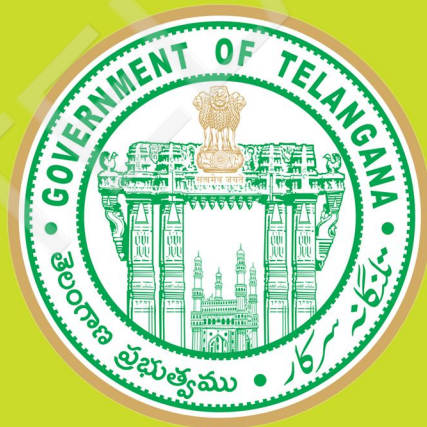
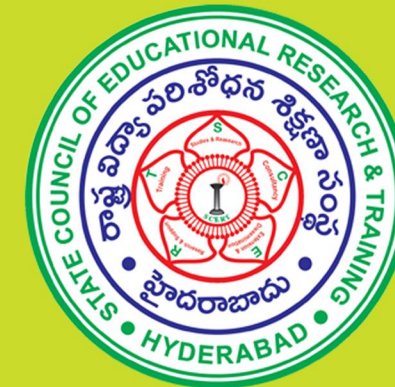


# State Curriculum Framework-2011

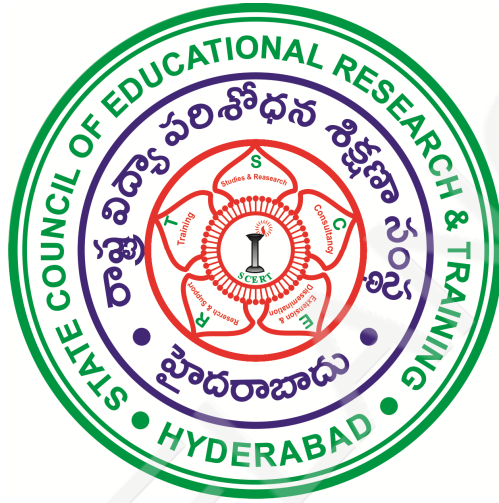


**School Education Department  
Telangana, Hyderabad.**



**State Council of Educational Research & Training  
Telangana, Hyderabad.**

# State Curriculum Framework (SCF)-2011



**State Council of Educational Research & Training,  
Telangana, Hyderabad.**

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State Council of Educational Research & Training,  
Telangana, Hyderabad.

## **Vision of the State**

*The vision of the State is that ALL children should receive high quality education and become responsible citizens with an acute sense of the other. They should be aware of their environment and think about it critically. They should listen carefully and speak fearlessly. They should be able to understand what they hear and read; but they should also be able to question it. Teachers should promote these skills, provide meaningful teaching learning processes in natural and friendly environment that enable children to express themselves freely and ask questions. Teachers are collaborative learners and reflective practitioners. Parents and community should have a sense of ownership and participate in the life of the school. In a world which is becoming increasingly instrumental, materialistic and competitive, school should become a space for reflection, cooperation and promotion of human and ethical values.*

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## *Executive Summary*

Schooling in this country was once a privilege of the few but today it is a fundamental right through Right to Free and Compulsory Education Act, 2009. Providing education to all is an important goal upheld by the Indian Constitution. India took up concerted efforts to establish a system of mass education more than 60 years ago. Constitution of India made it obligatory for the state to provide basic education to all in the age group of 6 to 14. This was a huge task. India is a nation of diversities with varied cultural and linguistic pluralities. It is also a nation committed to democratic values and social justice. Andhra Pradesh is no exception to this. The SCF is in agreement with the principle stated in NCF 2005 that the child should be at the basis of the education system. However, in addition, SCF takes the stand that learning should be interaction based, and that interactions between different components of the system should be given equal importance. This principle will guide our perspectives and actions in the realm of education.

As NCF 2005 states, what we include in ‘knowledge’ reflects our opinion of what we think the aims of education are. Since our aims of education are to enable the child to think critically, to observe, to analyze, rationalize and draw patterns, and to be sensitive to the diversity of human life, ‘knowledge’ should not only include pieces of information, but ways of thinking and feeling. We often think of knowledge as information that a child should simply acquire by repeatedly reciting or memorizing, but knowledge includes many more things other than knowing trivia about the world. The aim of education, therefore, is not to feed the child with pieces of information, but to hone her thinking skills. In order to achieve this, children will need sensitive scaffolding at appropriate moments and will have to play an active part in creating that knowledge for themselves and to analyse it.

In ensuring that this happens, the role of the teacher is very important. In spite of all the technological breakthroughs and the arrival of the virtual classroom, the importance of the classroom teacher has not reduced. In the Indian culture, the teacher has been given great position and respect. Although times have changed since, most Indians still look at the teachers with the same respect and awe. However, a shift in the traditional role of the teacher is recommended here. Teacher should act as facilitators of knowledge rather than givers of knowledge. They should regard their students as constructors of knowledge rather than mere



recipients thereof; and should have positive attitudes towards the learner as well as the learning process.

Along with the interactions between the child, teachers, parents and the community, interactions must also take place between the child and the learning resources. SCF believes that there is a set of underlying cognitive abilities such as analytical skills, logical reasoning and inference building which in different forms underlie all system of knowledge. After completion of school education children should develop a scientific temper, specific attitudes, physical skills, language abilities and abstract thinking. In addition to that children should be able to appreciate diversities in the society with a humanitarian perspective, and to think critically and creatively. They should become responsible citizens and rational human beings. The knowledge that is generated from the school must be based on child background and their experiences. Crafts, arts, play, work, health are also key areas in school curriculum along with subject specific areas. Assessment is also an integral part of the learning process and of ensuring quality education.

Quality education also implies providing children with an environment conducive to learning in schools. This goes beyond the teaching process and the curriculum to the physical environment and resources available to the child. Unfortunately, even today, in many cases remote isolated habitations, girls, minorities and children with disability do not have access to school. Even those who do have access, the quality of educational environment is often poor. This often acts as a deterrent to the educational process. This environment needs to be examined and reformed wherever required.

Along with the learning environment, there is also a need for systemic reforms. There are several problems in making the different components involved in the education of children work together in harmony but unless that happens, the project of quality education for all may remain a dream. We need to make changes towards a resolution of various problems which characterise the system. These need to be related to changes in the curriculum, in attitudes and preparation of teachers, in the support structures for teachers and others engaged in educational efforts, as well as in the nature of relationship between the community and the educational institutions. It is only through enhancing the quality of interactions between various agencies and stakeholders that education can be made interactive and meaningful.

# 1. Rationale and Perspective

## 1.1 Introduction

Schooling in this country was once a privilege of the few but today it is a fundamental right through Right to Free and Compulsory Education Act, 2009. Providing education to all is an important goal guaranteed by the Indian Constitution. India took up concerted efforts to establish a system of mass education more than 60 years ago. Constitution of India made it obligatory for the state to provide basic education to all in the age group of 6 to 14. This was a huge task. India is a nation of diversities with varied cultural and linguistic pluralities. It is also a nation committed to democratic values and social justice. Education is considered to be the source to achieve the democratic goals and social justice across the nation.

Several efforts have been made both by the central government and respective state governments to extend the educational facilities and improved access to children towards school education. There was quantitative expansion of school education in terms of number of schools and number of teachers and enrollment of children. Over 6 decades there has been a phenomenal growth in coverage and several milestone in this regard have been crossed and the progress achieved is worth appreciation.

The national government appointed several commissions after independence to suggest ways and means to improve the education at all levels. The education was included in concurrent list of the Indian Constitution during 1976 and both the governments of state and centre have become responsible to provide resources to improve the education in this country.

In this context the central government evolved national policy on education during 1986 proposing several reforms to improve education both qualitatively and quantitatively. High priority has been given in providing basic resources to elementary school through the schemes of Operation Blackboard and improved teacher education scheme through establishing and supporting DIET's, IASE and CTE's.

The school infrastructure has been improved considerably under basic education program like DPEP and SSA with appointment of regular and additional teachers and providing learning

resources to all the schools, capacity building of teachers through in service teacher training formulating expected learning outcomes among children etc. in course of the time.

As a part of education for all and to meet the goals as agreed in Jomtien Conference during 1990 and Dakar Forum during 2000 the country planned and implemented basic education programmes in almost all states like District Primary Education Projects (DPEP), Lok Jumbish, Serva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) as centrally sponsored schemes in collaboration with the states.

There was a marked progress in the expansion of education facilities and making school education accessible to children from diversified background with a provision to quality education to all. The issues and challenges or equity, excellence, teacher professional development, learning resources, learning achievement etc. are being addressed in a more scientific way now.

The curriculum, syllabus and textbooks have been revised in Andhra Pradesh during 1990 based on the recommendations of National Policy on Education 1986 and POA. The research study report of national and state level reveals overloaded curriculum and textbook. In its report, 'Learning without Burden' the Yashpal Committee pointed out that learning at school cannot become a joyful experience unless we change our perception of the child as receiver of knowledge and move beyond the convention of using textbook as the basis of examination. The size of the textbook has been growing in size at every successive revision of the textbooks with additions of higher level topics in the name of improving the standards. Moreover, it is the burden of a boring and irrelevant curriculum that the committee was talking about.

Though the basic education projects like A.P. Primary Education Project, District Primary Education Programme (DPEP) and Sarva Shiksha Abhiyan (SSA) have facilitated the implementation of joyful learning through activity based and child centered approaches with adequate orientation and in service training programmes to the teachers, these changes have not been sustained. These projects put up efforts to address the quality through improving professional standards of the teachers and supervisors but not much attention was paid to the improvement of curriculum in terms of improved textbook and learning material reflecting pedagogical renewal processes. There was no attempt at ensuring inclusive education and sustaining the effort over a long period of time so that one could ensure the education of underprivileged sections of society including girls, minorities, children with disabilities and special needs. The idea of problem posing education with critical pedagogy aiming children to

liberate rather than domesticate was not addressed and critical pedagogy and social construction of knowledge have not been represented in the textbooks and learning material. The perspective building of teachers through pre and in service teacher education programmes have not been attempted in the required spirit to promote critical thinking among children and for decision making.

The NCF-2005 showed a deep concern about several aspects of our educational practices such as (a) the school system is characterized by an inflexibility that makes it resistant to change; (b) learning has become an isolated activity, which does not encourage children to link knowledge with their lives in any organic or vital way; (c) schools promote a regime of thought that discourages creative thinking and insights; (d) what is presented and transmitted in the name of learning in schools bypasses vital dimensions of the human capacity to create new knowledge; (e) the "future" of the child has taken centre stage to the near exclusion of the child's "present", which is detrimental to the well-being of the child as well as the society and the nation. Briefly, education, even when it is available at the best of places, has become highly instrumental in nature. The basic purpose of education is to develop children holistically in terms of physical, social, intellectual and emotional aspects and to enable them to understand life and develop their potential and recognize the rights of others. The present education system has become more information oriented and competitive giving high priority to the acquisition of information in the name of knowledge with frequent examinations leading to stress, anxiety and tension. Therefore the document of state curriculum framework discusses the major concerns and challenges in the functional aspects of educational system in the state and recommends appropriate curricular and evaluation reforms to improve school education in the state. The curriculum framework guides the teachers and educational functionaries to plan and implement the appropriate activities to develop children in a holistic way.

In order to realize educational aims and objectives, the curriculum should be conceptualized as structure that articulates required experiences. For this, it should address some basic questions:

- (a) What educational purpose should the schools seek to achieve?
- (b) What educational experiences can be provided that are likely to achieve this purpose?
- (c) How can these educational experiences be meaningfully organized?

- (d) How do we ensure that these educational purposes are indeed being accomplished?

The proposed curriculum framework draws attention on basic issues and challenges in the system which may affect both quality and quantity dimensions of school education and suggests appropriate systemic reforms with a view to improve the academic and functional aspects through appropriate interventions. It is expected that this exercise will strengthen the ongoing practices of reforms focusing on decentralization of education of governance and devolution of powers and responsibilities to local bodies to own and manage the system. The proposed reforms in addressing equity, diversities, quality and professionalization of teachers and managers, examinations reforms may be found useful by the educational community and stakeholders.

## **1.2 Andhra Pradesh: Organization of the Educational System**

### *Introduction: State Profile*

Andhra Pradesh is the 5<sup>th</sup> largest state in India both in area and population. The area of the state is 2, 75,045 Sq. Kms with a population of 8,46,66,533 as per the Census 2011 and the decennial growth rate is 11.10. The major languages spoken in the state are Telugu and Urdu. The density of population is 308 per Sq. Km. The urban population is 27.08 % and the rural population is 72.92 percent as 2001 census. The literacy rate of the State as per the 2011 census is 67.66 in which the male literacy rate is 75.86 whereas the female literacy rate is 59.74 as per 2011 census. Consequent on the introduction of Mandal Praja Parishad System in place of Tahsils, all the 23 districts are divided into 1128 mandals with 32,940 villages, 22307 Gram Panchayats and 74954 habitations for the sake of administrative convenience.

The total SC population is 123.39 lakhs and the ST population is 50.24 lakhs. The sex ratio is 981 females for every 1000 males during 1961 and it is 992 as per 2011 census. The density of population is 277 during 2001 and it is 308 as per 2011 census.

In respect of the focus groups the literacy rates are 53.52 for SC and 37.04 for ST. The SC literacy rate is higher than the ST literacy rate. The gap is about 16%. But the SC male literacy rate is higher than the SC female literacy rate. The gap is about 19%. Similarly the ST male literacy rate is higher than the ST female literacy rate. In this case the gap is about 21%. However, the female literacy rates of both SC and ST are higher than the rural female literacy rate at the State Level.

### **Pattern of Education in Andhra Pradesh**

The following is the pattern of education in Andhra Pradesh. The first five years of schooling is called Primary level which covers up to class V, the next level is Upper Primary level which covers classes VI and VII and the third level is the Secondary level which covers classes from VIII to X. At the end of the Secondary level, a public examination will be held leading to Secondary School Certificate and at the 10+2 stage, the Board of Intermediate Education conducts a public examination, and at the 10+2+3 level Universities conduct graduation level examinations to award a 3 year degree certificates to the successful candidates. A 15 year formal study at different levels is required to obtain a degree in formal education.

### ***Access***

Out of a total of 74954 habitations in the State, 71860 habitations have access to primary level schooling within a radius of 1 Km. In the 2758 habitations which do not have adequate strength of children in the school going age, EGS (P) centers have been in operation to provide access to primary level of schooling. 378 habitations do not have either formal primary schools or EGS (P) centers. There are 374 habitations in the State qualified to have EGS (P) centers and the remaining qualified to have formal primary schools.

### ***Child Population, Enrolment, Schools and Teachers***

The total child population in the age group of 6 to 14 is 10687458 out of which 52.24 lakhs are girls. The total enrollment in this age group is 10571648 out of which 51.67 lakhs of girls have been enrolled in schools as per DISE 2011. The Gross Enrollment Ratio at the State level in the age group of children 6-11 is 111.51 and the Net Enrollment Ratio in the same age group at the state level is 99.35. It is clear that children are admitted in schools and classes irrespective of their age groups. However, the achievement in respect of NER is also remarkable as it is close to 100%. In due course of time, the State is likely to achieve 100% NER and retention thus making the people to enroll their children in age specific classes in the days to come to ensure quality learning by pupils. Repetition rates in the age groups 6-11 and 11-14 are 1.22 and 0.61 respectively. The trend is found to be more at the Primary level in the 6-11 age group than in the 11-14 age group which is in fact low. So, more attention has to be paid in respect of children belonging to 6-11 age groups. In respect of dropout rates a difference of 1.93 is seen between the age groups 6-11 and 11-14. The situation demands level

specific measures to bring down the drop out rate to 1% or even less than that to ensure near 100% continuation till the completion of the elementary stage of education. The transition rate at the state level is 94.47 from primary to upper primary stage. The data on schools captured through DISE 2010-11 in the State indicates that there are 66840 schools at the Primary level, of which 57184 are Govt. schools and 2109 Govt. Aided and 7547 Private. At the Upper Primary Level, the total number of schools under all managements is 15497 and the breakup of which indicates that 8937 are government, 423 Govt. Aided and 6137 private. The data on teachers (DISE 2010-11) reveals that there are 168924 posts of teachers sanctioned at the Primary Level of education and the number of posts filled in is 161083 leaving a gap of 7841. At the Upper Primary level, the number of regular teacher posts sanctioned is 82964 and the number of posts filled is 75421 leaving a gap of 7543 posts to be filled.

### **1.3 Vision of the State**

The vision of the State is that ALL children should receive high quality education and become responsible citizens with an acute sense of the other. They should be aware of their environment and think about it critically. They should listen carefully and speak fearlessly. They should be able to understand what they hear and read; but they should also be able to question it. Teachers should promote these skills, provide meaningful teaching learning processes in natural and friendly environment that enable children to express themselves freely and ask questions. Teachers are collaborative learners and reflective practitioners. Parents and community should have a sense of ownership and participate in the life of the school. In a world which is becoming increasingly instrumental, materialistic and competitive, school should become a space for reflection, cooperation and promotion of human and ethical values.

#### ***Knowledge***

Knowledge is not information. It is not in the books or it is not given. Knowledge evolves from the interactions and previous experience in the socio cultural context. It is built on the basis of some assumptions or axioms into a system and has a structure. It has certain sources of data and it has a truth criterion to validate its findings. It can be classified, verified, and demonstrated. Knowledge is constructed in different forms: Language, Mathematics, Science, Social Science etc. Work is also a source of knowledge. Artisans are great knowledge creators. It is in the case of artisans that mind and body work in harmony.

#### ***Children***

Every child has an infinite capacity. All children are capable of learning. They have immense potentialities and capabilities. All children create their own knowledge with their innate capacities through interactions with the elders, materials, peer and the nature. They come to school with substantial knowledge and different kinds of experiences and exposures. This knowledge constitutes the base of all learning. Productive and meaningful learning will result through a dynamic interaction between the teacher and children. It is a mistake to treat children as empty vessels / clean slate, in which knowledge is to be deposited. It is necessary to respect a child's identity and re-examine adult notions of what children 'should' learn and how they 'should not'.

### ***Schools, Learning, Teachers and the Community***

School is a place where democratic values are being practiced, shaping the children, developing their knowledge, skills and attitudes. It is not only a physical entity; it is a space where all kinds of teaching-learning and co-curricular processes will take place and a child will gradually evolve into a responsible citizen. Learning is continuous process. Learning means making sense and constructing knowledge, application of knowledge in new situations and further learning. Learning takes place in natural, fear free, meaningful environment. Teacher will work with a new perspective about the child and learning. Teachers will practice reflective teaching with the collaboration of children, other teachers and the community. Teacher will also function as a researcher through observing the children, analyzing the situations, drawing the inferences, and encouraging children to construct their own hypotheses and system of knowledge. Teachers will conduct a democratic dialogue with children to develop ethical behavior and human values. The community will provide the support for effective functioning of the school and child development. Teaching Learning Process (TLP) will provide space for thinking and participation of all children with diversities. Children will be free to express their ideas, thoughts and share experiences. Peer learning, interactions are the part of TLP. TLP consists of explorations, experiments, discovery, activities, tasks, project work etc. Locally available material will be used in TLP.

### ***Teaching-Learning Material***

Teaching materials should match the cognitive level of children and provide sufficient challenge for future growth. Information based materials encourage rote learning and hamper rather than facilitate the learning process. Materials should be sensitive to the children's environment and to their history and culture. The interest and exposure of children of different



areas may vary considerably and the materials should be adaptable to this variability. The world of fantasy, humor and word play is important in learning and it should not be stigmatized in the process of creating learning materials. It is necessary to use naturally available materials such as pebbles, seeds, twigs, sand, water, etc. Similarly, poems, stories, puzzles, proverbs, etc., also need to be used. Local forms of story-telling and singing and dancing may prove to be very useful for teaching. Whatever new materials are introduced they should be inexpensive, easily accessible, flexible and reusable. The potential of a given set of material should be carefully explored. A variety of objectives can be achieved through the same set of materials. Materials should have considerable in built flexibility providing multiple entry points for children with different abilities. Looping will help children revisit simple and basic concepts.

#### ***Monitoring and Assessment***

Monitoring is not for supervision, inspection or fault finding. It is for academic support to the teachers and for improving the existing situation. Teachers and children should be able to find support when they need it. Monitoring is also for appreciation oriented enquiry. Assessment is not for labeling children and blaming the teacher. It is for the analysis of the present situation to help in further planning and leaning. It should be Continuous and Comprehensive in nature. Assessment should not be confined to only the tests or assignments; it should have various techniques and tools.

### **1.4 Major Concerns and Challenges**

#### ***Assumptions and Beliefs***

The entire educational practice is based on a set of false assumptions, beliefs and attitudes of teachers, educational functionaries in the system, parents and people in general. No amount of radical changes in the curriculum, syllabus, classroom processes etc will change anything unless we question those assumptions and fight them. These myths have to be fought with all the rationality and resources at our disposal. These assumptions concern the child, the learning process, teachers, knowledge and language among other things.

#### ***About Children***

It is assumed that children's minds are blank slates and they do not have any knowledge before entering the school and that they receive all knowledge from the teachers through the process of instruction. It is a belief that children must be kept under strict discipline and

freedom will spoil them and they must be kept under strict vigilance and watch. All children cannot learn. A few can learn better because of their hereditary. **We know today that this is not true.** Children come to school with a substantial amount of knowledge about space and their environment; they also come with a language they have mastered. They have great innate capacities to learn and all of them can learn if provided enough exposure in a loving and caring environment.

#### *About Learning*

Learning for most people means memorization and getting marks in the examination. Most people believe that more home work will improve leaning and that we must correct children's mistakes immediately. It is also believed that parents are illiterate, their children cannot learn properly. It is assumed that children from certain communities cannot learn effectively. **Again all this is not true.** Education means understanding with a questioning mind; all children can learn and first generation learners do become educated all the time.

#### *About Teachers*

People believe that teacher is the sole source of provider of knowledge and information to the children. The ineffective functioning of schools and poor learning of children is totally linked to teacher performance. A good teacher is one who maintains strict discipline and silence in classrooms and gives less freedom and autonomy to the children. Teacher can award punishments in the interest of children education to improve performance. Teacher is the sole role model. Any change starts from the teacher only. The entire education system depends on teachers only. **These are all myths and we need to fight against them.** Teachers are a part of a larger system and if they were not doing anything, we will not have an educated person around. We need to examine these issues carefully.

#### *About Knowledge*

Information is treated as knowledge by most people and if a child can reproduce a poem or a table, she is appreciated a lot. The textbook loaded with more information and more concepts are treated as standard textbooks. Knowledge is treated as finished product to be acquired through books and from teacher. Knowledge is treated in bits and pieces and being provided in the textbook without much connectivity to human life. Children get knowledge by reciting or memorizing. **It needs to be understood that knowledge is essentially transformative and constructed through collaborative efforts; it is not linear and additive but holistic in**

**nature.** Teacher and textbooks are not the sole repositories of knowledge; the sources of knowledge are infinite.

### *Language*

People and teachers generally believe that children come to school with highly inadequate language or speaking a ‘dialect’ or a ‘khichdi’ or a ‘boli’ and they have to be taught the proper standard, pure language. Language is of utmost importance as it is not only a rich resource in itself but is the medium through which all other knowledge has to be internalized. We need to understand that a child comes to school after having fully mastered the spoken forms of the languages of her neighbourhood. She subconsciously knows the highly rich and complex grammatical systems underlying those languages. Notice that SCF consistently talks of Multilinguality and NOT ‘a language’ i.e. all children come to school with a rich verbal repertoire which systematically varies across several dimensions of person, place and topic. All educational transaction should be planned keeping this in mind: Children sitting in front of you are NOT blank slates; they have the capacity to crack complex linguistic systems. They can therefore learn all other systems of knowledge also if they are treated and guided properly.

### *Other Challenges*

#### *Flight to Private Schools*

In spite of all the assurances from RTE 2009 and NCF 2005, the number of children/ parents rejecting the once prestigious government schools in favour of often ill-equipped so-called ‘English-medium’ schools is increasing. This is indeed a frightening prospect for all concerned with the education, particularly those of children on the margins. They will NOT good education. In 2000-2001, the enrolment in Private Schools was only 17 %; but in 2010-2011, it rises to no less than 40 % of the total. Unless quality education is ensured in the government schools and the trust of the people is reclaimed, acts like the RTE may not prove to be of much use.

#### *Teachers Performance and Attitudes*

Teacher performance depends upon her professional perspective, her preparation and commitment towards children. It is reflected in the plans to transact curriculum, nature of activities and learning tasks used. The studies and monitoring reports shows that present situation is not satisfactory. Teachers merely speak or read or have children read from the text book and do not even use the black-board appropriately. The question of interactive

classroom, posing open ended questions, organising discussions, freedom to question and think, is inconceivable. Teacher and the school believe that their job is to finish or 'cover' the text-book. This is irrespective of whether all children understand and follow. Only a few teachers address the basic concepts required to develop the foundational abilities in children. There is no mechanism to visualize, asses and scrutinize seriously the performance of the teacher with supportive feed-back. There is also lack of clarity and consensus among different sections of the academic hierarchy as to what is an appropriate role for the teacher and how the class-room should appear during the interaction with children.

Teacher preparation and professional expertise is crucial for planning and organizing learning experiences in classrooms. Teachers need to acquire the skills of how to vary their approach depending on the class they are teaching and how to use the diversity available in the classroom as a resource. The delivery of curriculum in a meaningful way relating to child's context and level and engaging children and providing for individual, group and whole class is expected from the teacher. This depends on teacher's commitment and professional expertise.

#### ***Pre-service Teacher Training***

The existing pre-service teacher training programmes are dated and irrelevant. The whole system needs complete overhauling. It is proposed that based on the SCF 2011 and NCF 2005, pre-service teacher training programmes should be organized by the SCERT to engage the fresh teachers in a dialogue about the potential of the child, nature and structure of different domains of knowledge and the teaching learning process including TLMs and the classroom transaction strategies. There are several posts lying vacant in the present DIETs. These should be filled in with this perspective in mind.

#### ***Teacher Support Systems and Monitoring***

In spite of the network of School Complexes, MRCs, DIETs and SCERT, the actual support that reaches the teacher is rather minimal. We need to convert this network into a comprehensive framework in which each unit will enrich the other with sustained back for all and teachers will be able to receive all the support they require. This might mean building small local libraries and providing internet connectivity at the School Complex level.

#### ***Community Ownership and Empowerment***

The school is a part of community and belongs to the community. The school can effectively function through appropriate community support and involvement. The community monitors

the schools in terms of inputs, processes and outcomes. The community may monitor the attendance of the teachers. Retention of the children, children learning achievement in terms reading, writing arithmetic, school infrastructure, utilization of funds etc. can all be monitored by the community.

The VECs, School Committees, SMC have become nominal, non functional and exist mostly on paper. The members of these communities are not adequately motivated and empowered through trainings to participate in school activities and monitor the functional aspects of schools. Schools are not being transparent in their activities and performance to parents and at large to the community. The Panchayat Raj Bodies also play nominal role and do not take much interest in school / system functional aspects. The spirit of 73 & 74 Constitution Amendment is not reflected in the functioning of the Panchayati Raj. Parents don't get information as to what extent their children are learning in school.

The participation of parents and community in the school life is treated by the teachers as an obstacle in their business of curriculum transaction. Community is not seen as a source of support to improve schools in terms learner performance, feedback and fight for the rights of children. Community also treats school as an alienated space and a government institution where they have no role to play. If the community begins to take interest in the functioning of the school, it will automatically ensure teacher accountability. The community can also help the school in bringing the authentic folk culture and crafts to the school and some of them can actually teach children the traditional crafts and arts which may otherwise be lost.

### ***Teaching Learning Processes***

Children learn by doing and observing at elementary stage which requires meaningful activities/ projects in every subject and teacher acting as facilitator. Most of the schools show no evidence of such practice except lecture mode, reading textbooks para by para and explaining and asking children to copy down answers from the textbooks.

The rich interactions between teacher-pupil, pupil-pupil and pupil and learning material are missing in classrooms. Textbook and teacher become major source of learning. Planning and providing individual, group, and whole class activities are missed as a part of teacher plan and preparation. The classroom climate and learning environment need to be improved with active engagement of children on learning task, freedom to ask questions and posing problem leading to discussion.

### ***Diversity as a Resource***

Most teachers and education functionaries see different types of diversity found in a classroom as a major obstacle to curriculum and syllabus planning and teaching. The fact of the matter is that diversity can be used as a resource and a highly goal if it is properly understood and utilized. In any classroom, diversity may get manifested in terms of caste, colour or creed or gender or disability or language or minorities of different kinds. The presence of SCs or STs may pose a major challenge; providing security to girls and all kinds of facilities to children with disabilities is another major challenge. However, if the whole school, the community and the government think collectively about these issues, all these differences would prove to be a boon and enrich the discourse in the classroom.

### ***Achievement Levels***

The states conduct regular achievement surveys for tracking learning achievement across the districts in a systematic manner. The NCERT also conducts learning achievement surveys. The findings of the achievement surveys show that the overall performance of the children at class Vth is 50.69 against a national average of 53.65. The children performance in Maths, language and EVS is 47.44, 58.61 and 46.01 in A.P. against the national performance of 48.46, 60.31 and 48.46 percent.

As per state achievement studies 24 percent of students scores less than 50 percent of expected performance in languages and it is 30.51 in case of mathematics and 31.19 in case of English. In case of class 7th the percentage of students who score less than 50 percent is 32.52 in language, 40.11 in Maths and 43.3 in English. The CLAPs studies show that about 35 percent of children are unable to read and write and perform fundamental mathematical operations.

The above results on children learning achievement show poor performance of children even after implementing of several quality initiatives with teacher support mechanism like trainings, material, on job support etc. This is indeed worrying. This also explains partly why parents and children are opting out of the government school system. There is an urgent need to check this through quality inputs and a better understanding of the learner's potential and the teaching-learning process. We also need to improve the governance and management to monitor the functional aspects of schools and performance level of teachers and classroom practices.

### ***Assessment: New Perspectives***

Assessment of learning is now treated as terminal and outside the teaching learning processes to rank and grade the children. Assessment involves using paper-pencil test retrieving information from the children. Usually children memorize the concepts, definitions and answers to questions and reproduce them in the examinations. Children suffer tension, anxiety and fear of exams in view of burden of memorization and its proper reproduction. The assessment is also confined to core curricular subjects and it never attempts to know how far the purpose of school is achieved in terms of realizing educational aims and objectives. Assessment is not being treated as an evidence of teachers practice and strength of the curricular content. Assessment must become an integral part of teaching; it must be holistic, comprehensive and cumulative.

### ***Schools under different Managements***

At present the schools in Andhra Pradesh are being operated under various managements viz. government, local bodies, municipalities, tribal welfare department, minority welfare department, private management, Christian missionaries, residential institutions societies etc. Several departments run the schools but do not have machinery and professional expertise to run the institutions effectively on the expected lines. Though the department of school education is responsible for quality education across institutions being functional under various managements, it does not have control over the employees and teachers since service matters are being looked after by the respective departments. Therefore there is no effective control on quality management over these institutions run under various management. This matter needs immediate attention.

## **1.5 Guiding Principles**

What should be the guiding principles for the State Curriculum Framework? We may first turn to NCF 2005, RTE 2009 and the recommendations of the National Knowledge Commission.

### ***National Curriculum Framework 2005***

The National Curriculum Framework - 2005 is a means of modernizing the system of education. Following are the guiding principles as proposed by NCF-2005.

- connecting knowledge to life outside the school,
- ensuring that learning is shifted away from rote methods,
- enriching the curriculum to provide for overall development of children rather than remain textbook centric,
- making examinations more flexible and integrated into classroom life and,

- nurturing an over-riding identity informed by caring concerns within the democratic polity of the country.

***Right to Free and Compulsory Education Act 2009***

The RTE Act provides free and compulsory education as a right to every child in the age group of 6 to 14 years in a neighborhood school till completion of elementary education. No child can be refused admission on any grounds and will be admitted to her age appropriate class and make suitable arrangements so that the child can cope with the current curriculum. Education will be inclusive and the schools are supposed to make appropriate arrangements for children with disabilities and with special needs. The child is not liable to pay any kind of fee or charges and expenses which may prevent him or her from pursuing and completing the elementary education. A key feature of RTE is that it focuses on quality as an integral aspect of the child's right to be educated. Part Vth of the RTE act lays down fairly specific terms under which the quality of elementary education is ensured. The RTE emphasizes that the curriculum and the evaluation procedure for elementary education shall be laid down by an academic authority to be specified by the appropriate Government, by notification. The academic authority, while laying down the curriculum and the evaluation procedure shall take into consideration the following:

- (a) conformity with the values enshrined in the constitution;
- (b) all round development of the child;
- (c) building up child's knowledge, potentiality and talent;
- (d) development of physical and mental abilities to the fullest extent;
- (e) learning through activities, discovery and exploration in a child friendly and child centered manner;
- (f) medium of instructions shall, as far as practicable, be in child's mother tongue;
- (g) making the child free of fear, trauma and anxiety and helping the child to express views freely;
- (h) comprehensive and continuous evaluation of child's understanding of knowledge and his or her ability to apply the same;
- (i) No child shall be required to pass any Board examination till completion of elementary education.
- (j) Every child completing his elementary education shall be awarded a certificate in such form and in such manner, as may be prescribed.



Therefore it is mandatory on the part of the state government to take up curricular and evaluation reforms reflected in the above suggestions. The SCERT as academic authority must take up academic reforms as part of implementation of RTE. The proposed curriculum and textbook shall address pedagogic concern articulated in the RTE act.

#### ***Constitutional Provisions***

- The 73<sup>rd</sup> Constitutional Amendment created the systems of *gram, taluk and zila* levels to ensure greater participation in the *panchayati raj* in an attempt to give more powers to the local bodies.
- The 74<sup>th</sup> Constitutional Amendment ensured greater representation of SCs, STs and women on the local bodies.

#### ***National Knowledge Commission Recommendations***

- Flexibility and autonomy of local level management – the village panchayats must be given the power and autonomy to manage the elementary education as the spirit of 73 & 74 Constitutional Amendments.
- Management of Private Schools
- Focus on Early Childhood Education in view of 0 – 5 years are crucial for learning.
- Administration of School Education Departments and accountability.
- Effective mechanism on monitoring the quality of schools and making schools accountable primarily to the community.
- Social Audit of School Performance.
- Strong Mechanisms and programmes for professional development of teachers and on job support.
- Improved School leadership for managing schools
- Professional sharing and exchange between the schools
- Building of Strong Curriculum Groups and Textbook writers and promote curriculum action research.
- Education of marginalized groups, respect of diversity and equity.

These guidelines rightly lay great emphasis on teacher education, professional training, community participation, teaching-learning process and assessment procedures. We may discuss each one of these briefly.

#### ***The National Curriculum Framework for Teacher Education 2010***

The NCFTE -2010 focuses on:

- Effective pre-service teacher education

- Strategies for the professional development of in-service teachers.
- Focus on research on curriculum implementation and studies on programme evaluation.
- Professional ethics and teacher preparation.

## 1.6 State Curriculum Framework

### *Perspective*

1. The aims of education should never be lost sight of. The primary purpose of education is to produce rational and responsible citizens who can appreciate their heritage and also become agents of social change.
2. The needs and aspirations of the learner are central to the process of curriculum formation.
3. There is a certain cognitive sequence in learning. The curriculum should be in consonance with the cognitive levels of children. The curriculum should focus more on the process rather than the product. This will help the child to develop understanding rather than just accumulate information. It is also likely to equip the child with analytical skills.
4. Knowledge in terms of basic cognitive abilities needed is in a sense unified. Its division into different 'subjects' is in some sense artificial. The same text can often be used for many purposes such as developing language skills, mathematical abilities or social awareness; it can also be used for logical thinking, analytical skills and inferencing.
5. The curriculum should be dynamic. It should not be confined to the prescribed textbooks only. It must embrace the world outside the school as well as the creativity of the child and the teacher.
6. Decentralisation of all aspects including academic work and administration should be at heart of all educational activities in the State.

### *What is Curriculum framework?*

It is a plan that interprets educational aims vis-a-vis both individual and society to arrive at an understanding of the kinds of learning experiences schools must provide to children. The curriculum framework document provides direction to take up various educational activities, development of syllabus and textbooks etc.

Curriculum is a set of planned activities which are designed to implement particular educational aim – set of such aims in terms of the content of what is to be taught and the knowledge, skills and attitudes which are to be deliberately fostered, together with statement of criteria for selection of content, and choices in methods, materials and evaluation.

The curriculum is a source of everything that is done in classrooms and schools towards children's education. It tells us what is worth teaching, how much should be taught and in what sequence, with what methods and materials, how learning should be assessed, teachers prepared and schools monitored. Curriculum is the source of all works related to education.

***What is Syllabus?***

Syllabus refers to the content of what is to be taught and the knowledge, skills and attitudes which are to be deliberately fostered with state specific objectives.

***Process of Developing SCF -2011***

SCERT is expected to review school curriculum as a regular activity ensuring the highest standards of rigour. National Policy of Education 1986, National Curriculum Framework 2005 and Right to Free and Compulsory Education Act 2009 assigns a special academic role to SCERT in preparing and promoting State Curriculum Framework. As part of development of State Curriculum Framework, the curriculum committee examined the major challenges and concerns being faced by the school education system in the state. A high-powered Advisory Committee was constituted. It was decided to develop a Curriculum Framework document along with 20 Position Papers in different domains of knowledge. National and State level experts from different universities and institutions and teachers, teacher educators and NGOs were involved in the process. Huge curriculum load in terms of information loaded textbooks, ineffective methods of teaching learning processes, memory based examinations etc. warranted for improving the existing situation by way of undertaking curricular and examination reforms. This document lays the foundations of a completely fresh perspective on the education of children keeping their potential to learn at the heart of curriculum planning.

***SCF 2011: Key Principles***

It is required to focus on systemic factors that will address major assumptions, beliefs and attitudes in the system and improve the educational practice with appropriate transformation. The committee formulated the key principles for state curriculum framework. In this regard the guiding principles formulated under NCF-2005 were considered in addition to certain other principles to address the existing challenges. Following are the key principles of the A.P. state curriculum framework.

- keeping the potential of the child to learn always in focus,
- respecting the systems of knowledge such as languages children bring to school,

- connecting knowledge to life outside the school; children should not feel that
- ensuring that learning is shifted away from rote methods and the focus should be on interactions, project work, analysis etc. what they are learning at school has no relevance to their lives,
- enriching the curriculum to provide for overall development of children rather than remain textbook centric,
- making examinations more flexible and integrated into classroom life; more focus on assessment for learning than assessment of learning,
- promoting social constructivism, issue-based curriculum and critical pedagogy across curricular areas,
- nurturing towards flora and fauna and respect for bio-diversity and social diversity, respect to the work shall be promoted as a part of school curriculum,
- locating classroom practices in the languages and cultures of children.

## 2. Knowledge and Learning

### 2.1 Knowledge

As NCF 2005 states, what we include in ‘knowledge’ reflects our opinion of what we think the aims of education are. Since our aims of education are to enable the child to think critically, to observe, to analyze, rationalize and draw patterns, and to be sensitive to the diversity of human life, ‘knowledge’ should not only include pieces of information, but ways of thinking and feeling. We often think of knowledge as information that a child should simply acquire by repeatedly reciting or memorizing. But knowledge includes many more things other than knowing the multiplicative table of 3, the capital of Andhra Pradesh, the year in which Akbar was born or that there is gravity on Earth. Understanding how to observe, analyze, abstract or rationalize, and understanding how to empathize, to be compassionate and sensitive to diversity, should also be included as knowledge areas. The aim of education, therefore, is not to feed the child with pieces of information, but to hone her thinking skills.

We can say that **knowledge is not information. Knowledge cannot be ‘given’ to a child, but is self-driven and is acquired through experience. It can only be acquired when a child is able to make sense of new information. Children will need sensitive scaffolding at appropriate moments.** Children have to play an active part in creating that knowledge for themselves, to make sense of the world they are part of. In keeping with our understanding of the aims of education, therefore, we cannot see ‘educating’ a child as synonymous to transmitting information to her, asking her to memorize it and reproduce it exactly. The act of acquiring knowledge in the context of how we have defined knowledge entails the act of processing information and feelings, processes that require her to think, reflect, abstract, intuit and not just memorize. And it is this act that education aims to provide impetus to.

As the NCF 2005 also states, ‘If...knowledge is regarded as a finished product, then it is organized in the form of information to be “transferred” to the child’s mind. Education would concern itself with maintaining and transmitting this store-house of human knowledge. In this view of knowledge, the learner is conceived of as a passive receiver.’ (NCF, p. 25) Such a conception of ‘knowledge transfer’ and learning is not in tune with our idea of education which aims at the ‘dynamic engagement [of the child] with the world through observing, feeling, reflecting, acting and sharing.’ (NCF, p.25). Knowledge for each individual, therefore, is under constant transformation.

## 2.1 What is included in Knowledge?

We quote at length from NCF (2005: 27-28). “Knowledge can be categorised based on distinct kinds of concepts and meanings involved and processes of validation and justification. Each involves its own kind of ‘**critical thinking**’, its own way of verifying and authenticating knowledge, and its own kind of **creativity**.”

- A. **Mathematics** has its own distinctive concepts, such as prime number, square root, fraction, integer and function. It also has its own validation procedure, namely, a step-by-step demonstration of the necessity of what is to be established. The validation procedures of mathematics are never empirical, never based on observation of the world or on experiment, but are demonstrations internal to the system specified by an appropriate set of axioms and definitions.
- B. **The Sciences**, like the systems of mathematics, have their own concepts, often interconnected through theories, and are attempts to describe and explain the natural world. Concepts include atom, magnetic field, cell, and neuron. Scientific inquiry involves observation and experimentation to validate predictions made by theory (hypotheses), which may be aided by instruments and controls. Formalisation into theory and model building can sometimes involve mathematics, but it is only with reference to observations and not to mathematical accuracy that truth is tested. The attempt is to furnish a narrative that in some way ‘corresponds’ to reality.
- C. **The Social Sciences and Humanities** have their own concepts, for example, community, modernisation, culture, identity, and polity. The Social Sciences aim at developing a generalised and critical understanding of human beings and human groups in society. The Social Sciences concern themselves with description, explanation and prediction in the social world. The Social Sciences deal with hypotheses that are about human behaviour in collective living, and their validation finally depends on the observations made in the society. With regard to the process of knowledge formation, Science and the Social Sciences are almost identical. But there are two differences that are of great relevance in curriculum planning. First, the Social Sciences study human behaviour which is governed by ‘reasons’, while nature is governed by ‘cause and effect’. Second, the findings of the Social Sciences often raise issues of Oral and Craft Traditions. The oral lore and traditions of craft are a unique intellectual property, varied and sophisticated, preserved by innumerable groups in our society, including women, marginalised, and communities, and tribal people. By including these in the curriculum for all children, we could provide them with windows of understanding and kernels of ideas, skills and capabilities that could be worked into forms and inventions that could enrich their own lives and society. School privileges the literate, but cannot afford to continue to ignore the oral. Sustaining oral skills of all kinds is important. ethics and desirability while natural phenomena can be understood, raising ethical questions only when they enter into the domain of human action.

(We may add that at least to some extent the knowledge of artisans may be said to include everything of school subjects. For example mathematics, science, social, language subjects are involved in carpenters work. Different styles and forms of language will get manifested in

oral traditions. The folk arts like *burra katha*, *pallesuddulu*, *kolatalu*, *oggukathalu* etc are the forms of knowledge.)

- D. Art and aesthetics** have many words in common, such as rhythm, harmony, expression and balance, though giving them new senses or new ranges of application. Art productions cannot be judged against reality or investigated for ‘truth’. Although there is ample scope for subjective judgement in art, it is also possible to educate the artistic imagination to critically assess what is good and what is not.
- E. Ethics** is concerned with all human values, and with the rules, principles, standards and ideals which give them expression. In relation to action and choice, therefore, ethics must be conceded primacy over each of the forms of understanding. Ethical understanding involves understanding reasons for judgements—for what makes some things and some acts right and others wrong—regardless of the authority of the persons involved. Furthermore, such reasons will be reasons for anyone; reason, equality and personal autonomy are therefore very intimately connected concepts.
- F. Philosophy** involves a concern, on the one hand, with analytical clarification, evaluation and synthetic coordination of the aforementioned forms of understanding in relation to life, and, on the other hand, with the whole, the ultimate meaning and the transcendent.

Each of these knowledge areas involves a special vocabulary, concepts, theories, descriptions and methodologies. Each provides a ‘lens’ through which to view the world, to understand, to engage, and to act in it. All our children have a right to access this knowledge, to educate and enrich their common sense, to develop and discover themselves and the world of nature and people, through these lenses and tools (NCF-2005, p. 27&28)”.

“A vast array of human activities and practices sustain social living and culture. Crafts such as weaving, carpentry and pottery, and occupations such as farming and shop keeping, constitute along with the performing and visual arts and sports a valuable form of knowledge. These forms of knowledge are of a practical nature, tacit and often only partially articulated. Many of them involve abilities that are developed. These include the ability to conceptualise and imagine products that are useful or aesthetic, the knowledge of the ability to work with materials to fashion a product, knowledge of one’s own abilities, appreciation of team work, and attitudes of persistence and discipline.” (NCF-2005, p. 26-27).

### 2.3 Learning

Even though there are several theories of learning, we still understand perhaps a small fraction of this complex process. NCF 2005 and SCF 2011 consistently reject the behaviourist position

in which the child is regarded as an empty bucket or a blank slate. Child is born with enormous innate capacities to learn; however all learning cannot take place through the child's efforts alone, howsoever hard she may try. SCF thinks what is essential for learning to take place is a very carefully planned and executed programme that involves the child, her parents, teachers and the community in addition to all the learning resources such as the library or the internet. There is substantial amount of subconscious pre-school learning that takes place before the child comes to school. This learning is largely the result of child's innate potential and the caring environment in which she is brought up. She thus for example learns extremely complex structures of languages she is exposed and also learns to structure space. But school is a formal space. It is in the school that the kind of knowledge systems that have been described above are acquired by the child. The formal systems of science and mathematics and abstract ideas of social sciences cannot be acquired without the active intervention of teachers, peer-group, parents and the community. SCF strongly recommends that all possible efforts be made to strength these interactions. Learning is a continuous process and unless such support systems are ensured, it is likely that our half-baked education system will continue to flourish. Learning in this sense also focuses on understanding as opposed to rote-learning.

By birth, it seems children start exercising their innate capacities such as observation, recognition, classification etc., to understand the environment and express them in different ways. If we analyze the capacity of 3 years old child, we would appreciate that she learns to use language not only in a grammatically correct way but also in a contextually appropriate manner. Unfortunately most of the teachers are reluctant to see these facts as they have been trained in the behaviourst paradigms in which language is learnt ONLY through imitation and practice. They treat them as passive recipients and they regard themselves as resources of knowledge givers. This kind of misconceptions should be ruled out and they are to be sensitized towards providing meaningful contextual situations to enable the children to construct knowledge. Based on the above we can say that:

- Children learn when there is no stress or burden.
- Observe various things with keen curiosity by participating in conducive learning environment.
- There is no criticism, fault finding with children are learning.
- They are allowed to repair their errors themselves.
- They apply their acquired knowledge in different situations.



## 2.4 Implications for the Curriculum

What are the implications of all the above for curriculum planning? Students and teachers are key persons in the education system. All the processes and interactions influence the children's learning. If children are to become knowledge constructors, the role of the teacher, textbooks, and teaching learning process should be changed drastically. The aim of teaching is not to prepare children for examinations. All experience provided in the teaching learning process should contribute towards the construction of knowledge. Children come to school with prior knowledge. Teaching learning processes should be built on this. It means that in the class, children's language should be used as basis for further construction of knowledge. In language classroom, storytelling, songs, rhymes should be used as discourses to enable children to acquire language. Similarly in environmental science while teaching about **food**, instead of reading textbook and explaining, let the children discuss their food habits and varieties of locally available food, the food grains; vegetables cultivated in their village are to be critically compared with the text. Even children can go to the villagers, market and fields to collect information and analyze it. Through project works, field trips and field experiments children construct knowledge on various aspects of food. They are able to give a list of food items, classify them, and find the way how they prepared or cultivated etc. Instead of 2 or 3 pages text on food lesson, children get wide knowledge through this.

Along with the children experiences and prior knowledge, another important aspect in the process of construction of knowledge is the role of "interactions." Making children interact with peer, teacher, material, local environment and with the members of the society. They may interact individually or in groups and discuss on their understanding or on their predictions. They question to find the reasons for better conceptual understanding. They have to explain the reasons of their understanding during the discussions. Because of such process children have their own understanding and construct the knowledge. In this process the role of the teacher needs to change completely. Teacher participates as co-learner in the discussions with the students and facilitates them leading the discussion by posing probing questions. Working with the children, making children to respond, expressing and sharing his/her own stand are the key issues in the process of learning. The teacher becomes as a researcher, collaborative learner and facilitator instead of mere instructor.

In the process of knowledge construction reflective teaching is required. John Dewey mentioned about the following six key characteristics of reflective teaching.

*They are:*

1. *Aims and consequences: Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency.*
2. *A cyclical process: Reflective teaching is applied in a cyclical and spiraling process, in which teacher monitors, evaluate and revise their own practice continuously.*
3. *Competence in classroom inquiry: Reflective teaching requires competence in methodology of classroom inquiry, to support the development of teaching competence. It includes collection of data, analyze, evaluate, reflect, plan, make provision and act.*
4. *Attitude towards teaching: Reflective teaching requires attitudes of open mindedness, responsibility and whole heartedness.*
5. *Teacher Judgment: Reflective teaching is based on teacher judgment, which is informed partly by self reflection and partly by insights from educational disciplines.*
6. *Learning with colleagues: Reflective teaching, professional learning and personal fulfillment are enhanced through collaboration and dialogue with colleagues.*

## **2.5 Role of Textbook**

Present textbooks are loaded with lots of information; they do not give any scope to the children to exercise their innate abilities and construct knowledge. Education is limited only to textbook. Understanding the world and critical thinking are missing totally. Which is good? Which is not? This discrimination is also missing in majority situations. This is leading to the formation of wrong beliefs and assumptions. In this context it is very important to know how the textbook should be. What should be inculcated among children through textbooks? How to make the textbook more useful to the children? These are very crucial issues to be addressed. Clarity over these issues is essential for a curricular framework. As a tool for curriculum implementation the textbook is very familiar to all. The textbook should play great role in attaining goals of education, and give direction to the teaching learning process. But unfortunately it is not contributing to the all-round development of children but only limiting their knowledge avenues.

### ***Oral ad Craft Traditions***

*The oral lore and traditions of craft are a unique intellectual property, varied and sophisticated, preserved by innumerable groups in our society, including women, marginalized and communities and tribal people. By including these in the curriculum for all children, we could provide them with windows of understanding and kernels of ideas, skills and capabilities that could be worked into forms and inventions that could rich their own*

*lives and society school privileges the literate, but cannot afford to continue to ignore the oral. Sustaining oral skills of all kinds is important.*

**-NCF-2005, Page 27**

In this context state curriculum frame work proposes the following about the textbooks:

- Learning of children should not be confined to textbooks.
- They should provide wider space to the children to use their previous experiences, prior knowledge and innate abilities to interact with local environment.
- In addition to the subjects knowledge, social knowledge i.e. knowledge of artisans, local arts, literature and forms of folklore and scientific practices of the local society in their ways of living should be reflected in the forms of knowledge in the textbook.
- The ways of knowledge generation and their proofs based on truth criteria should be understood by children. The textbook should facilitate it.
- Social ethos of various sections of the society and their knowledge systems should be reflected. The social background of marginalized, depressed and their culture and customs should be reflected in the textbook. The affluent class notion of knowledge should not marginalize these sections in learning. The textbook should take care of all these issues.
- Textbook should be child centered. In recent times, it has become a buzz word. It has become only ornamental. If the entire system of education is child centered then their interests, aptitudes, learning styles, their roots and backgrounds should become key concerns in developing textbooks.
- Textbooks should be activity based. Activity based teaching should not be reduced to a ritual. In majority cases activities lead for meaningless mechanical process. Assigning students to rubbing the alphabet or read the text is not an activity or simply placing the material before the child is also not an activity. Activity should generate thinking. It should give scope for meaning making and applying it for truth criteria, making predictions and explaining reasons. As per the *state aims of education* in the *State Curriculum Framework 2011* education means to respect fellow beings, respecting others' languages, cultures, practice

of freedom, fraternity, democracy, cooperation, peace, values and human rights. Textbook should facilitate to practice human rights enable the children to acquire moral behavior.

- Children should understand the contemporary situation of the society. He/she should compare and contrast critically the issues they come across through the mass media. Textbook should facilitate this.
- Different sections of the society should develop through education. Textbooks should not represent the knowledge of a section of people. It should not be discomfort with the marginalized sections like women, dalits, special needs children and all kinds of minorities.

In the context of globalization and privatization education has become a commercial activity. With unwanted publicity and attraction people are targeted for exploitation in the name of education. At present it is a challenge that whether education is preparing the children for becoming doctors, engineers and other employees or preparing them as responsible citizens, those who work for the welfare of the society. Various sections of the society have a variety of aspirations. Every parent desires for the development of her/his wards better than her/him.

*A craft like carpentry involves the ability to conceptualize and design the object to be made, an understanding of its value in the society (socio-cultural, aesthetic and economic significance), knowledge of materials available and the most suitable in terms of quality and cost for the product to be made, knowledge of where to source materials, the ability to plan and execute the fashioning of the product from beginning to end, using one's own skills and sourcing relevant skills from others, maintaining the necessary tools, judging for quality, creativity and excellence in craftsmanship.*

*A sport like Kabaddi involves physical stamina and endurance, knowledge of rules of the game, skills and physical dexterity and knowledge of one's own capacities, ability to plan and coordinate as a team, to assess the other team, and to strategise to win.*

**-NCF- 2005,Page 26**

## 2.6 Critical Pedagogy and its Implications

Critical pedagogy is a teaching approach which attempts to help students question and challenge domination, and the beliefs and practices that dominate them. It tries to help students critically conscious. According to Ira Shor (1992), *“A student can be critically conscious thinking, reading, writing and speaking while going beneath the surface of meaning. A student goes beyond myths, clichés, received wisdom and mere opinions. Most importantly students must understand the deep meaning, root causes, social context and personal consequences of any action, event, object, process, organisation, experience, text, subject matter, policy, mass media or discourse”*. The main purpose of critical pedagogy is to empower the students and help them to liberate the students from oppression.

In "Construction of knowledge" approach, the role of traditional teaching methods is very limited. One of the important aims of education is respect the culture of others and understand self and the world with a critical and dialectical perspective. Critical pedagogy helps children to understand the knowledge of indigenous and subjugated people. The children who belong to the deprived and oppressed families learn about their own culture, history medicinal practices, religious, heritage etc. This can have a transformative effect on their lives and lead to their own empowerment.

The education itself is political. Critical pedagogy makes teacher as well as children aware of the politics that surround the education. It gives children the ability to understand the political notions of the teachers, the politics of validated scientific knowledge etc.

### Implications

- Critical pedagogy is a strategy for construction of knowledge.
- Reflective thinking skills, critical thinking skills, dialectical thinking skills and creative skills play an important role in critical pedagogy. The TLP should be organized to promote these skills. In all subjects it should be applied. For example in the language classroom while teaching a poetry lesson we may be able to make children reflect on the poems and why "poet" has written it? What is the inner agenda behind writing it? In social science, comparing with the contemporary issues is more important.
- Teachers should know that students have life experiences and their own knowledge that is key in shaping their education and learning.
- Good education system or school does not blame students for their failures or strip students of the knowledge they bring to the classroom.

- A deep respect should exist between teacher and student.
- We should think in terms of teacher student and student teacher that is "**A teacher also learns and a learner who teaches**"
- The professionalism of the teacher might be respected.
- It is vital to know children's culture, knowledge base, language etc.
- Part of the role of any educator involves becoming scholar and a researcher.
- Praxis is a problem solving method that is to identify a problem, research the problem, develop a plan of collective plan of action, implementation, and evaluation.

## 2.7 Social Constructivism

Social constructivism is a sociological theory of knowledge that applies the general philosophical constructivism into social setting, wherein groups construct knowledge for one another, collaboratively creating a small culture of shared artifact, with shared meanings. When one is immersed within a culture of this sort, one is learning all the time about how to be a part of that culture on many levels. Its origins are largely attributed to Lev Vygotsky (1896-1934).

Social constructivism has been studied by many educational psychologists, who are concerned with its implications for teaching and learning. Constructivism forms one of the major theories (behaviourism, social learning, constructivism and social constructivism) of child development, arising from the work of Jean Piaget's theory of cognitive development. Piaget's stage theory (describing four successive stages of development) also became known as constructivism, because he believed children needed to construct an understanding of the world for themselves. Social constructivism extends constructivism by incorporating the role of other factors and culture in development. In this sense it can also be contrasted with social learning theory by stressing interaction over observation.

Vygotsky's contributions reside in *Mind in Society* (1930, 1978) and *Thought and Language* (1934, 1986). Vygotsky independently came to the same conclusions as Piaget regarding the constructive nature of development.

Additionally studies on increasing the use of student discussion in the classroom both support and are grounded in theories of social constructivism. There are a full range of advantages that result from the implementation of discussion in the classroom. Participation in group discussion allows students to generalize and transfer their knowledge of classroom learning

and builds a strong foundation for communication ideas orally. Large and small group discussion also affords students opportunities to exercise self regulation self determination, and a desire to persevere with tasks. Additionally, discussion increases students' motivation, collaborative skills, and the ability to solve problems. This type of learning "promotes retention and in-depth processing associated with the cognitive manipulation of information.

SCERT TELANGANA

## 3. Empowering the Teacher and the Community

### 3.1 Good Teacher?

Who is a good teacher? This is the basic question that would unfold our understanding of the whole system of education. Teacher is a key player in any system of education. In spite of all the technological breakthroughs and the arrival of the virtual classroom, the importance of the classroom teacher has not reduced. In the Indian culture, the teacher has been given great position and respect. He is treated as equal to the gods. From the ancient shloka *gurur brahma gurur Vishunu*, we may understand the position of the teacher. Although times have changed drastically since, most Indians still look at the teachers with the same respect and awe. We do not suggest that children should accept everything teachers say blindly; on the contrary, they must question everything that's taught to them. However, natural respect for teachers is much better than implementing oppressive rules of discipline.

A good teacher is one who knows her subject well, understands the potential of the child and the teaching-learning process, appreciates the role of collaborative and peer-group learning, facilitates and scaffolds children when they need help and is always willing to say 'I don't know', if she does not really know the answer to a question asked by a child (which is often the case though teachers rarely acknowledge this) and then makes all possible efforts to find suitable answers to the question.

To attain the goals of education proposed in the school curriculum, several strategies, plans and programmes have to be adopted. They are largely mediated and implemented by the teacher. She may use all the technological aids and the TLMs made available to her, it is ultimately she who decides how best to transact a particular idea/ concept in the classroom.

Teachers are the main persons who influence children to a great extent. The ideas of teachers about children, their relations, every day interactions with the children will influence in developing children's attitudes and values. It is again the teacher who plans specific steps to constructively involve the community in the process of school education. Therefore from the beginning various educationists and commissions spelt out in various contexts that teacher is a continuous learner. It is the moral responsibility of the teacher to prepare the children to cope with the time to time changes in the social, political, economic and cultural scenario of the society. For this he has to recognize his needs, understand the current trends and also apply



them accordingly to change herself to become an agent of change. In this context, teachers may encounter the following challenges:

- Are they aware of the overall aims of education and the strategies to implement them? Or they are working mechanically for the short term goals?
- Are they really working in consonance with the changing socio-political, economic and cultural needs of the society?
- Are they aware of the potential of children to learn?

We need to appreciate that:

- Teachers should not feel that after completing the pre-service training and entering in to the teaching profession, there is no need for further learning.
- Teacher preparation programmers are lacking in the perspective for building programmes for the development of the teacher to cope with the changing needs of the society. They only emphasize training methods and techniques of teaching.
- The trainings must lead to conceptual clarity about the basic content areas and a clear understanding of the potential of the child and the teaching-learning process.
- There is a lack of professional outlook and accountability among the teachers.
- Teachers' work is mainly based on their assumptions and beliefs and they are not ready to change.
- The understanding about the nature of the child, their background, how they learn, what is the nature of learning is in fact largely misunderstood.
- Teachers don't feel that they are the key players in attaining stated goals of education. They also fail to understand that the attainment of these goals depends on their activities only. The entire perspective about teaching is missing among the teachers. They are habituated to work mechanically for examinations and results.
- School authorities and parents expect immediate results from the schools and the performance of the teachers are linked with these results. This builds pressure among the teachers.

We cannot define a good teacher with a definite set of qualities. But at least for our immediate purpose we may attempt to mention a few qualities of a good teacher in terms of his personality and work culture. A good teacher should possess the following set of qualities.

- ❖ Teacher is a facilitator, collaborative learner and reflective practitioner.
- ❖ Teacher provides opportunities to the children to construct knowledge and reflect critically on it.
- ❖ Teacher reconceptualises his/her conceptual frame work of assumptions and beliefs about the child, learning and relations with the community from time to time.
- ❖ Teacher believes in self – learning, reflection, assimilation and articulation of new ideas; developing capacities for self directed learning and the ability to think, be self critical and to work collaboratively in groups.
- ❖ Teacher will have cordial relations with colleagues, school authorities, parents and the community. Understands the strength of interpersonal relations.
- ❖ Teacher should have positive attitudes and respect towards the diversified background of the students and takes responsibility for the development of all children.

❖ Teacher participates in continuous professional development programmes and implements all these inputs in the class room for better teaching learning process.

### **3.2 Teacher Empowerment**

The empowerment of the teacher means providing opportunities for the following.

- For understanding the self and others (including one's beliefs, assumptions, emotions and aspirations); developing the ability for self-analysis, self – evaluation, adaptability, flexibility, creativity and innovation; understanding and developing oneself as a professional.
- To observe and engage with children, communicate with and relate to children
- Encourage self-learning, reflection, assimilation and articulation of new ideas; developing capacities for self directed learning and the ability to think, be self critical and to work collaboratively in groups.
- For content enrichment, efforts should be made to generate understanding and knowledge, examine disciplinary knowledge and social realities, relate subject matter with the social milieu and develop critical thinking.
- To develop professional skills in pedagogy - observation, documentation, analysis, drama, craft, story-telling and reflective inquiry.( Curriculum Frame Work for Teacher education Discussion Draft , NCTE-2006)

In the present context the teacher has to play the role as researcher, reflective practitioner and collaborative learner in the Teaching–Learning process. In the good old days if the teacher just taught, she was recognized as a good teacher, but now the teacher has to facilitate the students to construct knowledge, and provide environment to the children to react, analyze, and interpret. Unfortunately the efforts made to develop such kind of teachers failed in the system. The present day teacher education programmes instead of developing sound attitude among teachers for the skills like critical, creative and reflective thinking, develop stereotypes, rigid nature and autocratic practitioners. These teachers are trained in rigid formats of lesson plans and TLMs which encourages rote learning. They fail to appreciate the linguistic and cultural diversity available in their classrooms. They cannot even think of using them as resources for teaching. Because of this situation National Curriculum Frame work for Teacher Education (NCFTE-2010) recommended for reforms in teacher preparation programmes.

### **3.3 Need for Sensitivity to Children**

School is in a sense society in its miniature form. All the diversities of the society will inevitably be reflected in the school also. Children of different socio-economic and cultural backgrounds come to the school. Diversity is a natural phenomenon. The teacher who does not

take diversities of the society into account, he/she feels that this is a hurdle and weakness for learning. In day to day life the teacher for different reasons makes use of multiple languages but in teaching learning process he/she feels that it is a weakness and treats it as a problem. If you take any class room in the state of Andhra Pradesh, the following diversities will be found. They are:

- Children of different class, caste, regions and religions.
- Children of the families practicing various customs and traditions within the same religion and castes.
- Children of different languages.
- Children speaking different local dialects.
- Children with special needs.
- Children of different gender.
- Children of first generation literates.

It is believed that learning will be enriched with the diverse backgrounds of children. As the children belong to various socio- cultural backgrounds, it becomes a source of strength to share the experiences in the class. The diverse linguistic and cultural practices of children can be used as a resource in a variety of contexts.

RTE-2009 clearly states that all children must get quality education for their overall development. Now it is a constitutional mandate. In the light of right to education act, one should understand the child's back ground with due respect to providing equitable quality of education. Teacher should recognize the multi levels of learning among the students and organize the learning experiences so as each child can participate in the class. That's the only way to move towards the constitutional mandate of equality, justice, freedom and fraternity from the class room itself. Therefore there should be no discrimination of any sort like boys and girls or specially challenged or first generation learners. Equal opportunities should be provided to all the children to express their views freely and fearlessly and share the same in the group. The teacher must have a comprehensive understanding about the children background then only he/she can do justice to the teaching profession. Teacher should understand the problems of the students with lot of patience and empathy. Then only the teacher can organize the activities for overall development of the child. Children will come from the various family backgrounds nurtured in their traditional arts, music, literature and other artisan knowledge systems. Therefore their learning styles will also be different from others. Mainly they learn while doing the work. This should be respected and understood properly by the teacher. Understanding of the child's background helps the teacher to develop critical thinking, brotherhood, respecting others' languages, customs and traditions among the students which are the stated goals of Andhra Pradesh Curriculum Framework.

### 3.4 Self Esteem

In the education system, quality depends on quality of the teachers. The quality of the teachers consists of their competencies, attitudes, skills etc. On many occasions, quality of the teachers is recognized by the examination results of their school. As a result of this, entire education system concentrates on the examination results treating them as the sole indicator of teachers' quality. But, the schools are not only for good results. They should strive for the achievement of educational objectives. The achievement of these objectives mostly depends on the teachers who work in the school.

Majority of the children who are studying in government schools belong to poor families and to the deprived and marginalized sections of society. The backgrounds of these children are quite different from those of private schools. Parents of these two categories have remarkable differences between their ambitions, expectations and awareness about education. Every parent is expecting their child to excel in the examination and get good marks and ranks. After immediate declaration of results wide publicity will be given in the media, celebrating some schools at the cost of others. Even the government teachers try to talk with a sense of pride about their results. The schools which do not show good results are subjected to explanations and stoppage of increments in the case of board examination. In the case of quality in primary education also ASER and other agencies including SSA organize external evaluation and declare the results. In regular AMC meetings and in regular academic reviews the quality is reviewed in terms of school grade, class grade and grade in each subject. Though teachers and community members have their own justifications and complain about other agencies, ultimately the entire education is reduced to results instead of overall development. Quite often community compares the performance (in terms of results) of government with private schools and the notion of "Government schools are inferior to private schools in results" is being propagated. This also makes the teachers who work in government schools de-motivated. It is quite unfair to assess the quality of the teachers based only on examination results. This kind of treatment kills the self confidence and self esteem of the teachers.

Some of the teachers lose interest in teaching and continue mechanically in their profession; there is no choice to enter other prosperous employment. Still there are many teachers who, even in these critical and disadvantaged situations, strive hard with self motivation to make their schools as community centers. But they are gravely ignored and their services are unrecognized and unnoticed.

The supervisors/observers, who visit schools to monitor, sometimes behave indifferently with the teachers finding only faults and limit their work to only on collecting statistical data of the schools. This attitude certainly de-motivates the teachers and has adverse effect on their self esteem and self confidence.

The key elements of the monitoring such as discussing academic issues with positive appreciation, sharing experiences, rendering support, identifying the problems faced by the teachers etc., are totally missing. So gradually the demarcation between performing teachers and non-performing teachers is disappearing.

The present context causes irreparable damage to the esteem of the teachers and leads to a degradation of their profession. We need to organize pre- and in-service teacher training programmes which will train teachers to implement the goals of education as stated in NCF 2005 and also in SCF 2011 so that they can have faith in themselves and begin to respect themselves and their profession. The teacher's initiation, critical outlook, rapport with community, leadership qualities, work culture, communication skills are the major dimensions of self worth and self dimensions. This completely uncalled for focus on the examination results to the exclusion of all other aspects of education must stop. It leads to an unhealthy rat race among children, teachers and schools.

Present curriculum framework of Andhra Pradesh 2011 proposes the following recommendations to build self worth and self confidence among the teachers.

- Reforms in terms of making teachers change their preoccupied age old beliefs and ideas and work with new perspective of understanding children and their learning styles as their co-learner, researcher and facilitator.
- Instead of boring and monotonous in-service training programmes, sharing field level experiences, present trends in education and pedagogy, ground realities, using ICT, taking collective decisions etc., should be incorporated while designing alternative training pedagogy.
- Organizing exposure visits to schools where best practices are in and disseminate those practices through magazines to the community and teaching fraternity.
- Current one shot examinations to be replaced by continuous assessment where it becomes an integral part of learning itself. Support system mechanisms and monitoring procedures need to be radically transformed to become sources of inspiration and help rather than of intimidation, fear and insult.

### **3.5 Current Status of Teachers**

The current status of the teachers of Andhra Pradesh can be understood in terms of their educational qualifications, training, working conditions and opportunities for professional development.

In Andhra Pradesh at present around 8.5 lakh teachers are working in private and government managements. The teachers of government schools enter into the teaching profession after completing pre-service trainings like Diploma in Teacher Education (D.Ed.), Bachelor of Education (B.Ed.), Pandit Training, Bachelor of Physical Education (B.P.Ed.). To get into govt. schools these pre-service training certificate holders has to clear the District Selection Committee (DSC) examination or APSSC examination in case of school Assistants. At least 80% of the government teachers are either graduates or above. Except in the case of corporate schools in majority of private schools the qualification of teachers is only either graduation or below the graduation. In Andhra Pradesh rural private schools, 10<sup>th</sup> passed also working as teachers. In government schools large number of para-teachers are working with the qualifications of 10th in tribal areas and with intermediate in other areas.

The teachers possessing qualification of Intermediate and D.Ed. are eligible to work as primary school teacher (SGT) and qualifications of BA/BSc and B.Ed. is eligible for secondary school teacher and primary schools. B.Ed. is really a pre-service training for secondary school teaching. These trainees have not undergone any pre-service training of primary education. It means there is no relevance of special training for dealing with children. DPEP, Terminal Assessment Survey (TAS) mentioned that highly qualified teachers working in the primary schools is one of the reasons for the poor quality in the primary classes. These teachers are not satisfied with their job. They feel it is a stepping stone for further development. Leisurely, they prepare for the competitive examinations. In any case, we have highly inadequate teaching force at the primary level. Irrespective of whether a teacher is B Ed or only 10th pass, she is not trained to deal with children.

“In rural areas, teaching posts tend to be seen as plum jobs, with good salaries, secure employment and plenty of time for other activities. Anyone with the required formal qualifications may be attempted to apply, including persons who have no intrinsic attraction to the job, no sympathy for children, or no commitment to the spread of education. Teacher selection focuses on academic qualifications... many recruits are unlikely to have a special aptitude or motivation for teaching" (PROBE, 1999, p.58).

NCTE has given guidelines to the State Government to fill primary school teachers only D.Eds but not with B.Eds. It indicates how the recruitment policy is undergoing change for the better results.

The recent pay revision in the State enhanced the salaries of teachers to a respectable scale. Though society is giving some social recognition to government school teachers (private

school teachers are still ill-paid), but on the whole society has lost confidence in the government school system. Diminishing enrolment in government schools is a major indicator of this. PROBE, 1999 mentioned that "Teachers remain relatively privileged in terms of class, caste and gender. Most teachers come from economically privileged families". (PROBE, 1999). Government teachers are also influenced by Teacher Unions. They may use them to stop their transfers. "Many teachers are anxious to avoid being posted in remote or backward villages. Teachers spend a great deal of time and energy trying to avoid undesirable transfers, lobbying for preferred postings, and building up influential connections to play transfer game. This syndrome has become a major diversion in the teaching profession (PROBE, 1999, p. 60 and 61). The entire department of school education in Andhra Pradesh too is revolving around transfers and promotions' vicious circle every year. Professional work culture is missing in the State. There is an urgent need to professionalise school education and train and treat teachers as professionals. Many teacher training and capacity building programmes are being organised with this objective in mind by the government. To address these problem subject forums were established. For better awareness and sensitization 50 teacher representatives of all teacher unions of the state were taken to a study tour to Kerala for 15 days in the year 2010. A lot more needs to be done of course.

Another important consideration is that due to urbanization, majority of the teachers are commuting from the nearby city to the village schools. This is not only creating a social distance between community and teacher but also effecting quality of teaching. It is also creating additional problems relating to behavior and adjustment.

For the last decade in the DPEP and SSA programs for quality initiatives, trainings are given about understanding children, their nature, learning styles and nature of different subjects. There was a change in their work culture and attitude. They recognized the role of community participation in the school activities. They are now trying to gain confidence of the community to impart quality education among the government school children. They are sharing the school results with the community. With greater honesty teachers themselves talk about their children performance in CILP, CLAPS and LEP and sharing these with community in AMC meetings. They also try to change themselves. However, there is no visible change in teaching learning process through the trainings imparted in the past ten years. Teacher's higher qualifications, their continuous trainings and their abilities are not transforming into good results. It is a failure on the part of the system.

### 3.6 Teacher Trainings

In-service teacher training programs have become a continuous process after NPE-1986, in the State of Andhra Pradesh. Meanwhile a work culture is emerging in which teacher educators, teachers and NGOs are working together for the quality of education. Teachers emerged as textbooks writers, monitoring members, resource persons in the various educational programs. By analysing the training programs of APEP, DPEP and SSA it may be observed that, as the number of training days increased, the quality decreased. Because of non-availability of subject experts, proper training venues, lack of proper monitoring of training, etc. have become major problems in organizing good trainings. Academic discussions and debates are disappearing in the trainings. Teacher training has again reached a stage of 'useless mechanical activity'. However, the quality initiatives taken up in the Andhra Pradesh such as CLIP, CLAPS and LEP meant for attaining competencies of various subjects created interest and teachers felt happy about them as it was their need. The training inputs focused majorly on subject approaches, children learning styles, teaching-learning process, evaluation methods, etc. A lot more needs to be done at the Upper Primary Level.

When the teacher training programs were conducted during working days a criticism emerged that trainings is hampering the functioning of the school. As an alternative to this criticism for the last 3 years training programs were conducted in the summer vacations. But it is also not a success because of problems like drinking water, toilets, hot temperature in the training classes etc. Only teacher attendance to the training is taken as an indicator for the success of the training. The quality of training is slowly deteriorating. The training modules do not reach in time to the venue; funds are not released in time, course coordinators fail in organizing teacher trainings, etc. We need more funds, better avenues and more qualified subject experts.

Giving Earned Leave (which translates into cash) for the teachers attending trainings in the summer has become the motivation for the teachers to attend the trainings. Because of this monetary benefit teachers are not bothered about training inputs questioning the quality of training.

Teachers need to realize that they are continuous learners. To overcome the problems and the challenges of teaching profession and for professional development, trainings are the best sources. However, we should not dump the systemic failures on the teachers. All the shortcomings of trainings are of the failures of the system. (It means that because of not identifying right subject experts, not monitoring trainings, not releasing the funds in time, not providing required training material in training venue and the not selecting proper venue, etc.



are perhaps the primary reasons for the failure of teacher training programmes). Systemic reforms should be taken immediately for better teacher training. Therefore, A.P. curriculum framework proposes the following:

- Teacher trainings should be decentralized. The cascade mode, face-to-face model should be redesigned to avoid transaction loss from top to bottom.
- Provide basic facilities at school complex, MRCs and DIET to emerge as the training and resource centers.
- Evolve an appropriate strategy to develop resources and trained subject experts to give training,
- For effective organization of teacher trainings proper "planning", (including from need assessment to transaction of inputs of training) monitoring and evaluation should be taken care of. The observations of monitoring officers, results of external evaluation should be taken into consideration for further planning and implementation of training inputs.
- The tradition of giving training to all the teachers on the same topic should be withdrawn. In place of this by declaring training components well in advance the teachers may be requested to participate in the trainings as per their needs. Freedom should be given to the teacher to select and participate in the training. Training strategies should be changed for effective training sessions. In place of lecturing and routine group works, reading and referring to books, preparing reports, books reviews, discussions and application of training inputs to regular classroom transaction should be encouraged. An action plan for training strategies should be evolved.
- Trainings should not be with isolated strategies like only face – face, or only teleconference. But an integration of several strategies with the help of technologies should be evolved. Face–face, teleconferencing, phone-in programmes, audio and video presentations , using internet and library or any source of information to work on tasks given in the training programme, consulting experts through e-mails or net working etc. should be integrated. This integration of technology and human contact will enrich the training.
- Training impact studies, external evaluation should be done for the better results of the training.
- Study culture should be inculcated among teachers. For this purpose, school libraries should be strengthened.
- For professional development, school complexes should function effectively. Distance education courses should be designed and made accessible for teachers. Subject forums, networking systems should be strengthened. Research programs shall be made mandatory for teachers.
- To enhance due respect for teachers, let teachers themselves formulate their own code of conduct and follow it voluntarily without any kind of impositions.
- Teachers are treated as tools in a system rather than individuals. They should not be criticized, humiliated, disrespected and ill-treated publicly in meetings and conferences.

### 3.7 Teachers and the Community

So far the community and schools are concerned, a very unfortunate situation prevails in our country and in the State. Schools have become a source of perpetuating and legitimising an unequal status-quo. It ensures that rich stay rich and continue to prosper and poor become poorer and see very little hope for improving their future. One would want a kind of school system where every child can go to an equally good school and all these schools should be governed by a shared set of human and ethical values. On the contrary, we have several different kinds of schools meant for different layers of society even though none of them ensures the quality of education that has been visualised in NCF 2005 or SCF 2011. Middle class and upper middle class children go to modern English medium schools generally showing good results. Children from downtrodden, deprived, marginal sections go to Govt. schools and these children rarely if ever get the opportunities given to the middle class. One should therefore not be surprised at the flight of the poor or lower middle class children to the street schools which are 'English-medium' only in name.

RTE now makes it mandatory that all children receive comparable quality of education. It is therefore now the responsibility of the Central and the State governments to empower schools, teachers and the community to get ALL children to school and provide them quality education. Parents and community members are the important stake holders of the school system. School is the place where socially usefully and acceptable citizens are produced. The school environment promotes mutual understanding, cultural tolerance and sensitivity. There is an inseparable relation among objectives of education and needs of the society and parents.

After 73 and 74 Constitutional amendments education is in the hands of local self governments. RTE-2009 also states that parents should monitor schools to observe their children performances. The school management committees have the right to implant school development class, school supervision and monitoring. Unfortunately teachers do not often agree with the findings and remarks of school management committees in schools; political considerations also enter into these discussions. We note that:

- The committees which were formed to develop the school with parents and community members remained largely dysfunctional.
- Managements and teachers are insecure and misunderstand this committee.
- Committees do not know what to do.
- Teachers are not showing interest towards these committee meetings.

- Some parents and committee members feel that they are not suitable persons to talk with teachers about school.
- There is no funding for trainings these committees.
- Sometimes these committees try to blame the teacher at all costs.
- Most of the committee meetings are held at the time which is not suitable to be committee members particularly in rural areas.

This is becoming a challenging task. But the experiences of Kerala and Nagaland shows that we can get good results only with the help of proper teacher motivation. To attain good functioning of school management committees SCF recommends the following:

- Make teachers aware of the importance of society and parental participations by avoiding insecurities.
- Make exposure visits to the schools that developed with the help of society participation.
- Conduct training programs including teachers and school management committees to build confidence about school development.
- SMC and teachers sit together to develop school development plans and utilisation of resources properly.
- Meeting conducting responsibility should be handed over to chairpersons, MRP/CRP or an NGO should act as moderator.
- Meeting time schedule and place should be appropriate for committee members.
- Parents and committee members do not defeat self-confidence of the teacher.
- Mutual respect is necessary to express their ideas without fear.

## **4. Curricular Areas**

### **4.1 Linkages between Curricular Areas**

Along with the child, it is interaction which is at the centre of SCF. This interaction obtains on the one hand between the child, teachers, parents and the community and on the other between them and the TLMs and learning resources of all kinds. SCF also believes that there is a set of underlying cognitive abilities such as analytical skills, logical reasoning and inference building which in different forms underlie all system of knowledge. After completion of school education children should develop a scientific temper, specific attitudes, physical skills, language abilities and abstract thinking. In addition to that children should be able to appreciate diversities in the society with a humanitarian perspective, and to think critically and creatively. They should become responsible citizens and rational human beings. This curriculum framework also promotes a shift from rote learning to constructing knowledge that can be utilized in new environment. The knowledge that is generated from the school must be based on child background and their experiences. Crafts, arts, play, work, health are also key areas in school curriculum along with subject specific areas. Assessment is also an integral part of the learning process. It provides feedback both to the teacher and learner.

### **4.2 Language and Language Teaching**

Language plays a vital role in school education as a subject and as a medium. Language is a unique characteristic of human beings. It is the vehicle of thought. Many linguists may think of language only as a combination of words and phrases and sentences based on a set of grammatical rules. But for a speaker and a community language is much more than that. It is not only a medium for thought but also a resource through which all knowledge is constructed. It is also a marker of a community's identity.

#### ***Children's Language***

All children except those who may suffer from a mental deficit are born with an innate capacity to acquire languages. All normal children are in a sense linguistic adults by the age of 4 i.e. they know the basic vocabulary and the overall grammatical structures of the languages they are exposed to subconsciously. Children acquire extremely complex and rich systems of rules that govern language at the level of sounds, words, sentences and discourse structures. It is quite natural for children to learn more than one language at a time when there is rich exposure and caring and loving environment which is meaningful. Children are also highly

innovative in their use of language and acquire linguistic systems on their own terms. They don't imitate and rote-learn. Actually, it'd be so boring if they did. We will never hear novel sentences ever.

### ***Multilingualism***

Multilingualism is constitutive of human identity. Even the so called "monolingual" in a remote village possesses a verbal repertoire that equips her to function adequately over a large number of communicative encounters.

It is natural that our classrooms are multilingual since all societies employ a highly diversified repertoire to negotiate a multiplicity of situations. Therefore rather than treating classroom multilingualism as an obstacle, we should treat it as a resource and try to use it as a teaching strategy. It can be used to enable the child to sharpen her cognitive skills and also to acquire the target language. So the survival and maintenance of multilingualism should be at the centre of our language planning. We must find ways of respecting and using the multiplicity of voices represented in our classrooms. A child whose voice is not heard will definitely feel alienated and is likely to drop out of the school. Instead of teaching mechanical and boring grammar, we can make use of the multiplicity of languages available in the classroom as a basis for reflecting on language structure. Once again SCF suggests that it is interaction among linguistic groups that's at the heart of classroom processes.

### ***Second Language Learning***

Human beings are born with a language faculty and this enables them to acquire any number of languages at any point of time in their lives. It is true, however, that children acquire new languages much faster, in particular their sound systems. Adults are often better at acquiring words and sentence structure. If children fail to learn new languages such as say Hindi and English in Andhra Pradesh, the problem is not with children; the problem is with materials, methods and teachers and the overall infrastructure provided in the school. A second language will get easily learnt if we can ensure rich and challenging exposure and a caring and sympathetic environment. Rich exposure would include engaging with discourses of a wide variety including poems, stories, plays, jokes, hoardings, songs etc; and this engagement should ensure reflection and analysis. It is in the process of creating such an environment that languages and cultural practices children bring to school with them begin to get respected and used creatively in the teaching process. In general, the process of teaching a second language should approximate as closely as possible to a situation in which that language is acquired as a first language. This indeed is a difficult task but approximation is always possible.

### *Learning Outcomes*

Traditionally, learning outcomes have been seen only in terms of LSRW i.e. Listening, Speaking, Reading and Writing as discrete skills. We need to have a more holistic perspective on language outcomes just as we suggest a more holistic approach to the processes of language teaching. At all times, we would like to assess children in terms of the discourses they produce. In these discourses, not only listening, speaking, reading and writing will be involved but also situation appropriate use of language and the use of various visual media such as drawing and painting. The focus of language outcomes should be on reading and writing with understanding; it should help children to listen to others with patience and speak effortlessly with confidence. **We must insist that the language teaching programme should FIRST focus on enhancing proficiency levels in the mother tongues of children.** Once that is ensured, it will go a long way in helping children acquire higher levels of proficiency in other languages and subjects.

### *Language learning outcomes:*

- Listening, Understanding and Responding
- Speaking Appropriately
- Reading with Understanding
- Writing
- Vocabulary
- Creative Expression
- Aesthetic Sensibility and Social Responsibility
- Metalinguistic Awareness

As children move from the Primary to the Upper Primary and Secondary levels, they should be able to use language in increasingly abstract situations. They come to school with Basic Interpersonal Communicative Skills (BICS) in the languages of their neighbourhood; our first task is to ensure that they acquire CALP (Cognitively Advanced Language Proficiency) in the languages they already know. Once that's done, it would be much easier to acquire both BICS and CALP in other languages using multilinguality as a resource.

### **4.3 Mathematics**

Mathematics is one of the important subjects which inspires child's mind. This plays vital role in the cognitive development of child along with language in our school education. Human brain has the capacity to derive abstract concepts from daily life experiences. Mathematic is generated from this human ability. There is no relationship between number and object. For example the abstract concept of number 'three' is related to the concrete examples of 'three apples, three books, three girls etc...' Similarly triangle is also an abstraction and has no relationship with the shape of sail or rooftops of certain kinds.

Mathematics doesn't limit itself to such abstraction. It uses such abstract concepts to build many more abstractions. For example even numbers, odd number, prime number are abstractions. These are all derived from 'number concept'. Even though mathematics must have started with human experiences, its progress and development don't depend on that factor. They depend only on logical and creative thinking of human mind. This means that every mathematical statement need not correspond to daily life experience. It should be experienced only in human mind.

The ultimate aim of mathematics education is to inculcate capacity of mathematical problem solving among children. Among those number relations, four fundamental operations (addition, subtraction, multiplication and division), measurements, decimals, percentages are the primary objectives or lower order objectives. Mathematical thinking, logical thinking, logical conclusions, understand abstract concepts etc. are the higher order mathematical objectives. Both objectives contain capacity to organize various activities, capacity to solve problems, attitudes and aptitudes towards mathematics.

#### ***Vision for school Mathematics***

1. Children learn to enjoy Mathematics rather than fear it.
2. Children learn that Mathematics is much more than formulae and mechanical procedures.
3. Children see Mathematics as something to talk about, to communicate through, to discuss among themselves, to work together on.
4. Children pose and solve meaningful problems.
5. Children use abstractions to perceive relationships, to see structures, to reason out things, to argue the truth or falsity of statements.

#### ***Objectives of Mathematics***

Keeping in the view of importance of logical thinking in mathematics teaching, priority should be given to logical proofs. School level mathematics should promote these logical and organised proofing methods. The objectives of teaching mathematics would include:

- Children should be able to develop skill and understanding the various curricular areas related to number and space.
- Children should be able to reason mathematically.
- Children should be able to pursue assumptions to their logical conclusion.
- Children should be able to handle abstraction.
- Children should develop problem solving abilities understand, formulate problems, develop a variety of strategies to solve them verify and interpret results, generalize to new situation.
- Children should develop confidence in using mathematics meaningfully.
- Children should develop the following problem solving capacities –
  - Understand problem/arrange information about the problem.
  - Formulate different tactics for the given problem.
  - Analyse and explain results.
  - Apply those results for new situations or problems or able to generalise.
- Children should have confidence on applying mathematics in a meaningful way.

### **Stage wise – competencies / objectives**

#### **Elementary school**

- Any curriculum for elementary Mathematics must incorporate the progression from the concrete to the abstract. Starting with concrete experiences helps the child understand the connections between the logical functioning of their everyday lives to that of mathematical thinking. At the same time, there is a need to help children handle abstraction.
- Children need to be given space for problem solving, especially problems which present real life situations. They need to be encouraged to come up with and use more than one way/method of doing things.
- Mathematics games, puzzles and stories involving numbers are useful to enable children to make these connections and build upon their everyday understanding. Games – not be confused with open ended play – provide non-didactic feedback to the child, with a minimum amount of teacher intervention.
- The Mathematics syllabus for the elementary classes has to revolve around understanding and using numbers and the system of numbers, understanding shapes and spatial relations, measurement, handling data etc. In this the identification of patterns is central as it helps children make the transition from arithmetic to algebra.

#### **High school**

- “Skills are taught, concepts are caught.” (This has been said by many Mathematics educators, in particular by P K Srinivasan.)
- At this stage Mathematics comes to the student as an academic discipline. At the elementary stage, Mathematics education must be guided more by the logic of child



psychology than by the logic of Mathematics. But by the secondary stage, the student begins to perceive the logical structure of Mathematics. The notions of argumentation and proof become central.

- Geometry and trigonometry are widely regarded as the area wherein students can learn to appreciate this structure best. Another area which can be used is Number Theory; e.g., tests of divisibility; properties of the sequence of positive integers.
- Algebra, introduced earlier, is developed at some length at this stage. Facility with algebraic manipulation is essential, not only for applications of Mathematics, but also internally, in the discipline itself. Proofs in trigonometry and geometry show the usefulness of algebraic machinery. It is important to ensure that students learn to visualize geometrically what they are able to accomplish algebraically.
- The student needs to integrate the many techniques of Mathematics into a problem solving ability. For e.g. this implies a need for posing problems to students which involve more than one content area: algebra and trigonometry, geometry and mensuration and so on. Trigonometry is used to prove results in Euclidean geometry; for example the theorem of Apollonius. (Note however that it is *not* possible to prove Pythagoras's theorem using trigonometry, as this involves circular reasoning. The student needs to be aware of such logical traps, which are quite common).
- A graded exposure to non-routine problems is essential, right from the early years. This exposure must be gradual. It is pointless either to pose problems that are beyond a child's ability, or so simple that they do not in any way challenge the child. Only a teacher who has worked with the children and knows them well would be able to decide the right level of problems to pose.
- Mathematics is used in the Physical and Social Sciences, and making the connections explicit can inspire students immensely.
- Mathematical modeling, data analysis and interpretation can consolidate a high level of mathematical literacy.
- An emphasis on experimentation and exploration is worthwhile. Mathematics laboratories are a recent phenomenon which will expand in the future. Activities in practical Mathematics help students greatly in visualization.

The following activities may be used to enhance learning-

- Problem posing and solving. Real life problems can also be analyzed in a group and more ideas incorporated as a result of group discussion.
- Finding algorithms in Mathematics. Testing algorithms. Finding more than one way/method of doing things.
- Making conjectures, building arguments, testing them, generalize them and verifying results.
- Mathematical quizzes are a good medium for sparking interest in problem solving. These could be within a school or across schools in the form of a competition. The questions asked should be based upon the syllabus.

- In the classroom students should be encouraged to present ideas, prepare talks and deliver them in front of other students and teachers. The topics may be from the regular Mathematics syllabus and also from the world of science and applications.
- The formation of a Mathematics Club in a school can help create a stimulating mathematical environment in the school.
- A Problem Corner can be started by the Mathematics Club, with suitable puzzles and mathematical problems at all levels.
- Mathematical laboratories can have models of different kinds including geometrical shapes and solid objects like spheres, cubes, etc; charts of interesting curves; biographies of mathematicians; computers with Mathematics software; etc. Posters, charts, equipment for explaining theorems or making measurements can be kept in this laboratory. These have to be supplementary and used as temporary scaffolds to help build abstract concepts.
- Projects involving exploration. For e.g. collecting figures, photographs and models which have mathematical significance, from temples, mosques, churches, wall decorations etc, especially during festivals. Looking for patterns in nature.
- Mathematics teaching can be made more interesting by telling students about the lives and works of some Mathematicians and relating the evolution of Mathematics to historical events. The story of development of various mathematical ideas and concepts can be very interesting and inspiring for children. Audio-visual displays can be prepared which will bring out the latent creativity of children, and the children can also do skits connected with historical themes.

## 4.4 Science

### *Nature of Science*

Over the course of human history, people have developed many interconnected and validated ideas about the physical, biological, psychological, and social worlds. Those ideas have enabled successive generations to achieve an increasingly comprehensive and reliable understanding of the human species and its environment. The means used to develop these ideas are particular ways of observing, thinking, experimenting, and validating. These ways represent a fundamental aspect of the nature of science and reflect how science tends to differ from other modes of knowing. Science presumes that the things and events in the universe occur in consistent patterns that are comprehensible through careful, systematic study.

Science also assumes that the universe is, a vast single system in which the basic rules are everywhere the same. Knowledge gained from studying one part of the universe is applicable to other parts. For instance, the same principles of motion and gravitation that explain the motion of falling objects on the surface of the earth also explain the motion of the moon and

the planets. Science is a process of constructing knowledge. The process depends both on making careful observations of phenomena and on inventing theories for making sense out of those observations. Change in knowledge is inevitable because new observations may challenge prevailing theories.

Most scientific knowledge is durable. For example, in formulating the theory of relativity, Albert Einstein did not discard the Newtonian laws of motion but rather showed them to be only an approximation of limited application within a more general concept. Continuity and stability are as characteristic of science as change is, and certain as prevalent as tentativeness. There are many matters that cannot usefully be examined in a scientific way. There are, for instance, beliefs that-by their very nature-cannot be proved or disproved (such as the existence of supernatural powers and beings, or the true purposes of life).

### *Scientific Inquiry*

Plato believed that only through the mind we can arrive at reason and truth. Science asks three basic questions.

What is there?

How does it work?

How did it come to be this way?

Fundamentally, the various scientific disciplines are alike in their reliance on evidence, the use of hypothesis and theories, the kinds of logic used, and much more. Scientific inquiry is not easily described apart from the context of particular investigations. There simply is no fixed set of steps that scientists always follow, no one path that leads them unerringly to scientific knowledge. There are, however, certain features of science that give it a distinctive character as a mode of inquiry. Although those features are especially characteristic of the work of professional scientists, everyone can exercise them in thinking scientifically about many matters of interest in everyday life.\_ The validity of scientific claims is settled by referring to observations of phenomena. Hence, science concentrates on getting accurate data.

Scientific concepts do not emerge automatically from data or from any amount of analysis alone. The assumption has to be connected with conclusions through scientific arguments that conform to the principles of logical reasoning. Sometimes discoveries in science are made unexpectedly even by accident and often by leaps of imagination.

The predictions may be about evidence from the past that has not yet been found or studied. A theory about the origins of human beings, for example, can be tested by new discoveries of human-like fossil remains. This approach is clearly necessary for reconstructing the events in the history of the earth or of the life forms on it. It is also necessary for the study of processes that usually occur very slowly, such as the building of mountains or the aging of stars. Theories are judged by their results: When someone comes up with a new or improved version that explains more phenomena or answers more important questions than the previous version, the new one eventually takes its place.

### **Science as a Complex Social Activity**

Scientific work involves many individuals doing many different kinds of work and goes on to some degree in all nations of the world. Men and women of all ethnic and national backgrounds participate in science and its applications. These people—scientists and engineers, mathematicians, physicians, technicians, computer programmers, librarians, and others—may focus on scientific knowledge either for its own sake or for a particular practical purpose, and they may be concerned with data gathering, theory building, instrument building, or communicating.

### ***Science as the subject in the curriculum***

As per the general aims objectives content pedagogy and assessment would differ across different stages. While deciding gradation of science curriculum it must be borne in mind that a majority of the students learning science as a compulsory subject up to class –X in Andhra Pradesh. But most of these children are not going to train as professional scientists or technologists in their latter career yet they need to become scientifically literate. The science curriculum up to class – X should be oriented more towards developing awareness among the learners about interface of science, technology and society besides being able to look at the world in a rational manner and apply principles of Science to daily life. It should stress not only the content of the science but also the process skills and their linkage with the experiences and daily life.

### ***Primary Stage***

The main objectives of Science teaching at this stage are to maintain the curiosity about the world and have the child engage in exploratory and hands on activities that would lead to the development of basic cognitive and psychomotor skills. All this would be through language, observations, recording, differentiation, classification, inference drawing, reading and making illustrations, design and fabrication of simple things, estimation and measurement. The

curriculum should also help the child internalize values of cleanliness, honesty, co-operation, concern for life and environment at the primary stage. During this stage:

- 1) Children should be encouraged to explore their immediate environment without too much focus. For example, in the first two years this exploration can be without the aid of a specific science textbook. The book on language can contain topics that induce the child to look around and develop a familiarity with their surroundings.
- 2) Science education can be a part of environmental studies from class III to V so that children can examine and relate to their world holistically.

The assessment of Science at this stage should aim at checking the knowledge acquired as well as the skills developed. Some not obvious skills only language comprehension and reading ability, ability to work in groups, etc.

The criteria for identifying the content at the primary stage are relevance, meaningfulness and interest to the child. The content should provide opportunities to deal with the real and concrete world of the children, rather than a formal abstract world. The present practice of introducing ideas and concepts pertaining to science and social science as environment studies should be continued and further strengthened, with opportunities for children to observe, explore and relate to environment closely. It is, therefore, essential for the curriculum, syllabus and textbook developers of both the 'sciences' and 'social studies' groups to work together.

Scientific concepts to be taught at this stage should be chosen so as to make sense of everyday experiences. Apart from simple experiments and hands on experiences, an important pedagogical practice at this stage is to engage the students (in groups) in meaningful investigations – including particularly the problems they perceive to be significant and important. This may be done through discussions in the class with the teacher, peer interactions, gathering information from newspapers, talking to knowledgeable persons in the neighbourhood, collecting data from easily available sources, doing simple experiments and carrying out simple investigations in the design of which the students have a major role to play.

#### ***Upper Primary Stage***

Science education at this stage should provide a gradual transition from an exposure to ideas of Science through environmental studies of the primary stage to elements of science including its concepts, processes and methods. Scientific concepts to be taught at this stage should be chosen so as to be related to and help the child better sense of her everyday experiences. The emphasis on the process skills of science should continue through the upper primary stage to

enable children learn how to learn for themselves so that they could carry on learning to even beyond school.

The examination should assess the Childs practice and problem solving skills, ability to analyze data, application of knowledge learnt development of concepts, understanding, reading and making graphical representations and solving simple numerical exercises. Technology component of Science Curriculum could include design and fabrication as well as practical knowledge about common mechanical and electrical devices and about local specific technologies.

1. Science education should remain as general science for class VI to VII.
2. At this stage group activity, peer group interaction allowing for the child to articulate her formulations, questions, etc.
3. Children should be engaged in learning the principles of science through familiar experiences and to start recognizing the relationship of science and technology with society.
4. For example, students should be encouraged to make very simple working models using locally available materials.

### *Secondary Stage*

At the Secondary Stage concepts principles and skills of science would now appear appropriately but stress should be on use of concepts, on the ability to investigate and on comprehension and not on mere formal definitions. The organization of science content must be around what is close to children and the curricular load needs to be substantially reduced from the present to make room for aiding concept development and for the elements of design.

### **Learning out comes in science:**

- Conceptual understanding and Application to daily life situation
- Asking questions and making hypothesis
- Experimentation
- Information skills
- Communication through drawing , models
- Concerned towards biodiversity
- Aesthetic sensitivity and appreciation

## 4.5 Social Studies

Our children are growing up under rapidly changing conditions consequent upon the process of globalisation and deeper penetration of market in the lives of people. These processes simultaneously open possibilities for personal advancement and social mobility while also posing serious challenges to the livelihoods of people.

Social Sciences have been undergoing major paradigm shifts from the earlier positivist moorings to development of critical methods accommodating multiple perspectives. It is a matter of satisfaction that many academic institutions based in Andhra Pradesh and intellectuals from Andhra Pradesh have made significant contributions to this transformation of Social Sciences. It is time to harness this positive resource to transform our school education. Social science pedagogy requires that the curriculum be designed keeping in mind the context of the learners. The challenge before the Social Science curriculum designers is to address regional variations while at the same time conforming to more universal curricular objectives. Attempts should be made to help children understand their own world and the larger world through constant comparison and reflection over the similarities and differences. This requires both sensitivity to major regional social issues in the text books and also space for the teacher to take up issues of local and topical importance while teaching in the class. As a part of Social Science Teaching we need to develop special skills relating to the deciphering information and perspectives encoded in different media – narratives, visuals, tables, maps, graphs and pie charts. Equally important is to enable children to critically question the information so provided and assess its value and limitations.

### *Nature of Social Sciences*

A number of disciplines (like history, geography, economics, political science, etc) each with their own distinct methodologies and perspectives constitute Social Sciences. While respecting the distinctiveness of each, it is also necessary to develop inter-disciplinary perspectives to arrive at a holistic understanding of social issues. Social Sciences study different aspects of human life to understand social phenomena and also to help us determining normative priorities and policies.

They study society by using rigorous methods which are both quantitative and qualitative. In quantitative approach social phenomena are studied through quantifiable evidence where in statistical procedures are adopted to create valid and reliable findings generalisations are made

after studying many cases. In qualitative approach social phenomena are studied through direct observations, direct and indirect interaction with participants, analysis of texts and documents etc.

Another important feature of social sciences is that they always advocate multiple perspectives approach as human phenomena cannot and should not be understood from only one point of view. Multiple perspectives approach is more holistic and comprehensive as identification and utilization of various sources / points of view will help in development of analytic and critical thinking

### ***Social Sciences and Integrated Approach***

While teaching history a healthy balance between local, regional, sub continental and global histories needs to be maintained. There is great potential in local history, which has not been tapped in our history teaching for fear of local chauvinism. However it is time we abandoned this fear and come forward to study the history of the immediate social world of the students using critical methods. This will also enable us to broaden the issues discussed in history to include communities, settlements, technologies, cultures and folklore besides the conventional political and socio-economic themes.

Geography seeks to understand spatial patterns in social phenomenon in general and to explain spatial variation. An important component of this investigation is the relation between the natural environment and society. Investigation of the dynamic relation between natural environment and human societies, relations within a society, and the relation between societies inhabiting different regions opens up immense possibilities of moving back and forth from the immediate environment of the child to the global world.

Spatial variation is typically depicted on a map and the skill of interpreting and making maps of varied kinds is essential part of the training that geography education provides. However, maps need to be seen more than a mere skill of depicting information. Cartography is deeply embedded in the history of Geography and its social contexts. The major drive behind mapping the entire earth comes from the colonial need to access resources of the entire earth and gain control over all the peoples of the world.

This is a relatively a new theme in school curriculum which seeks to provide inputs to the budding citizens to understand the socio-economic and political world in which they live in. It thus draws from a number of Social Science disciplines like sociology, economics, political



science etc. It also takes up the major challenge of addressing normative issues like plurality, equity and justice. It thus combines in itself a dual objective of developing basic tools of social, political and developmental analysis and fostering the humanist values enshrined in the Constitution of India.

The general tendency to preach normative values in simplistic discourses is highly inadequate and can only foster cynicism in children. Any discussion of the norm needs to be accompanied by a discussion of actual social realities and problems in realising the norms. Such a critical engagement with the norms along with positive examples is essential for fostering a realistic and hopeful attitude among the students. Economics, Political Science and Sociology: These disciplines are introduced as separate subjects at the Higher Secondary stage for those who opt to study them.

It is suggested that while the existing disciplinary orientation may be retained, there is a need to make the boundaries between disciplines more porous. Wherever there is overlapping of the disciplines integrated approach must be adopted as there is a need for interlinking and cross referencing of different areas. As pointed out above in the section on feedback from teachers, there is an urgent need to address the issue of integration of the subjects at the Elementary School level. An alternative approach is to take up themes like family or agriculture and treat them in a multi-disciplinary manner – going into their histories, geographic underpinnings or variations, institutional processes etc. However, multi-disciplinary approach needs a prior training and background in the different disciplines.

**The themes** for the Elementary School Level can be as follows: Diversity on the Earth – Landforms and Climates, Production, Exchange and Livelihood, Governance, Social Organisation, Inequities, Deprivation and Social Movements, Religion & Society, Culture & Communication, Skills to Study Social Sciences. It is suggested that such an eclectic integrated framework may be followed for the Middle School classes (ie class six to eight), and we may adopt a more discipline based framework for the secondary classes (class nine and ten onwards).

#### ***Broad Objectives of Social Science Teaching***

Objectives of Social Science Teaching are Develop skills of reasoning and exploring causation in social context. Relate the immediate social developments to broader global trends and the vice versa. Understand variety of human experiences across time and space. Understand

multiple perspectives of looking at social world. Understand the differential impact of social phenomenon on different sections of people. Develop the ability of critically evaluating received information, hypotheses and images. Develop abilities to handle text, data, illustration i.e. different modes of representing/ interpreting/ visualizing information and knowledge . Critically engage with social and constitutional values.

### *Learning outcomes in Social Sciences*

Keeping in view of broader outcomes of social sciences the following learning outcomes are identified.

- **Conceptual understanding:** similarities, differences, giving examples, explanation, classification, application in new situations etc.
- **Reading comprehension and interpreting the text:** reading, comprehending, reflection, interpretation, critical analysis, dialectical analysis, developing flow charts, information sheets, taking notes and writing summaries. etc
- **Information skills:** gathering information recording, tabulation, represents the data through graphs, picture, information of tables, maps, analyzing the information charts and tables, drawing inferences, occlusions, making predictions etc.
- **Explaining causation and open reasoning:** ask questions, questioning the text , identify relations , relationships, interdependence, cause and effective relationships, response to the open ended questions and dialectical reasoning, analysis the contemporary issues.
- **Mapping skills/ picture reading skills:** map reading, map drawing, map pointing, preparation of thematically maps, picture reading, compare the picture with the text. Interpreting the text etc.
- **Appreciation and sensitivity:** respect others opinions, others language, equality, diversity, traditions, heritage etc.

## **4.6 Ethics, Values and Human Rights**

Humans are social beings and because of that they have built a fairly complex society. The functioning of this system and the earlier situation of surviving together requires an understanding and a sense of trust. It also requires a feeling of togetherness and interdependence. Human societies therefore need principles of behaviour that are acceptable. We cannot act behave as we want and yet expect the society to survive. Each society has its own ethical code based on its circumstances. The plurality of these ethical codes also has some underlying common principles that are accepted.

Ethics are the principles that guide our behaviour and therefore it is appropriate that children also get to absorb them. It is important to recognise that ethical development is not like following a set of rules or behaving in accordance with a set pattern laid out by someone else. It means the ability to find reason for what is appropriate at each point and act accordingly. The development of ethical consciousness implies the ability to feel comfortable with the choice to be made and be at peace with oneself in making that choice. This is in contrast to the feeling of having to do because 'that is how it is told to me.' The essence of ethical development is therefore to be at peace with oneself. The person acts in a way that she chooses to and the way that is reasonable rather than because she has to do it otherwise she would be punished or reprimanded or disgraced in some way. It means that she has an internalised set of ethical principles that guides her each time and enables her to make her choice which may be aligned or be at variance with what others living in the same group would suggest to her.

At present, in all societies, unrest exists in every walk of life. We can clearly observe and recognise the deterioration in ethics and the increasing stress in the lives of all peoples. A partial reason for this is the lack of development of conscious ethics among all people the society. These changes did not take place in a day or a year. They are a result of the gradual erosion of moderation and balance in our lives. That has been replaced by consumerism, greed and exploitation. And the net result of that has been insecurity and mistrust in the society. The mass media, disintegrated family system, market trying to sell its products and commercialized education system accentuate it.

The state of affairs in Andhra Pradesh are not different from those defined above. They are also the same in other parts of our country. Apart from the local level differences and inequalities, we have regional and economical inequalities, increasing unhealthy competition and commercialization of every aspect of life. This leads to situations like those of atrocities on women, female feticide and human rights violation. The root cause of all this is the deteriorating values and human relations in people and the spread of unrest in the society.

There is need for ethical development to be a part of school in order to have a dialogue with the children on the need for certain values and opportunities to engage with the implications of these on their lives. This dialogue would be through the analyses of the practice of ethics and values, their own lives and the options. It is important to be conscious of the strategies that can be used with children and the programs that can be taken up to help children confront the edge between individual and the collective; between consumerism and temperance, between

violence and peaceful struggle, between heated argument and patient negotiation, between parochialism to plurality and liberal ideas. In the context of ethical development the schools need to continuously ask the question: what can be done in the school social environment and in the class-room? What values should be developed in children? How do we sensitise children to respecting the rights of other human beings and be tolerant yet firm?

Each family in its interaction with the child instils some habits in children. These are instilled in various ways. Besides they are not the same for all children and may not be in conformity with what is expected by the constitution of India. Ethical principles that each community holds may not necessarily respect all communities and children may not come with a sense and belief of equity and similarity in all human-beings. Yet in order for a society to exist and for a nation to grow it needs a set of ethical principles and values that are commonly acceptable. The society also needs people to act according to these principles and values. And act on them, as has been said preferably of their own volition.

This is the role of the school. To bring together children coming from different back-grounds with various sets of ethical principles and values to a shared plural understanding of reasonable choices. The possession of values and conducting oneself with wisdom and sagacity are integral parts of holistic development of children. The key principles and values stressed in the constitution include justice, equality and fraternity. These in action imply pluralism, respect for others, self-respect and self-confidence, social responsibility, love, care and compassion, critical and creative thinking values, and aesthetic values. It is important to recognise that sense of equality, compassion and critical thinking are crucial for making a person an ethical and autonomous responsible citizen of a society or a nation. It is these together that make her capable of making reasonable choices in action. Once again, all these values can be promoted meaningfully more through the kind of interactions between the child, the school and the community that SCF talks about.

#### **4.7 Health Education and Physical Education**

Children's health is an important concern for all societies since it contributes to their overall development. *Health, nutrition and education* are important for the overall development of the child and these three inputs need to be addressed in a comprehensive manner. Health is important for the physical development of any individual. The practice of

Physical education activities in school leads to sound health among the children. Health is not merely the absence of disease but is influenced and shaped by the access to basic needs like food, safe water supply, housing, sanitation and health services. Health is a multidimensional concept because it is shaped by biological, social, economic and cultural factors. *Health education is the sum of all experiences which favorably influence habits, attitudes and knowledge relating to individual, community and social health. Health education in school includes healthful school living and health instruction, and health service.*

*Physical Education is the cultivation of the powers and capabilities of the student as it will enable him to maintain his bodily condition in the best working order, while providing at the same time for the greater efficiency of his intellectual and spiritual life. Physical education including Yoga, games and sports aims at developing an all round personality of the child. It contributes not only to the physical development of the child but have positive impact on psycho- social and mental development as well. **Sports are not only essential but also indispensable for an all-round development of the youngsters.** Physical education plays a critical role in educating the whole student.*

*The benefits of physical education can affect both academic learning and physical activity patterns of students. The healthy, physically active student is more likely to be academically motivated, alert, and successful. In the preschool and primary years, active play may be positively related to motor abilities and cognitive development.*

We should not forget children with disability while thinking of physical education; they need physical exercise and sports as much as others. Every possible effort should be made to organize events in all possible formats. There would be events in which they would participate with other children while there will also be events exclusively organized for children with disability. The point is that cultural and sports dimensions are as important for them as for other children. Physical activity has a positive impact on cognitive ability, tobacco use, insomnia, depression and anxiety.

*In order to transact the curriculum effectively it is essential to ensure that the minimum essential physical space and material equipments are available in every school, and that the doctors and medical personnel visit the school regularly. Teacher preparation for this area needs well-planned and concerted efforts. This subject area, consisting of health education, physical education including yoga must be suitably integrated with the elementary and*

*secondary pre-service teacher education courses. Therefore it is recommended that this area must be a compulsory subject up to the tenth class and be treated on par with the core subjects so that students wishing to opt for it can do so in lieu of one of the five subjects for the board exams at the end of Class X.*

*Physical education including yoga, games and sports should be given appropriate place in the school timetable. It should become an integral part of school processes. Health Education of children is a combined responsibility of home, community and the school. Health Education in the school should form a part of the mainstream programmes of the school contributing to the development of a right attitude among children towards health and inculcation of good health habits in them.*

*Teacher preparation at different levels is mandatory and refresher courses must be made available for in service teachers at least once in five years for their professional growth with appropriate incentives. Resource material should be made available to the pre-service and in-service teachers to enhance their knowledge of the subject. As already pointed out, specially trained tutors practicing Yoga would be required for the yoga classes. The evaluation for this area has been divided into theory and practicals with 70 percent for the former and 30 percent for the latter.*

#### **4.8. Assessment for Learning**

Assessment is considered as a process of estimating ways of children learning and development. Assessment and learning are mutually dependent and both cannot be assessed comprehensively through marks or ranks. Assessment is an internal part of learning. Assessment provides direction to the teacher to plan for appropriate teaching learning processes. Assessment also provides information on learning gaps among the children in different subject areas, teaching, learning processes, organization of learning experiences TLM used etc. The assessment should focus NOT on rote learning and information testing BUT on concepts and conceptual understanding, skills, competencies / abilities , interest, attitudes, creativity, values, games, sports and expressive arts and participation in creative activities.

### ***Present Status – Challenges and Move Forward***

Assessment is reduced to examining only the academic skills. The present assessment procedure is not assessing over all development of the child, but assessing rote memory skills, recording and reproducing skills. The fear of examination creates lot of fear and stress among the children and parents. Unfortunately the failures in the board examination students commit suicides. The sole agenda for the teachers is preparing the children for the examinations. Examinations are creating the competition among various institutions.

In the state of Andhra Pradesh conducting SSC Board examinations is a prestigious task for entire school education department. Bureaucrats, politicians, Headmasters, teachers and parents show keen interest in getting best result by designing 40 days programmes, special study materials to make children well equipped with ready-made answers. The process of examination goes on easily for 15 days. The students have to write 11 papers for 6 subjects. And after examination they try to release results within 45 days. The testing items (questions in examinations) are repeated, monotonous and sometimes socially unjust.

### ***Assessment in different subjects***

The nature of different subjects and their knowledge systems are different. Learning takes place as per the nature of subject and nature of the child. Therefore the assessment should also be different in subjects. Variety of ways may be selected for the assessment of the knowledge of various subjects.

We can use the following as evaluation tools in the assessment procedures.

- Portfolios.
- Anecdotes (Record of specific details of pupil)
- Participation in different discourses and extra-curricular activities
- Language games
- Report preparation and presentation
- Project works
- Performance reviews and book review etc.

### ***Continuous and Comprehensive Evaluation (CCE)***

In this context the NCF 2005 and RTE 2009 recommended for appropriate curricular and examination reforms and for the implementation of continuous and comprehensive evaluation. The CCE refers to assessment of physical, mental development along with development of

knowledge skills and various competences. This requires a variety of assessment tools and procedures.

The holistic development of children can be assessed through the process of continuous and comprehensive evaluation. The school processes may also become part of CCE. The CCE leads to:

- Reduction of mental stress and fear of exams among children.
- Assessment will be complete and comprehensive.
- Teacher work for children development through comprehensive plan.
- Appropriate changes in teaching learning processes.
- Identification of learning problems / issues.
- Provides clarity to the teachers on how they teach and how to provide individual concentration for the children with learning difficulties.
- Assessment will become continuous through formative evaluation and helps teacher to adapt suitable strategies for the remedial teaching for the children who are lagging behind in certain subject specific areas.

#### ***Teacher Appraisals***

Continuous teacher preparation and development of their professional expertise for effective organization of curriculum with appropriate TLP and TLM is a must to ensure children learning achievement and development in a holistic manner. Therefore, regular teacher appraisals must be there to see to what extent teachers are fit to perform their professional duty and motivate children towards learning with appropriate learning tasks.

#### ***Recording – Reporting and Sharing***

Progress recording of children learning achievement is one of the important areas in the process of assessment. The results shall be analyzed with children and plan accordingly made for further development.

- Recording children progress competency wise and make it more transparent and open for children and parents.
- The progress reports shall not only constitute progress in curricular subjects such as languages and non languages but also pertaining to children development in physical and as well as other areas such as interests, attitudes, values, etc., i.e., comprehensive development of children.



- Encouraging children for self appraisal by way of providing exercises, activities in the text books as being followed in text books of Kerala Government.

#### *What should be done?*

Provision for documented evidence of children performance in the form of assignments, portfolios, projects, anecdotes with due weightage should be made. Nature of questions in examinations should be open ended and analytical which gives space to child to think and express on his own. As per RTE-2009 there shall be no board examinations up to class VIII and the board examinations at class X shall be made more process oriented and continuous and comprehensive in nature. Examination reforms should be aimed to reduce fear, stress and anxiety about examinations and among children, parents, teachers and facilitate the children to express their learning experience and performance freely without any stress or fear. 50% weightage to board examinations and remaining 50% weightage shall given to projects, assignments, experiments, etc. Due weightage shall be given to creative areas health and Physical Education, Art, Craft, Work, Experience, Values and education etc., Introducing grading system in place of marks which reflects learning competency of child in difference subject areas. Commissioning open book system in the identified subjects like Languages and Social Studies from class-V onwards should be tried. There should be access to get answer scripts of board exams for those who want to get them.

## **4.9 Work and Education**

Work at home and in their parent's fields, shops and various other spaces is a natural part of a child's daily routine in the Indian society. It would indeed be a rare situation, if you were to go into a rural household and the child at home was not helping in some domestic chores, or farming activities especially during peak seasons, or making pots, baskets etc with her parents. This work, as distinguished from wage and other forms of exploitative labour, is a source of multi-dimensional learning for the child- cognitive, social, affective and physical and an invaluable resource for the teaching-learning process.

Most schooling experience however not only ignores this source of experiential learning but also denigrates it as being inferior and thus alienates a child from it. A parent lamenting that

his son refuses to work in the field after finishing school or another one not even expecting that his educated son would do such a thing, are common occurrences in the rural countryside. Rooted in the Brahmanical organisation of society where those who work with their hands and produce wealth are denied access to formal education while those who have access to formal education not only denigrate productive manual work but also lack the necessary skills for the same (Position paper, NCF, 2005) schools today continue to accentuate the divide between work and knowledge. Schools also carry a similar legacy of colonial education where the disjuncture between the 'valid' textbook knowledge provided at school and the learning inherent in productive work and its social ethos are accentuated. In turn, the forces of globalization continue to privilege the position of the white-collared, urban, middle classes and elite. Thus, over a period of time and through systematic practice, such a notion of education has come to be rooted in the school system, representing the dominant classes / castes / cultures / languages with gender playing a hegemonic role in each of these categories. The education system has tended to 'certify' this form of knowledge as being the only 'valid' form. In the process, the knowledge inherent among the vast productive forces in the country along with its related values and skills has been excluded from the school curriculum.

***Why should work be made a part of the curriculum?***

1. Work gives space to the social and economic realities of most Indian children in school. It helps children in connecting their school learning to their contexts making it meaningful.
2. Children are curious by nature and also enjoy working with their hands. They want to understand the processes that underpin the various products they use.
3. Making work a part of the curriculum helps in bridging the gap between the 'productive' and the 'schooled' groups of society.
4. Work situations have immense potential for acquiring various competencies- cognitive, social and affective. The learning in such environments is both, *hands-on* and *minds-on*.

***The role for work in the school curriculum***

The school timetable for classes 3 to 10 needs to make space for exposing children to various types of work and for realizing its pedagogic potential. This position paper describes the pedagogic potential of work in terms of the following competencies-

**Cognitive competencies-** The word cognition is defined as both 'the mental processes of knowing which include perception, reasoning and intuition as well as 'that what comes to be known or knowledge'. The set of competencies among others include:

- Planning for work
- Being organised and orderly in activities
- Prioritizing activities
- Use of appropriate tools and materials
- Workmanship and skill in the performance of work
- Planning for new products/ innovating/ creativity

#### **4.10 Habitat and Learning**

The Environmental Education (EE) curriculum, 'Habitat and Learning,' is largely a step to enable an understanding of how human beings shape the world they live in, to inculcate in the learners an attitude of responsibility of action that has bearing on their environment, and an attitude of respect towards the diversity of human life and experience. It is aimed at building an understanding around the interdependent relationship between the man-made and natural environment. Considering the current problems of over-use of resources, resource management and resulting issues of socio-economic inequity, and a loss of bio-diversity as a result of expanding human settlement, to state a few, it is a need of the hour for the school curriculum to build among the future citizenry an awareness and sensitivity around environmental challenges, and cultivate an attitude of concern and accountability.

EE has often been seen as enlisting environmental problems without enabling the child to actively engage with and reflect on the physical and social habitat she is part of. In moving away from this, we need to devise a framework that enables a child to build an understanding around the following:

- that there is interdependence of all life on Earth, and there exists a relationship between all living things (including human beings) and their physical environment;
- that human beings are instrumental in shaping their environment;
- that environmental problems exist, often as a result of human activity, and that an understanding of environmental problems can be made by observation, analysis and drawing inferences;
- that they as children are responsible members of a community and can, individually and collectively, shape their environment;
- that there is a great diversity in human life – diversity in the way different communities interact with their physical (natural or man-made) environment;
- that there is a need to keep the environment safe for and to foster concern for all living species.

### ***Teacher sensitivity to the diverse backgrounds of the learners***

Each individual's habitat is unique. Every individual evolves in a context that is specific to her/him, and it is this context that shapes her/his experiences and opinions. Since meaningful learning can only take place in the context of one's own experiences, it is crucial for the teacher to be sensitive to the unique habitat or individual context of the learner.

The teacher needs to empathise with and be sensitive to the needs of diverse children. Activities, worksheets and other materials, too, must be tailored according to the children's diverse backgrounds. This will encourage children to explore and understand their own and their community's role in shaping their habitat.

### ***Learning about habitat vs. Learning through habitat***

It is crucial that there be active learning by the learner about her environment *through* the natural and social world around her, i.e. through her habitat. A shift needs to be made from a teacher-directed 'show and tell' manner, where knowledge about the environment is seen as information that is memorised without questioning or analysis. EE needs to include learning which is participatory and involves problem-solving.

Activities and activity-based project work must be considered an essential part of EE, and should not be carried out routinely as material to be gathered and put together or memorised without probing the analytical skills of the child. Activity-based learning and project work needs to be devised in a manner that it involves parents and the immediate community (governmental, commercial, etc.) where possible, and should enable the child to analyse, evaluate and draw inferences regarding environmental processes and related issues through her observation. Learning about the environment, therefore, will only be meaningful for the learner if she actively engages with the world around her.

### ***Learning for habitat and the learner's power to influence her habitat***

Since human beings are instrumental in shaping the environment, it is essential that the EE curriculum be shaped in a manner that it enables the child to think in a direction to make her feel accountable for her surroundings. EE often entails the simple enumeration of environmental problems which adds to the bulk and burden of information that has to be memorised by the child. In this way, EE is seen as a subject that deals with the environment almost clinically, from the outside, without assessing one's own role in shaping one's environment. A teacher, therefore, needs to be instrumental as a facilitator in the learning

process in enabling children to realise their own and their community's role in shaping their immediate environment. The realisation that they are members of a community and that the choices they make as responsible members of that community have an impact on their habitat needs to be emphasised in the classroom.

#### 4.11 Art Education

The Arts in school curriculum have often been relegated to the position of hobbies' or activities for pleasure and diversion if time and resources permit. Often, children are encouraged to make charts or prepare a song, dance or skit to embellish an occasion in the school. It is crucial that the position of the arts be deemed significant beyond these sporadic, meaningless activities. The Arts need to be included in the curriculum not only to ensure that the cultural heritage of the community is communicated to another generation, but also because the skills involved in their production are essential in the overall affective and cognitive development of the child. Because of many reasons like over emphasis of core subject, and lack trained teachers.

The arts curriculum needs to entail both '**Learning in the arts**', i.e. learning the arts as disciplinary subjects, in their unique technique, skill and vocabulary, and '**Learning through the arts**', i.e. using the arts as a medium of expression and communication of ideas in other subjects. The aim of this curriculum will be to enable an integrated cognitive development of the child through experimentation in the arts through disciplinary learning, and through their integration in other disciplines.

The development of artistic interest and abilities is a regular part of learning and cognition, not limited to the highly gifted. The production of art involves the processing of knowledge using certain cognitive abilities such as spatial visualization, forming mental images, perception, memory and problem-solving, abilities that are used in several other domains of knowledge building and acquisition, such as language or mathematics.

Arts like visual arts, music, dance, and theatre arts are the power full mediums for the cognition. One may identify three steps in **visual cognition**: one, analysis of the basic shape, form, contour, colour of the object; two, organizing this basic information into something intelligible, i.e. interpreting what the basic form means mostly without the use of prior knowledge; three, assigning meaning to the intelligible form through associating with previous knowledge one has in one's memory. Music, like language, is a system that is innate to all human beings and is not something that is limited to an individual's unique traits or

acquired by imitation. The production of music by humans is as natural as the production of language. 'Music is a form of thought and that it develops over the life span much as other forms of thought develop, principally those such as language, mathematical reasoning, and ideas about the physical world. Dance is an aesthetic culmination of movement, music, expression, literature, mythology, philosophy, rhythm and fractions, yoga and *sadhna*, it can, if taught properly lead to quantum jumps in the physical and cognitive growth of children. Nothing is more versatile than drama for working together and for developing the sense of the other. There is nothing more challenging, engaging and entertaining for children than to actually stage a play that has been prescribed for them as a text; the essence of drama is after all in performance. At the elementary stage, drama may remain mostly at the role-play and improvisation stage. More formal dramatisation may be taken up at the secondary stage.

The objectives in Art education should not be to merely give training to learners in a particular art form in which they can become proficient. It should be aimed at cultivating certain skills in the learners that are evoked while engaging with other areas of learning, and to provide them space for the expression of ideas via other (artistic) media. skills or habits to contribute to the overall learning potential child, such as observing accurately, innovating through self exploration, envisioning (forming internal mental images) and reflective self evaluation, skills which are difficult to quantify through standardized tests. Sensitivity to cultural context of others' sense of aesthetic is an important life skill which is crucial to not only an art education, but also to social science education. In this way, art classes can help cultivate in the learners ways of thinking that will be of value to learning in other disciplines. Art class urge the learner to step beyond the learned technical skill in the art form to express her/his ideas, emotions and unique personal vision non-verbally, i.e. through media other than language.

It is essential that the learner be familiar with the diverse artistic heritage of her/his local region and country. Forming a bond with one's cultural heritage is inextricably linked with building one's identity as a member of that cultural community and to deepen one's relationship with the community.

'Learning in the arts' would focus on the learner exploring and expanding her/his artistic potential to hone those skills that would enable the learner to become a competent, proficient and accomplished artist who has acquired technical skills of a particular medium. The arts as media of communication can, therefore, be used in everyday classroom transaction across disciplines. As stated in the NCERT NFG Position Paper on 'Art, Music, Dance and Theatre,' 'Learning through the arts should take place throughout school education (2+10+2) stage

wise. ... In the pre-primary stage or early childhood, learning should take place only through drawing, painting, role-play, mime, dance, movement, gestures, story telling, singing, etc., where both the teacher and the taught take part in the activities. This should continue to the next stage up to class III. In the late primary stage (Classes IV – V), schools may have separate classes for arts and crafts, music, dance and drama. At the upper primary or the middle school stage, art education should be a separate subject and this should continue up to the secondary stage or Class X.' (p.8) Therefore, though the NCF states the need for the formalization of the Arts as discipline, it also emphasises the need to use the Arts as medium of expression in other subject areas. The learning curve of a child in any art form can be evaluated in several ways.

## **5. Management of Learning**

### **5.1 Introduction**

There is nowadays a widespread recognition across Andhra Pradesh that every child has a right to have quality education. Owing to the needs of a liberalized economy and international commitments towards universal education, there has been an increased effort towards improvement in school environment, physical access to schools, and school attendance across the state. However, we are still far from our constitutional commitment of education with equity. The access is still limited and in many cases the schools are inaccessible to remote isolated habitations, girls, minorities and children with disability. Even those who do have access, it is to extremely varied quality of schools in terms of infrastructure and the quality of teaching. There is also a rise in dropout percentages as the enrollment increases. This indicates problems in both infrastructure and learning processes. There are yet very low levels of literacy in pockets across the State and on the average also, the figures are not very impressive. There is a high dropout rate and serious disparities across gender, also across regions and across social groups. There are many children with special needs in Andhra Pradesh whose needs are not being looked into. There may be several reasons for the children to leave or not attend school regularly. One key reason is the environment that the child finds herself in when she is in the school and then in the classroom. In this chapter we examine these environments to understand how they can significantly influence children's learning. The introductory remarks and substantial parts of what we say later in this chapter are based on NCF-2005 and some studies conducted in Andhra Pradesh.

### **5.2 School and Classroom Environment**

School is the centre of the entire effort of the education system. It is here where the efforts to reach the aims and objectives of education are realised. This can be the social institution where parents, members of society, officers, teachers, children, NGOs, etc., can assemble to discuss and develop education of children and evolve meaningful school development plans. The idea of a 'school' is often epitomized by buildings, children, teachers, books, blackboards and many other things. But actually schools are not just these materials and the infrastructure. It is the whole ambiance, a culture and human relationships that make it an institution that appears to welcome children and encourages them to make an effort or discourages and dismisses them. Ideal schools should provide new opportunities for all learners to learn about themselves, others and society. These factors also influence the access of the weaker sections to school and



it builds a climate of respect that ensures that all children come to the school irrespective of the family they are born into. The formal processes of learning that school makes possible can open up new possibilities of understanding and relating oneself to the world.

The purpose of the school is to organise the knowledge that children acquire naturally in their own explorations and in their contexts. Besides this a lot of education of the child happens in the family and through the community around. In addition to organising the knowledge of children the school helps children in the following ways:

- It helps children to play and learn together.
- It trains them to adjust to the environment.
- It helps the children understand plurality of societal customs and practices.
- It widens the disciplinary knowledge of children and opens their minds to their large scope.
- It has comprehensive plan for all-round development of children.
- It is the child rights protection centre. Andhra Pradesh state govt strongly believes that out of school children are potential child labourers. It is the place that liberates children from exploitative work.
- It creates awareness among children from the marginal and deprived sections of the society and their development i.e. health, education....etc. It also makes them aware of their rights, their capabilities and the essential similarity of all human beings.
- It inculcates values like self-respect, respect for others, team work among members of the society and passes on the comprehensive knowledge, culture and heritage to the children.

### **5.3 Good School**

Given the purposes of the school, a good school is the institution that would be able to do much of this successfully. Children should be placed where they feel respected, engaged and happy; they must feel that they belong to the institution and are a part of it. The school must be a part of the community and they need to consider themselves as owners of it, both empowered to act on it and to act for it. The school should help children integrate with the community while aspiring to bring changes in the rituals that are iniquitous.

At present all over the country including in Andhra Pradesh, the school are far from fulfilling these requirements. A very large number of children do not have attractive schools to go to and are disinterested in fact against being sent to the school. There could be many reasons for this disinterest. These include infrastructural features, basic facilities in and around the school on the one hand and the way children are treated including respect for them, physical punishment etc. on the other. The third axis that makes school uninteresting is the manner in

which teaching-learning takes place. The school process is mechanical, un-engaging, emphasis on rote memorisation, exam stress, no scope for play and games, hard discipline without rationale and dialogue etc. As per the spirit of the NCF 2005 and reiterated in RTE – 2009, the qualities of a good school are:

- School should have the desirable number of classrooms, teachers and infrastructure facilities.
- School should have a comprehensive institutional plan prepared by teachers and parents.
- There must be love and affection for children in the environment of the school. Children should be called by their names.
- There is a scope for free thought of expression without fear.
- There should be no comparisons made among children, no deriding the way child learns, no unfair or overt criticism, no blaming the child, no scolding, etc.
- The class-room has a teaching learning process that includes all children, has open ended activities, has provisions for observations, experiments and project work by children.
- Locally available material, ICT ..etc., are utilized to increase space for children to think, reflect, formulate their ideas and gain new experiences and data to analyse during the teaching learning process.
- Parents participate in school processes.
- Transparent plan of action takes place during assessment, grants utilisation, etc.
- School has specific indicators for performance of teachers, headmaster and children. This can include their effort towards empowerment of the community, their fulfilling the social responsibility, etc.
- There school has a comprehensive facilitative inclusion system for gender, SC, STC, CWSN children. The program developed must be such that it encourages teachers to conduct learning activities to participate all children at their own pace.

Schools are institutional spaces for communities of learners, including both students and teachers. They participate in many activities together. This includes play and scuffle with one's friends on the school grounds, free time to sit on the benches and chat with one's friends during breaks, gathering together for morning assembly and other festive and significant occasions in the school, studies carried out in the classroom, anxious turning of pages before a class test, and trips made with one's classmates and teachers to places outside the school etc. All these bring the community together, giving it the character of a learning community. Behind the scenes, but still significant in giving the school its character, are the teachers and the headmaster, planning and carrying out daily routines, examinations and special events that mark the school calendar.

How can we organise the environment in the school and classroom so that such interactions support and enhance both teaching and learning? How can the space of the school be nurtured as a context where children feel safe, happy and wanted, and which teachers find meaningful and professionally satisfying? The physical and psychological dimensions of the school environment are important and are interrelated.

### *The physical environment*

Children are constantly interacting with the physical environment of their schools during structured or unstructured time, consciously or unconsciously. Yet not enough attention is paid to the importance of physical environment for learning. Often classrooms are, with no alternative spaces to learn, nor are they attractive, inviting or sensitive towards children's needs. Inappropriate school design may drastically affect the teacher's productive output and classroom management.

During 2007-08 Rajiv Vidya mission (SSA) children conventions (Chinnarula Sabha), reading festivals, library weeklong celebrations, different melas such as language mela, metric mela, learning material mela etc., were organized across the State. Children participated in them very actively and expressed freely their views on school environment. Some of them are:

1. School should be colourful, friendly and peaceful.
2. There should be open space offering with small nooks and corners.
3. Enough space should be provided to interact with learning materials.
4. There should be Wall Magazine where children can display their creative works.
5. There should be space for attractive pictures of animals, birds, plants, flowers, trees etc.,

Even classrooms can be brightened up by first ensuring adequate natural light inside and then made lively by displaying children's work on the classroom walls as well as in different parts of the school. Drawings, art and craftwork put up on the walls and shelves send out a powerful message to children and their parents that their work is appreciated. These must be displayed at locations and heights that are physically and visually comfortably accessible to children of various ages. Many of our schools in Andhra Pradesh continue to function in dilapidated and dingy buildings, presenting a dull, drab and a non-stimulating physical setting.

Buildings are the most expensive physical assets of a school. Maximum educational value should be derived from them. Creative and practical solutions can be used to maximise this educational value while repairing or upgrading existing schools or making new buildings. The enhancement of the physical environment through this can bring about not just a cosmetic change but also an inherent transformation in the way that physical space connects with the pedagogy and the child. In many parts of the country, schools and classrooms have large

permanent displays painted on the walls. Such visuals are over-stimulating, and with time they become monotonous and cease to enhance the quality of the space. Instead, smaller sized, judiciously chosen murals may be a better way of adding colour to the school. Most of the wall display area should be utilized for children's own work, or charts made by the teacher and these should be replaced every month. Preparing such wall displays, and participating in putting them up, can be also valuable learning activities for children. There should be scope for interactive learning materials (language games, mathematical games, read and reach (treasure hunt ), multiple ways of mapping models, outline maps ...etc.,) where children can interact anywhere and at any point of time.

The physical layout of the classroom could be altered so that children can sit together in small groups, or gather in a large circle for storytelling, or sit on their own for carrying out some individual reading or writing tasks, or assemble in a group near the radio or TV for a broadcast. But still many schools invest in heavy metal benches and long desks, which can only be placed in rows, and which reinforce the teacher and blackboard-centered system of learning. Worse still, many of these do not have adequate place for children to keep their books and belongings, nor are they wide enough or with back support suitable for the physical comfort of the child. Such furniture should be banned from school spaces. Many schools do not even have a playground.

The maximum use can be made of available school and classroom spaces as pedagogic resources. In some areas, the walls of primary school classrooms till the height of about 4 feet have been painted black/green so that they serve as a free slate and drawing board for children. In some schools geometric designs that can be used for activities are painted on the floor. A corner of the room may be used to organise learning materials, to keep some appropriate story books, puzzle or riddle cards, and other self-access learning materials. When some children finish their assigned lessons before the allotted time, they should feel free to come and pick up something from this corner to occupy themselves.

Children can be encouraged to participate in activities to make the school and classroom attractive for study, work and play. Most government schools have the healthy practice of giving children the charge of cleaning, thereby encouraging the inclusion of work into the routine of the school. But it is also distressing to note that there are schools where it is the girls or children from the lower the castes who are expected to do this work. In some schools, children do not take on any such responsibilities, and cleaning activities are often meted out as 'punishments' for misdemeanors. Such practices stem from and reinforce cultural norms of the division of labour, and the association of distasteful jobs with traditional hereditary

occupations of lower–caste groups. As schools are public spaces that must be informed by the values of equality as well as respect for labour/work of all kinds, it is important that teachers consciously avoid distributing tasks on the basis of cultural notions. On the other hand, keeping the classroom clean and putting things in place are important curricular experiences through which children learn to take individual and collective responsibility and to keep their classrooms and schools as attractive as possible. The understanding of being part of a larger collective, and the abilities needed to work within a collective, can be internalised in children in a variety of ways as they interact in groups within the classroom and the school.

#### *Nurturing an enabling environment*

As public spaces, schools must be marked by the values of equality, social justice and respect for diversity, as well as of the dignity and rights of children. These values must be consciously made part of the perspective of the school and form the foundation of school practice. An enabling learning environment is one where children feel secure, where there is absence of fear, and which is governed by relationships of equality and equity. Often this does not require any special effort on the part of the teacher, except to practice equality and not discriminate among children. Teachers should also nurture their classroom spaces as places where children can ask questions freely, engaging in a dialogue with the teacher as well as their peers, during participation in learning processes. Unless they can share their related experiences, clarify their doubts and ask questions, they will not engage with learning.

Teachers and children are part of the larger society where identities based on membership of caste, gender, religious and linguistic group, as well as economic status inform social interaction, though this varies in different social, cultural and regional contexts. SC and ST communities, members of minority groups, and girls and children with disabilities are usually placed in situations of disadvantage because of their identities, and are denied equal access to valued resources in schools and participation in different school level activities / programmes. Girls are often subject to stereotypical expectations based on notions of their future roles as wives and mothers rather than enabling them to develop their capabilities and claim their rights. Many studies and researches on school processes suggests that identities of children continue to influence their treatment within schools, thereby denying them meaningful and equal opportunities to learn. Children belonging to SC and ST groups, and other socially discriminated against groups such as sex workers and parents with HIV, are often subjected to demeaning treatment in the classroom, not only by teachers but also by their peers. Children with disability often confront insensitive environments where their needs are completely

ignored. *Schools must be conscious of the importance of creating equitable classroom environments in which students are not subjected to unfair treatment and denied opportunities on the basis of their sex or membership of a caste, tribe or minority group. On the other hand, the culture of the school must be one that highlights the students, identities as 'learners' and creates an environment that enhances the potential and interests of each child.*

*'On an average in Andhra Pradesh, teachers and children spend around 5-6 hours a day, and over 1000- 1200 hours a year, in school. The physical environment in which they go about their tasks must be congenial, providing a level of comfort, and offering a pleasant space to work in. For this, the school must have minimum facilities that include essential furniture, basic amenities (toilets, drinking water) and soon. There are a large number of schools in rural areas, especially in SC and tribal habitations, as well as in poor urban settlements, which have not been able to provide these basic facilities, although there are official norms for the same. Teachers, including the headmaster and the Academic Monitoring Committee or School Management Committee, need to be aware of the official norms of the state regarding the essential physical infrastructure and amenities.*

#### ***Discipline and participatory management***

Under the guise of discipline, freedom of children is being violated in the schools. Various kinds of punishments such as making children sit silently or stand on the benches for hours together, frightening by beating and imposing penalty when they disobey and do not follow the instructions given by the teachers and the headmaster. At present, school rules, norms and conventions define permitted 'good' and 'proper' behaviour for individual and groups of students. Maintaining discipline in schools is usually the prerogative of teachers. Frequently, they also induct children as 'monitors' and delegate the responsibility of maintaining 'order' and ensuring control. Punishment and reward play an important role in this. Forms of disciplining such as corporal punishment and, verbal and non-verbal abuse of children, continue to feature in many schools, and are used to humiliate children in front of their peers. Hence rights of children are being violated. Under no circumstances should children be beaten up or subjected to humiliation.

***The Right of Children to Free and Compulsory Education Act,2009 (Act No.35 of 2009) states that if children are punished, and abused in any condition/situation will be treated as crime .***

To maintain positive discipline in the school, the *State Curriculum Framework* emphasizes the following:

- Formulating the rules and regulations to improve the schools performance with the partnership of teachers, parents and school management committee. They together should discuss the do's and don'ts of the children and teachers and implementation strategies should be evolved collectively.
- If they fail in the implementation of the above, reasons should be analysed critically and try to understand empathetically.
- Unwanted action taken in the name of discipline should be avoided strictly.
- Awareness on positive discipline is provided to children, teachers and community.
- Motivational activities/ programmes should be designed and implemented to create positive attitude towards discipline and to develop self discipline.

***Discipline should enable the performance of, and be conducive to, the task at hand. It should enable freedom, choice and autonomy for both teacher and child. It is necessary to involve children themselves in evolving rules, so that they understand the rationale behind a rule, and feel a sense of responsibility in ensuring that it is followed. In this way they would also learn the process of setting codes of self-governance and the skills required to participate in decision making and democratic functioning. Similarly, the children themselves could also evolve mechanisms for conflict resolution between teachers and students, and among students. The teacher should ensure that there are as few rules as possible, and that only rules that can be reasonably followed are created. It does no one any good to humiliate children for breaking rules, particularly when there are good reasons for the rule being broken. For instance, 'noisy classrooms' are frowned upon by teachers as well as headmasters, but it is possible that rather than the noise being evidence of the teacher not being in control, it may be evidence of a lively and participatory class.***

- NCF-2005

#### ***Space for parents and the community***

Schools should invite the community into their premises, and give the larger world outside a role in influencing the curricular process. Parents and community members could come into the school as resource persons to share their knowledge and experiences in relation to a particular topic being studied. For example, for a lesson on Tools we use, local carpenter, goldsmith, blacksmith, potter, farmer, electrician, mason, and mechanic are invited and have a talk about sharing their experiences on and how they learnt to use their tools effectively in their field of work.

In the child's world of education and learning community participation is essential. Community may help in:

- Transferring oral history (dealing with folklore, migration, environmental degradation, traders, settlers, etc.) and traditional knowledge (sowing and harvesting, monsoons, processes related to traditional crafts, etc.) to children.
- Influencing the content of subjects and add local, practical, and appropriate examples
- Supporting children in their exploration and creation of knowledge and information
- Supporting children in their practice of democracy through their participation in information generation, planning, monitoring and evaluation with local governments and schools

- Monitoring the realisation of children's rights as well as violations of these rights
- Participating in addressing the constraints faced by children

### ***School timings***

School timings should be decided as per **RTE – 2009**. The act clearly states that schools of all managements should strictly follow the timings as mentioned in its schedule. Primary schools should function yearly 200 days where as upper primary and high schools should function yearly 220 days. It also mentions that consulting with SMC members, the school can make certain necessary changes not lessening the above instructional days.

However the timings of the school day could be decided at each school level, in consultation with the school management committee keeping in mind issues such as the access of the school, parents working hours because in rural areas, owing to wide gap between school timings and parents working hours, children are being met with accidents and in urban areas owing to traffic jam and employment of both the parents and attending school from distant places cause lot of inconvenience. This flexibility is suggested only in order to facilitate children's participation in school. Schools should strongly maintain that the time spent in school itself, and on learning in the school, cannot be in any way compromised or reduced.

### ***Responsibilities of teachers and headmasters***

Different organizations, institutions, educationalist, experts in various fields participate in the development of curriculum of a particular nation. School is the implementing agency of the curriculum. Achievement of educational – curriculum objectives depends on teachers and headmasters. **As per RTE 2009, the responsibilities of teachers are:**

- With the help of continuous comprehensive evaluation assess children performance and make remedial measuring.
- There should not be any discrimination among children. Equal developmental activities should be given to all children to participate in the learning process.
- Utilise children notebooks, answer sheets, anecdotes, portfolios for the assessment of children's knowledge, skills and attitudes.
- Discuss with parents about children performance.
- Conduct remedial measures for slow learners.
- Prepare and implement a plan of action for multi-level children.
- Utilise locally available material for regular teaching learning process.
- Do not complete syllabus mechanically.
- Teacher should make a lesson plan with suitable TLM to organise participatory teaching-learning activities.
- Follow time table for engaging children in TLP.



- Actively participated in training workshops, reviews school complex meetings and apply those issues that discussed at the above mentioned areas in their regular classroom teaching.
- Update records and register in the school.

#### *Teacher's autonomy and professional independence*

Regarding teacher's autonomy National curriculum Framework-2005 states that the teacher autonomy is essential for ensuring a learning environment that addresses children's diverse needs. As much as the learner requires space, freedom, flexibility, and respect, the teacher also requires the same. Currently, the system of administrative hierarchies and control, examinations, and centralised planning for curriculum reform, all constrain the autonomy of the headmaster and teacher. Even when there is curricular freedom, teachers do not feel confident that they can exercise it without being taken to task by the administration for doing things differently. It is therefore essential to enable and support them in exercising choice. As much as the classroom needs to nurture a democratic, flexible and accepting culture, so also the school institution and the bureaucratic structure need to do the same. Not only should the teacher receive orders and information, but equally the voice of the teacher should be heard by those higher up, who often take decisions that affect the immediate classroom life and culture in the school. Relationships between teachers and their heads and principals must be informed by equality and mutual respect, and decision making must be on the basis of dialogue and discussion. The annual, monthly and weekly calendars of activities need to provide time for such staff interactions for reviewing and planning. There is a need to encourage an atmosphere that facilitates collaborative efforts among teachers. There must also be mechanisms for conflict resolution.

## **5.2 Learning Mechanisms**

The pluralistic and diverse nature of our society makes the need for providing a variety of inputs necessary. Only textbooks are not enough; other materials, Teaching aids, books, toys and games, help make school interesting for children. In our state, good use has been made of the funding assistance through RVM (SSA) and other programmes for acquiring and developing teaching-learning materials to promote children's creativity, participation and interest, thereby enhancing their learning.

The main curriculum sites and learning resources are text books, supplementary books, handbooks, story books, library resources, educational technology resources, laboratories and local sites such as monuments, museums, natural physical features such as rivers, hills, market

places, social institutions like post office, grampanchayat, police station etc., learning materials (atlases, outline maps, globe...etc.,

### ***Materials***

Materials play a key role in making the children getting practical experiences in their world of learning. They provide children multiple learning opportunities. Usually many teachers in many occasions/contexts consider that card boards, maps, thermocol, models of different houses as materials. In fact many things that are available in the local environment such as pebbles, grains, seeds, beads, feathers, sticks, wrappers, etc., can be used as effective learning materials. These can be used in many subjects as learning materials. Children can learn effectively interacting with the materials that is provided to them in the classroom. Dice games, matrix, mazes, puzzles, language games, maths games, outline maps etc., are the examples of interactive learning materials. Though news papers, magazines, cartoons, story books, number cards etc., are available in the school some of the teachers fail to use them in the teaching learning process. The state curriculum frame work suggests that in addition to locally available material, TV, Radio, Computers, library and laboratory resources should not only be made accessible to the children but they interact with them meaningfully getting rich learning experiences.

### ***Library – laboratories***

RTE-2009 clearly states that every school should have library facility and every high school should have laboratory. Every year necessary steps should be taken to strengthen them and their utility. Almost all government schools in Andhra Pradesh have library. Though the government high schools have no full pledged laboratories, they have adequate equipment, substances to conduct experiments. Grants are being released to all Government schools in the state by Rajiv Vidya Mission (SSA) to procure science materials and library books. Status of private schools in this aspect is very poor.

To encourage children as independent readers, under Rajiv vidya Mission (RVM) children clubs were constituted in schools. Library committee run by children will look after library books utilization. Under RVM, rich children literature - story books, story cards etc., and NCERT Graded reading material translated into Telugu and Urdu were supplied to all schools in the state. However, the utility of the library is made essential, teachers lack sensitivity towards it. They don't consider that it would enhance children learnability, therefore it can be treated as an additional support in teaching learning process.

### ***Information Communication Technology***

In this modern age, the use of information and communication technology in the teaching learning process is inevitable; in Andhra Pradesh, computers were supplied to some primary and upper primary schools under DPEP, RVM (SSA). Through MPLAD scheme and with the assistance of some NGO's computers were supplied. To utilise this popular gadget, CD lessons were designed and distributed to schools under RVM. Through Radio “vindamu nerchukundam” some audio lessons in Telugu, Maths, EVS subjects are being transmitted. Lessons are also broadcast through T.V. channels with the help of SAPNET, SIET and Doordarshan.

Though we have ICT, we are lagging behind in its full utilization. It is revealed by the latest survey conducted in the state. Providing children more direct access to multimedia equipment and Information Communication Technology (ICT), and allowing them to prepare and make their own productions and to present their own experiences, could provide them with new opportunities to explore their own creative imagination.

### **5.4 Classroom Processes**

School is the primary place to achieve educational objectives through various activities and processes like teaching learning activities and strategies. But the present system of classroom transaction is mechanical and information oriented. Entire teaching learning processes are confined to giving information in the name of knowledge. Children fill their brains with the information by rote methods and pour it out on the paper in the examinations. Friere stated that this banking model of classroom processes is mechanical and needs to be rejected. The classroom environment without interaction, discussion and free expression of thought makes the children disobedient, aggressive, slavish in attitude, unwilling to face problems and dependent in nature etc., So this kind of classroom process produces impatient, arrogant, passive listeners, dependent, inactive citizens. To avoid this, teaching learning process should make the children construct knowledge on their own. Further this knowledge can be utilized in their daily life.

### ***Pedagogy and learning progression***

Teaching learning process should enable all children to participate on their own. Learning should take place by using previous knowledge and experiences of the children. Interaction, brain storming, inquiry, collaborative learning activities, experiments, projects should be properly utilized in the learning practices. The main purpose of interaction between teacher

and children is to understand their needs and capabilities and encourage them to participate in an inclusive manner. This enable the children feel free from insecurity and they will be able to ask questions to clarify their doubts and express their ideas without any inhibition.

Diversity is the general characteristic feature of the school. If the school does not take into consideration children's diversified background, culture and languages, learning becomes meaningless and incomplete. Language background of child plays vital role in learning process. School should allow them to speak in their mother tongues. Teacher should use children language and vocabulary where necessary in teaching learning process with the help of children. These multiple backgrounds should be regarded as a rich resource that will help them to construct knowledge. So multilingualism is a resource not an obstacle in the teaching learning process. Diversity is inevitable in our classrooms.

Schools, therefore, have a responsibility of providing a flexible curriculum that is accessible to all students. This document can form a starting point for planning a curriculum that meets the specific needs of individual students or groups of students.

#### ***Management of learning***

We know that all children should participate in teaching learning process. This depends largely on classroom management. Our state has two types of classroom environment. One is that in mono grade and the other is multi grade. Where there is a teacher for each class or section mono grade model of teaching takes place. Whereas single or double teacher schools one teacher teaches more than one class in multi grade model. There are 80 percent of schools in Andhra Pradesh that have multi grade classrooms. RTE 2009 also suggests that the number of teachers should be appointed based on number of children not on the basis of class or sections. So there is no chance to make all schools in mono grade manner.

Another dimension of classroom management is that children in the classroom are at different levels. Rajiv Vidya Mission survey report stated that there are 50% of children with Second class level standards in class 5. According to RTE 2009 child has a right to enroll in age specific class. This is also a reason for multi level classes. Differences in learning levels of children are generally depend upon their previous knowledge, experience, interest and encouragement. Curriculum should address these multi grade and mono grade situations while making teacher education. Teachers and teacher support systems should strengthen to address these multi levels of learning strategies. Infrastructural facilities are needed to organize multi level learning activities at school. In-service teacher training also designed for teachers to maintain multilevel learning environment in the classroom systematically. Suitable textbooks

should also be developed for multi levels of learners. Success stories and experiences alternate teaching strategies are identified and make them available to all teachers.

### *Planning for teaching*

Generally, teachers are expected to write lesson plan of the subjects that they teach, develop appropriate teaching learning material and prepare well as per plan before they provide teaching learning activities to the students in the classrooms. In-service trainings/orientations also confined to only orient/train the teachers on these aspects. Educational authorities often state that educational standards are being deteriorated due to teaching without proper planning. Virtually the steps in the lesson plan that are to be followed by the teachers are rigid in nature. Sincere teachers try to stick to those steps and follow them blindly. There is no flexibility in the process of planning. Gradually they move away from writing the plans. Study reports state that many teachers complete the prescribed syllabus without any plan, preparation of TLM that are required to provide to the students. Even the importance of writing lesson plans is being reiterated often in the training programmes. The teachers are reluctant to do so. Teacher Unions argue that it is improper to blame only teachers for not writing plans and preparation without analysing the reasons behind it.

Regarding plan for teaching, the state curriculum framework proposes:

- The term ‘activity’ is now a part of the register of most elementary schoolteachers, but in many cases this has just been grafted onto the ‘Herbartian’ lesson plan, still driven by ‘outcomes’ at the end of each lesson. There is now more talk of competencies, but these competencies are still pegged onto lessons much in the manner of ‘outcomes’. Instead, teachers need to develop the ability to plan ‘units’ of four or five sessions for each topic. The development of understanding and of competencies is also possible only through repeated opportunities to use the competencies in different situation, and in a variety of ways. While the development of knowledge, understanding and skills can be assessed both at the end of a unit, and revisited at a later date, the assessment cycle for competencies needs to be longer.
- Activities could enable teachers to give individualised attention to children, and to make alterations in a task depending on their requirements and variations in the level of interest.
- A lesson plan or unit plan for an inclusive class should indicate how the teacher alters the ongoing activity to meet the different needs of children.
- Teachers need to understand how to plan lessons so that children are challenged to think and to try out what they are learning, and not simply repeat what is told to them.
- Planning with the support of appropriate material resources for individualised, small group and whole group work is the key to effective management of instruction in a multigrade, multiability or vertically grouped classroom.
- The practices of teachers in classrooms, the materials they use, and the evaluation techniques employed must be internally consistent with each other.

- Most of the teachers prepare their lesson plans and learning material for the sake of display or for the officers who ever visit the schools for monitoring and supervision. Teachers are to be motivated to develop TLM for the needs of the children during teaching learning process.
- School complex should act as resource centre for teachers to develop as professionals in true spirit in planning for teaching effectively.

Planning for teaching is a skill. It reflects professionalism of the teacher. Bring in the required changes in planning as per latest trends in the field of teaching learning process is a must. To prepare teaching community towards this is a crucial task. Our trainings and orientation programmes should be designed in a manner that it should enable the teachers to adopt simple and flexible steps in planning, keeping latest trends in view.

## **6. Systemic Reforms**

### **6.1 Introduction**

The SCF is child-centric but also gives equal importance to the interactions of the child with the world around her including the community, the social institutions, the TLMs and learning resources as well as the natural environment. Thus, SCF takes the stand that learning should take place through natural experiences and autonomous exploration by the child, which go a long way in building her knowledge. These interactions will make the child's learning meaningful in the general social scenario.

There are several problems in making the different components involved in the education of children work together in harmony but unless that happens, the project of quality education for all may remain a dream. We need to make changes towards a resolution of various problems which characterise the system. These need to be related to changes in the curriculum, in attitudes and preparation of the teachers, in the system of evaluation, in the support structures for teachers and others engaged in educational efforts, as well as in the nature of relationship between the community and the educational institutions. It is only through enhancing the quality of interactions between various agencies and stakeholders that education can be made interactive and meaningful.

### **6.2 The Question of Standards**

The aims of education cannot be adequately met in the current system, because of certain inflexibilities and inadequacies which prevent meaningful interactions from taking place. The system presently faces many challenges. These include unfilled teaching posts, the lack of drinking water and toilet facilities in schools and other infrastructural inadequacies. Most schools are far from being disabled friendly in the real sense. For example, in most there may be not be any Braille facility or a language Signer. Other concerns include the inability of the current system to encourage students and teachers to participate in knowledge construction, to provide education to each child as per his / her need and to bring about the overall development of the children. The Constitutional aims of providing each child quality education with equity and justice are not being met. Knowledge which the children gain in school is seldom connected to their own lives and is based on a method of memorising from the textbook. Also missing is the dialogue with teachers and others around them which can

help them in making sense of their learning in the context of the world they observe around them, which is the very aim of the educational endeavour as the current document sees it.

Other concerns which need to be addressed through reforms include the declining rate of enrolment in Government schools, indicating a loss of trust on the part of major stakeholders such as parents and the community. Also, the use of same curricula and textbooks for all children results in some children being favoured over others. Children from marginalised backgrounds have different needs, which are not addressed through the curriculum. There is a wide gap between the contents of the curriculum and the local context of the lives of the pupils. These issues related to equity need to be addressed. Added to these are issues of health and malnutrition, which pose impediments in the educational process. Teachers' ideas of teaching, which are often restricted to the transferring of knowledge from the textbooks to the children, also need to be changed. Teachers' and children's absenteeism is another issue. Teachers' perspectives are related to inadequacies in the teacher training institutions. Lack of community participation in the education process leads to low accountability of schools towards the community and other major stakeholders. Lack of trust in Government schools prompt parents to send their children to private schools, which are associated with better results in terms of academic performance measured in marks. Since these schools face pressure from the parents regarding the performance of the students, only some subjects in demand get highlighted and the overall development of the children is neglected. Lack of regulation of this trend is also another major concern, since it tends to make education stressful and less meaningful and enjoyable for the children.

### **6.3 Academic Leadership and School Monitoring**

It is the vision and standards set by the leaders of any endeavour which have great power to determine the quality of results of that endeavour. Thus, if the leaders of institutions and initiatives have capability as well as clarity of aims, they will be able to guide their organisations better. This will, in the long run, ensure better returns for the children, who are the direct beneficiaries of these efforts. Quality of leadership, monitoring process and on-site support is important for quality in school education. The Headmaster is the primary person at the school level responsible for effective functioning and for harnessing appropriate support from community and parents. The headmasters need to be chosen appropriately and prepared and empowered to ensure that the institution runs well. The absenteeism will decline, classroom processes will become child involving and the school will be more sensitive to the needs



of children, particularly the marginalized children, if the headmaster allocates the resources and guides the personnel with wisdom and pragmatism.

Another issue pertaining to leadership comes from the training facility for the teachers, which have the potential of determining the quality and attitudes of the individuals who will take on the mantle of educating the nation. The condition of these institutions in the State needs improvement. The DIETs are understaffed even though the salary of the staff is to be received entirely from the MHRD as a grant. An alternative way of staffing of DIETs i.e., part time Lecturer/ Direct Recruitment etc. has not been developed leading to a stalemate and no appointments in the DIET's. It is necessary to involve young persons, who are from Universities and Departments of Education. They could be Post Graduates with M. Phil or Ph.D in some disciplines. Their coming to the DIET with a strong disciplinary background would strengthen the institutions.

Leadership and direction is also provided to the teachers through teachers' unions. In Andhra Pradesh the situation of the teachers is complicated by the fact that there are many teacher unions. While the total number of such unions is close to 25, only 6 are officially recognised. Officer bearers of about 25 of all these unions at state, district, mandal level are busy in union activities. The RJDSE, DEO, Dy. E.O, MEO avoid visits to the schools of union leaders and do not take action against their unauthorized absenteeism. Thus, while the unions do wield great power to lead the teachers, it is not utilised constructively in a manner which will benefit the children.

#### **6.4 Quality of Teacher Performance and Attitudes**

Teacher preparation and professional expertise is crucial for planning and organizing learning experiences in classrooms. Even though the capability of teachers to plan and organize teaching-learning process based on the curriculum and the syllabus is varied among teachers, the delivery of curriculum in most cases is still not meaningful. It does not relate to the context of the child and her level. No space is created for her participation and for individual or group tasks and presentations. The present situation indicates that most teachers rely on textual matter and transaction of the same without any value addition like adding of examples, illustrations etc. or referring to resource books /material. There is no evidence of planning and strategising to help children learn. Teachers do not seem to bring TLM to make children engage in learning. This is a question related not only to the lack of training, but also the lack of favourable attitudes towards these resources amongst the teachers.

Most of the teachers and supervisors rarely refer to library books, modules, internet, professional magazines etc. Professional growth including promotions is not linked to addition of capability or to performance but only to the number of years spent in service. The system of transfers is also arbitrary and leads to a feeling of alienation from the system. Besides this, the support from School Complexes, MRCs for professional clarity, guidance is also not as per expected levels.

There is a need to prepare teachers professionally and set up systems of motivation and learning so that they are able to take the effort to do justice to children from marginalized communities and recognize their strengths. Teachers need to be professionally oriented with appropriate accountability procedures and options for their carrier advancements and somehow linking their performance to their future prospects.

Another issue pertaining to the performance of the teachers is that the teachers are absent from schools for many hours and for many days. The attendance and the functioning of the schools are irregular and erratic. A careful look at the functional aspects of schools shows that they do not function seriously. Research studies show that about 25 % of teachers are absent i.e., not-available to the children for various reasons. This is a major concern and even the reason for the parents to opt for private schools.

Teacher performance depends upon his professional perspective, his preparation and commitment to children. It is reflected in his plans to transact curriculum, nature of activities and learning tasks used. The studies and monitoring reports shows that present situation is not appropriate. Teachers merely speak or read or have children read from the text book and do not even use the blackboard appropriately. The question of interactive classroom, posing open ended questions, organising discussions, freedom to question and think, is inconceivable. There is very little clearly visible teaching and learning time.

Teachers and the school believe that their job is to finish or 'cover' the text-book. This is irrespective of whether all children understand and follow. Only a few teachers address the basic concepts required to develop the foundational abilities in children. There is no mechanism to visualise, asses and scrutinize seriously the performance of the teacher with supportive feedback. There is also lack of clarity and consensus among different sections of the academic hierarchy as to what the appropriate role for the teacher is and how the classroom should appear during the interaction with children.

In order to address these difficulties, changes need to be brought about on a systemic level, because the problem lies in the very structure of the system and not in particular organisations. Thus, one of the aims is improving the quality of the teachers. The quality is in terms of their

professionalism, professional attitude and professional commitment towards children's learning achievement and their professional improvement. For this to occur, teachers must understand the nature of learning and of the learner. They must understand that learning occurs in many ways and learn to give importance to all forms of knowledge, since they form part of the overall mental make-up of the child. They must analyse the material provided to them, including the textbooks and the curriculum, in the light of the context of the child and try to incorporate elements which will be relevant to the child. They must endeavour to make the process of learning an enjoyable experience for the child, since these emotions will go a long way in motivating the child to learn further.

They must maintain positive attitudes towards the children. Teachers must always keep in mind that their first responsibility is towards the children, and they have the power of influencing the children, purposefully or inadvertently. They must, therefore, own responsibility towards the society and the world as well. They must consider their job not as an immobile entity with fixed sets of skills and actions that they must perform, but as a constantly evolving profession responding to the requirements of a continuously changing society. Thus, appraisal should be considered as guidelines for further action rather than a judgement on their performance. They should learn to make use of these appraisals in a constructive manner.

The major shift in the role of the teacher is towards making her the facilitator of the teaching learning processes, of helping children develop concepts, become wiser, act as a supporter in enhancing learning through multiple exposures, encouraging the learner to continuously achieve his/her educational goal. S/he has to move away from transmitting information and forcing children to copy and, what is worse, to merely satisfy the data requirements of the cluster, block, district and state statistics.

The power of the teacher unions can also be harnessed for their development. At present the role of the teacher unions is confined to protect their service rights and conditions, pay structures, transfers and promotions. Not much effort is taken for professionalization of teacher cadres and for professional development of teachers, and ultimately for improving children's learning achievement. The way the system responds to the unions and their leaders also promotes this stance. The departments of education and government feel that it is their sole responsibility to providing programs for professional development of teachers through trainings, workshops, reading material, teaching learning material etc., but never expect that teacher unions to participate in these matters. The teachers do not look at them as a source for

furthering their knowledge and experience but as a structure that would confront the education department on their behalf.

It is, therefore, important to support and fund teacher unions for capacity building of teachers. They should also be supported for organizing seminars, workshops on various curriculum subjects to understand the nature of the subject and ways of teaching learning processes. They could also manage and set up subject forums in different areas and support new teachers on-site.

The roles of the teachers, however, are often restricted by the curriculum. Therefore, curriculum needs to be changed in order to provide teachers enough freedom to exercise all their duties effectively and to their satisfaction. This includes focus on critical pedagogy and on the learning process rather than the outcomes. Space should also be created for teachers to undertake small scale research, particularly action research in the class through which they can improve their classroom transactions.

### **6.5 Teacher Education for Curriculum Renewal**

Pre-service education for elementary and secondary teachers is being offered by government and private institutions. A large number of private institutions have come up recently for both elementary and secondary education. This has resulted in deterioration of standards of pre-service education due to lack of monitoring and regulatory mechanisms. It is required to assess the functional aspects of these institutions and focus on the professional preparation of teachers to ensure quality education for all. In-vice teacher education institutions face their own problems such as lack of resources, of qualified manpower, and lack of patterns of financial allocations.

The different professional support structures involved in teacher education at various levels viz. SCERT, DIETs, IASEs, CTEs, BRCs, CRCs and NGOs are unlinked and therefore lose the opportunity to share resources and learning from each other. It is necessary to establish a functional network of sharing and mutual learning. The capabilities required for building fresh understanding and materials that would add to the capabilities of the teachers as well as those in the DIETs /CTEs and SCERT itself cannot be created at all centres. It is necessary to identify specific institutions and make them responsible for work in specified fields and gain capability and authority of knowledge that can then be shared across institutions. There is thus a need to develop role clarity and a vision of what they can do in these professional support

structures. There must be mechanisms set up to overcome the constraints and structural energy. They need to have some additional resources and space for using them flexibly.

At present certain qualifications are prescribed for the teachers to enter into teaching profession. Once teachers enter service they are expected to teach the prescribed syllabus through textbooks and there is no encouragement and incentives to improve their professional academic qualifications. Nowhere is their performance or qualification linked to their future advancement on professional ladder. In a welfare model, it is the responsibility of the government to provide free education with qualified and challenging persons with high expertise. Therefore talent, acquisition of higher qualifications, improved performance levels need to be recognized, supported and linked to incentives such as promotions, monetary benefits, study leave, exposure to successful practice within and outside the country etc.

### **6.6 Curriculum and Textbook Development**

The present textbooks at school level are information loaded and unrelated to the life of children and do not require them to engage actively. Attempt must be made that the studies enable the children to contribute to the needs of the family and society. Text books should include the productive systems in the community to empower the experience of the students and the community. The curriculum should reflect the aim and purpose of education, give ample scope to children and teachers to engage in knowledge construction, focus on the processes of learning rather than the outcome, and encourage interactions between children and the community at large.

### **6.7 Examination Reforms**

Assessment of learning shall not be treated as terminal and external to the teaching learning processes. The assessment is primarily a diagnostic activity to identify the learning gap and other indicators of learning. Children come from diversified backgrounds with different kinds of prior knowledge and ideas. Thus, they need differential kind of support. The assessment may not be a separate test, but it should be an evaluation of children's work, such as assignment, homework, projects, collaborating with peers etc.

The assessment shall be holistic and shall serve as a marker to guide teachers regarding whether they are on the right track. The assessment should cover entire profile of the child i.e. knowledge, skills, attitudes and analytical abilities, values and ethics. Therefore assessment must be continuous, comprehensive in nature and a guide for understanding the child's progress in all areas. There must be linkages between curriculum, syllabus, textbooks, teacher

training and assessment. The assessment ultimately shall reflect the extent to which we have achieved expected curricular aims and objectives.

The assessment procedure shall not be confined to a paper-pencil test but will be oral, performance-based, project-based etc as well. The child must express his/her own ideas and thoughts and construct answers without memorization. The textbook based, memorized answers and practices shall be discouraged and shall not be given any importance. The analytical and higher order thinking skills must be fostered and assessed. These include critical thinking, reasoning, analysis, synthesis, evaluation etc. The tasks for learning and assessment must be challenging and create interest among children. They should help to develop an attitude of self learning for pursuing knowledge through various other means.

### **6.8 Community Participation**

The school is a part of community. The effective functional aspects of the school can be achieved through appropriate community support and involvement. At present the schools do not feel answerable to the parents and the community and do not respect them. They hide information from them including of their own attendance, regularity and school performance. They also do not invite community involvement. The VECs, S.Cs, SMC are nominal, non functional and exist only on paper as there is a feeling of mutual distrust.

Since education can be meaningful only when children see reflections of what they study in the outside world, community participation should be encouraged to establish these linkages. Such an act is also likely to make schools more accountable to the community, which is an important stakeholder in the process of education.

### **6.9 Systemic Support for Diversities**

Children from different backgrounds have different needs, since they relate to different kinds of materials and learn in different manners. It would be unrealistic to expect a single curriculum to fit all. Hence, in order to cater to the needs of all, the curriculum should be flexible enough to cater to the needs of all children. Teachers should be sensitised to the needs of special children. The curriculum should value and promote diversity. Communication between children and teachers should be promoted to turn this diversity into a valuable resource for information and learning rather than something that has to be ‘managed’.

### **6.10 New Partnerships**

Different initiatives have been taken by the Centre as well as the State towards the aim of providing quality education for all. However, these are often found to be working in parallel rather than in collaboration, something that undercuts the efficacy of these endeavours. The mandatory institutes responsible for supporting quality like SCERT and DIETs have been sidelined and are suffering from scarcity of funds and persons. Therefore the programmes are operationally parallel at state and district level.

The establishment of parallel project offices separately under DPEP and SSA has also delinked elementary education from the regular administrative bodies like district educational office. Slowly, the official and regular structure is moving away from its mandatory duties of maintaining and supporting quality. Therefore, any impending project shall invariably run through regular department. The implementation of the programs and projects through regular department mode will result in capacity building for the system and individuals and will also lead to sustainability of quality and programmes. The centre-sponsored schemes and programmes should strengthen the existing structures rather than operate in parallel and weaken the existing system/ structures.

### **6.11 Innovations in Ideas and Procedures**

Several centrally sponsored schemes and programmes with large funding are operating in to improve the quality of education with equity. There must be periodic assessment of these efforts with a view to improve and direct them. Often, the assessment is mechanical and does not incorporate many contextual elements. There is little participation of the local functionaries and the process is not transparent.

Sound participative methodologies may be developed for undertaking programme evaluation in a manner that encourages the functionaries to make a greater effort. The evaluation can be internal or external to the department but should be in consultation and partnership with the persons whose work is being assessed. It should be a supportive process rather than a fault finding one. Every programme must have a certain budget towards its own assessment as a part of its implementation. Discussions involving all stake holders may be organized on the findings of the assessment and program implementation made more transparent. Building networks between different institutions and initiatives will help in ensuring more effective functioning and getting results.

### **6.12 Management and Governance**

The organization of educational system and its governance has a major impact on the functional aspects of the system. Appropriate governance structures and procedures are

required for the system to run with efficacy. At present the schools in Andhra Pradesh are being operated under various managements viz. government, local bodies, municipalities, tribal welfare department, minority welfare department, private management, Christian missionaries, residential institutions societies etc.

Several departments which run the schools do not have the required zeal, understanding and professional expertise to run effectively. Though the department of school education is responsible for quality education across institutions functional under various managements, it does not have control over the employees, teachers since service matters are the concern of the respective departments. Therefore there is no effective control on quality management over these institutions under various managements. Therefore certain policy formulations are required to get schools under one management i.e. under Panchayati Raj duly reflecting the 73rd and 74th constitutional amendment.

Panchayats operate at local level and take up ownership and management of the schools at the local level in a decentralized way. They attend to the local level problems and issues as well as to enrolment, retention, attendance of teachers and people, school infrastructure etc. appropriate budgetary allocations may also be made to Panchayats to manage the schools and improve the schools with local participations and support. Appropriate orientation and training may be given to the PRI members on school management, support and financial transactions and procurements.

### **6.13 Accountability and Performance**

Parents send their children to schools with the expectation that they would grow in academic, social and personal behaviour. The child invests a lot of formative years in school, the parents invest their time and money in making it possible for the child to be in school and the government also invests in schools. There needs to be a justification for this expense and effort. If the schools do not run seriously, children do not enjoy or learn in the school, all this expenditure is not justified and the stakeholders are justified in looking towards alternatives. Therefore, the system must ensure outcomes and make the individuals and institutions accountable towards the stakeholders particularly children and ensure their learning, performance and development.

At present, schools are not as accountable to the community as is desired for a variety of reasons. There is a lack of clarity regarding the aims of education on part of various stakeholders, including the parents and teachers. The emphasis given to employability has resulted in certain subjects being emphasised, leading to increase in stress levels and neglect



of overall development of the child. All these problems are related to lack of accountability. If the schools were accountable to the community, they would have to answer for not having been able to meet their aims.

Therefore, there must be clarity on the expected academic standard among all the stakeholders, viz. educational managers, supervisors, head teachers, teachers, parents and children. The description of the academic standard in terms of the quality of curriculum and textbooks, teacher preparation, classroom practices, learning outcomes etc. must be detailed and awareness must be raised about it. Frequent appraisals of the maintenance of academic standard must be taken up, and further steps should be guided by this appraisal.

Schools must be evaluated in terms of their performance over identified indicators. The mechanism of self appraisals by the head teachers and teachers shall be implemented in addition to external appraisals. A school score card resembling the children's score cards may be developed and implemented.

The quality of teachers and supervisors and managerial staff at professional level shall be monitored and appraised at regular intervals to ensure good quality practices across the system. Frequent orientations and discussions on the contemporary theories, research literature and practices shall be conducted. Effective institutions and individuals shall be identified and supported further and linked to incentives such as monetary or service benefits incentives.

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## **Constitution of India preamble**

**WE, THE PEOPLE OF INDIA, *having solemnly resolved to constitute India into a SOVEREIGN, SOCIALIST, SECULAR, DEMOCRATIC, REPUBLIC and to secure to all its citizens***

**JUSTICE, *social economic and political***

**LIBERTY *of thought, expression, belief, faith and worship***

**EQUALITY *of status and opportunity and to promote among them all***

**FRATERNITY *assuring the dignity of the individual and the unity and integrity of the nation.***

**IN OUR CONSTITUENT ASSEMBLY this twenty –sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**