1.Introduction

Department of Education, Government of Kerala, has implemented the new curriculum for Primary classes (From Grades 1 to 7) from the academic year, ie, 2008-09 Kerala. The curriculum is based on following basic tenets. They are,

1. Education is a process of socialization and it should strive for developing critical consciousness in learners through their learning process.

2. Education should equip learners with the concepts, skills and attitudes to identify, challenge, analyse and find solutions to the varied problems that they and the society face.

3. The concepts, skills and attitudes are not to be rote- learned but to be constructed by the learners by involving in the actual societal processes and interaction with texts, materials, physical resources, peers and other members of the society.

2.Core beliefs and assumptions of the curriculum

Based on these basic tenets of the curriculum, a set of core beliefs and assumptions about learners, knowledge and curricular vision about learning and teaching have been developed and included in various documents like, Curriculum materials, Approach papers and Teachers' source books.

2.1.Core beliefs and assumptions about Learners

The school curriculum is based on the pedagogic principles of Social Constructivist learning, Issue based approach and Critical pedagogy which has been advocated by NCF-2005 and KCF-2007. With the implementation of new school curriculum in Kerala during the past two years this approach has been recognised by teachers, parents and community members as a prominent approach to teaching and learning.

The new curriculum brought in a paradigm shift in the beliefs and assumptions about the nature of learners and their learning process. They are the following.

1. Each learner is an individual having unique individuality

2. Each learner looks at the world in his/her own way so that each learner's construct about the world differ from others construct.

3. Each learner construct meaning about the world in his/her own way.

4. The attitudes, aptitudes, interests, capabilities and potentials of each learner differs from that off others.

5. Since learners come from different social and home settings, their expereinces, world views, beliefs and assumptions about himself/ herself and others will be different.

2.2.Beliefs about learning

Social Constructivist epistemology assumes that learners construct their own knowledge on the basis of interaction with their environment. The epistemological assumptions of Social Consructivist learning at the heart school curriculum in Kerala are the following.

1. Knowledge is physically constructed by learners who are involved in active learning.

2. Knowledge is symbolically constructed by learners who are making their own representations of action.

3. Knowledge is socially constructed by learners through negotiation for meaning within a social group as it communicates, makes use of symbols and tools, and organizes its belief systems.

4. Knowledge is theoretically constructed by learners who try to explain things they don't completely understand.

5. Knowledge is critically constructed by learner to solve problems using theories belonging to more than one discipline.

6. Knowledge as a whole is problematized or based on issues felt by each learner.

The theoretical underpinnings of these two sets of changed beliefs and assumtions on knolwedge, teaching and learning are the following.

2.3.Beliefs and assumptions about Knowledge, teaching and learning

1. Knowledge as a whole is problematized or based on issues felt by each student

2. Methodological approaches towards learning are required to be much more circumspect and reflexive because there is no absolute knowledge and theire is no 'royal road' to truth or near truth.

3. The focus of concern is not just the students' cognitions, but the students' cognitions, beliefs, and conceptions of knowledge.

4. The focus of concern with the teacher and in teacher education is not just with the teacher's knowledge of subject matter and diagnostic skills, but with the teacher's belief, conceptions, and personal theories about subject matter, teaching, and learning.

5. Although we can tentatively come to know the knowledge of others by interpreting their language and actions through our own conceptual constructs, the others have realities that are independent of ours. Indeed, it is the realities of others along with our own realities that we strive to understand, but we can never take any of these realities as fixed.

6. An awareness of the social construction of knowledge suggests a pedagogical emphasis on discussion, collaboration, negotiation, and shared meanings.

In tune with the belefs and assumptions as detailed above, the elementary school curriculum has developed the approaches to all the subjects at the elementary level. The approach towards each subject is included in the Teachers' Source Book specific to each subject and grade. In addition to these, the state has developed Source book for teachers on Assessment too. The broad vision of Learning Process and each one of the subject included in the curriculum are outlined below.

2.4.Vision - Learning Process

The characteristics of active learning in a Social Constructivist constructivist learning and teaching context envisioned are the following.

1. Multiple perspectives and representations of concepts and content are presented and encouraged.

2. Goals and objectives are derived by the student or in negotiation with the teacher or system.

3. Teachers serve in the role of guides, monitors, coaches, tutors and facilitators.

4. Activities, opportunities, tools and environments are provided to encourage metacognition, self-analysis -regulation, -reflection and awareness.

5. The student plays a central role in mediating and controlling learning.

6. Learning situations, environments, skills, content and tasks are relevant, realistic, authentic and represent the natural complexities of the 'real world'.

7. Primary sources of data are used in order to ensure authenticity and real-world complexity.

8. Knowledge construction and not reproduction is emphasized.

9. This construction takes place in individual contexts and through social negotiation, collaboration and experience.

10. The learner's previous knowledge constructions, beliefs and attitudes are considered in the knowledge construction process.

11. Problem-solving, higher-order thinking skills and deep understanding are emphasized.

12. Errors provide the opportunity for insight into students' previous knowledge constructions.

13. Exploration is a favoured approach in order to encourage students to seek knowledge independently and to manage the pursuit of their goals.

14. Learners are provided with the opportunity familaiin learning in which there is an increasing complexity of tasks, skills and knowledge acquisition.

15. Knowledge complexity is reflected in an emphasis on conceptual interrelatedness and interdisciplinary learning.

16. Collaborative and cooperative learning are favoured in order to expose the learner to alternative viewpoints.

17. Scaffolding is facilitated to help students perform just beyond the limits of their ability.

18. Assessment is authentic and interwoven with teaching and learning.

3.The focus, status and pace of change

In order to bring about these paradigm shift in Education, Department of Education has designed and implemented curricular revisions, development of new textbooks and teacher source books, and Continuous Teacher Empowerment Programme (C-TEP) from the first year of its inception itself. The changes envisaged by these initiatives are focussed on the following areas.

- Changes in Learning and Teaching (Instruction)

- Changes in Management of Instruction

- Changes in Assessment

- Changes in Proefessional development of teachers

- Changes in School-Community relations

An analysis of the status and pace of changes in these areas can be summarised as given below.

3.1.Current status of change in Classroom processes towards Learning

It has been noticed through these monitoring mechanisms that there are strong trends of change in students' learning and learning achievement are visible in the district. The major changes identified are summarised below.

- Majority of students have acquired basic learning tools like reading, writing, computations, algorithams by the end of primary schooling.

- Students recognize the importance of effective communication in various situations but could not recognize that communication involves problem solving and decision making .

- Students are beginning to recognise and use that speech is an important tool for thinking,

learning, and communication and practise the behaviours of effective speakers.

- Students recognize listening as an active, constructive process, have shown the behaviours of effective, active listeners and listen effectively in a variety of situations.
- Students have recognised writing as a constructive, meaningful process and are able to write confidently in a limited variety of formats/discourses.
- Students have recognised limitedly that reading as an active, constructive process, are in the stage of beginning readers and yet to practise the behaviours of effective strategic readers reading a variety of texts.
- Students are able to view factually visuals but could not interpret visual information critically.
- Students are able to identify issues/ problems related with the theme/concepts/idea and to develop questions for addressing them.
- Students are able to develop preliminary hypothesis for investigation.
- Students are able to access and collect primary data from restricted sources and are able to analyse them working with their peers and with the active assistance of teachers.
- Students are able to conduct prelimainary investigation processes with the issue/problem that they have identified.
- Students are seen re-collecting their expereinces related with theme/concepts/idea of the issue.
- Students' learning are centred around few students' expereinces and monopolised by teacher's explanation.
- Students are able to derive new understandings even though the uunderstandings are superficial, thus inhibiting them from towards becoming the self-directed learners.
- Students are able to work and construct knowledge democratically by working in groups, presenting their knowledge and assumptions.
- Students havve shown the trend towards accpeting different view points and constructs while working in groups and they are willing to work collaboratively.
- Students appreciate the relevance, need and advantage and happiness of working along with their peers irrespective of learning styles and any other facotrs of discrimination.
- Students are willing to work along with students with speacial educational needs but they don't have the tools, strategeis and processes to work along with them.
- Students with special needs are drawing   little amount of compensation or adaptation in tune with their needs and learning styles.
- Students are willing to work co-operatively with the active observation, assistance and

supervision of teacher.

- Students are able to respond to varied learning tasks through different modes of inquiry but still dominated by teacher-led discovery learning.
- Student are able to draw out societal contexts related with learning and relate the knowledge built with the real world in limited settings.
- Students apply routine problem solving strategies mechanically but find it difficult to identify and apply appropriate strategy for solving a specific problem.
- Students are able to use multiple modes of representation (oral, written, graphic and performance modes) of their knowledge and expereinces.
- Students find it difficult to engage in learning tasks which require higher order thinking skills,   abstract thinking and visualisation.
- Students are able to identify prelimainary criteria for assessing their own work and that of others.
- Students are able to provide cursory and superficial feedback on evidence of learning to peers and group members but started appreciating positive feedback from peers, teachers and parents.

4. Obstacles and Issues found to bring changes in classroom process

The obstacles and issues before brining in changes in the classroom processes are categorised into these sub heads.

1. Management of Learning, Instruction and Assessment
2. Management of the system and personnel for Learning, Instruction and Assessment and professional development of teachers
3. Community participation in Learning, Instruction and Assessment
4. Roles of Government, Support structures and Academic Bodies in Learning, Instruction and Assessment

4.1.Management of Learning, Instruction and Assessment

4.1.1.Planning of Teaching-learning process and assessment

An analysis of planning of teaching-learning process in classrooms throws light into the changes in teaching-learning process and the changes in the beliefs and assumptions of teachers.

- The teachers are familiar with the concept of developing day-wise Teaching Manual and they have started writing the same in the new modular format.
- Teachers in general have recognized the role of Teaching Manual as the main tool for transacting the new curriculum and pedagogy. They also agree that the planning done in CRC meeting is quite helpful for them to develop their own Teaching manual.

- But it has been observed that all the teachers in the sample do not develop and maintain day-wise teaching manual. A scribbled note becomes the easier substitute for Teaching Manual in these cases. Variations do exist between classes where the students achievement is high and classes where student achievement is low. The teachers in the former category maintain day wise Teaching manual and document feedback of planning received in the response page.

- In the cases where a detailed Teaching Manual is developed in the CRC meeting itself, the teachers are found reluctant to make necessary adaptations to the Manual according to the specific interests and experience of students in the class and making variations in selecting the issue based on the problems felt locally.

- Teachers in general do not exhibit enough confidence to make instructional decisions while planning a unit. They find it difficult to match the content and processes with the experiences, strengths, needs, and interests of students, the learning expectations that could be incorporated, and the most effective instructional approaches while designing a unit plan and Teaching Manual. They require further support to make such critical decisions through materials, O.S.S and CRC meetings.

- Analysis and planning of a unit completely is a task where majority of teachers where teachers are not fully confidant. An analysis of professional needs of science teachers in Upper primary classes indicate that identification of what the teacher wants her students to learn in terms of the Objectives, Areas, Concepts to be acquired, Processes to be acquired, Skills to be developed and Attitudes is an area of concern for most of the teachers. An analysis of Teaching Manuals of teachers indicate that in the case of designing appropriate methods, strategies and activities to meet the above said learning outcomes the teachers do not show much improvement and competence.

- Arrangement of physical settings, equipments and other facilities is really important for planning instruction. Even though the teachers admit that these have to be considered while planning a unit, the lack of focus given to this aspect in CRC meetings, lack of enough facilities, absence of hands-on familiarization for using the equipments and the non-clarity of teachers about the process skills to be targeted are the main reasons behind this.

- Designing assessment item which validly assess instruction and learning and integrate it along with the instructional procedure is a critical component of constructivist learning. Plan assessment points, strategies, tools to assess continuously what the students have learned have not been fully understood by the teachers. But it has been identified that teachers find it useful to include assessment strategeis and tools to be used in Teaching Manual.

- The regular practice of conducting self-assessment on the instructional process by the

teacher herself, recording the assessment results on the response page and re-planning the same part of the module or the remaining part are the components of an organic process of interactional culture. Even though this is yet to become a regular practice, teachers have started identifying areas where they have to improve their professional skills.

- The Headmasters' insistence on developing the Teaching Manual, maintaining a record of Teaching Manuals as submitted by teachers and comments on the content and format of the same rare in schools. The prevalent practice in these schools is to sign the Teaching Manuals en bloc by the Head masters.

- The major issued articulated by them during discussions and in SRG meetings are given below.

    a. What shall be the basic unit for fixing the limits of a module in Core subjects and in languages? Are they the same (like concepts, skills and attitudes) or different?

    b. How to place issues and sub issues in the modular form, synchronise it with concepts, skills and attitudes and assess them?

    c. The time available in CRC meetings is insufficient to plan the entire unit in its modular form since the Handbooks doesn't prescribe one.

    d. How to make Teaching Manual flexible to adapt daily changes and how to incorporate continuous assessment strategeis and subsequent planning through the modular form of Teaching Manual?

    e. How to provide feedback to students integrated with the classroom teaching?

    f. How to assess qualitiatively the evidences of students/ learning and use it summatively?

    g. What type of written feedback is to given to different learning evidences, in different contexts to different students?

    h. How to adapt teaching-learning process to students with special needs?

4.1.2.Managing Teaching-learning process and assessment

It is expected that the entire learning has to be issue-based and students construct concepts and acquire skills and attitudes through the process of finding out solutions to the issue that they faced.

To what extent is the teacher aware and capable of implementing the pedagogic methods, strategies and processes of critical pedagogy, issue based teaching and constructivist learning is an important area this study focused through classroom observation of instructional process? .

- Teachers in general are aware of the shift in curriculum from child-centred pedagogy to issue based, critical pedagogy and constructivist learning.

- It is seen that earnest attempt is made by a majority of teachers to develop questions connected to the issue domain indicated in the grid.

- The teachers, understand the need for charting out the expected exhibits of learning, process through which it has to be developed and how they are to be exhibited and disseminated in the class.

But observation of classroom processes, interactions in SRG meetings and discussion in CRC meetings indicate the following issues that the teachers face during implementation of teaching-learning process.

- The constructivist learning process requires that the teacher is familiar with the designing of constructivist learning model. Teacher should be able to develop and use appropriate method, strategies, activities and processes and materials to determine student's prior knowledge and to bridge what they already know and what they might learn in connection with the issue and the lesson content. This is an issue seen in the instructional process across all classes and all teachers in teaching science. Teachers also reported that this is not addressed so far in any training programmes or through O.S.S.

- It has been observed in all classes that the teacher are either ignorant of the importance of developing guiding questions to introduce the situation, to raise the issue relevant to the students' experiences, to arrange groupings, to arrange the bridge, to keep active learning going, to develop relevant learning exhibits and to encourage reflective thinking on their learning. The explanation given on Constructivist learning in the initial training programme was highly theoretical and lecture based, they complain.

- Though the teachers use questions, they are more interactive rather than inquisitive questions. Majority of the questions are close-ended ones too. Moreover, the teachers haven't started identifying and recognizing the role of questions at every point of learning programme under the new pedagogy. They are yet to recognize the role of questions as an effective tool for guiding learning and furthering active learning.

- Teachers do not develop decisive questions as a part and parcel of Teaching Manual. During interactions with teachers on 'What guiding questions will they use to introduce the situation?', majority reiterated the issue domain or the sub issue as given in the grid.

- Teachers are not confidant enough to develop and use questions to arrange the groupings, to set up the bridge between what they know and what they wanted to know, to keep active learning going, to prompt exhibits, and to encourage reflections o learning.

- The grid of the unit indicates the issue domain and the components of the issue in the form of statements, which is general across different grades. So very often the teacher could not demarcate the border lines of the issue, the sub issue formation and the language to be used for framing the sub issue. It is observed that teachers reach at some points which may be out of the scope of the unit as conceived by the grid.

- Though the teachers recognize the importance of students' existing knowledge related to a particular issue/concept, when teaching starts, it is seen that, the teachers go through a linear process, without providing enough recognition to students' existing ideas related to the issue, sub issues and concepts. Many often the recognition ends with a casual question and an immediate answer, thus failing to make use of learners' knowledge and experiences to guide further teaching and learning.

- Eliciting students' ideas before presenting teacher's own is a feature which was more visible in the classrooms but it is seen that teachers are in a hurry to arrive at conclusions hastily, thus providing little time to view critically the entire situation and information.

- The THBs do not mention or enrich or awaken the teacher to develop issues, sub issues and sequencing of sub issues based on the textbooks, Culture, Language and Experiences of children in a particular class. The attempt of developing Teaching Manuals at District level has been welcomed by teachers but a careful analysis of these materials has not been done.

- This has limited majority of teachers, especially in to identify and formulate the issue and sub issues specific to the culture, language and experiences of learners, sequencing the sub issues, converting them into modular form, detailing the processes to be adopted and devising teaching-learning strategies and assessment techniques appropriate to facilitate constructivist learning in the class.

- The teachers are the least conscious of 'the text', based on the learners' experiences related to the issue. The idea of Local text and the processes through which it can be developed have not been elaborated so far. In the absence of Local text developed by teachers, Newspaper articles became the staple diet for learners, which is peripheral, inappropriate to their experiences, language, culture and learning situations.

- In most of the classes observed the instructional strategy in teaching science still dominates is Direct instruction. Processes are highly teacher-directed and most of the time is spent by majority of teachers on lecture, didactic questioning, explicit teaching, practice and drill and demonstrations of experiments and demonstration of problem solving. Reflective discussions, concept formation, concept attainment, problem solving, and guided inquiry are the learning strategies seen lesser.

- The new curriculum demands that the teacher should be able to develop and apply a method or design for integrating critical viewing of the issue and construction of knowledge through the process of inquiry undertaken by learners. But the present trends show that the teachers are willing to adapt to the changes but their capacities, potentials and understandings are to be developed further along with the skills of designing materials, classroom strategies and management of learning.

- The teachers lack instructional and assessment process skills to know how learners will make their own meaning/ acquire concepts, skills and attitudes in connection with the topic.

- Making new ideas/information accessible to students is critical especially in the case of core subjects like Science and Malayalam/Kannada. But the teachers in most cases, end up with alerting students to the ideas/information given in the text book or present the information given in THB but make use of other information sources like reference books, articles, CDs, internet and local resources a little. Even if teachers use them, they end up like demonstrations or previews. How to integrate these information and resources with the learning process is not made much familiar to the teachers.

- Students get few opportunities to describe phenomenon/issue/concept in their own words based on their own experiences but explanations and interpretations of the issue/concept are still done by teachers.

- Little provision has been given for learners to reflect on their own thinking, self-assess and explain their opinions, contradictions and misconceptions. Though group works are taking place, fine tuning the group dynamics and providing opportunities for co-operative learning has to be done.

- How does the teacher know what the students learned? Oral and written ansers still dominate as main tools for assessment. Discussions with teachers indicated that teachers do not have sufficient understanding about the nature and role of assessment practices in constructivist learning design.

- The classroom arrangements, especially in U.P classes are not conducive for learners to put forward and discuss ideas with the teacher and with their peers as a part of co-operative and collaborative learning.

4.1.3.Beliefs and assumptions of teachers towards new pedagogical practices

Students' learning is associated with the behaviours exhibited by the teacher during instruction. One's behaviours in classroom instruction is shaped by that person's beliefs, assumptions and understandings about the subject, pedagogic practices and about students. This contributes towards the teacher's competence to teach. Many studies conducted world wide have identified that teacher competence has significant impact upon students' learning than road school level factors.

1. Teachers generally are aware of nature of core subjects and language.
2. They believe that learning is enhanced by creating challenges, problematising issues and initiating inquiry within a supportive environment and through activities which build upon students' experiences and issues felt to them.
3. In the case of science teachers teaching in U.P classes, teachers place the role of doing

practical/ experiments and hands-on activities in science instruction on a higher pedestal.

4. Majority of them do not believe that scientific problems given to students should be solvable quickly in a few steps. Periods of uncertainty, conflict, confusion and surprise are a significant part of the Science learning process.

5. On issue based pedagogy the teachers agree that they should negotiate social issues with the students in order to develop a cooperative learning environment in which students can construct their knowledge.

6. They do agree that the role of teachers is not to transmit information and not to verify that learners have received this information.

When we come to their practice of these beliefs in instruction, the study realizes that the beliefs are not internalized fully by the teachers, the practices to put into action these beliefs have not been developed and there are enough evidences of continuation of traditional teaching in most of the classes.

4.1.4.Role of Resource groups for bringing about the changes

Planning the academic activities at school is the core of the entire school functioning. The planning structures include SRG in all schools and subject councils, specific to U.P schools. The planning tools include School Calendar and Teaching Manual.

It has been found that all the schools have constituted SRG early in the academic year itself and 6 to 8 SRG meetings have taken place so far in all the sample schools. Subject councils are not operational in most of the schools. The SRGs do maintain the minutes of the meetings conducted SRGs have taken major initiative to prepare school calendars in all the schools.

To what extent the SRGs contribute towards improving science teaching is the question arises here. But the following observations on the general conduct of SRG meetings itself in these schools show that the influence of SRG on science teaching and other subject areas are less in terms of efforts and in terms of its quality.

1. The focus of SRG meetings is on management aspects of day celebrations, PTA meetings etc than on planning and sharing of academic content and processes.

2. The SRGs are yet to take up initiative to devise plans for addressing instructional issues felt by individual teacher at the school.

3. The implementation of decisions taken in the SRG meetings are not monitored and evaluated by the Headmasters but left to the person on whom the duty of implementing a particular task falls.

4. All the teachers in the sample have reported that they could not give self-directed activities for students while SRG meetings are conducted. This force them to round up the SRG meetings quickly, with out elaborate discussion and planning.

5. It is sad to say that SRG meetings in schools are yet to become mini-planning workshops in which the goal-setting of the school takes place.

6. The full time participation of Headmaster in SRG meetings, especially in U.P schools are becoming less frequent and less focused.

7. The subject councils are not functional in these schools where more than one division of a particular grade exists. The advantage of subject councils in such schools is yet to be understood by the teachers.

4.2. Management of the system and personnel for Learning, Instruction and Assessment and professional development of teachers

Effectiveness of the management of the system and personnel for learning, instruction and assessment directly influences learning processes and learner achievment. The status of the system on these aspects are the following.

4.2.1. School policies on Learning, Instruction and Assessment and   professional development of teachers

The effective transaction of curriculum demands a dynamic system constantly linking the curriculum, instruction and assessment. Institutionalizing feedback loop which runs through these three elements at various levels, class, school, sub district and state, is vital to meet this demand. Formulation of school policies at the beginning of the academic year and its constant monitoring and improvement received through the feedback has to become the foundation stone for maintaining and upgrading this system. At present, the entire management of this system is left to the teacher. There are no specific school policies with regard to identification of priorities in learning and assessment, term wise scheduling of curriculum statements which are to be assessed, the strategies for instruction and assessment, the frequency of class tests, reporting of students' learning and achievement etc. The institutions which are created for formulating the school policy, Headmaster, SRG, Subject councils etc haven't paid any attention to the demand of institutionalizing school policies on instruction, assessment and examination but runs on subsequent administrative orders. The same picture is repeated at sub district, district and state levels.

4.2.2. Collaboration of various personnel and agencies

It is left to the teacher to mange the entire academic programme, but with little amount of school level planning, collaboration and assessment of the programme. The changed vision of learning demands a changed form of collaboration among teachers, teachers and students, teachers and parents and school and community. The constant feedback running among them makes the instructional programme dynamic and helps to meet the school level policies. The role of Headmaster has been restricted to an administrative manager of the system, but not as a facilitator, monitor and guide for effective management of school programmes and policies.

4.2.3. Accountability on roles and functions

Accountability for implementing the whole process is left on teacher's shoulders. The Headmaster's role of monitoring the implementation of assessment and instructional programmes have been restricted to signing documents at the end of each term or at the end of the academic year. Sample monitoring and evaluation of 1) school development plan 2) Instructional plan and instructional strategeis 3) assessment plan and assessment strategies 4) instruction and assessment tools like Teaching Manual and Students' profile 5) classroom instructional and assessment processes and students' evidences of learning 6) Grading procedure 7) examination tools 8) scoring programmes and score sheets of students etc are some of the roles that the Headmaster and the school should be made accountable.

4.2.4. Monitoring programmes and processes

The system of BRCs/CRCs/VECs/Sub district level monitoring groups/District monitoring group.. The list of monitoring agencies may be swelling up. But the monitoring agencies also lack a monitoring plan fixing its frequency, priorities, information required, building linkages among strucutres at various levels and communication channels, tools and strategies. All these agencies demand consolidated report at the end of every month/term but seldom go through the information, analyse and interpret it.

4.2.5. Integrated efforts to build up the capabilities of personnel and system

The capacity building programmes of teachers, trainers and monitoring personnel have been focusing their entire efforts to see how the text shall be taught but not on methods to figure out how a teacher/a school/ an organization or a group can best undergo positive change for effective curriculum transaction. The starting point of change has to be on acknowledging the strengths and skills the personnel already have in instruction and assessment. Through a process of enquiry, integrated programmes for capacity development of the personnel has to be attempted so that every one is able to visualize the road map of action lying ahead of him/her. (Quote the results of various studies)

5.The Need for New initiaitives in bringing out Changes

In order to sustain the trends of changes and to increase the pace of changes, review and reforms in interventions and the inclusion of new alternative interventions have to be brought into the sytem. This initiative shall focus on

1. revisitng the basic curricular aspirations and approaches

2. developing practical models focussing on curricular aspirations

3. developing alternative practices adapted to the professional needs of teachers and learners

4. addressing the curriculuar and professional issues related with teaching and learning

5. development of research based practices and strategeis to address the issues related with instruction, instructional management, school level practices and community relations.

6. Updating the curriculum, textbooks, source books and teacher development programmes based on the data generated through continuous monirtoring and assessment of interventions.

7. Revising the role and functions of academic institutions like DIET and BRCs in initiating changes.

6.Need and Scope of Pedagogic Lab

It is in this context that DIET Palakkad advocates the estblishment a Pedagoci Lab with the goals and objectives as given below.

6.1.Pedagogic Lab-Goals

Design, Research, Try out and Develop practical models on these areas and integrate with the Common school system so that

- the curricular assumptions and goals are more readily imbibed by the practioners,

- they are empowered with the competences to bring in changes,

- the problems pervading in Educational system are addressed (through contextually) and solved through practice-oriented and research based methods and strategeis.

6.2.Objectives of Pedagogic Lab

- To make theoretical and practical reflections on curriculuar perspectives, approaches and strategies.

- To examine, evaluate and upgrade the constructs of pedagogy and didactics which account for the curriculuar perspectives.

- To identify the competences required by the practitioners, develop multiple models to address them, develop professional development plans and put it back into the system.

- To generate new tools, processes and technology for practitioners.

- To help the practitioners acquire necessary knolwedge and skills to meet the challenges of education in the era of globalisation.

- To develop and further augment Resource centres with the capacities and facilities to develop, try out, apply and decentralise the processes of change.

- **6.7.Activities**