INTRODUCTION

1.1 The primary education

Primary education is a crucial stage of an individual's growth and development because it is the most formative stage in one's life. The seven or eight years of primary education can lay the foundation for one's personality and also equip him for life long education. The right kind of outlook towards life and society needs to be cultivated at the first stage of school life on the part of children so that they could grow up as productive and socially useful citizens of the country.

Universalisation of elementary education has been one of the top priority programmes of Government of India for over four decades. Realisation of this goal obviously calls for three things, namely universal access, universal participation and universal achievement. Concerns for all these have been highlighted through various reports and policy statements. Government of India took serious note of the recommendations made in these reports and took up the task of Universalisation of Elementary Education on a massive scale. Consequently there has been a tremendous expansion of schools in the country and a substantial rise in the enrolment of children in school. Retention of children however still remains a serious problem before us. Besides, another important aspects of Universalisation of Elementary Education which has not made much headway is universal achievement. Measures of children's performance continue to reflect not only low levels of achievement but also achievement gaps amongst children. Equity issues in matters of enrolments, retention as well the learning achievement are of paramount concern in our efforts towards universalisation.
Enrolment, retention and learning achievement are dependent on the quality of education which has to be perceived as joyful by the children and useful by the parents.

Time and again it has been shown that unless the holding power of school is improved, there is little hope that children would remain in the folds of formal school to atleast complete education upto the primary level. The social, economic and other well known factors are deterrents no doubt in bringing the children from disadvantaged section of the society to the primary schools, nonetheless drab and unattractive classroom, meaningless content of what one learns at school, and the overall school climate including the teaching-learning strategies have been constant source of discouragement for pupils to remain at school.

In the case of primary education quality and quantity are not two separate issues. When quality of primary education improves, it would naturally lead to quantitative expansion involving a larger enrolment of children and a better retention of those enrolled.

The performance level of children in the primary school of Tamil Nadu. In the case of Tamil only 12% of children have scored 60% and above while the percentage of such children was 25 in maths and 49 in EVS. However the percentage of children scoring 35-60% of marks was 34-35% in all the three subjects (Final national report UNESCO - APEID sponsored joint innovative project on raising the achievement level of children in primary education in India, Feb, 1986 - March 1987 NCERT).

Though the improvement of the school climate as well as increasing the active participation of pupils in teaching-learning process and involvement of the teacher in both curriculum preparation and transaction had been emphasised by commission and policies on Education, yet it was in the enunciations of National Policy on Education,
1986 (revised 1992) that very extensive and concrete recommendations were made for improving the quality of primary education and enhancing the holding power of schools.

The NPE, 1986 envisages adoption of the child-centred approach in education in the context of the effort to promote universal enrolment and universal retention of children and substantial improvement in the quality of education. The NPE highlights that a warm welcoming and encouraging approach in which all concerned share a solicitude for the needs of the child is the best motivation for the child to attend school and learn and that a "child-centered" and activity-based process of learning should be adopted at the primary stage. In this context, the NPE also stresses the need to allow first generation learners to set their own pace of learning and provide supplementary remedial instruction to them to increase the component of the cognitive learning as the child grows and to develop skills through practice and to make evaluation as disaggregated as feasible.

1.2 Child-centred approach

Curriculum in its modern sense, does not restrict itself to subject matter alone but extends to cover the entire range of experiences planned by the school. Development of such curriculum started with a concern of experiences, organising their sequences, followed by evaluation.

The Mudaliar Commission (1952-53) placed heavy emphasis on activity curriculum and continuance of basic education. The Kothari Commission (1964-66) shifted the emphasis to be placed on disciplined inquiry and knowledge for science and technology. The National Policy on Education, 1968, was based on the recommendations by the Kothari Commission and the curriculum for the ten-year school was prepared by NCERT in 1975 to attain these objectives. In 1977, the curriculum was subjected to
review by Ishwarbhai Patel Committee which asserted that it was discriminatory against the poor and weaker sections of society.

It is realised that the present school curriculum imparts mostly theoretical knowledge to our children and does not prepare them sufficiently to face real situations in their life. The syllabus is quite heavy due to multiplicity of subjects, with heavy content-load in each. Subjects are presented as separate entities without bringing out their inter-relationship. Children face difficulty in understanding concepts because they are usually not related to their social and physical environment. Present curriculum hardly makes use of individual experiences of children and also does not enable them to develop a realistic understanding of the world they live in (O P Arora, 1991).

The existing curriculum is criticized of the following drawbacks:

1. It emphasises more on bookish knowledge.
2. It does not allow for adequate practical work and other kinds of activities.
3. It is dominated by examination.
4. It does not cater to the needs, abilities, attitudes and interests of children.
5. It is rigid, not flexible in nature.

In this context, an attempt is to be made to present an alternative approach to curriculum. One of the major aims of education is the 'over-all development of the child'. Therefore in the new curriculum the child or the learner is to be the active participant or the centre of the educational programme. The NPE-1986 states that (i) a child centred and activity-based process of learning should be adopted at the primary stage (ii) 'effective steps will be taken to provide a framework for the curriculum on the lines
of the national core curriculum but based on the needs of the learner and related to the local environment.

The basic assumptions underlying the child centred approach to education can be summarised as:

1. A learning environment which helps in fulfilling the developmental needs of a child and activates his/her motivation to learn.

2. Learning experience provided at a level consistent with the mental abilities at different stages of intellectual development.

3. Activities and exploration, manipulation of materials and through interaction with pupil.

4. Allowing individual differences which will facilitate attainment of the expected learning achievements by all children.

The recommendation which emerged as a result of deliberations as presented in the report of National symposium on child centred approach to education NCERT, 1988 are

1. Though the idea of child centred education is not new in India, what is new is the angle from which we have to approach the whole concept in the present day Indian context. We have to keep in focus the child coming from different social economic backgrounds viz, the rural child, the poor child, the disadvantaged child and the child from the working class.

2. The objectives of education have to vary according to the specific needs of children in different social milieu. We should however, not forget that
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2. The objectives of education have to vary according to the specific needs of children in different social milieu. We should however, not forget that
Education has to maximise each child's capacities, develop in him desirable values, self-concept and other qualities like independence of thinking, creativity and self expression.

3 Education has to be broad-based. It has to take care of not only the cognitive development of the child but his affective, psychomotor and social development as well.

4 For achieving the goals of broad-based education the process of learning strategies of instruction, quality of teachers, well designed curriculum, etc are all important which have to be properly geared to the specific needs and background of children.

5 Special emphasis should be laid on the needs and problems of the disadvantaged children who despite having the same level of ability are lower on scholastic achievement. Children from the deprived sections should be provided with good and intensive quality of education right from the pre-school stage. The education by and large should be both product and process oriented.

6 Education must go beyond the school. It has to take into it's folds not only the parents and family but the entire community to facilitate the all round the harmonious development of the children.

7. Proper action strategies should be devised to implement the process oriented teaching rather than content oriented education.

8. Learning experiences should encourage intrinsic motivation rather than extrinsic motivation. Evaluation of learning has to be in terms of feed
back from activities which can enhance the intrinsic motivation in the child.

9. Different theoretical models of Education should be reviewed and examined from time to time to select the best under the existing circumstances and context because a sound practical requires sound theoretical base.

10. Education for life should be emphasized. Efforts should be directed to develop desirable values, attitudes and skills. Activities and methodologies should be duly modified, keeping in view the variabilities in the potentials of children in varied social context.

In view of the thrust envisaged in child-centred approach to education, it is imperative that the scope of assessment be broadened in terms of the wholesome development of the child. The child or the learner is to be the active participant or the centre of the educational programme. This approach is known as 'learner-centred approach to curriculum'. The learner-centred curriculum implies the following changes in the current curriculum-practices:

1. Shift in emphasis-need of a shift from teaching to learning

2. Flexibility provisions - a curriculum has to be framed keeping in view the needs, interests and abilities of children. 'Core-elements of curriculum have to be identified which will be common and compulsory for all children'. The approach allows for flexibility in the methods and materials in class-room situations. Such materials will have to be developed depending on local needs. The available resources in the local environment may be conveniently made to develop locally relevant material.
The evaluation will have to be based on the attainment of various competencies rather simply acquisition of knowledge alone. The performance of the child will be compared with his own earlier performance and not with the performance of other children.

Role of teacher is that of a facilitator or a guide whose is expected to provide appropriate learning experiences to children.

'Ten year schooling' envisages making of a good citizen by way of imparting General education for all (The curriculum for the Ten year school NCERT, 1975). Hence, the primary goal of schooling should be to make an 'independently thinking and acting' citizen. Realization of this aim is possible only when children would be developing 'critico-creative abilities of thinking. Mere possession of the facts by the pupils does not help them build hypothético-deductive reasoning. This would require the child to use interactive strategies in learning, than just reading a text book or listening to teacher's lectures about a course content. Hence there is an urgent need to develop an appropriate school curricula that shall match the developmental characteristics of the pupil, to the requisite levels of conceptuals and syntacticals. (Curriculum material development and evaluation - Induction package NCERT, RCE Bhopal, 1991).

Close parallels can be drawn between the curriculum development approaches of our country and that of USA (I.D Gupta, 1991) National Policy on Education, 1986 subscribes to the learner-centred information processing of sciences. This simply means children should be sciencing, rather than listening to the history of sciences in the classroom. One of the important contribution of American Association for Advancement of science (1973) was the development of curriculum for elementary stage popularly
known as science - a process approach and it had contributed much to the process approach to curriculum in our country (Pauchury, 1990, Avinash Growel, 1991)

Recent concerns for comparable quality of education for all and solution of specific problems in particular contexts have given rise to the need of decentralised curriculum which follows basically the problem solving approach and the action - research technique. Emergence of systems - management design gave added impetus to the new theory. In terms of curriculum theory system - management implied that curriculum development improvement does not start with determining objectives on the simple theoretical foundations of sociology, psychology, other disciplines and philosophy but on the basis of analysis of situation calling for attention. Certainly, the objectives have to be delineated before initiating any programme of curriculum improvement but they are not pre-determined or theory based, objectives rather reflect now the purposes for problem - solving inviting an action - research strategy to design a programme, implement it and evaluate for efficacy of outcomes. The approach has lent itself to decentralisation of curriculum - development work down to the school level or even the class - level introducing new terms SBCD or CBCD (School Based Curriculum Development or Classroom Based Curriculum Development) to curriculum-theory. SBCD does not mean that every thing in curriculum development is left to the school. It asserts that the unit for effective curriculum development is the school and its entire programme. Its development requires attention to the specific problems and their systemic solutions in a designed manner by professionals with active involvement of the school staff and school-community.

Education improves the lives of children. A child who has access to quality primary schooling has a better chance in life. Learning to read, to write and to do basic arithmetic provides a foundation for continued learning. A girl or boy who acquires these learning skills is able to continue learning throughout life.
Educational systems fail to teach life skills children. Many who complete primary schools have not acquired the skills they need for productive adult life. Two main obstacles keep education systems from teaching all children effectively: a lack of resources and a lack of ideas. Children learn best when they are actively engaged. Children learn better and faster when they are actively engaged and help create lessons by interacting verbally, physically, and intellectually with the material being presented. Children can assist and reinforce each other's learning when they work together in small groups. What are we waiting for? Education for all vision, decentralised solutions, community, school relationship, school-based professionalism, principal leadership viz. collegiality and commitment and accountability, flexibility in curriculum, pedagogy, level of pace organisation are the elements for creating effective schools in developing countries' (Mary B. Anderson, UNICEF, New York, 1992).

1.3 Importance of laying down some standards of learning

Binod Khadria (1995) in a review of the book 'Smart Schools, Smart kids why do some schools work' by Fiske Edward B says that the outdated values of the 'factory model' - centralisation, standardisation, fixed schedules and accountability based on adherence or non-adherence to given rules - must give way to new values of the 'smart schools' viz decentralisation, respect for diversity, emphasis on learning and accountability on learning and accountability based on results rather than on rule following, further he emphasises that the amount of actual learning that students do must become the criterion on which educational professionals, administrators and researchers alike are held accountable. The author suggests these ideas can be applicable in India.

As it has been pointed out, there has always been a gap between what our majority of learners achieve and what is expected of them to achieve. Despite the
investment of huge amount of money, time and effort, our schools in general have not moved towards the goal of increased learning for all learners. The policy of no-detention did appear to yield results that student from disadvantaged home who used to dropout did stay in school longer. But soon came the observation that ‘no-detention’ is only an administrative device to maintain such children on the rolls of the school, it did not in any manner improve the academic holding capacity of the school. The population of students appeared moving up in the educational ladder although no or a little learning occurred to them. Obviously our elementary education stands at the cross roads of quantity and quality. Neither can be ignored; a balance has to be maintained between the two simultaneously. Some minimum progress must be visible; formative years of life cannot be allowed to be go waste.

At present most teachers are concerned only with completing the course. Instead of this, according to the learner centred approach the goal of every teacher should be to make sure that every child has attained the prescribed ‘essential learning outcomes’ the competencies for that class, for all subjects. If the school has to ensure under universalisation of elementary education equality not only in terms of areas but in terms of success also, beginning has to be made by defining some expectancies on which each child shall be expected to have a success experience. By which logic is it ethical to admit a child to school to force him/her attend school, (for none likes to on one’s own unless the school makes itself charming enough) and then to force him/her to encounter experience of failure. The expected levels of learning must be so placed that not more than 10% - 20% fail to achieve the targets under all the odds. The competencies implies a calculated effort to include those minimum essential and common competencies that all children must master.
1.4 Essential learning outcomes and the performance based classroom

Behaviourists describe learning as a change in the behaviour of the learner that can be described in terms of explicitly measurable optimal performance. If the learner as the result of classroom teaching learning strategies can achieve mastery or near mastery level, then the performance is said to be optimal. Performance based learning situation can be achieved by allowing the students to learn at their own pace and providing for enough individual guidance so that every student is able to achieve an anticipated level of performance.

Many educators (Bloom 1968, Keller 1968, Block 1971, Clift and Imrie 1981) feel that if the classroom instruction is really good, the final student-performance should not resemble the bell-shaped curve of normally distributed scores, but rather it should be skewed up towards the higher end. According to Bloom et al (1971) a random distribution indicating 'grading on a curve' for a final examination means that the instruction has not taught anybody anymore than one would expect them to learn by chance. Therefore, bringing about conditions so that the anticipated performance level is achieved by most of the student is basic to the performance based classroom instruction. Generally for a performance based classroom an achievement level of 70% or more marks in unit test is fixed.

1.5 Mastery learning strategy for achieving expected essential learning outcomes

Most of the performance-based instructional methods such as mastery learning procedures (Bloom 1968) Personalised system of instruction (Keller, 1968) are some of the individually guided system of instructions. According to carroll (1962), the performance-based instruction should be organised in the following steps.
Specify what is to be learnt and prescribe a level of performance.

Motivate students to learn.

Provide instructions to foster learning

Present materials, at rate appropriate to different students

Monitor student's progress through readiness tests

Diagnose student's difficulties and provide remediation

Give praise and encourage pupils for good performance

Give review and practice

Maintain a high rate of learning over a period of time

Making the students contract for a level of performance, has the advantage of committing them to self initiation and self direction in learning. Also fixing the performance level, helps the teacher in planning his teaching with the element of remedial instruction (Ramey, 1971). It not only helps the teacher to identify the weak students but also to organise the amount and intensity of individual guidance they need. It also provides a standard by which the teacher can measure his own performance in terms of the achievement of his students (Popham and Backer, 1970). Moreover fixing a performance level has yet another advantage that it helps students to strive for consolidation of the subject matter being taught. The performance based classroom, has the emphasis on statement of behavioural objectives and 'competencies' to the mastered by the student. A good objective must be specific and describe in 'measurable terms' the post instruction behaviour of the student. Clearly stated specific objectives not only help the teacher in evaluating the performance of his students but in planning and evaluating his own classroom instruction.

The core theoretical idea in mastery learning is based on John Carroll's (1962) interesting perspective on the meaning of aptitude. Traditionally aptitude has been thought of as a student characteristics that correlates with his or her achievement (The
more aptitude one has, the more he or she is likely to learn. Carroll, however, views aptitude as the amount of time it will take someone to learn any given material, rather than his or her capability to master it. By his view, students with very low aptitude with respect to a particular kind of learning simply take a much longer time to reach mastery than students with a higher aptitude.

This view is optimistic in the sense that it suggests that it is possible for nearly all students to master any given set of objectives, if sufficient time (the opportunity to learn) is provided, along with appropriate materials and instruction. Thus viewed, aptitude becomes primarily a guide to how much time a learner will need. Aptitude also suggests how to instruct because learner of different aptitudes will learn more efficiently if the style of instruction is suited to their configurations. For any given objective, according to Carroll, the degree of learning achieved by any given student will be a function of time allowed, the perseverance of the student, the quality of instruction, the student's ability to understand instruction and his aptitude.

The problem in managing instruction is how to organize the curriculum and the classroom so that students will have optimal time, good instruction, be induced to persevere and receive assistance in understanding the learning tasks.

Bloom (1970) transformed Carroll's stance into a system with the following characteristics.

1. Mastery of any subject is defined in terms of sets of major objectives which represent the purposes of the course or unit.

2. The substance is then divided into a larger set of relatively small learning units, each one accompanied by its own objectives, which are parts of the larger ones or thought essential to their mastery.
Learning materials are then identified and the instructional strategies are selected.

Each unit is accompanied by one diagnostic tests to measure the student’s developing progress (the formative evaluation) and identify the particular problems each student is having.

The data obtained from administering the tests is used to provide supplementary instruction to the student to help him overcome his problems.

If instruction is managed in this way, he believes, then time-to-learn can be adjusted to fit aptitude. Students of lesser aptitude can be given more time and more feedback while the progress of all is monitored with the assistance of the tests.

Mastery learning strategy is the instructional procedure which has gained currency recently as a deviation from the traditional methods of mass instruction. Mastery learning model is an individualized instructional procedure in which a student learns at his own pace, decides when he is ready for next learning assignment, takes guidance from his peers and instructions and takes a criterion tests to access his mastery over his on-going assignment. Criterion referenced testing is the most effective feature in the mastery learning.
Criterion referenced testing is the description of an individual's performance in respect to the specified and defined functions and materials included in the test. Here testing compares the level of the individual performance against an identified standard or criterion. It is to ascertain an individual's status with respect to a well defined behaviour, outcomes or competencies. Criterion referenced testing does not indicate the performance of an individual relative to the other individuals of a group but related the test score to the specified extent of learning of the content. In Mastery learning strategy the student is allowed to proceed on to the next assignment when his performance is perfect or near perfect on his present assignment. Because of the features of self-pacing individual guidance and mastery testing, many educators (Carroll 1963, Keller 1968, Mayo 1970, Bloom 1971, Mathew 1983, Mathur 1983) see mastery learning strategy as a viable alternative to the lecture method of classroom instruction.

There are many versions of Mastery learning model in existence at present but all agree on the point that all student can master what is taught in the classroom to the extent of 75% to 95% (Block 1971). Mastery can be achieved if
I. If the instruction is approached systematically, 
II. students are helped when and where they have learning difficulties, 
III. students are given sufficient time to achieve mastery and 
IV. there is some clear criterion of what constitute mastery and meant by mastery

The teacher should make use of a variety of achievable materials and methods to make sure that the essential learning outcomes have been attained by every child. He should also plan evaluation in the same way. While selecting instructional strategies the capacities, capabilities, learning characteristics of the child, organisational climate prevailing in the school and the classroom will have to be kept in mind. The selection of teaching-learning strategies depends on the quality of teacher's preparation. The teacher must be very imaginative and creative. Mastery learning asserts that under appropriate instructional conditions virtually all students can and will learn most of what is taught in schools. Quality of instruction must be developed with respect to the needs and characteristics of individual learner rather than groups of learners. Thus mastery learning is a teaching-learning approach involving presentation (Cues, feedback mastery-testing), correction (employing alternative approach to student learning) till practically all students reach the desired mastery level.

Certain efforts have been made at the National level to raise the standard of achievement and ensure that no school remained below that standard. The National Council of Educational Research and Training in collaboration with the states undertook a UNICEF assisted project in 1978 with a focus on primary education Curriculum Renewal. Under this project, the minimum learning continuum was developed. Subsequently the National Council for Educational Research and Training came out with minimum levels of learning at primary stage, the minimum levels for each subject has been stated in terms of competencies. These are the essential and expected learning
outcomes. Several models of instructional objectives particularly Bloom's (1956) objectives of pupils growth-cognitive, affective, psychomotor domain; Guildford's (1967) three dimensional model viz content operations, products of structure on Intellect model attempting to classify intellectual objectives into hierarchical order and the taxonomical models developed by Krothwel (1964) and Dave (1968) systematising the instructional objectives in psychomotor domain were all incorporated in arriving at spelling out the competencies and sub-competencies which are the expected essential learning outcomes.

In pursuance of NPE / POA, the National Council of Education research and Training brought out in 1988, a National curricular frame work for all stages of school education. The revised curriculum takes into account the need for reduction of curriculum load, keeping in view the requirements for modernisation and relevance. The need to lay down minimum levels of learning emerges from the basic concern that irrespective of caste, creed, location or sex, all children must be given access to education of a comparable standard. The MLL strategy for improving the quality of elementary education is an attempt to combine quality with equity. It lays down learning outcomes in the form of competencies or levels of learning for each stage of elementary education.

1.6 Content based approach in learning

The 'Content based approach' is the one where

* over emphasis is given to the learning of content. The existing curriculum gives over emphasis on content placing excessive content load in the syllabus.

* examination dominates resulting in rote memorization of facts because content laden curriculum demands such efforts and the content based approach is characterized by the norm-referenced testing.
Emphasis is on teaching rather than learning.

No activity based teaching - learning strategies or strategies that aim for the development of higher order thinking skills. Absence of any form of individualized instruction, traditional methods of teaching where contents in the text books dictate the teacher are followed.

It is not child-centred in the sense that as it does not cater to the needs, interests and abilities of the children. The curriculum which gives emphasis to content is not child-centred, because this leads to the situation of functional illiteracy among those who have completed the primary education.

No importance is given for development of competencies / skills which ought to be the important goals and objectives of education and particularly of primary education. The content knowledge is tentative and only the skills acquired are permanent and transferable to real life situations. It is realised that the present school curriculum imparts mostly theoretical knowledge to our children and does not prepare them sufficiently to face the real situations in their life. The syllabus is quite heavy due to multiplicity of subjects with heavy content load in each. Subjects are presented as separate entities with out bringing out their interrelationship. Children face difficulty in understanding concepts because they are usually not related to their social and physical environment. Present curriculum hardly makes use of individual experiences of children and also does not enable them to develop a realistic understanding of the world they live in.
* Is not child-centred. The role of memorization takes away the joy of learning from the child. There is no open learning environment. Students do not learn all that are prescribed in the syllabus and if at all they learn, they learn to the level of 10-30% of mastery. Teacher accountability is limited or almost nil.

* The general performance level being generally low with a mean value of 40-45% and the pattern of distribution follow the normal distribution, and in few cases the achievement are positively skewed to the lower end.

* No mastery level learning, absence of any specified objectives as essential learning outcomes in terms of competencies / skills which are spelt out keeping in view of the transfer of these skills / competencies to real life situation.

* No criteria as specified objectives, so naturally no form of any criterion referenced testing.

* Teacher has not taken the role of facilitator of learning and only the traditional lecture method is used. Teacher takes for granted that the completion of the syllabus is his / her duty. There is absence of any child-centred and activity based teaching - learning strategies / model which aim for development of creativity, higher order thinking skills, discussing skills, information processing skills, originality and independent thinking skills.

The content based approach has resulted in poor quality of academic achievement as revealed by observations, survey and research works.
1.7 Competency based approach in learning

The qualitative achievement in primary education is feasible when

* Shift in emphasis from teaching to learning.

* Curriculum in terms of specified skills / competencies so as to give direction.

* Shift in emphasis from content to process of learning

* Mastery learning of the essential learning outcomes in every one of the students with criterion referenced testing in the form of formative evaluation

* There is teacher accountability.

* Text book information and contents not to be taken as ends but as means.

* Various teaching - learning strategies such as strategies for developing the creativity, higher order thinking skills like inquiry, logical reasoning, questioning, information processing skills, collaborative skills, to be utilized.

* Teacher develop / prepare / collect a variety of content / curricular materials so as to use in the various teaching-learning strategies.

* The activity based learning and activity based evaluation leading to free and open environment and thus result in joyful and meaningful learning.
The goals, contents and methods and process should try for all round development of personality. Harmonious blending of physical, intellectual, emotional, social and the spiritual and moral growth and development must be taken care of. Education has to strive for inculcating in children emotional stability and security, moral maturity, positive self-identity and self efficiency, urge for continuous self-improvement, sensitivity to beauty, capacity to choose and decide the desirable course of action, healthy habits, and a desire to help others to grow and develop in order to be first rate citizens of the country. The schools' activities, therefore must diversify tremendously to include the gestalt development of children in the broadest sense of term. Curriculum should cover all aspects viz knowledge skills, attitudes, physical health, moral and spiritual values, aesthetics and work experiences. The whole process of education needs a telescopic vision rather than a microscopic one.

The approach must be child-centred. Child-centred approach to education has a sound basis rooted in principles of education, child developmental research approach to education, as emphasized in NPE, 1986, integrates the theory and research of a number of investigators such as Dewey, Piaget, Erickson, Rogers, Maslow Child-Centred approach to education is the one where the learning inputs are made available in an informal and free environment where there is scope for participation out of free will and where expression is encouraged and appreciated. For Piaget, knowledge is a spontaneous process of total development involving the physiological emotional and mental system.

Emphasis on self-learning and learning to learn in the development of competencies which have high positive transfer value are useful for living.
The need of the hour is the competency based approach where every essential learning outcomes are mastered by each and every student.

1.8 Competencies speltout as minimum levels of learning at primary stage by NCERT in mastery learning strategy

The MLL consists of three sub concepts Learning, Level, Minimum Learning is defined as a change in behaviour or the process of acquiring knowledge, skills, attitudes and values, in some contexts it refers to what is learned. Level refers to standard for comparing or judging attainment of individuals, groups and institutions. Minimum means that quantum of learning be also clearly specified. The urgency for ensuring minimum levels of learning of students has been re-emphasised in the revised policy formation and programme of action (1992) of National Policy of Education 1986 As a follow up of directive of NPE, a committee to lay down minimum essential competencies at the primary stage was set up in 1990 by the Ministry of Human Resource Development (MHRD) Department of Education, Government of India. In 1991 this committee submitted its report entitled 'Minimum levels of learning at primary stage' The report has laid down the essential competencies for class I to V in languages (mother tongue), mathematics and environmental studies. These specific levels of learning which are the expected outcomes set a standard which all students should achieve at the end of each grade.

The report may be seen as an attempt at presenting a curriculum that will equip all children who complete primary education with the learning outcomes that will enable them to understand their environment more meaningfully and to function as socially useful and contributing adults. The committee had laid down the learning outcomes by conducting a series of workshops and meetings involving primary school teachers, non-formal education instructors, eminent educationists and the State Council of Education
Research and Training of States of Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu

The major focus of policy formulation behind the formulation of competencies is upon equity and reduction of existing disparities with concerns for equity keeping in view the developmental needs of children from the disadvantaged and deprived sections of the society, the dropouts, working children and girls who constitute the majority of school-going age population in this country, and to whom, in all likelihood, at least for some time to come primary education will be the only opportunity for structured learning.

The following few pages gives a brief account of the curriculum recommended for the primary stage in the cognitive areas of mother tongue mathematics and environmental and non-cognitive areas (MLLs at primary stage) by the committee under the chairmanship of Prof. R H. Dave, 1991.

Every curriculum, as it attempts to modify the cognitive as well as non-cognitive domains of development of learner, lays down specific educational objectives and the corresponding learning outcomes expected on the part of the learners. Usually, these are defined with reference to targets of educational achievement under ideal conditions of learning, enabling the learner to fully realize their inherent potential and engage in socially useful life.

At the primary level, language occupies a pivotal place in the curriculum. The basic skills acquired through language learning facilitates learning of concepts in other areas. Moreover, in shaping of the personality of the child and in all his effective transactions in the day-to-day life situations, the competencies in language plays a significant role. The objectives of language learning are
- be able to listen with understanding,
- be able to speak effectively in both informal and formal transactions,
- be able to read with comprehension and enjoy reading various kinds of instructional materials.
- be able to write neatly, with logical sequence and creativity
- be able to comprehend ideas through listening and reading
- be able to use grammar functionally in various contexts

For achieving these objectives nine basic language skills viz listening, speaking, reading, writing, comprehension of ideas (through listening and reading), functional grammar, self-learning, language use and vocabulary are spelt out with subcompetencies for each of the standard from I-V.

One of the major objectives of teaching primary mathematics is to enable children to solve speedily and accurately the numerical and spatial problems which they encounter at home, in the school and in the community. Primary mathematics should help children develop understanding of key mathematical concept at each level through appropriate experiences with things from the physical world and the immediate environment. It should help children develop and understanding from the concrete to the abstract, from the specific to the general. The mathematics curriculum at the primary stage should therefore be directed to achieve the following objectives, Ability to

- perform computations with speed and accuracy
- translate verbal statements in mathematical form using appropriate symbols and diagrammatically - make reasonable good appropriation and estimate measurements.
apply mathematical concepts and skills to solve problems of day-to-day life, think logically, recognize order and pattern

The following are the areas of mathematical competencies spelt out to realize the above mentioned objectives: Ability to add, subtract, multiply and divide whole numbers, ability to use and solve simple problems of daily life relating to units of money, length, weight, capacity, areas and time; ability to use fractions, decimals and percentage, understanding of geometrical shapes and spatial relationships. Under these five areas several subcompetencies are spelt out for each of the standard from I-V.

Environment is generally taken to consist of two main aspects natural and human i.e., man made or social. The proposed curriculum plan tries to include all these three dynamic and mutually interactive elements. It has been built around ten major competencies. The first one is concerned with one's well-being in the context of natural and social environment. The next five deal with the social aspects such as socio-civic environment, the world of work, spatial relationship between man and his natural environment, man's past - present relationship, and some common problems concerning environmental interaction. The last four major competencies relate to selected components of natural environment pressing on the scientific aspect besides the personal and social ones and include the elements of health, living things, non-living things and the earth and the sky. The ten major competencies aimed at the cognitive, affective and psychomotor domains of development together with the content elements associated with them are enumerated below.

The pupil

1. acquires awareness about one's well-being in the context of social and natural environment.
ii. Explores important aspects of one's socio-civic environment and comprehends their working.

iii. Knows about various people at work and appreciates the importance about the 'World of work'.

iv. Understands and interprets the spatial and interactive relationship between man and his environment.

v. Begins to see the relationship between man's past and present, and to hold the past in its proper perspective.

vi. Senses common but simple and easily observable socio-economic situations and problems, analyses them and seeks possible solutions at his level of experience.

vii. Understands the factors contributing to the preservation of good health.

viii. Observes and examines some common characteristics of non-living things.

ix. Observes simple phenomena on the earth and in the sky and draws inferences.

The non-cognitive aspects are related directly or indirectly to every learning experience provided in the school. The psycho-motor abilities are closely linked with such curricular components as work experience, physical education, art education.

All specifications of minimum or essential areas of learning have a normative basis. This is particularly the case with respect to specifications of outcomes in the affective domain. It is therefore, necessary to identify the appropriate normative base for deriving specifications and adopting them in the empirical context provided by daily life experiences and needs of children.

The competency, sub competency in the three areas represent a specific curricular objective describing expected learning outcomes of learning in view
The non-cognitive aspects of learning is a wide area viz the psychomotor domain and affective domain and the committee of MLL indicated the direction for imbibing a few basic characteristics relevant to personal and social growth of the individual as well as National development. Keeping in view the National values enshrined in the Indian constitution, which have been further explicated in the National Policy on Education, the committee specifically highlights the need for promotion of values such as India’s common cultural heritage, egalitarianism, democracy and secularism, equality of sexes, protection of environment, removal of social barriers, observance of small family norms and inculcation of scientific temper. Keeping the above policy directive as the broad guidelines the recommendations given are that every school should make conscious effort to develop the following. They are regularity and punctuality, cleanliness, industriousness, diligence, sense of duty and service, equality, co-operation, sense of responsibility, truthfulness, national identity. The non-cognitive domain do not lend themselves to be specifically attached to any particular area or subject of learning, rather they are related directly or indirectly to every learning experience provided in a school.

The basic consideration kept in view while formulating the ‘minimum levels of learning’ are the cognitive capabilities of the children at different classes and grades corresponding to different stage of development and the empirical reality in terms of the enabling environmental conditions that characterise the primary education programmes. The emphasis on defining precisely what children should have learnt by the end of each stage of education stems principally from three concerns. Firstly, laying down of well-defined levels of learning is expected to introduce a sense of direction and a greater element of accountability in the system. Secondly, it is expected that MLL will provide an effective tool in programme formulation for school improvement. Thirdly, that all children irrespective of the conditions they come from and the condition of the schools
they attend, develop these essential competencies that would eventually enable them to understand their world and prepare them to function in it as permanently literate, socially useful and contributing adults.

The competencies spelt out as minimum levels of learning by the committee (1991) as essential learning outcomes is expected serve as rational criteria for judging the curricular inputs provided in the text and also help the teacher to develop his own curricular inputs. These competencies developed through various projects taking in to consideration the cognitive capabilities of the children at different classes corresponding to different stage of development. These competencies apart from relevance and functionality, they serve as performance objectives and for they are developed after various projects and researchers as minimum essential learning outcomes that could expected to be mastered by every student if suitable learning situations are provided. That is they are realistic and achievable. The competencies are easily understandable and have inbuilt evaluating capacity. The competencies are sequenced hierarchically so that the clusters of competencies in one unit are built on the competencies in the preceding unit. Learning is conceived as a continuum. So mastering the competencies of each unit before they move on the next, makes the learning of each subsequent unit enjoyable and meaningful. The competencies leaves room for the teacher to relate text book information and objective reality in to a meaningful process of understanding and application. The competencies spelt out have relevance and functionality in the realisation of major objectives of learning in primary education in cognitive and non-cognitive domains.
1.9 Development of the competencies to mastery level as major concern of the competency based approach

It is hoped that the implementation of Bloom's mastery learning model in the acquisition of the essential learning outcomes, the competencies, spelt out in the report minimum level of learning by NCERT to mastery level in the teaching learning process, will go a long way not only in shifting the emphasis from content to process of learning but also in improving the quality of education for all learners. The modality of formulating and presenting the essential levels of learning adopted as MLLs is such that it not only helps the primary school teachers in anchoring the task of teaching to a series of competencies in a progressive manner through various units of study within a grade as well as across grades, but it also asserts them and others concerned in conducting competency based evaluation. Each competency constitutes as expected performance target and each cluster of competencies lends itself to unit testing and formative evaluation. In brief, a competency / sub competency becomes a criterion to organize teaching and learning and it is also used for conducting criterion referenced evaluation.

For this purpose a competency or a subcompetency spelt out serves as a basis for selecting and arranging appropriate teaching-learning activities with a view of meeting learning needs of the learner. This calls for child-centred and activity oriented, competency based teaching. In other words, teaching-learning activities have to be organised in such a manner so as to suit the needs of the individual learner. The competencies as the instructional objectives will help teacher to decide suitable content, appropriate teaching methodology, suitable teaching aid, appropriate evaluation techniques and necessary remedial measures for those facing learning difficulties. Suitable combination of teaching-learning strategies are to be employed to attain mastery learning according to the demands of teaching-learning, situation. The learning
experience is planned and provided so that it emulsifies currents of growth in cognitive, affective and psychomotor domains.

The competency based approach utilizing the mastery learning model provide a new approach to student learning, where all most all students can acquire competencies if proper guidance, sufficient time and specific criterion of mastery are provided by the system. It is a range of performance. Mastery learning envisions that it is possible to help 90-95 percent of learners to acquire 90-95 percent of content taught through the uses of appropriate material and increasing time for learning for the pupils falling short of the desired mastery level. Hence the basic idea of mastery learning is that if proper facilities are provided to all students, they are expected to achieve the desired level of mastery. This approach involves the following features.

- mastery defined in terms of degree of attainment of particular objective,
- instructions are to be organized into well defined learning units, each unit consisting of a collection of learning outcomes,
- complete mastery of each competency unit by the student is an essential condition, before proceeding to the next
- at the end of each competency, an ungraded diagnostic test should be administered so as to identify the strengths and weakness of the learner.
- finally, on the basis of this diagnostic information, each students organized instruction will be supplemented with appropriate corrective measures.

The concept of mastery learning has some practical questions which should be answered in clear cut words. These questions are: What is mastery? How does one logically establish an absolute standard or criterion of mastery, How does one justify a criterion of the cutting score for mastery of some concept or domain? When does one
have a proper understanding of attainment of this level? How does one establish a level of minimum competency in reading, spelling, listening, writing or even tests construction or interpretation? Many concepts are virtually inexhaustible, so how does one draw an arbitrary line at some minimum point? Then there are limitation with regard to mastery testing like there are a few competencies for which complete mastery is possible, again, it is not possible on logical ground to set absolute standards for performance in these areas to find out whether the examiner has or has not reached the particular performance criterion as required, rarely there is a definitive logical basis for establishing the standard. A system of keeping 70% or 80% for mastery is completely arbitrary and inadequate. For example, of the two set of items of an identical concepts, one is being composed of very easy items and the second set of very difficult item, i.e. a score of 70% of 80% of an easy test will reflect poor achievement on difficult test item.

Although the concept of mastery learning has a number of practical problem it has a definite meaning in competency based approach. In this context, mastery learning means that all the competencies or almost all the competencies are to be mastered by all the children or almost all the children. For this purpose, criterion referenced test is used as diagnostic process test to determine which learner has or has not mastered and what he must do to complete his learning unit. So the objectives in mastery learning are based on: What maximum knowledge and skills as the pre-requisites to further learning in the same area. What basic skills are pre-requisites to learning other areas? What minimum knowledge and skills are needed to function in everyday? What minimum skill is needed for safe performance of some particular activity?

Thus in the mastery learning model and criterion referenced testing the emphasis is on reaching the optimum essential competencies by the maximum number of students rather than attainment of maximum by the minimum number
1.10 Child-centred teaching-learning strategies in mastery learning of competencies

A thorough analysis of various studies and research works in the field of instruction reveals that techniques for improving the creative ability, inquiry skill, higher order thinking, teaching for concept learning, process approach to teaching learning, project method, discussion method, techniques of role play, co-operative learning, peer-tutoring, child-to-child programme in learning health and hygiene concepts can best be utilized for mastery learning of the spelt out competencies.

Development of competencies until mastery level is major concern of the competency based approach. For this purpose, a competency serves as a basis for selecting and arranging appropriate teaching-learning activities with a view to meeting learning needs of learner. This calls for child-centred and activity-oriented competency based teaching. In other words, teaching-learning activities have to be organized in such a manner, so as to suit the needs of individual learner. The competencies will help a teacher decide suitable context, appropriate teaching method, suitable teaching aid, appropriate evaluation techniques and necessary remedial measures for those facing learning difficulties. Suitable combination of various instructional strategies are to be employed to attain mastery learning according to the demands of teaching-learning situations.

There is a growing feeling that ‘teaching’ seldom results in ‘learning’. The teacher does strive hard to make the child understand the given topic and the underlying ideas and principles contained in it. But the method he uses to do this is often not suitable for the purpose in hand. It is now being recognized that for effective use of school curriculum the teacher must be able to see the relationship between the
nature of the content and objectives to achieved through it, on the one hand and the teaching-learning strategies on the other.

A strategy is nothing but ‘a constellation of certain planned activities’ for handling a given content in a specific teaching-learning situation, so that the objectives are achieved to the maximum possible extent. The teacher can understand a strategy well if he is able to analyse it in terms of the specific teaching tasks involved in it, and the purposes which is likely to serve. Specific skills like engaging children in group work, helping children in studying the environment, engaging pupils to express their own ideas sustaining the interest of the group, etc may be useful in a number of strategies used by the teacher in the classroom. What the teacher needs is to acquire mastery of the teaching skills of specific teaching situations, which would facilitate the attainment of specific educational objectives.

The selection of appropriate teaching-learning strategies will depend upon a number factors, the most important being naturally the objective of education. Educational objectives are generally stated in terms of pupil behaviour in cognitive, affective and psychomotor domains. While selecting instructional strategies the nature of content whether it is Language, Mathematics or Environmental Studies, the availability or resources, the capacities and capabilities of the child and the entry behaviour of the child will be kept in mind. The selection of suitable teaching-learning strategies will also depend on the type of organisational climate and also depends on the quality of teacher preparation. For example the teacher must be very creative if the teacher has to use discovery techniques of the teaching-learning. So before choosing a teaching-learning strategy the teacher may bear in mind the following points

i. The strategy should be usable by the teacher in the given situation

ii. It should have relevance to the objectives to be achieved
iii. It should help in greater involvement of children in the learning process.

iv. It should be appropriate to the age, ability, and interest of the child.

v. It should, as far as possible, lead to self-learning on the part of the child.

vi. It should help in building a good climate for learning.

The teaching of critical thinking skills to students is increasing in priority (Pire Joseph M. 1990). Learning to reason can be via instruction in argumentation. Vas Jones F. Mery. C (1991) argues that argumentation defined as the generation and evaluation of arguments, is at the case of reasoning and that instruction in argumentation is therefore critical to the development of reasoning skills. It has been found that school can influence the development of logical thinking (Padhey 1986). Rational thinking which assists children to examine their irrational belief systems assists children in learning self acceptance, understanding their feelings and examining their belief systems. (Lesseire Ronald J 1990)

Chance Paul (1987) referred to studies made by Bloom and C. Broder in 1950s which demonstrated that higher level skills which many psychologists and educators took to be largely inherited, could be taught. The development of problem solving skills helps in getting acquainted, recognising and understanding feelings, understanding and accepting individual differences and developing social living behaviours (Rose, Steven R 1987). Social interaction is crucial in the child's thinking development, so child's thinking should be encouraged through classroom activities (Denham, Susanes, 1991).

Briggs (1987) theorized that there are three primary approaches surface, deep and achieving which students tend to employ in organising their learning. Mindfulness in learning has been described by solomon and Globerson (1987) as a mode of task engagement which reflects a powerful, effortful and consciously self regulatory conception of learning. Deep learners are conventionally described as exhibiting high
levels of intrinsic motivation coupled with the utilisation of a sufficiently broad strategic repertoire to enable the motivational goal of learning to be achieved. As problem solving situations, highly complex and ill-structured information implies the identification of both the nature of the problem and the solution requires more than the application of routine algorithms (Schoenfeld, 1987), that is as a number cognitive theorists have suggested (Prawat 1980, Soloman and Globerson 1987), unraveling highly complex and ill-structured information requires in the first instance, a conception of learning that embraces reflective or mindful planning and processing in the second instance a knowledge base of sufficient abstraction to provide a frame work for interpreting complex data and in the third instance the availability and accessibility of appropriate problem solving strategies. The transition between surface and deep predisposition is difficult to influence. However three type of intervention viz teaching skills appropriate to the deep approach, reorienting students conception of knowledge, consistently presenting deep level study task (Kember David 1989) can help

Researches show the relationship between the quality of questions asked and the depth of processing on input. Three categories of coding defined through observation of secondary classes are reproducing words (rote), reproducing content, generating new content. It is suggest that surface or deep processing can be induced by manipulating certain dimensions of inputs and question (Keivukari A Mirjoni 1987). Data collected on types and levels of questions asked by elementary and secondary school teachers of social studies in the classroom shows that 93% of teacher's questions were at the literal level of comprehension slightly less than 7% were interpretative question (Dianadelva 1986). Teachers can enhance the effectiveness of their questioning technique by the taping classroom interaction to assess personal questioning style, acquiring a working knowledge of the micro thinking skills, providing time for students to respond to questions and processing, prompting and redirecting questions, learning activities that
allow students to experience problem solving guide, teacher modelling the appropriate cognitive behaviours, brain stroming and using fictional characters from role play and creative drama (Brown lisbeth J 1986)

Understanding of child’s understanding bring about teaching that builds understanding (Kiran Thomas 1990), Quicke John (1992) argues that the purport to develop children’s thinking should not loose sight of three principles These are i. The acknowledgement of the commonsense understanding with which pupil’s thought is embedded in everyday life ii. the importance for students to be some degree familiar with specific content and to have some understanding of key concepts before they can be expected to demonstrate and develop thinking skills and iii. the role of teachers in introducing new frames of reference that challenge pupils assumptions and facilitate comparisons of different perspectives and the reconstruction of their knowledge in the light of new evidence

Higher order thinking can be promoted by presenting non-routine challenges (Newman Fred M 1991) Teaching the thinking process that occurs during problem solving suggests that more emphasis be placed on the acquisition of thinking skills in classroom. A major reason for its absence in 90% of the classrooms is that teachers are unprepared to teach thinking skills. Onosko Joseph (1991) conducted interviews, gathers questionnaires to find out the barriers to the promotion of higher order thinking and the barriers were teaching as knowledge transmission, broad superficial content coverage, teachers low expectations of students large number of students, lack of teacher planning, a culture of teacher isolation

In a survey conducted by Dholokia B.B. (1985) it was found that pupils felt that their teachers performed their duties with no sense of belongingness and do not care for the pupils expectations and aspirations. Pupils were found to be functional but learnt
the subject rather mechanically without knowing the underlying purpose. Parents seldom made a serious inquiry into pupils' growth. The pupils complain that properly drawn experiments were not given examinations were not systematic, laboratory experiments were absent, the school authorities did not recognize the value of projects and identification of talent.

1.11 Evaluation in the child centred approach

Assessment research and innovative practice in United Kingdom and other countries provided us with a framework to oriente our enquiry and investigation. Tarrence (1989) in review of developments in the field of assessment over the last ten to fifteen years, cites arguments by assessment analysts who perceive a shift away from theoretical assessment to a broader conceptualisation than the traditional form which had exerted an unduly restricting influence on the curriculum and the process of teaching. These psychological arguments have been exerting on influence on assessment practices. The result is a shift from selection and grading being the prime function to a more inclusive definition, encompassing the notion the educational assessment should provide a broader range of information above pupils accomplishments. This in turn, leads to developing assessment strategies that offers insights in to learning process in order to both review achievement already gained and to improve on them (Fredrikson and Callins 1989, Paris, Lawtan, Turrer and Ruth 1991 Tylar 1986, Wood 1987).

Bhadwal (1980, 1987) in his experimental study investigated the effects of formative tests on the performance, test anxiety and achievement motivation of the seventh grade students, and found that the knowledge of the results improved performance and significantly reduces test anxiety at the end of the experiment in comparison to those who were not administered these tests during instruction.
Ronald D. Anderson (1970) says test these following principles viz: Uses of performance objective for unanticipated learning giving opportunity and the unexpected outcome, not confusing objectives with the means of instruction, being maginative, use of performance objectives to avoid neglect of higher objectives, consistent long-range as well as short-range goals. (Ronald D. Anderson, 1970).

In addition to cognitive and non-cognitive variables, the instructional strategy used in the classroom by the teacher plays a significant role in determining the academic attainment of students, the instructional strategy adopted by the teacher in the classroom generally includes three stages viz pre-active, interaction and post-active. Main function of an evaluative device at the pre-active stage is to assess the pupils with respect to their entering behaviour, i.e., what the pupils have already learnt, at the post-active stage it is to assess the pupils with respect to their performance in order to determine how they have achieved the instructional objectives at the inter-active stage the teacher interacts with the student so as to impart the instruction effectively. There is a strong research evidence that if teacher makes use of the criterion referenced teaching and testing strategy at the inter-active stage, the students including slow learners can achieve the desired level of mastery of the learning task. This strategy is based on the assumption that students are different primarily in the speed at which they can learn. Here the amount that is to be learned in the classroom is fixed for all learners but their rate of learning is allowed to vary. In this strategy the purpose of evaluation is to distinguish the students who have and those who have not mastered the minimum essentials. The evaluation in the context of criterion referenced teaching is continuous and formative and the advantage of this type of evaluation lies chiefly in diagnosing the blocks in learning and providing remedial instruction for minimizing such blocks. The motivational effect of formative evaluation holds good in view of the fact that children and adolescents need short term goals and working towards remote goals, without the
encouragement of intermediate consequences does not create interest in them. The formative evaluation procedures can increase the retention of the learned material and transfer of learning. (Lakesh Karl, and Satish Chand Bhadwal, 1986).

In an era of accountability for teachers, it is vital that quality procedures in evaluation of learner progress be in evidence. Checklists, and rating scales can be utilised in evaluating a students proficiency in each of the higher cognitive level skills for eg. being able to think critically, creatively and solve problems may be evaluated on a five point scale (Marlow Ediger 1996) use of checklist can be utilised in evaluation procedures, for recording observations, paper-pencil and situational tests and short answers, comprehension true-false, the multiple choice test, the crossing out test, rearrangement test (IIJ. Byerne, 1960).

A prerequisite to child centred approach to education is a change in the form of assessment currently used in schools to evaluate learning achievements. The most desirable form of assessment in the context of child centred approach to education is a criterion based assessment, grading and reporting Every instructional effort is directed to some predetermined outcomes of learning This may be the instructional objective of a unit or an expected learning outcome, a particular level of proficiency in a skill The evaluation in the elementary stage must take into consideration the characteristics of the learner, the process of learning, the nature of the content, the quality of instruction Since a theoretical model is developed on certain assumptions about learner and the learning process and corresponding implication for teaching and evaluation are traced If the assumption is about the learner and learning is Good evaluation promotes better learning and efficient teaching, Then the implication for teaching learning can be (a) making evaluation as an integral part of teaching (b) using objective based questions during developmental teaching (c) using mastery learning strategy (d) providing self learning assignments like quizzes and programmed material and the implications for
evolution are (a) construction of valid and reliable tools of evaluation (b) making evaluation a continual process (c) making evaluation comprehensive (d) testing for mastery leasing (c) using evaluation data for diagnosis rather than for grading of students (f) forming criterion referenced judgements (g) giving feedback evidence regularly to the learners.

1.12 Scope of the study

The need for emphasizing mastery at the basic stage of education is the question of quantity and quality coupled with equity. Competency based approach utilising the mastery learning strategy provides a new approach to student learning by which all or almost all students can acquire all the competencies spelt out as MLLs which are the essential learning outcomes at primary stage.

It is expected that competencies spelt out MLLs will serve as reference in the development of instructional materials, selection of suitable teaching-learning strategies and evaluating learners progress in the mastery learning strategy. The teacher is the principal means for implementing educational programmes and of the organisation of education. In competency based teaching, the teacher would act more as a mediator of learning. He would help children in and through their own environment, stimulate them how to learn by themselves, help them develop inquiry mind and act as a guide to identify learning resources. The shift in emphasis from teaching to learning has quite a number of new dimensions to teachers roles.

Educational evaluation is another area where the teacher can use his expertise. Competency based approach will help in the continuous and comprehensive evaluation of the learner. In this approach evaluation is made in terms of providing the feedback to the child to enable him to fully profit from learning, for here the testing is based on
mastery learning model and criterion referenced testing and hence the teacher plays a major role.

Education plays a vital role in the development of human potentials. Life in the coming decades is likely to bring both challenges and opportunities and the pupil must take advantage of the opportunities come their way. They must develop the ability to think and apply new ideas constantly and creatively. The competency based approach will help children to meet the challenges of the changing time.

The implications of mastery learning of competency are lightening the curriculum of its textual load and also the burden of memorizing unnecessary and irrelevant facts, leaving room for the teacher to relate textbook information and objective reality into a meaningful process of understanding, acquisition of basic competencies and skills to such a level where they are sustainable and would not easily allow for relapse into illiteracy - permitting mastery learning not only by the brightest students in the class but also by all most all children, including the first generation learner.