

INTRODUCTION

CHAPTER I

INTRODUCTION

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which Primary level is of great importance as lays down the foundation for the higher education. No wonder Education Commission (1964 – 66) remarked “The destiny of India is shaped in her classroom.” Thus, the school prepares the future citizens.

1.1 PRIMARY EDUCATION

The process of education being a continuum of different stages, from primary to university, each stage covers a specific age group of learners and provides fixed levels of learning, primary stage, which is the first five years of learning, lays foundation for the personality, attitudes, social confidence, habits, learning skills and communicating capabilities of pupils. It is here where the basic skills are learned like reading, writing, numeracy, gain power to articulate and to express with self confidence (Jallaludin, 1988). Thus, it is a very important stage and “if a child goes through good education at this stage he never looks back in the life for he has been prepared to exercise his initiative to overcome difficulties” (MHRD, 1985).

Thus, primary education although basic and catering to very young children, has two main purposes : (1) to produce a literate population that can deal with problems at home and work and, (2) to serve as a foundation upon which further education can be built. The history of primary education is as old as formal education though its form has undergone a change. According to the shift in the stage.

1.1.1 Historical Development of Primary Education in India

Ancient Phase

Primary education during Vedic Period (upto 1000 BC) when most of the vedic literature was composed, every person male or female was required to undergo the discipline of Brahmacharya when one was initiated into the sacred literature. The beginning of education was marked by a ritual called upanayana; it was considered a second or spiritual birth. Great stress was laid on the individual's capacity to memorize, recite and explain the religious hymns, on

creative intellect, on debating power and on developing a spirit of inquiry. Since education was not yet so complex in most early societies, it was the father who used to educate his children.

During **Dharmashastra** period (from 200 B.C. to A.D. 500), the Gurukula System emerged. The Gurukulas were residential schools. In Gurukulas a large number of students living under the superintendence of a teacher. There was monitorial system, with brilliant students in charge of junior classes.

During **Upanishad – Shutra** period (from 1200 to 200 B.C.), with the extensiveness of vedic literature, complexity of rituals and the growth of new branches of learning, the professional teacher became the special feature. Students in a small number were required to live with the teacher at his own house as the members of their own family under a system of rules and regulations governing their life and studies for a period of twelve years. No fee was charged. The students were, however, helping teacher in his household and farm work in his spare time. Correct memorization and proper pronunciation was emphasized. Much attention was paid to female education.

Medieval Phase

During **Muhammdan** period the personal character of the ruler was the most important factor affecting education. If the ruler was of literacy taste, education was encouraged. On the other hand if the ruler was devoid of literacy tastes, there was a definite set-back in learning. For a time the indigenous system of education was deprived of royal support and patronage which was at that time directed to the promotion of new Islamic learning. Mugal regime started schools for teaching urdu and religion. These schools were called as Madrasas. The Madrasas had a kazi or the Mullah as their teacher.

British Phase

Primary Education and Basic Education : With the advent of the British rule, primary education under *A* went a change. The system as it evolved between 1854 and 1947 can be divided into four broad phases :

The progress of primary education was very slow during 1854 – 1902 period. Usually three causes are ascribed to it, i.e. (I) Non-introduction of compulsory

primary education, (ii) Transfer of primary education to the control of local bodies, and (iii) Neglect of the indigenous schools. However, the period was marked by qualitative changes in certain aspects of primary education which were : (i) construction of school buildings, (ii) Admission of girls and Harijan pupils, (iii) use of printed books, (iv) improved curriculum (v) Adoption of new methods of teaching, and (vi) Improvement in the training and qualification of teachers.

The Indian Education commission (1882 – 83), the first commission on education in India, made the principal object of its inquiry ‘the present state of elementary education throughout the empire and the means by which this can everywhere be extended and improved’. The commission placed special emphasis on its recommendation that the strenuous efforts of the state should be directed to the elementary education of the masses in a still larger measure than before that primary education be regarded as the instruction of the masses through the vernacular in such subjects as will fit them for their position in life; and not be necessarily regarded as a portion of instruction leading up to the university, and that primary education be extended to backward districts.

During 1902 – 1921, the policy of larger grants to primary education initiated by Lord Curzon brought about a considerable expansion of primary education between 1905 and 1912. Gaekwad of Baroda introduced compulsory education throughout Gujarat in 1906. This led the Indian nationalist opinion to press Government for the introduction of compulsory education. Thus, during 1921 – 1937 Compulsory Primary Education Acts were passed in most of the provinces of British India. These Acts transferred large powers of administration and control over primary education to local authorities, and the provincial Governments liberalised the constitution of local self government institutions and gave them additional powers of taxation. The number of primary schools increased from 1,55,017 to 61,09,752 and Enrolment of students raised from 1,84,829 to 80,17,923 students during this period. (Agrawal, 2000) This period witnessed neither an appreciable improvement in quality nor expansion in the field of primary education.

During 1937 – 1947 period compulsory primary education received more attention. Many new areas were brought under compulsion. An epoch – making event of the period was the scheme of Basic Education formulated by Mahatma Gandhi. The plan of post – war educational Development in India prepared a Sargent plan (1944) adopted the scheme of Basic Education with some modifications.

In the year 1937, two important documents were submitted – the Abbot – Wood Report and Zakir Hussain Committee Report. The Abbot – Wood Report emphasized that the education of children in the primary school should be based more upon the natural interests and activities of young children and less upon book learning, that the mother – tongue should as far as possible be the medium of instruction throughout the high school stage, and that the pre-service education course of teachers of primary and middle school should be of three-year. Dr. Zakir Hussain Committee Report also focussed on activity based education through mother tongue and three years of course of teacher training.

The scheme of ‘Basic Education enunciated by Mahatma Gandhi remains the most epoch-making event in the history of primary education in modern India.

During this period, the First Conference of National Education resolved that, free and compulsory education be provided for seven years, the medium of instruction be the mother tongue, the process of education should centre around some form of manual productive work, and all the other training, as far as possible, be integrally related to the central handicraft.

The next important document is the Report of the central Advisory Board of Education on ‘post war Educational Development in India’ (1944). It laid down the educational development of the country and recommended that a system of universal, compulsory and free education for all boys and girls between the ages of six and fourteen should be introduced.

Post Independence Phase

After independence in 1947 the country has set before itself two goals in the field of primary education : (I) introduction of free and compulsory universal primary education for all children up to 14 years, and (2) the conversion of all primary schools to the basic pattern. Two All India Educational surveys have been carried out for assessing the possibilities of providing primary school within easy walking distance from the home of every child. In the year 1956, A National Institute of Basic Education was established. The National council of Educational Research and Training was set up to develop programme of high level research and advanced training and extension and improvement in school education.

National Policy on Education (1968), a system of twelve years of school education, popularly known as 10 + 2 system, has been adopted. The ten – year school is conceived in three segments : primary (classes I to V), Middle (classes VI to VIII) and Secondary (classes IX & X). ‘Primary’ and ‘middle’ together constitute the ‘elementary’ stage.

Article 45 of the constitution of India lays down that “the State shall endeavour to promote within a period of ten years from the commencement of the constitution, for free and compulsory education for all children till they complete the age of fourteen years,” by the year 1960. The target date was revised to 1970, then to 1976 , and again to 1988. In 1982, New Twenty point programme was reinforced point sixteen of the Twenty point programme reads as ‘spread universal elementary education in the age group 6 – 14 with special emphasis on girls, and simultaneously, involve students and voluntary agencies in programmes for the removal of adult illiteracy.’

In order to achieve the target of universal enrollment by 1990, following targets were adopted :

- (i) 95 percent enrollment in primary schools and 50 percent enrollment in middle schools by 1984 – 85; and
- (ii) 100 percent in both by 1990

To give a further boost to the programme of universalisation of elementary education (UEE) and to give recognition for excellence in performance for the spread of girls education, a scheme of incentives / awards has been formulated and put into operation during 1983 – 84.

Since independence the government of India formulated a number of interventions in the form of policy recommendations to achieve universalisation of elementary education. Thus, to improve primary education the government have formulated various documents in the form of commissions and committees and five year plans.

1.1.2 Commissions, Committees and Plans in Primary Education

Education and National Development Report (1964 – 66)

Education Commission (1964 – 66) stated that ‘the state shall strive to provide free and compulsory education for all children up to the age of 14 years.’ This was to be achieved by 1960. But due to a number of reasons such as lack of adequate progress in primary education of girls, large numbers of children of the backward classes, general poverty of the people and the illiteracy and apathy of parents, it was not possible to make adequate progress in primary education, and the constitutional directive has remained unfulfilled. Education commission has also given some strategies to fulfill the directive, that is

Each state, and even each district should prepare a perspective plan for the development of primary education taking into account the stage of development already reached and local conditions and problems.

Each state and district should be assisted to go ahead at the best pace it can, and the progress in no area should be allowed to be held up merely for requirement of essential facilities or financial allocations, and while the constitutional directive will be fulfilled in some places such as urban areas or advanced states as early as in 1975 – 76, all the areas in the country should be able to provide five years of good and effective education to all the children by 1975-76 and seven years of education by 1985 – 86.

National Policy of Education (1968)

The National policy of education maintained that strenuous efforts should be made for the early fulfillment of the directive principle under Article 45 of the constitution, seeking to provide free and compulsory education for all children up to the age of 14. Suitable programme should be developed to reduce the prevailing wastage and stagnation in schools and to ensure that every child who is enrolled in school successfully completes the prescribed course.

Ishwarbhai Patel Committee Report (1977)

Review committee report, chaired by Ishwarbhai Patel Committee has given some objectives of primary education are :

1. Acquisition of tools of formal learning, namely, literacy, numeracy and manual skills.
2. Acquisition of knowledge through observation, study and experimentation in the areas of social and natural sciences.
3. Development of physical strength and team spirit through sports and games.
4. Acquisition of skills of purposeful observation.
5. Acquisition of habits of co-operative behaviour within the family, school and community.
6. Development of aesthetic perception and creativity through participation in artistic activities and observation of nature.
7. Development of social responsibility by inculcating habits individually as well as collectively of appreciation of the culture and life styles of persons of other religions, regions and countries and readiness to serve the weaker and the deprived.
8. Development of the desire to participate in productive and other processes of community life and to serve the community.

Draft National Policy on Education (1979)

Draft national policy on education 1979 mentioned that highest priority must be given to free education for all up to age of 14 as laid down in the Directive principles of the constitution, Education up to this stage should be general and not specialised, and should give pupils a confident command of language and tool subjects and a scientific attitude, Elementary Education should be an integrated stage. The essence of elementary education should be on the development of personality and character. The content of the elementary education needs to be restructured keeping in view not only the tradition and values that make up the countries composite culture but also the present realities and the vision of a common future. The content of education at this stage should include language, arithmetic, history and simple elementary science, with special reference to Environment cultural values and physical education.

Curriculum Load at the School Level – A Quick Appraisal (1983 – 85)

Curriculum load at the School level focused on **child centred approach** as a warm welcoming and encouraging approach, in which all concerned would share a solicitude for the needs of the child to attend school and learn. It also mentioned that a child centred and activity-based process of learning should be adopted at the primary stage and by 1995 all children would be provided free and compulsory education up to 14 years of age.

Operation Black Board (1987)

It is a follow up of National Policy of Education 1986. The purpose of Operation Black board is to ensure provision of minimum essential equipment, use of the word operation implies that there is an urgency in this programme, that goals are clear, well defined and that government and the people are determined to achieve those goals within a predetermined time frame. Operation Black Board envisages (I) two reasonably large rooms that can be

used in all weather (ii) necessary toys and games material (iii) black boards, (iv) maps (v) charts, and (vi) other learning material.

During the period 1987 – 88 to 2000 – 2001, Teaching Learning Equipment (TLE) has been sanctioned to 5,22,902 primary schools and 1,38,009 upper primary schools. Posts of 1,49,146 teachers were sanctioned for primary schools to cover them into dual teacher schools. Moreover, 83,045 posts of third teachers and 77,610 posts of additional teachers have been sanctioned for primary schools with enrolment exceeding 100 and for upper primary schools respectively.

The National Policy on Education (1986)

The National policy on education has laid great emphasis on universalisation of elementary education, assuming that the universal elementary is achieved by 1990. Out of the total age specific population of 17.4 crores, 11 crore pupils need to be in primary stage and the remaining 6.4 crores in the middle stage. It may be noted that this achievement implies that the primary education will be 1.5 times and the middle will be 3.2 times of its present size. It seems that this was not achieved due to the grim reality prevalent in our socio – economic system unless large scale wastage is reduced to minimum and other objective conditions are fulfilled, the target of universalisation of elementary education will remain as a dream.

Programme of Action – National Policy of Education (1986)

National policy of education had proposed some measures to improve the quality of elementary education, which included reform in the content and process of education, improvement of additional teachers and the comprehensive programme of teacher education. Minimum levels of learning were to be laid down for each stage, which would naturally include laying down such norms for the primary and upper primary stages. The central feature of the implementation strategy will be area specific and population specific planning. The emphasis will now shift from sheer enrolment to retention and

quality of education. Keeping in fact that situation of elementary education varies from one part of the country to another and sometimes within one district, and even one block, the process of running will be decentralised and the teachers as well as the local community will fully involved in this process. Besides such genuine initiatives there are certain efforts made by Non-Government Organisation towards universalisation of primary Education. Currently, elementary education is largely based on externally funded programme like Mahil Samakhya (funded by Netherland Government) and Shiksha Karmi and Lok Jumbish (both externally financed by SIDA).

Mahila Samkhya (1986)

Mahila Samakhya was launched in April 1988 which seeks to mobilise rural women through Mahila Sanghas in each of the village concerned. An Indo – Dutch programme, it gets 100 percent assistance from the government of Netherland. The programme revolves around village level activators who mobilise women on issues such as access to health, water education and general information about development programmes, and so forth. The main focus of the programme is to generate demand for education.

Lok Jumbish (1997)

Lok Jumbish is a peoples movement for universalisation of primary education in Rajasthan. The goals of Lok Jumbish are as follows :

1. Providing access to primary education to all children.
2. Ensuring that all children complete primary education.
3. Emphasis on quality of education an effort to ensure that all the children achieve at least minimum levels of learning.
4. Modifying content and process of education an instrument of women's equality.
5. Bringing girls to same level as boys and making education an instrument of women's equality.
6. Effective involvement of people in educational management.

Lok Jumbish is an innovative approach with education policy 1986. It provides access to education through school mapping. Through micro planning it monitors participation and retention. It stresses on peoples and teachers' involvement in education.

Shiksha Karmi (1987)

The Shiksha Karmi project is being implemented in Rajasthan State since 1987 with assistance from the Swedish International Development Agency with the aim of universalisation of primary education in selected remote and backward villages of the state. The project identified teacher absenteeism as the major obstacle in achieving the objective of universalisation of primary education. It envisages substitution of the primary school teacher by a team of two locally educated workers called shiksha Karmis for whom educational qualifications prescribed for teachers are not insisted upon. They are however, provided training and academic support on a sustained and intensive basis to enable them to carry out their duties. The existing primary school when run by Shiksha Karmi is called day centre. Apart from the state projects, there are certain intervention programs to enhance the primary education.

Minimum Level of Learning (MLLs) (1989)

The National Policy on Education (NPE), 1986 emphasized the need for laying down Minimum Levels of Learning (MLLS) for each stage of school education as a pre-requisite for setting performance goals for the teachers. This was visualized so that these could serve as effective guides for organizing teaching – learning experiences and evaluating pupil achievement.

Learning lays emphasis on :

- (a) relevance and functionality in primary education.
- (b) Lightening the curriculum by emphasizing competencies rather than content.
- (c) Ensuring acquisition of basic competencies and skills.

- (d) Promoting mastery learning not only by the brighter students but by all children in the class and
- (e) Introduction of continuous and comprehensive evaluation in the classroom in order to give teachers a diagnostic tool and facilitate remedial teaching.

Minimum Levels of Learning can, perhaps, be specified in a variety of ways. MLLS can be stated as expected learning outcomes defined as observable terminal behaviours. One may also go for a taxonomic analysis of learning objectives such as knowledge, comprehension, application, analysis, synthesis, evaluation and so on and accordingly indicate the expected learning outcomes. One can also state the MLLS in terms of learning competencies expected to be mastered by every child by the end of a particular class or stage of education. These difference approaches for stating the MLLS are not mutually exclusive of the various alternatives available, the committee has chosen to state the MLLS in terms of terminal competencies. Each competency can be further delineated in terms of sub-competencies while specifying the content inputs or while designing specific measures of learning.

It may be well noted that the set of MLLS would actually represent the rational criteria adopted for judging the adequacy of the curricular inputs provided and the learning outcomes to be expected. Two basic considerations kept in view while formulating the MLLS are :

- (i) the cognitive capabilities of the children at different classes or grades corresponding to different stage of development; and
- (ii) the empirical reality in terms of enabling environmental conditions that characterise the primary education programme.

Programme of Action National Policy on Education (1992)

The National policy on Education, adopted in 1986 and updated in 1992, was a landmark in Indian education as it provided both a comprehensive framework for the development of education up to the end of the century and a plan of action assigning specific responsibilities for organising, implementing and

financing its proposals. It gives unqualified priority to give good quality of primary education and adult literacy programmes.

The NPE tempers idealism with realism, conceding for the first time that schooling cannot reach all children in the near future. Millions of girls and working children will be excluded. So it plans a large and systematic non-formal education programme combining flexibility with quality in order to reach them. School building are being made more attractive and incentive schemes such as school lunches are being widely implemented. But despite enormous progress, India faces huge challenges. Estimated 153 million children between 6 – 14, there are 28 million out of school, over 14 million of whom are working. Nearly half of those entering grade one drop out before grade five and two third before grade eight. Levels of achievement remain low.

The National policy on Education 1992 gave a new scheme for achieving elementary education with the financial support from international agencies that is the District Primary Education Programme.

District Primary Education Programme (DPEP) (1993)

DPEP launched in 1993 as a national initiatives to achieve Universalization of Elementary Education (UEE) through district level, intervention, the overall goal of the DPEP is the reconstruction of primary education system to operationalise the strategy of UEE as envisaged in National Policy on Education (NPE, 1986 POA – 1992) through decentralised planning and management, disaggregated target setting, community mobilisation and population specific planning.

The fundamental principle of DPEP is to evolve strategy at state and district level. It goes beyond the conventional packages such as opening of new schools and appointing new teachers and addresses the issues of content, process, quality and equity in education.

The objectives of DPEP were :

- 1) to reduce difference in enrolment, drop out and learning achievement among gender and social groups to less than five percent.
- 2) to reduce overall primary drop – out rates for all students to less than ten percent.
- 3) To raise average achievement levels of at least twenty five percent over measured base line levels and ensuring achievement of basic literacy and numerical competencies and a minimum of forty percent achievement levels in other competencies by all primary school children.
- 4) To provide, according to national norms, access for all children to primary education classes (I – V), i.e. primary schooling wherever possible or its equivalent non-formal education.

Learning Without Burden (1993)

The drop out according to the Yashpal Committee report ‘Learning without Burden’ is due to the manner in which syllabus is covered in the average classroom, is by means of reading the prescribed textbook allowed with occasional noting of salient point on the black board. In rural India, there are basic problems such as abysmally poor condition of school, absenteeism among teachers may cloud the problem of curriculum load. The high rate of dropouts has its origin in the curriculum. It takes away the element of joy and inquiry from learning, which obviously contributes to the rate at which children leave school in the early years, undoubtedly, under the force of economic and social circumstances.

National Programme of Nutritional Support to Primary Education (1995)

A nation – wide programme of Nutritional support to primary Education was launched on 15th August, 1995. The programme is intended to give a boost to universalisation of primary education by increasing enrolment, retention and

attendance and simultaneously enhancing on nutritional levels of students in primary classes. The ultimate aim under the programme is the provision of wholesome cooked/processed food having a calorific value equivalent to 100 gms. of wheat/rice per student in all government, Local Body and Government aided schools in the country.

Sarva Shiksha Abhiyan (2002)

Sarva Shiksha Abhiyan is an effort to universalize elementary education by community – ownership of the school system. The SSA programmes is also an attempt to provide an opportunity for improving human capabilities to the poorest children through provision of community—owned quality education in a mission mode.

The main aim of SSA is to provide useful and relevant elementary education for all children in the age 6 to 14 years by 2010. There is also another goal to bridge social and gender gaps, with the active participation of the community in the management of schools.

According to article 28 of the convention on the Rights of the child, “The State recognise the right of the child to education and they shall make primary education compulsory and free to all.” ‘Sarva Shiksha Abhiyan’ has been born out of a recognition of this need, a need to impart primary education to their children who do not go to school.

Primary Education in various Five Year Plans

During **First Five Year Plan (1951 – 56)** in the post Independence period problems of educational reconstruction, expansion, qualitative improvement and financial implications, thereof were reviewed by several commissions and committees. The recommendations of these commissions and committees together with the constitutional provisions became the basis for priority determination in the First Five Year Plan. The Basic system of education as propounded by Gandhiji was another source of determining priority at the primary stage of education.

In view of the limited resources, it was envisaged that a large share of responsibility in this area would have to be borne by the people themselves. The plan also visualised that private agencies would be encouraged by the states to take up the work of educating the people in a big way. The plan emphasized that in view of the poor return from primary education, the tendency to open new primary schools should not be encouraged and as far as possible resources should be concentrated on basic education.

Taking note of the constitutional provisions of universalisation of elementary education (UEE) it aimed at providing facilities for approximately sixty percent of children in the age group of 6 to 11.

Second five year Plan (1956-57 to 1960-61) laid great stress on basic education. The assessment Committee on Basic Education (1956) appointed by the Government of India became the basis of the expansion and reform in basic education and as such one of the thrusts in the plan was on popularising and expanding basic education.

Third Five Year Plan (1961-62 to 1965-66) noted that education must become the focal point of planned development. The emphasis was laid on the provision of facilities for the education of all children in the age group of 6- 11, orientation of all elementary schools to the basic pattern, establishment of basic school in urban areas, to link up basic education with the development activities of each local community, establishment of schools in rural areas within the walking distance of one mile.

Fourth Five Year Plan (1969-74) took into account the recommendations of the Education Commission (1964-66) and Resolution on National Policy on Education (1966), sought to raise the standard of living through programmes designed to promote equality and social justice and laid particular emphasis on improving condition of less privileged and weaker sections especially through provision of education and employment.

Fifth Five Year Plan (1974 – 79) included Elementary Education in the National programme of minimum needs and proposed full time primary

schools facilities for 97 percent of the children in the age-group 6 – 11 and 40 percent in the age group of 11 – 14 by plan and period.

Sixth Five Year Plan (1980 – 85) assigned highest priority to elementary education and proposed to cover 80 lakh children in non-formal education programme during the plan period.

Seventh Five Year Plan (1985-90) emphasised on policies and programmes which aimed at realisation by 1990 universalisation of elementary education for children of 6-14 age group. The development of education during this period was marked by the formulation of the NPE (1986) and programme of Action (POA – 1992) is also launching of Operational Black board (OB).

Eighth Plan (1990) The main objectives in the Eighth plan was towards universalisation of elementary education and complete eradication of illiteracy.

Ninth Plan Approach Paper (1997-2002)

Realising that although UEE was included in seventh plan and DPEP and nutrition support to primary education during eighth plan, backlog in enrolment has continued. Ninth plan Approach paper proposed that directions of National Policy on Education will be carried out and that sixty percent of Gross Domestic Product will be earmarked for education and fifty percent of it for primary education. Universalisation of primary education continues to be priority area in the Ninth plan, efforts was made to ensure both easy and equal access to education for girls.

In the Ninth plan, the thrust was on strengthening the early joyful period of play and learning in the young child's life to ensure a harmonious transition from the family environment to the primary school.

Tenth Plan (2002 – 2007) launched Sarva Shiksha Abhiyan (SSA) with an outlay of Rs. 16,000 crores.

According to Article 45 of the constitution, the state shall endeavor to provide universal, free and compulsory education to all children up to the age of 14 years by 1960. However, the fact is that the goal of UEE has been revised several times, first to 1970, and then to 1976, later to 1988, 1990 and 1995 (for higher primary stage), yet even after half century goal of UEE still remains a

distant dream though tremendous efforts have been initiated for achieving UEE. Considerable progress has been made in post-independent India in terms of increase in all types of Institutions, levels of enrolment and the sophistication as well as diversification of the educational programmes, but the main requirement for meeting the national aspiration of UEE is to successfully meet the challenges of universal access, retention, equity and quality is still long way to go.

The NPE (1986) and its programme of Action (POA) updated in 1992 reaffirmed the national commitment towards universalisation of elementary education and put forth several concrete strategies for the pursuit of UEE. These strategies revolved around micro planing decentralization of planning, administration and management, an active involvement in planning by communities and NGO's as well as non-formal education programs aimed to meet the needs of out of school children. Several innovative schemes like operational blackboard, minimum levels of learning, special orientation programme for (SOPT), Tarang Ullhas, DPEP, SSA etc. have been implemented nation wide inorder to improve the quality of primary education.

1.1.3 Quality of Primary Education

In the past few decades education systems all over the world have expanded rapidly, as reflected in large increases in enrollments and public education expenditures. But as education systems develop quantitatively, problems of low educational quality have become more evident. In many countries, there are high drop-out and repetition rates in education especially at the primary level (UNESCO 1984). Here, is a need for the investment in educational quality. For developing country like India, the need to improve educational quality presents a formidable fiscal challenges. Unmet social demand for education and stagnant economic growth indicate that interventions to improve school have to be undertaken under very tight government budgets.

Education is subject which has been generally given a secondary treatment in National Budget. Budget allocation for education was 1.2 percent in 1950-51,

which has steadily increased to 3.9 percent in 1989-90. Whatever budget allocation there is, the money is further distributed. Out of which budget allocated for elementary education was 0.48 percent in 1950-51 and which has increased to 1.72 percent in 1989-90. More budget is generally allocated for those areas which involve less number of students and less budget for areas which involve more number of students. This is why primary education in general has got less attention, whatever money is spent on primary education the major chunk of this goes in quantitative expansion. Which leads to problem of qualitative improvement. Since first to fifth five year plan the emphasis was on quantity only in sixth five year plan elementary education got priority along with universalization of primary education, improvement has become a motto. A need for quality control has arisen specifically after that.

Population explosion, lack of funds and failure of implementation of many of the educational policies at the primary level, resulted in the present poor quality of primary education system.

Quality education for all is essential for ensuring the quality of life of all people. Teacher is the key to quality education. Good management and good teaching generates higher quality education. It is being finally recognized that a child's right to education leads to overall growth and development. This requires a comprehensive approach, better care, stimulation and above all is commitment and realization that more resources have to be developed.

1.1.4 Status of Primary Education in India

Education plays a paramount role of economic development besides being instrumental in development, it was also an end in itself because it helps people lead better lives. According to census of India 2001, level of literacy was 65.5 percent. For broad based sustainable economic development, primary education was critical. Neglect of primary education is endemic in developing nation like India.

According to public expenditure for elementary education is only 0.17 percent of GDP for India. Literacy was only 80 percent in urban area and 60 percent in

rural area. About 36% of all 7-14 year old children were illiterate that was, the total population in rural and urban areas that needs primary education was 340 million.

Just to provide primary education, India requires seven million teachers if one were to have 1:50 teacher students ratio. Not only was that number formidable the problem is compounded by the fact that these teachers are mainly required in the rural areas where the current number of qualified teacher was extremely low. (Data from census India 2001 and from Azim Premji Foundation)

Thus, it can be clearly envisaged that number of commissions and committees appointed since independence, aimed at the attainment of UEE but the final result was postponed every time. Though the directive principle was given the constitution, state was not provided with adequate facilities to achieve it. As a result, inspite of enormous efforts in the direction of UEE, we have not been able to achieve it so far and it has remained a dream for us.

1.1.5 Structure of Primary Education in Gujarat

The state of Gujarat came into existence on 1st May 1960. Gujarat is surrounded by Madhya Pradesh in east, Rajasthan in north and Maharashtra towards south. Gujarat is located on the western side of India. The State is spread in the area of 1,96,022 square kilometers. Gujarati is the regional language of Gujarat. Garba and Dandia Rass are the folk dance of state. It has 25 districts. The numbers of villages are 18622. Village having more than 200 population should have Primary School but still there are sixteen villages does not have Primary School facility. Basically this includes the villages located in Panchmahal, Surat, Surendranagar and Vadodara districts. Gujarat, since independence has made considerable progress in the field of elementary education.

Table 1.1

**Retention and Enrolment of Students at primary stage in Gujarat State
According to 1991 Census**

Sr. No.	Areas	Male	Female	Total
1.	Enrolment	83.81	68.79	76.44
2	Retention	65.00	58.08	61.88
3	Literacy	73.13	48.64	61.29

Source : Statistical data on primary education published by the Government of Gujarat for the year 1995-96.

Number of municipality board is 61 and District Education Committee is 19. Total population is 4.13 crore out of which male population is 2.14 crore. Rural and urban population are 65.51% and 34.49% respectively. Tribal and schedule caste population are 14.92% and 4.14% respectively

Sex ratio 934 females per thousand males. Decenial population growth rate is 201.19 percent (1981-1991), population density is 211 per square kilometers. Net Enrolment Rate (NER)(1986) is 76.44 percent, out of which the net enrolment rate for girls are 58.08 percent and 65 percent for boys. Literacy rates are 48.6 percent for males and 33.13 for females. There are about 32952, primary schools in the state. Total rural and urban primary schools in Gujarat were 2794025012 respectively. The primary schools are managed by different management bodies like 147 central and state government schools. 27420 district panchayat schools managed by district panchayat, 1594 Municipal schools, 1180 private aided schools and 2611 private unaided schools. In all there are 177137 primary teachers in Gujarat state out of which 99053 were male teachers and 78084 were female teachers. The growth of enrolment in primary education in the state is from 2247113 to 7666424 from 1960 to1997. The rate of retention upto class V is 54.56 percent and the plan and non plan expenditure for the elementary education for the state was Rs. 8811608 thousand for the year 1994-95.

1.1.6 Primary Education in Baroda District

The attempt of free, compulsory and universal primary education is not new for Baroda. This was first tried by Maharaja Sayajirao Gaekwad III of Baroda state in 1906. He was a firm believer in universal education. Baroda compulsory primary education act was first passed in 1906 and then, successively a modification in 1910, 1916 and 1926.

In Vadodara district, the population is 1,705,617 and the literacy rate is 71.32 percent. Further, the literacy rate of Vadodara taluka is 85.46. Literacy rate of Dabhoi taluka is 69.46 percent. Literacy rate of Dabhoi taluka (rural area) is 66.51 percent. There are about 2676 primary schools in the district, numbers of students are 5,00,535 and total numbers of teachers are 12,461. (Census, 2001).

1.1.7 Curriculum at Primary Level

Curriculum at primary level is decided on the basis of the objectives laid down at a particular level. The regional meeting of representatives of Asian member states on primary and compulsory education was held at Karachi in December, 1959 and January 1960.

The following objectives of primary education were developed.

- 1) To give adequate mastery over tools of learning.
- 2) To bring about a harmonious developments of the child's personality by providing for his physical, intellectual, social, emotional aesthetic, moral and spiritual needs.
- 3) To prepare children for good citizenship, and its culture and to inspire in them sense of service and loyalty.
- 4) To develop in the children the spirit of international understanding and universal brotherhood.
- 5) To inculcate scientific attitude.
- 6) To inculcate a sense of dignity of labour.
- 7) To prepare children for life through the provision of worthwhile practical activities and experiences including work experiences.

The curriculum for the ten year school (NCERT) suggested mother tongue, maths and environment as the subjects at the primary stage. It says in the primary classes the sciences should be taught as environmental studies; in class I and II as a composite course including both the natural and the social environment and later on as two subjects, viz. Environmental studies II (social Science). The purpose should be not to stuff the minds of children with facts and information, but to sharpen their senses, to enable them to observe there environmental and to enrich their experience. There should be solid foundation of the experience from the environment of the child. The subjects taught at primary level are language (Mother tongue), Mathematics, environmental science (combination of science and social studies) Art and physical Education. Language is an important tool which increases self expression in day-to-day interactions. Mathematics develops logic and reasoning which too is helpful in day-to-day life activities. Art develops psychomotor skills along with appreciation and aesthetic sense development, whereas physical education helps towards healthy development of body. Environment science prepares well informed and responsible citizens. It aims at developing an understanding of physical and social environment.

1.2 MEANING AND DEFINITION OF ENVIRONMENTAL EDUCATION

The term “environmental education” has two components, viz., “environment and Education.” Environment is already been defined “the sum of total of all conditions and influences affecting the life and development of organisms.” Education is “forming desirable attitude, values, skills, understanding about the environment so as to preserve it and improve it for survival of the present and future mankind.”

To understand the meaning of Environmental Education, its three major aspect are to be considered, they are :

- a) Education about Environment
- b) Education through Environment and

c) Education for Environment

These three aspects in short specifies that education should be about environment by making environment as a subject of investigation; education through environmental means where environment should be used as a medium of study using real life situations and education is for conserving and improving the environment and finding solutions to the problems related to it.

There is no single definition of Environment Education accepted universally because for different authorities, scientists, educationists, and other eminent persons have defined the term as per their philosophy, needs and their perceptions.

According to United States Environmental Education Act (1970): “Environmental Education is an integrated process which deals with man’s interrelationship with his natural and man made surroundings, including the relation of population growth, pollution, resource allocation, technology and urban and rural planning to the total human environment.

According to Schinieder (1974) “Environmental education is concerned with dynamic interaction between humanity and nature and it is directed at the improvement of the quality and existence for all living things.”

The UNESCO Report (1976) defines “Environmental Education as the outcome of re-orientation and devoting of the various discipline and of different education experiences making it possible to achieve and integrated perception of the environment and to act towards it, it is a way that is more rational and corresponds to social needs.”

Thus, Environmental Education involves teaching about value judgements and ability to think clear about complex problems about the environment which are political, economical and philosophical. It is an interdisciplinary action process which enables one to understand the dynamics of relationship between nature and man culminating into high quality of life.

A simple definition of environment can be, “the aggregate of all external conditions and influences which affect our life.” But in reality the concept of

environment is very complex and comprehensive, as it includes a wide range of phenomena and their interactions.

Environment is both natural environment as well as social environment. The natural environment is classified as biotic and abiotic components. The biotic components includes all the living beings, while the abiotic components includes all the basic organic and inorganic components of the physical or non-living environment like water, carbon-dioxide, oxygen, nitrogen, etc. The natural environment can also be subsumed as renewable and non-renewable. The renewable environment includes the soil, water, forest, vegetation and wild life while the non-renewable includes minerals, oil and coal.

The social environment includes the economic, political, cultural and social relationships that exists among the people. The proper appreciation of these relationships is very well vital for their survival and development. The product of such relationships are modes of production, industry, education, technology, means of transport and commerce, housing, bridges and highways, etc. For a peaceful existence and progress and for the prosperity of human race both types of environment are essential.

1.3 WORLD ENVIRONMENT SCENARIO

Humans made great inventions like plough and wheel. The plough gave freedom and the wheel a quick means of transportation. With these inventions human started transforming, destroying and also improving environment through their cultural evolution. With the advent of modern science and technology combined with man's greed and with the exploit the resources of earth, point of redemption has lead to the creation of environmental problems.

The environmental problems are all around the world i.e. in developed, developing and also in third world countries.

Late Mrs. Indira Gandhi (1972) rightly observed that the environmental problems in rich countries is due to affluence and lavish consumption styles, while in developing countries they occur due to ignorance and poverty. The Reports of International Commission on Environment and Development (1980)

and the Brandt Commission Report (1980) have warned ~~the~~ mankind against the impending doomsday and catastrophic nature of environmental problems, unless corrective measures are taken well in advance.

The problem should not be considered as regional but should be considered in totality. This calls for a collective effort of people all around the globe for the control, prevention and finding solutions for environmental problems. The declaration of the United Nations Conference on Human environment, in Stockholm (1972) proclaimed, "To defend and to improve human environment for present and future generation has become the imperative goal for mankind." (Pahraj, 1991).

Here, arises a need that the global citizens become aware and concern about environment and its associated problems. For this, it is necessary that citizens should be both literate and educated, so that they can take suitable action to make the world happier place to live. So education can be a powerful intervention tool through which citizens can learn to behave socially and ethically towards biosphere. In other words, if there ought to be environmental awareness, there should be education, which should not follow the populace just from nursery to university, but to the grave.

1.4 SARDAR SAROVAR PUNAHVASAHAT AGENCY

The present investigation was with the schools of Sardar Sarovar Punahvashat Agency (SSPA), investigator would like to report about SSPA in brief.

Sardar Sarovar Punahvashat Agency is the Resettlement and Rehabilitations (R&R) Agency involved in resettling people Project Affected Families (PAFs) affected by Sardar Sarovar Project (SSP) SSP is a multipurpose project on the Narmada river. This is a joint venture of three states Gujarat, Madhya pradesh and Maharashtra. This is the largest water resource development project in India where the 75 percent of the command area in drought prone. SSPA officials are involved in the whole process of R & R right from the identification of land resettling PAFs at R & R and rehabilitation and post rehabilitation activities.

PLATE - I



**S.S.P.A. SCHOOL
Dabhoi Taluka**



Health Centre

Main Features

- This is a separate organization has been set up in 1992 in Gujarat namely Sardar Sarovar Punahvasavat Agency (SSPA) to exclusively implement Resettlement and Rehabilitation (R&R).
- Powers of the State Government, with respect to implementation have been delegate to SSPA to avoid delay and ensure flexibility, project affected families academicians are represented on the Executive Committee of SSPA.
- Rehabilitated and Resettled (R & R) sites committees are formed in most sites and these committee are being vested with responsibility to tackle routine repairs and maintenance problems. The committees are encouraged to take up small civil construction works to be done within the site.

Objectives

The approach of the Government is to ensure that the project affected persons do not have to pay the price for providing irrigation and other benefits in the downstream area. In fact, a concerted efforts has been made to see that, the project affected families are the first beneficiaries of the project. To achieve this purpose, the objectives for the R & R plan are –

- Improving the economy and standard of living of the PAFs which they had been enjoying prior to their displacement.
- Full integration of project affected families in the community in which they are resettled.
- Providing with the appropriate compensation and adequate social and physical rehabilitation infrastructure including community services and facilities.
- Ensuring participation by the Project Affected Families (PAFs) in their resettlement and rehabilitation.

Education Cell

The education cell looks after the educational activities at various R & R sites. A two / three room primary school is provided in all sites where Madhya Pradesh and Maharashtra families are resettled, irrespective of the number of families resettled. This cell supervising the primary schools at the R & R sites and sends the requirement of the teaching staff to the district panchayat school going children are provided with meals and children upto 6 years, pregnant and lactating mothers are provided with nutritional supplements under the Integrated Child Scheme (ICDS). Special nutrition supplement is given to malnourished children.

Table 1.2
Details of Activities

Sr. No.	Details of activity	Total No. of PAFs Benefited (2002-2003)
1	Schools - activity?	236
2	Schools running	144
3	No. of schools upgraded	156
4	No. of school rooms	601
5	No. of Teachers working	412
6	Total number of students	6964
7	No. of Boys	3745
8	No. of girls	3219
9	No. of teachers proceeded for in service training	412
10	Mid - day Meal Centers	163
11	Average pass percentage	92 - 95%

The other facilities provided by Education Cell

1. Education kit
2. Furniture – table chair for teachers
3. Utensils
4. Music instruments

5. Set of slat-pen-pencil, note-book, rubber, ball-pen
6. Mini-library set
7. Chalk-box
8. Asan-patti

Other Activities

- Education Advisory Committee formed
- Education kits provided to schools
- New design of school approved
- Educational tour programme of vasahat school.
- Adult Education Survey
- Medical survey.

1.4.1 Importance of Sardar Sarovar for Gujarat

Gujarat will have an estimated daily increase of Rs.4 crores. Gujarat State has low and erratic rainfall with large variation over time and space only a very small portion in South Gujarat has sufficient rainfall. In view of low and erratic rainfall, limited surface and ground water concentrated in South and central Gujarat and limited irrigation, Gujarat's agriculture is highly susceptible to droughts and famines.

The impact of 1987 drought was extremely severe, where it affected 77 per cent of Gujarat population, 71 per cent of cropped area in more than 15,000 villages. The recurring and consecutive drought can be eliminated only by augmenting the water resources of Gujarat. This can be achieved only through Sardar Sarovar project. All other alternatives will be ad hoc and placement.

Because of this project, 17.921 lakh hectares of land in 3,244 villages of 12 districts will have the benefit of irrigation water (if we put all other irrigation schemes of Gujarat together, it comes to 18 lakh hectares of land). Thus the project would benefit one fifth of the rural population of the state and would cover 17 per cent of land of Gujarat. 72 per cent of the command area is drought prone area. 131 towns and cities and 4,720 villages will have the

benefit of drinking water. Total power generation will be 145 mw. When Sardar Sarovar project is complete, the annual increase in the agricultural income will be of Rs.900 crores, the increase in the income through electricity will be Rs.400 crores. The increase in the income through the supply of water will be Rs.1 crore. Thus, Gujarat state will have the total increase in its income to the tune of Rs.14,00 crores annually.

Although many facilities are provided by SSPA but still there is an imbalance. Due to lack of teachers they have to handle ~~to-handle~~ more than one grade simultaneously and so here multi-grade teaching situation prevails.

1.5 CONCEPT OF MULTIGRADE TEACHING

Multigrade teaching is one of the major areas of concern in primary education. This situation has been a part of primary education throughout the long history of education until the advent of industrial revolution and urbanisation, multigrade schools were the dominant model of primary education in North America. Monograde classes evolved as a means of managing the learners by organising them into grades or classes in 1800s.

As a result textbook was developed accordingly. In rural areas of United States and other developed countries multi-grade classroom was used as a necessity. This was popularly known as 'one room school house' in United States. Later on the graded school system was developed.

Good land and Anderson (1963) reflect upon this as, "Structural change in American education was accompanied by the advent of the graded text-books, state support education and the demand of trained teachers. These later changes further solidified graded school organisation."

The major implementation of multi-grade schools occurred in early 1960s when USSR began a scientific cold war between USSR and US reaction against scientific advances of sputnik ~~that~~ launched by the USSR.

In the middle of 1970s multi-grade schools suddenly increased in developed countries. According to Simon Veenman and Jan Raemakers, "This is because of economic constraints, cuts in staff and demographic contractions. Multi-

grade situation takes place generally because of administrative and economic reasons. Small schools in sparsely populated areas always had multi-grade classes but the need of multi-grade teaching is now being faced by a much wider group of schools both in rural and urban areas.”

Multi-grade system in India is oldest one. In India it dates back to the ancient Gurukuls, since the vedic period. India has a sound socio-cultural and educational background. Later on pathshalas were evolved as the centres of education where the community was appointing a local person as the teacher (Upadhyay). He was supposed to teach primary skills of reading, writing and numeracy. The children in these schools were happened to be at different stages in learning and multi – level skills in reading and writing. So as teaching happened to be a multilevel teaching.

In medieval period of the Indian history the maqtab system was introduced to fulfill educational demands of Islamic families. Chorus drills and individual guided practice were the back bone of this maqtab system. The maqtabs had only one teacher posted to teach Persian, Arabic and Urdu languages to all the learners. There was no grade system. Only language skills and ethics based on the holy Quran were taught. This education system was also not available for every Indian. But those Islamic families who were interested or who felt need of Islamic education only sent their wards to the maqtabs.

The East India Company established on December 31, 1600 A.D. as a trade organisation. Gradually its pendulum swang from commerce to administration during 18 century. Till that, education was not a duty of the government. But as the charter of East India Company was renewed in 1813, a clause was inserted to it that, the Governor General was required to spend more than 1,00,000 rupees annually on the education of the Indians. Before this, in 1542, Christian Missionaries had started their educational activities in India.

Later on, in 1835 Thomas Babington Macaulay submitted a famous letter on education, popularly known as “Minute on Education.” Further this letter became a resolution on March 7th, 1835 and determined the character of Indian education. Thus, a system of English or western education was adopted by the

British Government. School Buildings were constructed with medium of Instruction in English. Teachers were appointed as a paid employee of the government. During this period multigrade system was prominent, because only one teacher was provided to teach more than three grades.

The second half of 19th century is, nonetheless, of great significance to the country because modern India may indeed be said to be a creation of this era. The British system adopted peer learning and monitorial system, who was assisting the teacher in day to day school management. This period was also the period of multigrade teaching when one teacher was appointed in a rural area to teach the children of entire community.

After independence, government took over the responsibility of education as a welfare state providing free and compulsory primary education policies forced the union and the state governments to create primary education facilities at a large scale. But still school – teacher ratio shows that only three teachers per school running I to VII classes was provided. It indicates that multi-grade situation is prevailing since 1950-51 till date. More than 90 per cent schools, sanctioned after independence prevailed with multi-grade situation.

Multi-grade teaching is more common in India. An UNESCO Report 1990 indicated that India has the second largest strength of multi-grade schools after china in the world. 89 percent primary schools in rural areas are functioning in multi-grade situation.

Multi-grade teaching refers to the teaching of students of different ages, grades and abilities in the group. It is to be distinguished from mono-grade teaching in which students within the same grade are assumed to be more similar in terms of grade and ability. Multi-grade teaching is the situation, when one or two teachers teach more than one grade at the same time. It implies the school situations where the number of students in different grades is so small that the students of different grade together assembles or add – up to a class. It connotes combination of groupings of different grades. Such a situation arises when the number of teachers is less than the number of grades.

According to Gupta, Jain and Bala (1996) "Multi-grade teaching refers to a situation in an educational institution (formal and non-formal) wherein a teacher is expected to teach a group of children belonging to more than one grade (of different age groups and with different levels of achievement and may be different subjects) simultaneously."

The Grades can be defined as number of years of schooling. Every grade has a particular syllabus, which has to be completed by the students of that grade after completion of this syllabus if they attend certain levels of measurement they are promoted to the next higher grade.

According to Gupta "It is a system, which requires a teacher to teach students in more than one grade / cohort simultaneously. The system is restricted, in general, to the primary stage of schooling and violates the modern professional norms of mono-grade teaching."

According to Nagraju (1997) and DPEP (1998) News letter listed some of the problems in multi-grade teaching in India are

1. The curriculum and the textbooks are the same as in other schools where one teacher teaches one class. As a result the teacher have to face the following problems.
 - Prescribes courses cannot be completed
 - Teaching is limited to the core subjects i.e. language and arithmetic
 - Teachers have to lean heavily on the assistance of senior students, who act as monitors. Where the monitor is one of the pupils of the same class, his assistance is inadequate for instructional purposes.
 - Generally, classes 1 and 2 are left in charge of monitors and the monitor devotes more time to these classes than teacher.
 - There is less emphasis on games, co-curricular activities, arts and crafts. Therefore, effective and psychomotor domains of pupils' personality remain, by and large, underdeveloped as the emphasis is on cognitive aspect.
2. Due to heavy pressure of work on the teacher, he generally treats the teaching of different subjects casually and suit his convenience.

Consequently, children do not get regular and systematic instruction in different subject areas.

3. There is no definite pattern of class combination taught by one teacher.
4. There is no special training given to the teachers handling multi-grade teaching.
5. The teachers find it difficult to take the children out on educational trips as envisaged in the curriculum.
6. The teachers do not find the time to attend to remedial teaching programmes.
7. Generally, school equipment is supplied in proportion to the number of teachers. For example, in a two- teacher four / five classes school situation, usually two blackboards are supplied instead of five. This requires two or three class of the school to be engaged in a work, which does not involve the use of chalkboard. Instructional work is thus suffered.
8. The instructional programmes suffer heavily when in a two teacher school either of the teachers proceeds on leave. In such a situation single – teacher has to handle almost double the number of pupils. Therefore, the instructional work of the second teacher suffers.
9. In view of the already heavy workload, the teachers do not take the necessary interest in compulsory education enrolment drive. Moreover, little attempt is made to retain such children who show tendencies to dropout.

Looking to the problems few questions is Multi-Grade teaching are raised.

- a) Practical aspects of classrooms situation such as the complexity of conducting activities in multi-grade setting, overcrowding classes.
- b) Curriculum : should there be cross-curricular integration, what is the place of a school readiness programme, what would be realistic learning goals, should curriculum be redefined in terms of multi-grade context ?
- c) Teaching Strategy / Methodology / Classroom management, e.g. what kind of activities would help a teacher ? What kind of planning is required on part of the teacher ?

- d) Teacher training : what are the requirement from teachers to teach / create learning environment ? How can teachers be equipped for multi-grade situation ?

However, to deal with Multi-grade teaching situation there is a need for adopting different strategies that can make teaching – learning process more interesting and effective. Thus, at this point investigator would like to discuss and clarify about strategy.

1.6 CONCEPT OF STRATEGY

A strategy consists of critical guidelines related to selecting the best procedure and how to make decisions about its use.

To be certain, strategy has its own peculiar meaning. Originally a term confined to the military frame of reference, it meant, “The art of a commander—in-chief, the act of projecting and directing larger military movements and operations of a campaign. In the beginning, it was carefully distinguished from tactics which is defined as “ the art of handling forces in battle or in the immediate presence of the enemy. Strategy expressed the more general and the larger concept; whereas, tactics conveyed the idea of the more specific and the smaller (Hardwicki, 1970) A tactics is defined as a pattern of appraisal behavior used to support the primary instructional pattern that is the strategy.

As years went by, the military term of strategy took on other connotations. It gradually developed a generic application. Today, it is correctly employed to designate skill in planning or managing. Moreover, social scientists have taken the term strategy into their lexicon and given it a bit more specific definition as “.....the general out line of the ways of achieving certain goals.” (Hardwick and Landuyt, 1970).

According to Oza (1995) ‘A number of or a combination of learning styles towards a specific purpose is what is termed as learning strategies’.

An individual's approach to a task is called a strategy. It includes how a person thinks and acts, while planning, executing performance on a task and its outcomes.

Gagne and Beard (1978) refers to strategies as 'Executive control processes.' This view is corroborated by Norman, where he included the 'regulatory system'. These regulatory or control processes that constitute a strategy are used to monitor and modify continuous cognitive processes or operations.

Hunt (1978) refers to strategies as 'quick decisions making processes.' According to Kail and Bisnaz (1982): "A strategy is a sequence of activities rather than a single or unitary events."

Thus, strategy means set of processes which ultimately facilitate learning process.

Smith et al (1967) considers that a strategy is a way of looking at the activities involved in class-room discourse. It refers to a set of verbal actions that serve to attain certain results and to guard against others. There are two dimensions of a strategy, namely, the treatment and the control dimensions. The treatment dimension concerns with the type and sequence of operations that the teacher and the pupils jointly enter into setting forth and structuring information in such a way as to disclose the content that is to be learned. The control dimension deals with the operations, the teacher uses to guide and control the participation of pupils in performing these operations on the content.

According to Flanders (1970) :

"Strategy is the way in which the teacher handles a class room situation in order to facilitate learning."

Praenkel (1973) considers teaching strategies exclusive of pupils learning activities. Teaching strategies refer to operations, a teacher performs in order to involve students in activities to help them learn, whereas learning activities represents things which students do, or actions in which they engage. This idea of a teaching strategy involves only the teachers behaviour and not the pupils behaviour.

Aranha (1988) defined strategy as the determination of the basic goals and objectives of an organization, and the adoption of courses of actions and the allocation of resources necessary for carrying out these goals. Thus, strategy refers to both means and ends.

To summarize, strategy is number of inputs applied in Teaching – Learning process (Instructional process), intended to bring about certain expected changes in pupil behaviour signifying expected ‘growth’ in pupils. These are spelt out in terms of certain behavioural attributes like knowledge, skills, attitudes, etc., in the cognitive, affective and psychomotor domains.

1.7 RATIONALE OF THE STUDY

Since 1970s many schools in developed countries have been forced to discharge their teachers because of financial constrains. Moreover, due to change in birth rate and declination in population has reduced the enrollment rate. This has also forced to the Government to establish small primary schools for thinly populated areas in the form of multigrade schools.

World Bank technical paper 172 (issues in the development of multigrade school by Christopher Thomas and Christopher Shaw) concluded that multigrade schools are not secondary option. They can be effective and efficient means of delivering educational services to the rural areas. Further added when correctly implemented it comes effective.

In a multi-grade teaching situation about 30 to 150 students, who are in many respects heterogeneous, have to be kept busy. They are aged from 6 to 11 years; there are differences in the capacity of their understanding and they come from different socio-economic backgrounds. The teacher’s task of handling such a group is really difficult.

Usually, the first difficulty that teacher encounters, is that of space. Invariably, the single-teacher school is a one-room affair, where the learning ability of a pupil depends much on the way sits along with pupils of other classes. Teacher attention is automatically distracted.

The major issue is that lack of orientation to teachers. Teacher competence, as of today, is woefully inadequate to handle multiple class teaching situation. Even through large number of teachers have to handle them, the training institutions hardly equip them with the skill to do so. An in-built programme of exposing teachers to such a situation, making them aware of the problems and imparting them the necessary skill to handle the multi-grade situation.

It can be said that the successful accomplishment of task of UEE along with MLLs i.e. quantity along with quality is possible only if there is universal retention and improved teaching – learning process by making teaching – learning process more joyful and activity based.

Since, All India Educational survey are global in nature, they do not show the unique features and available facilities of education of local areas. Hence, it is very essential that studies be conducted for local area also. Moreover, there is a dire need for primary education in order to bring 100 percent enrolment in secondary and tertiary level by bringing the quality in primary education, through Intervention.

The Curriculum for the ten-year school (NCERT) suggested Mother Tongue, Mathematics and Environment as the subjects at the primary stage.

Thus, Investigator prepared a Strategy for Environment for Class III and Class IV. As, In Multi-grade teaching these two classes are merged and taught together in a single Classroom by a single teacher. Moreover, units and competencies of Environment are related in these classes. Pupil should be able to develop the habit of cleanliness. They should be able to see and observe the gradually expanding components of human life and pupils should be able to know about natural phenomena. Moreover Environment as a subject prepares well informed and responsible citizens. Added Environment as a subject is given least importance as teacher devotes most of her instructional time in teaching the other two subjects i.e. Gujarati and Mathematics. Teacher's teach Environment twice or thrice a week only.

According to Dave, et. al (1988), that pupils achievement in environmental science was excellent in class I and II, minimum in class III, and poor in class IV.

DPEP (1998), stressed on Multi-grade situation that majority of the teachers in the country find themselves in such situation. Supported by UNESCO Report (1998) that Multi grade teaching is not a temporary phenomenon. 77 percent of primary schools in India are Multi grade. Thus, Investigator focused her study on Multi grade teaching.

The basic assumption, which the Investigator had formulated on the basis of her own experience, teacher's views and from reviews, is that teachers teaching in Multi-grade situation needed more of a planning in the classroom. Moreover, they need to have much information about curriculum organization and integration of competencies with regard to Multi-grade teaching. They treat textbook as a major or only aid. Therefore, there was a need to develop an Strategy, which could help teacher's to understand the planning and its execution in a Multi-grade set up.

Since gap lies in research in the area of quality improvement, it becomes very essential that study be conducted to improve quality of education in Multi-grade schools. This, aspect therefore needs research at each and every local area level so that standards of Minimum level of learning can be reached and task of Universalisation Primary Education gets accomplished and finally the quality of Primary Education is Improved.

1.8 STATEMENT OF THE PROBLEM

Development and tryout of a strategy for environment in multi-grade teaching for class third and fourth.

1.9 OBJECTIVES OF THE STUDY

1. To identify administrative and pedagogical problems in Multi-Grade teaching

2. To develop a strategy for environment in Multi-Grade teaching
3. To implement and study effectiveness of developed strategy with respect to a) achievement of students b) competency
4. To compare the achievement of the schools
5. To study the reaction of teachers regarding workshop
6. To study the perception of teaches regarding the developed strategy on Environment

1.10 EXPLANATION OF THE TERMS

1. **Strategy:** The term strategy is used here to refer to a series of pre-planned, well defined and sequenced inputs that will be introduced into the classroom, with a view to realizing instructional objectives with major emphasis on competencies of Environment subject of class three and four through activity based approach and by using appropriate teaching-learning materials.
2. **Multi-Grade teaching:** In this study the term implies a teaching situation in which a teacher has to teach and handle more than one grade or class in a single classroom.
3. **Academic Achievement:** The term academic achievement here refers to the marks obtained by the pupils on a test developed for the selected units of Environment subject of class three and fourth. In this study the effectiveness of the strategy was studied in terms of the scores in the post-test as compared to the scores of pupils in pre-test due to developed strategy. It was seen by comparing pre-intervention and post-intervention test scores.

1.11 DELIMITATIONS OF THE STUDY

The study was delimited to the schools run by Sardar Sarovar Punnahvasahat Agency –Education cell, Vadodara district.

The study was delimited to the Environment subject of class three and four.