by the same.

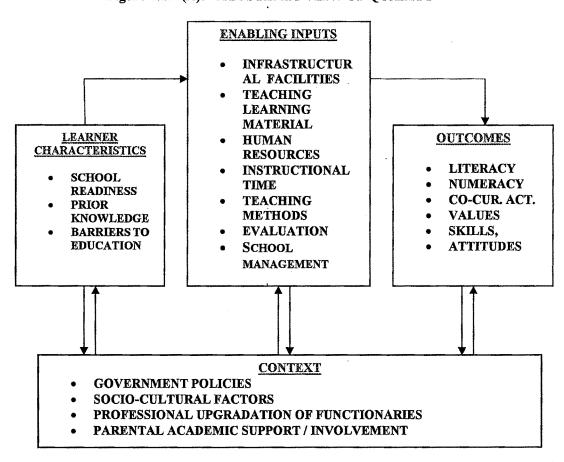


Figure 7.18 (A): A SYSTEMIC VIEW OF QUALITY

Source - (UNESCO,2005).

The present study is, as represented above, a system with the input-process-output interdependence clearly evident. Any judgment regarding the quality of such a system would depend upon the inputs into the system, the effectiveness of the consequent processes and eventually upon the outcomes – here seen exclusively as academic

achievement and participation in co-curricular areas. In addition to the learner characteristics, the quality of the 'enabling inputs' can play a significant role in the achievement of objectives. A favorable context too has a significant bearing on the entire functioning of the system.

There is surely nothing deterministic in the entire process of functioning simply because the inputs are human and strongly conditioned by environmental factors. Thus, crucial to the effectiveness of the system is the process of education itself wherein the available inputs and the processes meaningfully interact, with the 'context', a strong influencing factor!

'Shortage of funds, the limited capacity of systems and institutions to manage change effectively, the myriad constraints on teacher effectiveness and the absence of a strong political alliance supporting quality in education can constitute major barriers to change. However, much can be achieved by making better use of existing resources and focusing on targeted interventions that respond to specific weaknesses. These factors add up to an ambitious programme for reform, particularly in low-income countries where class sizes are large and teachers often have scarcely more formal education than their pupils. Nevertheless, some countries have put all, or most, into effect, with a significant impact on the quality of learning in their schools. Studies of country experience suggest that common to these successes was the central importance assigned to the quality of the teaching profession- its training, support, recruitment standards and pay - relative to other professional groups. These countries' experience also suggests that successful qualitative reforms require a strong leading role by the government. Each case showed a continuity of policy over several decades, remaining stable even when regimes changed. Thus, a robust long-term vision for education, with quality as a persistent theme, appears to be a vital ingredient' (UNESCO, 2005).

The present study revealed an enabling political environment where Universalisation of primary education was a Constitutional promise made to the nation and sustained endeavors made since Independence for realization of the same; not too many constraints with relation to finance and continuous and relevant programs designed for the up gradation of Functionaries... despite all this, the 'quality' of the system was found to be below the mark. A detailed analysis of the situation revealed provision of inputs but lack

of a consequent follow-up of utilization and maintenance thereby wasting efforts and no significant outcomes getting realized.

The enrollment data from Vadodara revealed a gradual decrease in numbers as one progressed to the upper primary grades – thereby the need to rethink on the endeavors made to enhance the quality of the system in terms of financial allocations and whether or not these efforts were indeed being wasted. Despite concerted efforts made to increase enrollment and participation through Policies and Community initiatives, why was the system unable to retain the learners? Was this a reflection on the overall quality of the system? This fact of poor retention was also supported by the findings of the PROBE team. Their analysis of the situation revealed that unable to cope with lack of comprehension (due to teacher centric modes of instruction and voluminous and irrelevant curricula) students finally gave up; parents withdrew their children finding that not much was being achieved anyway and consequently the system gradually 'filtered' out most children as things got harder and harder in higher grades. (PROBE, 1999).

Research studies on student achievement have proved that a certain minimum number of years at school are essential if children are to master basic skills and it must be ensured that children who are once enrolled must continue in school long enough to acquire the basic skills and a 'certain' period in school alone would determine this sustainability. (UNESCO, 2005).

Thus, we cannot afford to overlook the fact of drop-outs not only because basic skills are not being mastered but also because the 'scarce national' resources utilized for the benefit of the learner are being rendered a wasteful expenditure under these circumstances.

However, in the midst of this scenario, a positive trend observed was that of increased girl child enrollment indicating the gradual awareness in society for the education of the 'girl' child.

Research studies have revealed that the overall systemic performance has not significantly increased, despite large increases in real per-pupil spending - particularly in the Indian context, it is important to consider not only the 'physical distance' but also the 'social distance' that the child needs to cross over so that wholehearted participation become a reality. Thus, there are other factors that also play a crucial and determining

role – namely school readiness, prior knowledge and above all the barriers that prevent the learner from wholehearted participation and successful completion of education.

In the given context, it was found that monitoring of Early Childhood Care and Education (ECCE) was very important. ECCE referred to a wide range of programmes all aimed at the physical, cognitive and social development of children before they entered the primary grades which set the foundation for life-long learning and instilled desirable learning habits, social skills and values (Mandke, 1989; Kaul et al, 1992; Pattanaik, 1991).

However, it was found that since participation was not yet enforced compulsorily, school readiness was not present in many cases. The Study conducted by Maiyani (1989) on the development of Pre-primary education in Gujarat during the post-independence period revealed that the present set-up of pre-primary education in the State was not satisfactory; the number of trained teachers at this level should be increased and concluded that the quality of pre-primary education in Gujarat was only average and needed serious attention.

Thus, delayed enrollment accompanied by barriers to the successful completion of the complete cycle of primary education are factors that one needs to contend with and together with making ECCE compulsory, the provision of sufficient number of Balwadis would ensure greater participation and long term benefits.

Once these factors have been resolved the next consideration would be the provision of 'enabling inputs' - these inputs in school play a decisive role in the determination of 'quality'. It has been widely acknowledged that Infrastructural facilities play a contributory role in the entire learning environment – facilitating the teaching-learning processes and thereby indirectly influencing the quality of the system. While these facilities may not be the sole determinants of quality, they provide the atmosphere and conditions necessary for learning to happen and thus indirectly influence the quality of education. Keeping this importance in mind, the National Programme 'Operation Blackboard' was launched in 1987 and under this programme; schools were provided minimum essential facilities so that academic programmes could be carried on effectively.

With respect to provision and status of infrastructural facilities it was found that the schools were of a pucca structure but a large percentage of these schools were in busy

localities; in most cases there were sufficient number of classrooms for each grade but these classrooms were not too well ventilated – thus both the classroom and surrounding ambience were not too conducive to learning; while certain essential facilities like Electricity, sanitation and the Mid day meals were provided to most of the schools, there were other facilities which were important but the provision was lacking, namely - the presence of a Library, appropriate storage facilities for scientific apparatus, school playground and sports equipments. In most of the cases the Library was not a very functional one although Teachers did get the benefit of Reference books to aid in their daily teaching....... while scientific apparatus was reported in a large percentage of schools the system of storage and maintenance of these apparatus was questionable and while these very schools reportedly had sufficient number of classes for each grade they did not have separate Activity rooms for the conducting of the activities listed in the time-table.

From the present investigation it emerged that while funds were being sanctioned and utilized, a regular follow-up is required to ascertain whether or not the facilities provided are being maintained properly or not. In the event of this not happening very regularly, the facilities gradually deteriorate and then become a barrier to the effective conducting of the instructional process. This finding was consistent with similar research findings that most school premises were scarcely stimulating for the purpose of learning and there was widespread failure to create a pleasant and attractive atmosphere at school with the means available. The problem of poor utilization and maintenance had nullified many of the apparent infrastructural gains that had been made in the recent years. (PROBE, 1999).

Also, an unreadable blackboard, non-availability of ready support material for students, inadequacy of appropriate storage facilities for scientific equipment, uncomfortable seating arrangements in poorly ventilated classrooms...... these are surely not conducive factors to learning and may be reflected in the future in the form of poor achievement outcomes as was found to be the case with the prevailing system and situation.

The scenario with respect to Computer training was especially revealing......it revealed that the schools had been provided with Computers in order that Computer literacy was ensured. Although the schools did have the computers there was a dearth of trained

teachers to teach the subject and so these machines were predominantly nonfunctional except for cases where an outside agency offered services such as the NGOs.

However, it was found that this problem was taken care of by training teachers via the In-Service training programmes which attempted to impart functional computer literacy to the teachers so that instruction as well as some of the academic duties could be done with the help of computers. Despite these efforts, the extent of usage was found to be very minimal.

Provision of instructional material is one of the ways of improving the quality of Education. International experience has shown that relatively modest instructional materials actually promote learning. Materials such as textbooks, libraries and classroom instructional materials are significant determinants of achievement in low income and middle-income countries. This is especially true in the Indian classroom situation where the Textbook is the single most important and widely employed Instructional aid.

With respect to this most widely used instructional material, it was found that the school Textbooks were periodically revised and necessary updations were made, the content was organized systematically with ample examples provided for better understanding. The 'noteworthy' elements were the inclusion of the latest information in connection with some of the topics; the attempts to correlate specific topics with other disciplines and also Life-skills and the attempts at continuous formative evaluation for student self assessment.

Despite the noteworthy attempts made to make the text books relevant, updated, correlated and well presented both with respect to mechanical and content aspects – it was found that these Textbooks were crammed with awesome information, concepts and vocabulary. In this very connection, the PROBE Report *also* concluded that Language teaching in the primary grades focused mainly on the language structures and other mechanical aspects - the nature of the text was far too formal and removed from the spoken form; there was no attempt to include colloquial forms (used in daily conversations) from the different dialects with the assumption that children would learn to communicate only through rote memorization and repetition. What was needed but lacking was an appropriate implementation of this instructional tool and a stimulating environment to promote maximum usage because language cannot be taught otherwise. (PROBE, 1999).

The Maths textbook too revealed excessive accumulation of facts and although examples, applications, teacher activities and student self-assessment exercises were provided, there was lack of correlation with daily life experiences and eventually the subject became irrelevant and meaningless to the learner who failed to find meaning in the topics included. The treatment appeared cut off from daily life and consequently meant little to the confused and intimidated learner.

The issue of poor performance as one of the possible factors for children opting out of schooling was attempted to be rectified by introducing the MLLs in the three subjects i.e. Languages, Mathematics and the Social Sciences. Keeping in view the poor performance of systemic components and consequent poor achievement levels in the students which had adverse effects such as reduced retention levels, the Minimum Levels of Learning were introduced in order to shift the focus from superficial treatment of textbook based factual content to attainment in terms of actual learning behaviors.

In this approach, the competencies are broken down into detailed sub-competencies assuming that the sum of these sub-skills would be the competency itself. Frequently, with the focus on behaviors and performance, concepts may not even feature in the assessment. 'This logical yet mechanical listing of sub-skills and rigid timetables for their achievement does not reflect either the concern that learning and use of the competency may itself be more flexible, or, that the cycle over which competencies are learnt need not follow the timing or pace described, or that the whole may be greater than the sum of the parts. Designing learning and test items for these detailed lists, and teaching to these learning outcomes, is impractical and pedagogically unsound' (NCF, 2005). Yet another disadvantage would be the restriction on more creative activities which may arise in certain typical contexts.

The studies conducted by Govinda and Varghese (1993) and Saxena, Singh and Gupta (1995) clearly highlight the significance of Text book in enhancing students' learning. But, any effective tool also demands thoughtful implementation and the subsequent analyses i.e. classroom observations, interviews with the Practitioners themselves and finally the student learning outcomes found this aspect of effective implementation lacking!

Another important 'enabling input' in the educational system is the Teacher and her years of experience, qualifications and content mastery are indeed significant factors for school quality. (UNESCO, 2005).

The study revealed that the Teachers' educational qualifications were indeed in need of attention – there was a very large population of Teachers who were Secondary school certificate holders after which the required P.T.C. certification had been attained; a very small percentage of graduate teachers with an advanced professional training i.e. B.Ed and a miniscule percentage of teachers with a post-graduate qualification. Research studies in countries still endeavoring for Universalisation of Elementary education have shown one of the major constraints towards achievement of Universalisation is the fact that in these countries, the teachers themselves often have scarcely more formal education than their pupils (UNESCO, 2005). This eventually reflects on the quality of the Instructional processes. Research also proves that Teacher education and particularly the number of years of pretraining general education are related to student achievement (Saxena, Singh and Gupta, 1995).

Thus, if there is evidence of student achievement being linked with teacher qualification there is an urgent need to raise the minimum qualifications of teachers and especially the appointment of qualified subject teachers. These findings are in consistence with the study by Ramkumar (1998) which also revealed that a majority of Teachers possessed just the minimum general and professional qualifications, the standards for which were fixed long ago.

What emerges is an urgent need to upgrade the general educational qualifications of the Teachers and for this to happen all new entrants should possess advanced educational qualifications - this would be in the interest of the students - the direct beneficiaries of this system.

In the words of Krishna Kumar '.....while the efforts and gains made by students and teachers over time are essential components of any assessment, a system's capacity to reform itself by encouraging new practices must also figure in any comprehensive framework of the assessment of quality.......' (Krishna Kumar, 2006). It is in this context that Teacher training assumes significance keeping in mind the fact that the scenario with respect to general educational qualification was not very encouraging and hence in service training must be strengthened in order to remedy this (Ramkumar, 1998).

In addition to qualifications, Teacher's training does make considerable difference to the instructional processes...hence, training of teachers was necessary to improve the academic performance of primary grade children. (Govinda and Varghese, 1991).

The present study revealed that regular updations of skills was given importance and in keeping with this, Training programs were conducted to attend to both academic and academic related areas. Skills expected of Teachers in contemporary times; issues of concern to Officials and Teachers in this system specifically (namely, effective teaching methodologies, preparation of support learning material, social issues such as Gender sensitization, etc.) and issues of future relevance to students were all taken up periodically and attended to. The study indicated the conscious efforts made by the concerned Authorities to provide rich inputs to the Functionaries as well as the students thereby continuously ushering in meaningful and desirable changes to enhance the overall quality of the system.

The extensive research study conducted by the PROBE team concluded that In-service training of Government school teachers was indeed beneficial as it was more in line with current school developments in the field as well as with the ground realities faced by these teachers, however, in-service training was too short to impact teaching methods and affected instructional time because teachers were not willing to come after school hours and during vacation times.

The study revealed that indeed the training programs were for a short duration of a few days only and conducted during the ongoing academic session.

Thus, it is necessary to devise mechanisms whereby these training modules can be conducted over extended periods of time so that their impact translates into more effective instructional processes. Such training programs need to be conducted at the very beginning of the year so that the learning finds ample opportunity for expression during the academic year and also because teachers are relatively less burdened during the initial stages. In the later stages, they may possibly be arranged so that the training period coincides with the internship phase of the P.T.C. student-teachers and valuable instructional time is not completely lost.

The data analysis of the status of learning resources in the schools under study revealed an organized functioning with a pre-drawn schedule i.e. a time table; teachers planning their annual, monthly and daily academic activities for meaningful and effective classroom instruction and also a supervision mechanism that inspected the above mentioned on a daily basis There was provision for extra reference material for the Teachers to refer in order to enrich their instruction.

However, the speculation was whether these were done on a notional basis or were the plans actually implemented thoughtfully during the teaching-learning process?

....how did these compulsory and regular pre-planned activities translate into quality inputs and ultimately impact the quality of the teaching-learning process. Did they finally enable a more systematic and efficiently functioning system?

Research evidences show that the instructional time and the quality of instructional time spent has a significant effect on learning outcomes. Research evidence from 'instructional effectiveness' research confirms these results. It suggests that structured teaching methods, bringing a strongly ordered approach to learning tasks – with clear learning goals, sequenced introduction to new material, clear explanations, regular checking of understanding, time for pupils to practice new skills, completion of learning tasks and frequent testing and feedback – are helpful ingredients in strategies for quality improvement and reform (UNESCO,2005).

In contrast to the above, the study revealed that the practices inside the classrooms were predominantly teacher-centric with little scope for active participation by students in the learning process. The classroom observations revealed a classroom atmosphere wherein the most pre-dominantly used methodology was the lecture method and the teaching aid was the blackboard; students mostly wrote down facts from the blackboard with very little participation in the ongoing instructional processes. These findings were supported by the findings of the PROBE team – they too concluded that the child's natural curiosity and propensity to constantly ask questions are all silenced by the school environment and gradually they assumed the role of passive listeners. (PROBE, 1999).

A significant observation was that the same class teachers taught the different subjects and very often had no subject specialization in these subjects .The P.T.C. qualification was considered sufficient to make them eligible to teach all the subjects without any apparent content or methodological difficulty. It was here that the in-service training programs were considered useful because these programs attempted to provide inputs in the areas found to need specific attention.

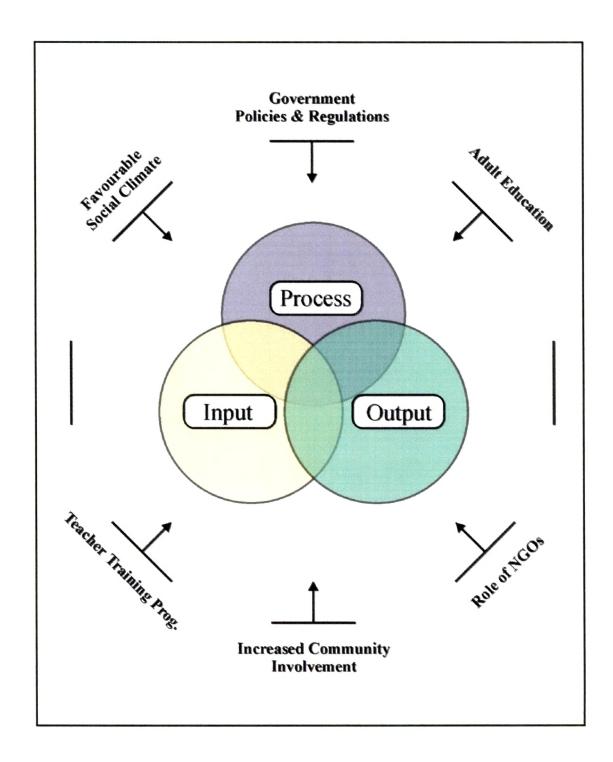
The study also revealed that the Teachers were expected to perform duties other than their regular academic duties and a large population of Teachers found these to be a disturbance to the conducting of their regular school activities. Such additional duties are detrimental to the 'quality' of elementary education. (Bhattacharya and Dave, 1991) however shortage of staff made the performing of these additional duties imperative – often at the cost of academic duties which should have been the prime concern!

Among the beneficiaries of the education system, Parents are a significant component and their contribution cannot be ignored. Research has established the fact that pupil achievements are higher in schools with active parent-teacher association and lack of active parent participation is a serious shortcoming of the system today (PROBE, 1999). However, despite the significant role they played, their involvement was found to be less than what was needed. Teachers and Administrators alike commented on this lack of involvement and wished it would have been increased in the interest of the learner.

A noteworthy fact was that despite their poor involvement in the conductings of the school, overall their attitude towards education for their children was favorable – this finding was supported by other research findings as well - 80% parents wanted Primary Education to be made compulsory for all children and 89% parents gave importance to education of the girl child. (PROBE, 1999).

But, if the data shows that indeed they are keen that their children should receive Primary Education, what is that which prevents their wholehearted participation? Was it that Parents lacked faith in the system and hence their efforts were half-hearted? The real challenge in future would be to devise means whereby parental involvement may increase as it would increase accountability on part of the Functionaries. The real challenge in future would also be not just to activate Parent Teacher Associations but also to achieve greater popular involvement through all available channels – the parents, Government and finally, the community at large(educational institutions and private agencies) emphasizing the complementary role of all these different participants.

Figure 7.18 (B): Education - An Open System



The system as could be seen was being impacted by several components all making their significant individual contributions – those which may be deemed positive were a certain regularity and organization in the daily working schedules of the Teachers, a supervision mechanism that ensured that this systematic and well organized set-up was adhered to and the recognition that parental involvement was crucial in the achievement of system objectives and then devising ways to facilitate parent-teacher interactions.

However, while on the one hand regularity and systematization was being attempted, on the other hand teachers were assigned duties which they themselves professed as being a disturbance in the conducting of their academic duties; while parental involvement was considered crucial, attempts at involving the parents were often unsuccessful and finally there were also societal perceptions and realities which determined and influenced the functioning of the system.

The fact remains that for the system to function effectively all components should function in an integrated and interdependent manner eventually enabling the realization of objectives and not that these influences cancel out one another thereby negating all the well thought efforts put in for the benefit of the Learner. Thus, interdependence needs to be mutually supportive and oriented towards the overall systemic goals.

With all these varied inputs – some beneficial and some detrimental; it now remained to be seen as to what were the outcomes in terms of curricular and co-curricular achievements of the students.

The Evaluation pattern was indicative of a comprehensive evaluation pattern which took into account all aspects of the student's development. While giving importance to academic areas, it also gave importance to non-academic areas and there were activities designed meaningfully in accordance with the respective grades. However, the evaluation pattern was not a formative one with regular evaluation not being done to ascertain student progress in different learning areas on a periodic basis. The case of poor performance can be taken care of by periodic diagnosis of learning difficulties and conducting remedial classes thereafter. Regular monitoring of student progress and according feedback are all significant factors related to school quality.

The results of the achievement test conducted for Std.V, VI, and VII for Mathematics and Language revealed an overall academic performance which was dismal and certain sections of the student population had fared very poorly - it may be indicative of lack of

proper instructional inputs at the school which impacted their overall understanding of the subject; lack of additional academic support from home keeping in mind their disadvantaged background; the difficulty of finding teachers to teach certain subjects, as well as the difficulty of obtaining additional reference material for certain subjects. Certain Subjects are not very common in usage but their inclusion is necessary keeping in mind the fact that primary education needs to be imparted in the child's own mother-tongue and hence the inclusion of such subjects. The presence of only 'one' such school in the city is indicative of the very small population it was catering to and explains why not too much of reference material was readily available.

Among students of all the mediums, the overall performance of girls was better than that of boys and the percentage of failures was found to be higher among boys in almost the grades and subjects.

It was also found that the percentage of failures in Maths was lesser in the lower grades and as the students went to the higher grades i.e. Grades VI and VII, their performance in Mathematics became poorer with the number of failures increasing. The performance in Language also showed that majority of students did not score above the fifty percent mark indicating that the written skill needed further attention. Also, Maths is a scoring subject with the possibility of scoring full marks also – however, the analysis of scores revealed that among students who had fared well, the maximum scores were in the 60-70 % range, with very few students scoring more than 70% in this subject. Analysis of percentage of failures in each Subject, Grade and Sex also revealed that the percentage of failures was very high in each subject and grade.

Thus, fundamental concepts need to be attended to as these were linked to other more complex concepts in the future grades and only the understanding of these would ensure a good performance in the future. The Mathematics curriculum is organized in such a manner that concepts keep recurring and also concepts are linked to one another — the knowledge of one enables the learning of many other related concepts, and so it is very important that elementary concepts and misunderstandings be clarified to ensure future understanding.

Regarding Language, it was revealed that elementary knowledge was lacking and without a sound knowledge of the basics, how could these students be expected to perform well? Also, the written expression was found to be poor and so while they

comprehended and answered the questions correctly in a given comprehension, these students were unable to express themselves in questions like paraphrasing, story constructing and essay and letter writing. The problem may be related both to the knowledge of appropriate vocabulary as well as to lack of proficiency in written expression. Also, the problem may lie in the transaction of the language classes research studies have proved that language teaching is not focused on activities which develop skills in using language but on correct spelling, neat writing and rote memorization with very less focus on application of the knowledge thereby reducing its applicability and relevance (PROBE, 1999).

Particularly in the Indian context, examinations become the major referral system and ultimately shapes the patterns of teaching, textbook writing and classroom interaction and if exams expect children to reproduce and memorize, there is little hope of expecting the scenario in the classrooms to change. In this context, the PROBE (1999) concluded that the ability to express independently, reason logically is given little importance in the classrooms as ultimately students will not be evaluated in any of these. There is an urgent need to revisit our objectives and re-examine our examination patterns if the classroom scenario and the quality of transactions therein are to be changed accordingly.

Finally, pupil achievement reflects all of these - family background (parental education and social factors) and school characteristics (infrastructure, teacher attributes, teaching-learning processes, examinations (PROBE,1999) and consequently the role played by each and every systemic subcomponent is complementary and significant.

The analysis of data in relation to participation in different co-curricular activities revealed that the academic planning did take into account the importance of co-curricular activities and both the time-table and the co-curricular organization revealed that such activities were indeed incorporated on a regular basis. However, not all activities could be conducted sometimes due to lack of trained staff and at other times due to the unavailability of related material. Also, for the Competitions, participation was limited to only a few students ultimately as the requirements stated that only a few students per school could participate in these competitions and so a majority of students were unable to participate in these competitions.

Thus, the need to devise mechanisms where all may get opportunity to participate.

7.19 EDUCATIONAL IMPLICATIONS.

The findings of the study revealed that the endeavors made for the Universalisation for Elementary education are indeed appreciable – despite these efforts, the goal was not being achieved although efforts for the same were being made since Independence. Hence, the need to identify areas that needed attention and remedy them.

- To begin with, Secondary education needs to be universalized so that students need not leave the education system after completion of upper primary schooling and are absorbed into the senior grades within the same institution; many a student becomes a drop-out due to lack of facility of secondary schooling and Universalisation of the same may be a strong motivation to continue with schooling;
- Balwadis need to be increased in number and enrollment in the same a compulsory pre-requisite before entering the primary section;
- The mandatory teacher qualifications need to be upgraded so that new entrants to the system have advanced general educational qualifications and bring with them greater content knowledge and know-how; also the subjects allocation should then be done in accordance with the specialization so that the quality of the instructional processes are qualitatively enhanced; this ought to be done especially for language and mathematics subjects because both these subjects have great significance for future learning and need to be emphasized in the formative years;
- Teaching-learning processes need to be reviewed particularly keeping in mind the poor performance shown by the students. Instructional patterns especially in the lower grades need to be given greater emphasis as these lay the foundation for future learning to happen and thus the focus ought to be more on 'learning by doing' and conducting of relevant and meaningful activities. The study shows the need for more fluency in language, increased vocabulary, writing fluency and consequently the need for activities such as oral reading practice, guided reading, word study, reading self selected books independently. Also, in order to make the curriculum more meaningful to the learner, the activities should focus on genuine and meaningful real life situations. Formative assessments to identify student strengths and difficulties would enable educators to modify instruction to Learner

- needs, give timely guidance and design useful interventions to help treat any future learning difficulty.
- School facilities like the Library need to be utilized to greater extent to assist in the development of reading competencies and increased reading habits would be beneficial to the learner in terms of vocabulary enhancement, reading and speaking skills which would culminate into appropriate writing skills. Thus, the Library needs to be utilized on a daily basis with provision of interesting and relevant reading material for students to improve their language skills and other areas too such as a general knowledge of their subjects and surroundings;
- Teachers play a crucial role in the schooling system and consequently their inputs are very important. Classroom instruction constitutes the bedrock of the schooling process and its quality should be given due importance. In order to achieve this, teachers should be given ample time to focus on their academic duties and very little additional and administrative work should be allocated to them during the ongoing academic year. Only then can the recommendations of activity based instruction, regular assessment of homework and formative assessments become a possibility.
- The Training modules need to be conducted preferably at the very beginning of the year so that the learning finds ample opportunity for expression during the academic year and also because teachers are relatively less burdened during the initial stages. In the later stages, they may be arranged so that the training period coincides with the internship phase of the P.T.C. student-teachers and valuable instructional time is not completely lost.
- Particularly in the Indian context, examinations become the major referral system and ultimately shapes the patterns of teaching, textbook writing and classroom interaction and if exams expect children to reproduce and memorize there is little hope of expecting the scenario in the classrooms to change. Thus, the need to rethink on our objectives and then revise the existing examination patterns only then, consequent modifications in transaction and instructional materials will follow;

- Although examinations are centralized, the answer sheets are evaluated by the school teachers themselves and the good efforts are thus nullified. The evaluation should be taken up by teachers other than the respective school teachers so that the focus would be more on student learning and less on teacher teaching; this would have a positive impact on classroom transaction and greater involvement on part of the teachers to ensure better learning;
- In the Indian context, what needs to be considered is not only 'physical distance' but also 'social distance' i.e. identifying social barriers to education and increased parental educational levels would go a long way in tackling this issue. Although there is parental cooperation, in order to increase their involvement Adult Education programmes should be a parallel priority so that increased education brings about increased awareness and also that accountability of the Functionaries towards the learners would increase with increased parental awareness. This would also give students academic support from home which so long they were unfortunately missing.
- Teacher Education Institutions need to make brief periods of Internship in Government schools compulsory so that trainee teachers are sensitized to this reality as well and the school students get the benefit of their expertise.....these may be done especially for areas where both staff and resources are lacking namely Computer training;
- According to the PROBE Report 'Primary schooling may not be actually free as projected the minimal expenditure too may be difficult to bear' this is one of the reasons why continued efforts for increased retention at the Upper primary school levels are still far from expectations. Thus, Community initiatives are necessary and Community adoption of schools would enable partaking and sharing in a national responsibility so long only undertaken via Government Policies and regulations, eventually, societal pressure alone will help change the present scenario.

7.20 SUGGESTIONS FOR FURTHER STUDIES

This study was conducted within a specific frame determined by the objectives laid down for the study. However, the study may serve as a useful springboard for the conducting of future related research.

The study did reveal poor achievement outcomes and the causes for this could be many – namely ineffective teaching methods, voluminous instructional material, lack of parental academic support or even regular student absenteeism.

- Since Private educational Institutions (Primary and Upper Primary sections) are functioning comparatively better with their students recording better outcomes both in curricular as well as extra-curricular areas, a Comparative study of teaching practices in Government and Private Institutions would give an insight into practices which are necessary, could be imbibed as also those which may need consideration or modification. Also, Case studies would enable the deeper understanding of successful institutional functioning.
- There are instances of States having achieved 100 % literacy with Community based initiatives and with the same financial allocations and thus these examples may be replicated in other States as well. Case studies of successful experiments in the area of primary education namely Himachal Pradesh, Nagaland, may be educative examples.
- Since PTC is considered to be the requisite qualification for the teachers of Municipal Corporation Primary schools, their curriculum needs to be reviewed for relevance and appropriateness. Along with the academic requirements, the trainee teachers need to be sensitized to new and relevant methodologies as well as the social issues that need to be understood and then empathetically dealt with. Thus, the need for researching into comprehensive training modules and studying the value components in these training programs.
- The content mastery of school teachers themselves need to be looked into. Research
 studies in countries still endeavoring for Universalisation of Elementary education
 have shown one of the major constraints towards achievement of Universalisation is
 the fact that in these countries, the teachers themselves often have scarcely more

formal education than their pupils. This would eventually reflect on the quality of the Instructional processes.

- Studies need to be conducted focusing on such areas as close observation of classroom practices and the quality of instruction therein especially in the lower primary grades, since understanding at this level would definitely affect future understanding be it numeracy or literacy. The curriculum at the pre-primary stage i.e. the Balwadi needs to be reviewed because this formative stage enables the inculcation of many learning and social skills which would lay a strong foundation for future learning to happen successfully.
- Studies need to be conducted on academic areas such as Innovative practices in the
 transaction of Primary curriculum; Effectiveness of activity based approaches;
 Evolving modules based on child centered approaches and studying their
 effectiveness; Designing primary education curricula through child inspired
 education.
- e Education plays a significant role in encouraging learners' creative and emotional development, in supporting objectives of peace, citizenship and security, in promoting equality and in passing global and local cultural values down to future generations. Many of these objectives are defined and approached in diverse ways around the world. Compared with cognitive development, the extent to which they are achieved is harder to determine (UNESCO, 2005). The present study too focused on academic areas—and conducting of co-curricular activities in its determination of quality and future studies may be taken up wherein the non-academic aspects may be critically reviewed namely the skills and values developed in students as a result of the ongoing programmes in schools.
- Research needs to done to evaluate the impact of the training programs keeping in mind the resources which are periodically being expended i.e. studies related to the relevance of the training programs and how far they enable the realization of objectives. It needs to be determined whether or not the quality of the instructional processes is indeed being improved qualitatively or do the previous conditions continue? Thus, studies need to focus on classroom practices in the post training periods.

- Para-teachers have been appointed for the primary education system and the
 educational qualifications of these teaches need to be reviewed critically also, are
 these teachers indeed assisting in the endeavor for primary education or is their
 employment yet another financial implication only?
- Studies need to be conducted to ascertain the perception of community members
 regarding the quality of the programs under SSA. These studies would help devise
 increased Community participation mechanisms because their active involvement
 would definitely increase accountability and ensure more quality measures in future;
- A study of the remedial programs need to be conducted and their utility or usefulness in assisting students to achieve better learning outcomes.
- The extensive use of ICT as a possible and alternative instructional tool to improve achievement levels would be another necessary area of investigation.

7.21 CONCLUSION

When we, India, started out on this journey of according equality of educational opportunity through the Universalisation of Education programme it seemed a task which would be easily achievable and hence the deadline of a decade to achieve the final goals. The sheer scale and enormity of the task however slowly dawned on us that together with the tremendously large and diverse population that had to be brought within the fold of education, there were also accompanying social issues which needed to be addressed parallely so as to enable the enrollment of disadvantaged sections and enable Universalisation to be come a possibility.

The assignment was in no way a singular one; it entailed taking into account a multitude of associated issues - inaccessibility of large numbers of student population, physical and social barriers due to a strongly stratified and structured society which was resistant to the according of education perceiving it as a threat to their very existence, a society that placed social values above all else with consequent subjugation of the girl child - all these barriers were tremendous challenges to contend with. The inequalities existing in the education system today are largely the result of the larger social inequality that prevails in society today and while the endeavor has been for achievement of social equality through education, this goal has remained largely unrealized.

Education is perceived as a significant tool to bring about social equality but the emphasis has been restricted to official documents and policies ...'there are amazing contradictions between official rhetoric and practical action' (PROBE, 1999).

Despite these awesome challenges and inequalities, certain Indian States have come very close to universal elementary education and examples of these are Himachal Pradesh and Kerala and their success underlines 'the virtuous cycle of State initiative

and public response' (PROBE, 1999). While Himachal Pradesh has benefited from favorable social conditions, Kerala started of with a highly inegalitarian and oppressive social structure but it was political action that made it possible to overcome the initial obstacle against mass education (PROBE, 1999).

Thus, although external assistance can help in achieving appropriate resource levels and managing school systems, it cannot make up for the absence of a societal project for improving education. That must come from within each society and cannot be engineered by outsiders (UNESCO, 2005).

What emerges is that with a thoughtful re-orientation of our financial allocations, our priorities and increased Community initiatives it may still be possible to achieve Universalisation of Primary education through self-sustaining mechanisms.