Systematic Assessment and Monitoring leading to Improving Quality of Education

Abstract

This study was aimed at assessment of quality of teaching-learning process and impact of interventions on actual learning by students. The study was focused on Indian schools operating in India, Bahrain, Dubai and Sharjah. It covered Government schools and Private schools both in rural and urban areas. Around 5000 lesson observations were conducted. The process was carried out for six years and few schools were monitored consistently to study the effectiveness of interventions on quality of teaching and impact on students learning. Learning indicators prescribed by NCERT–India were selected as parameters and by combining recommendations of National Curriculum Framework and norms of various inspection bodies; the standard framework was prepared. This was a comprehensive effort covering cognitive learning and Life Skills.

Results indicated the crucial role of understanding of age-subject specific expected learning outcome and appropriate pedagogy. It also helped to design Model of Assessment and Monitoring to improve overall quality. In this Model “Structured Lesson Observation” was used as “Assessment Tool” and specific “Monitoring” to establish connection between classroom teaching process and students’ learning. To gauge the impact of learning by students “Question Specific Analysis” was conducted after each assessment. The Study also provided contributing factors and challenges to maintain quality of education.
“The purpose of education is not to produce mere scholars, technicians and job hunters, but integrated men and women who are free of fear; for only between such human beings can there be enduring peace.”

J Krishnamurti - Education and the significance of life

Introduction:

This study primarily focuses on the EFA Goal 6: Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

This study reviewed the status and the process of achievement of Class wise (age appropriate) subject specific recognized and measurable learning outcomes and thereby designing a practical and workable model to enhance the quality of education at micro as well as macro level.

Background

While conducting the workshops for the school leaders on ‘Quality School Governance’ as a part of one of the national drive and working with the CBSE (Central Board of Secondary Education in India) on various Capacity Building Programs for school heads and teachers, we realized that most of the teachers treat curriculum and syllabus synonymously and have focused more delivery of text-book contents.

These workshops were of three days duration (ranging from five days to two days) and thus we got an opportunity to interact with school leaders and senior teachers at length, spending enough time on discussing to understand the ground realities.

Over a period of six years approximately 400 schools from various states of India viz Maharashtra, Kerala, Madhya Pradesh, Andhra Pradesh, Karnataka, Tamil Nadu, Gujarat, Arunachal Pradesh, Assam etc and Indian schools in Dubai, Sharjah, Bahrain, Al Ain etc were interacted. It included Government or Government aided schools and Private schools as well. The boards covered were State Boards, CBSE and ICSE.

Considering the inclusiveness, large sample size and adequate time spent with the school leaders and teachers to understand the facts; these observations stand valid and have played an important role in creating foundation for the study undertaken.

Two Key Observations:

1. In spite of efforts taken by all boards to incorporate the recommendations of NCF 2005 into day-to-day teaching learning process, most of the teachers are still unclear about the shift in pedagogic process and the rationale behind it. Awareness level of ‘Aims of Education’ and ‘subject specific recommendations’ in Position Papers was found extremely low.

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1 J Krishnamurti - Education and the significance of Life
2 EFA Goal 6 - UNESCO
2. Teaches’ subject-matter knowledge was moderately good but the pedagogical skills and its awareness was poor. Even the concept of joyful learning was implemented without the meaning and understanding of its principles.

‘The fact that learning has become a source of burden and stress on children and their parents is an evidence of a deep distortion in educational aims and quality’ – NCF 2005

Benefits and Limitations of Trainings

While working with the schools we realized that only imparting training to teachers will not be sufficient to improve quality of education.

For example: Teachers who were trained on CCE shared that trainings helped them to understand the process of CCE and also to maintain various records. But while practicing, they were actually implementing Formative Assessment, though the tools selected were from the recommended list of formative assessment, in spirit it was found to be ‘assessment of learning’ rather than ‘assessment for learning’

Benefits and Limitations of Establishing Governance System (School Accreditation)

In addition to this, the experience of establishing the strong governance system through successfully completing National School Accreditation, to help improve quality of education indicated limitations.

It was rightly pointed out that ‘Countries design National Curricula to embody the knowledge and skills deemed important for pupil to acquire. Even most finely crafted curriculum is irrelevant, however, if teachers do not use it as the basis for their classroom interactions’

The Study Plan

Context

The National Council of Educational Research and Training (NCERT) is an autonomous organization of the Government of India it assists and advises the central and state governments on academic matters related to school education and Implementation of the National Curriculum Framework.

The NCERT provides syllabi following the NCF. NCERT has also provided model text books along with class-subject specific learning indicators. At state level this has been taken care by SCERT.

Private publishers are also required to follow NCERT directives.

Thus conceptually, right from curriculum, syllabus, textbooks and recognized learning outcomes to teacher support material, all required for quality education is available. Still there are gaps between the planned or conceptual frame and actual implementation; hence this study.

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3 National Curriculum Framework 2005
4 CBSE CCE Manual for Teachers Classes VI-VIII
5 NABET School Accreditation of 15 completed projects
6 UNESCO. - Education for All: status and Trend 2000: Assessing Learning Achievement
Outline of the Study

The study started with an objective of ‘**improving quality of education and especially the classroom delivery focusing achievement of curricular objectives**’

Measuring the progress on quality is a tough task hence the tangible, observable and measurable parameters of classroom delivery were selected.

Based on the initial findings, we decided to have comprehensive interventions and worked out a model to ensure the enhancement of quality of education.

**Study Samples and categorization**

For this study initially we observed around 800 lessons and then derived this study model

After the design of model, around 1200 teachers were monitored periodically with systematic coaching over a period of time varying from one year to 4 years and observed over 4000 lessons.

These teachers were selected from different type of schools and are categorized as:

1. Government or Government Aided Schools
2. Rural Private Schools
3. Urban Private Schools
4. Overseas Indian Schools

**QUALITY IMPROVEMENT MODEL**

**Rationale**

This Model has an interdisciplinary approach. It is based on age appropriate pedagogy, principles of holistic psychotherapy and Organization Development (OD) theory.

In the process of ‘Improving the Quality of Education’ TEACHER has always been the primary factor. *Learning happens only through teacher-student relationship*. Even the use of advanced technology has lot of limitations and cannot replace teacher. Ultimately the ‘Teacher’ becomes the driving force in the whole movement of Quality of Education.

Another factor which helps to enhance the quality of education is availability, awareness and use of ‘recognized and measurable learning outcomes’ including ‘age appropriate pedagogy’

This model therefore revolves around **helping teachers to improve the quality of teaching-learning process by equipping them with tools, techniques and a system of curriculum delivery**

**Design**

Principles of holistic psychotherapy have been used as a foundation. In this model teachers will get to know the present status of their teaching learning process in an unbiased way. The Lesson Observations provide ‘Here and Now’ status. Without commenting about the teacher ‘as a person’ or ‘his or her ‘teaching style’ this model focuses on **gaining awareness of the**
present moment and the present context and thereby finding ways for further improvement. This provides a comfort zone for teacher and paves way for communication. Thus the Lesson Observation analysis combined with feedback was used as a ‘Performance Management’ tool rather than appraisal.  

Based on the here and now findings the feedback is provided. The feedback has to be impersonal and unbiased for better acceptance; hence the standardized Learning Indicators published by NCERT were used which also clarifies age appropriate pedagogy.

Comprehensive OD interventions are used in this model to ensure its workability and effectiveness. Initial preparations of Annual Plans based on NCERT curriculum guidelines provide ‘structural’ component and here-and-now analysis along with impersonal feedback, as a part of ‘process intervention’ component. With the involvement of teachers and handing over the ownership of improvement to them brings cultural change in school which is be long lasting.

Overall progress on the improvement scale is measured in terms of Level 1 to Level 6. These are the performance levels indicating the progression on quality of education. Each level has been defined clearly and aligned with the scores given based on the rubric. After the each cycle of lesson observation the scores and in turn the achievement on Performance Levels were analyzed and teachers use this analysis to move on to next or desired level achieving the objective of ‘Improving the quality of education’

Performance Level description

<table>
<thead>
<tr>
<th>Level</th>
<th>Score Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6</td>
<td>71-100</td>
<td>Constructivist Approach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning experiences are carefully designed and</td>
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<td></td>
<td></td>
<td>learners are actively involved in a process of</td>
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<td></td>
<td></td>
<td>meaning and knowledge construction</td>
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<tr>
<td>Level 5</td>
<td>61-70</td>
<td>Learner Centric</td>
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<tr>
<td></td>
<td></td>
<td>Communicative and collaborative learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>environment. Facilitates supports and encourages</td>
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<tr>
<td></td>
<td></td>
<td>learning.</td>
</tr>
<tr>
<td>Level 4</td>
<td>51-60</td>
<td>Planned and Structured</td>
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<tr>
<td></td>
<td></td>
<td>Lessons are planned focusing the expected</td>
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<tr>
<td></td>
<td></td>
<td>learning outcome and accordingly the activities</td>
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<tr>
<td></td>
<td></td>
<td>are implemented. Students show progress in</td>
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<tr>
<td></td>
<td></td>
<td>learning.</td>
</tr>
<tr>
<td>Level 3</td>
<td>41-50</td>
<td>Improving</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher-student interactions are conducive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>leading to learning</td>
</tr>
<tr>
<td>Level 2</td>
<td>31-40</td>
<td>Teacher Centric</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The classroom remains orderly. Students are</td>
</tr>
<tr>
<td></td>
<td></td>
<td>quiet, and the teacher retains full control of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the classroom and its activities. Still rote</td>
</tr>
<tr>
<td></td>
<td></td>
<td>learning is focused.</td>
</tr>
<tr>
<td>Level 1</td>
<td>01-30</td>
<td>Inconsistent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unstructured and inconsistent practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>emphasizing rote learning.</td>
</tr>
</tbody>
</table>

Working methods of the Model

In this model, structured and systematic ‘Lesson Observation’ is used as a tool of assessment of improvement in quality of education and in true sense ‘Performance Management’ tool.

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7 People - Capability Maturity Model® (P–CMM®) Version 2.0 CMU/SEI-2001-MM-01
Lesson Observation shall be conducted on 10 parameters and each parameter is further measured on 10 point scale (scores). These 10 parameters and 10 point scale of each parameter called as rubric was shared with teachers.

The outcome of Lesson Observation in form of scores earned on each of the parameter shall be discussed with each teacher which helped them to understand the status on the Improvement Scale (Lesson Observation Rubrics).

Now each teacher is aware of the current status and also the way forward on the path of improvement using rubrics.

Parameters of Lesson Observations:
1. Start-up activity & Class Set up
2. Quality of questions by teachers/ assessment tasks
3. Quality of Participation by students
4. **Planning of activity**
5. Execution of planned activity
6. Differentiation and its impact
7. Cross curricular linkage / Life skills/ Values
8. Overall time and Classroom Management
9. Usage of ICT or other teaching aids
10. Effectiveness of plenary

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**Lesson Plan Parameters**
- Specific learning Objectives
- Unit/topic learning contexts
- Pedagogical strategies
- Flow of lesson/unit (including activities/ experiments/hands-on-learning)
- Assessment tasks
- Remedial teaching plan
- Interdisciplinary Linkages
- Infusion of Core (Life-skills, Values, etc.)
- Resources (including ICT)
Steps involved

Step 1: Teachers’ orientation on the Class wise – Subject wise Learning Indicators (Expected Learning Outcome), Stage wise Curriculum Expectations and related pedagogic process

Step 2: Lesson Plan alignment with the Expected Learning Outcome

Step 3: Lesson Observation Parameters discussion and sharing with teachers along with rubrics for scoring each parameter followed by Periodic Lesson Observations.

Step 4: On completion of each cycle the trend of each of the parameters to be shared with teachers. Teachers identify the areas of improvement on their own along with the means to achieve them using the rating rubric

Step 5: Student Assessment outcome (based on systematically designed assessment tools) shall be linked with the teachers Lesson Observation outcome so that they can identify the areas for further improvement.

Sample Case Study (Illustrative example)

This sample school, case study, is a 10 year old Co-educational, CBSE affiliated school having student strength around 1800 and teaching staff of 140 teachers. Prior to the interventions the school has average level of academic performance.

The model was explained to the governing board along with the rationale behind it and after their consent the ‘Team’ of 5 senior members was formed to execute this project. This team was briefed about the comprehensive nature of model. All steps mentioned above were followed systematically.

Senior team members evaluated the current status of the academic system and its performance using the NCERT Learning Indicators as benchmarks, Specific targets were then set.

As a part of preparation; Annual plan was prepared referring the NCERT documents; later Unit Plans, Assessment Plans and School Activity Plans were drafted. All teachers were informed about the process, their role, objectives and points to be covered while preparing lesson plan.

First cycle of lesson observation was conducted and all details were shared with the teachers individually. Team helped them to understand current status and ways of improvement using rubric.

If any teacher got score of ‘4’ on the parameter ‘Quality of Participation by students’ then the teacher would use rubric and decide how to move on higher scale and achieve 6 or 7. To score 6 teacher would require ‘Organized efforts to enhance participation focusing Learning outcome’ and to score 7 teachers will have to use active learning technique. Thus teacher would plan their improvement on their own using rubric. Please check the sample given below.

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11 Minimum Learning Level – Ministry of HRD, India| Learning Indicators and Learning Outcomes at the Elementary Stage – NCERT | Maharashtra State SCERT Primary Education Curriculum 2004
3. **Quality of Participation by students**

(This parameter primarily focuses on efforts taken by teacher to involve students in the process of learning throughout the lesson)

<table>
<thead>
<tr>
<th>No participation</th>
<th>Passive listening to teacher’s lecture</th>
<th>Teacher asked questions to selected students and thereby ensured their participation, but in a limited way.</th>
<th>Teacher asked questions or involved more students in learning</th>
<th>Organized efforts/activity by teacher to enhance participation</th>
<th>Organized efforts by teacher to enhance participation focusing learning outcome</th>
<th>Active learning technique used by teacher</th>
<th>Active learning technique used and students made responsible for learning</th>
<th>Peer sharing leading to independent thinking</th>
<th>Student lead class with minimal teacher talk time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
<td>5.</td>
<td>6.</td>
<td>7.</td>
<td>8.</td>
<td>9.</td>
<td>10.</td>
</tr>
</tbody>
</table>

All these teachers were monitored by way of periodic lesson observation and feedback was shared with them.

Discussion of following points helped teachers to identify their areas for improvements.

- Class – subject – topic specific learning outcome to be focused
- The flow of lesson, Prior Planning & Time Management is of utmost importance.
- **Teaching aids** need to be **topic appropriate**, easy to view and understand.
- **Plenary** planning to ensure **good retention**
- Questioning skills needs to be improved to include variety of questions for different purposes.

Following table shows the improvement trend over a year. (Scores are the average- rounded off scores)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Starting Point</th>
<th>After 6 months</th>
<th>After 12 months</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Start-up activity &amp; Class Set up</td>
<td>3.5</td>
<td>4.5</td>
<td>5.0</td>
<td>▲++</td>
</tr>
<tr>
<td>2. Quality of questions by teachers/ assessment tasks</td>
<td>4.0</td>
<td>4.5</td>
<td>5.0</td>
<td>▲+</td>
</tr>
<tr>
<td>3. Quality of Participation by students</td>
<td>4.0</td>
<td>5.5</td>
<td>6.5</td>
<td>▲++</td>
</tr>
<tr>
<td>4. Planning of activity (Lesson Plan)</td>
<td>4.5</td>
<td>5.0</td>
<td>6.0</td>
<td>▲++</td>
</tr>
<tr>
<td>5. Execution of planned activity</td>
<td>4.0</td>
<td>5.0</td>
<td>6.0</td>
<td>▲++</td>
</tr>
<tr>
<td>6. Differentiation and its impact on learning</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
<td>▲+</td>
</tr>
<tr>
<td>7. Cross curricular linkage</td>
<td>3.0</td>
<td>3.0</td>
<td>5.0</td>
<td>▲++</td>
</tr>
<tr>
<td>8. Overall time and Classroom Management</td>
<td>4.5</td>
<td>5.0</td>
<td>5.5</td>
<td>▲++</td>
</tr>
<tr>
<td>9. Usage of ICT or other teaching aids</td>
<td>3.0</td>
<td>4.0</td>
<td>5.0</td>
<td>▲+</td>
</tr>
<tr>
<td>10. Effectiveness of plenary</td>
<td>3.0</td>
<td>4.0</td>
<td>4.0</td>
<td>▲+</td>
</tr>
</tbody>
</table>
After collection of the scores of all the parameters of teachers who were observed, it was observed that the following parameters shift in level of quality:

- Quality of Participation by Students
- Planning of Activity
- Execution of Planned Activity

The following areas were identified for further improvement:

- Differentiation and its impact on learning
- Cross Curricular Linkage / Life Skills/ Values – showed shift in level but has not yet reached the desired level.
- Effectiveness of Plenary

Coming to an overall conclusion, it was observed that most of the teachers showed improvement, since the implementation of this concept.

Planning of activities and their execution has improved and teachers have incorporated Learning Indicators as well as Pedagogic Processes.

Differentiation and Cross Curricular Linkage needs immediate attention and the usage of learning aids needs improvement.

**Verifying the Impact: Question Specific Analysis**

To verify the impact and usefulness of the efforts taken, weekly test and term test question papers were re-structured to map with learning outcome. This activity of designing assessment tools, scientifically, help teacher to reinforce the importance curriculum based approach and learning outcome. After the end of each test, a subject wise – question wise analysis was conducted. Student wise data helped teacher to understand and realign their teaching-learning process.

**Student Response**

The success of this initiative was evaluated by feedback from the students. They feel very comfortable of new changes in teaching and learning in classrooms.
Category wise findings and data analysis

1. Urban Private Schools

The urban private schools were selected from metro cities, regional centres and district headquarters. The students are mostly from the middle and upper middle class where the literacy rate is high (average 85%). The population of these places ranges from 10 lakhs to 60 lakhs.

The teachers in these schools were found to be qualified and many of them have additional qualifications. The urban private schools have good infrastructure.

The sample size considered for the study was 375 teachers from various schools and the total number of lesson observations conducted was 1200

Observation and Analysis

Initially we found that use of learning aids to support teaching-learning process were not appropriate. Most of the Teachers heavily use lecture method or sometimes only Audio-visual clips. Planning of the lesson was restricted to the topic to be taught on that day, some questions to be asked and the activity mentioned in the textbook

We had periodic lesson observations followed by discussion on scores and a way forward. After a year improvement was visible and it showed consistency for three years.

This analysis is based on the average of this group. Few individual schools showed better shift in quality of education than the average.

- Teachers understood the importance of systematic flow of lesson delivery. Few teachers used innovative methods
- Quality of questions changed, the shifted to use variety of questions, involving students in learning process etc.
- Initially the student participation was limited to answering the questions which were most of the time memory based or sometimes understanding based and related to the textbook content. As teachers provided space and opportunity to the students to interact freely, participation showed upward trend along with better understanding.
- Once planning part become clear with the understanding of NCERT Learning indicators, teachers started planning the lesson seriously focusing expected learning outcome.

In general urban private schools showed improvement in quality and shift to Level 4. The schools where the management was actively involved and extended support with understanding the situation showed great improvements.

Majority of urban private schools improved up to level 4 and beyond and few schools reached to Level 5

Areas of Improvement

- Balanced allocation of instructional time for scholastic and co-scholastic subject areas.
- Quality of assessment tools shall be focused
- Parental involvement with clear understanding of aims of education
- Selection of textbooks.
2. Rural Private Schools

Schools selected for the study have following Demographic characteristics; average population 40000; average literacy rate below 75%, people mainly earn their livelihood by farming and by doing farm related work. Other occupation also includes small traders and retailers. Teacher attrition rate is observed to be high. Schools generally face the problem of scarcity of qualified teachers.

Schools located in rural area lack in infrastructure and other facilities.

Sample size of 400 lesson observations of total 120 teachers approx. was taken for the study.

Regarding implementation of improvement model all steps were religiously followed.

We observed two distinctly different approaches in rural private schools. Schools having competition of nearby schools showed good improvement; even better than urban private schools; can be called as ‘Improving school’

While other schools continued to show poor performance. This was due to untrained teachers and lack of commitment and care from school management called as ‘Stagnant Schools’

Observation and Analysis

These score are from the schools that witnessed consistent improvement and maintained the trend for three years.

Out of 10 parameters designed for lesson observations 5 parameters had noticeable findings and other five parameters were hardly practiced.

- Earlier practice was an unstructured flow without creating context. After the interventions things changed and almost all teachers showed improvement in adopting systematic flow
- Like urban schools, Question quality improved.
- When the space was provided to the students, they used it creatively. Rural student who used to be shy in asking questions or were passively learning in class now started participating in the learning process.
- Lesson Planning took almost a year for improvement. Teachers started preparing lesson plans covering the recommended aspects.

Improving schools from rural area reached to level 4 and Stagnant schools from rural area remained at level 2

Areas of Improvement

- Rural private school teachers need periodic and ongoing training
- Quality of assessment tools is a matter of great concern.
- High attrition rate of teaching staff need to be addressed
- Infrastructure and learning aids
3. **Overseas Indian Schools**

Overseas Indian schools showed resemblance with private schools from metro cities. With moderately good infrastructure, qualified and sufficient staff, parental literacy almost 100% and good paying capacity provided a good working culture.

600 teachers and more than 2200 lesson observation gave enough and reliable data for study and analysis.

Administrative control was effective and schools showed commitment in implementing the model. All preparations prior to the beginning of the Lesson Observations were completed within two months including detailed Unit Plans and Assessment Plans.

Orientations for teachers were conducted periodically and parameters of lesson observation and scoring rubric were shared with teachers.

Performance of overseas Indian schools was similar to Urban Private schools (from metro cities). All parameters had similar trend.

**These schools improved to level 4 and 5**

**Areas of Improvement**

- Selection of textbooks and other learning material must be pedagogically sound and age appropriate
- Simplification of assessment practices. Students are over burdened with unreasonable home work and too many tests; specifically in primary grades.
- Staff training is currently inadequate.

4. **Government and Government Aided Schools**

We studied Government run schools from three districts with 70 teachers and 120 lesson observations.

These schools are State Government run primary schools in rural areas. In addition the state government also gives financial aids and technical supports to the schools. Majority of the poor parents choose these schools. For the study schools were selected from different locations right from remote villages, block level to small towns.

All teachers were found to be qualified as per the prescribed norm and were well paid. Teachers also belonged to nearby area.

Parents were mostly from lower middle class to poor families; their occupations were farmers, laborers or small traders and sometimes government employees.

Schools were small with minimal infrastructure, that too, in quite bad shape. The text books and other material were supplied free by the government.

In government run schools we face the problem of consistency. Any change may it be the senior official’s transfer, teacher, head master or frequent new directives would disturb the entire teaching learning process.
Teachers were implementing the various schemes and guidelines but the focus was “COMPLIANCE” rather than helping students to learn. The documentation, record keeping etc was almost perfect. But the ‘student’ was not at the centre of the affairs. Everything was being done for administrative compliance.

Lesson observations conducted also indicated inconsistency and similar approach.

In another study of Government Aided schools, we selected schools from similar background and systems but these schools were managed by Not for Profit – Non Governmental Organizations. This one factor made huge difference.

We studied these schools with 110 teachers and 400 lesson observations over a period of two years.

In these schools we replaced NCERT documents with SCERT curriculum.

Initial status was similar to government run schools but the school management took a decision to implement the Accreditation system and thereby improve quality of education. The above model was used.

The diagnostic phase revealed that teaching learning process was teacher centric covering textbook portion. After the preparation of annual plans based on SCERT guidelines teachers realized the specific learning outcome and classroom teaching was aligned to it.

**Government schools, in spite of efforts by few teachers, lack consistency and frequent changes in policies made schools less effective. These schools can be rated maximum up to level 2**

**Government Aided school selected for this study showed greater commitment and worked hard to reach to Level 3 or slightly above 3**

**Areas of Improvement**
- Infrastructure and learning environment
- Low morale and motivation level
- Stable working system and methods
- Well defined tasks with measurable outcomes

**Issues and concerns**

In spite of clear directives by CBSE to select pedagogically sound text books, almost all schools use age-inappropriate, error-laden textbooks and other material which do not focus on stated curricular objectives.

Assessment system varies from school to school. Tools and processes and the way they are administered do not match the learning outcomes and curricular objectives.

High teacher attrition rate and teacher absenteeism and poor quality of in-service training is adversely impacting quality.
Parents’ perception of education is a matter of concern; they value written work, memorization and lot of home work. Productive skills and marks are given much more importance and understanding, reasoning and logical thinking skills are not valued.

**Conclusion**

Concept of systematic assessment and periodic monitoring backed by structured, impersonal feedback combined as ‘comprehensive interventions’ worked well with all types of schools having different socio-economic background and the serving population. Improvement in quality is gradual and consistent. Further it did not show any sign of relapse over the period of four years.

It showed limitations with the Government Schools but the reasons were different than the workability of this concept.

**Micro level Implementation**

Individual schools can effectively implement this concept without any modification or alteration. One needs to understand the rationale behind it and then proceed step by step.

**Macro level Implementation**

If large clusters wish to implement this, then school wise groups can be formed to conduct awareness campaign about the design and rationale. Once the rationale is clearly understood then only the cluster can move to methodology awareness and later the implementation.

Since this is a comprehensive OD intervention, challenges are bound to be there. It is likely possible that score would be taken as comparison, this would change the whole approach. We do not intent any competitive approach but rather open and transparent culture wherein the scores are used to map the progress and improvement. Focus must always be on ‘Performance Management’ and NOT on ‘Performance Appraisal’

**Recommendations**

Involvement of all stakeholders of would help improving quality of education. Their commitment is vital for this greater cause.

School Management, Teachers and even students must have complete clarity of recognized and measurable learning outcomes which are age and subject specific.

Measurement of student learning shall be done using scientific tools and processes. Assessment methods must be aligned learning outcome.

Academic supervision shall be systematic and periodic. The outcome of the each lesson observation and the student assessments shall be used as input for improving classroom delivery.

At school level, specifically private schools, efforts should be taken to align the annual plan to the recommended instructional time and curricular objectives.

Parental understanding of ‘Aims of Education’ is desperately essential for quality of education. Once the parents start demanding the quality naturally schools will have to deliver the quality.
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