SARVA SHIKSHA ABHIYAN
TAMIL NADU

QUALITY INITIATIVES
2016-17
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Content</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>QUALITY ENHANCEMENT</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>TRIMESTER, CONTINUOUS AND COMPREHENSIVE EVALUATION</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>QUALITY MONITORING TOOLS - QMT</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>PERIODICAL ASSESSMENT</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>STATE LEVEL ACHIEVEMENT SURVEY- SLAS</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>PERFORMANCE INDICATORS - PINDICS</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>SHAALA SIDDHI</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>SIMPLIFIED ACTIVITY BASED LEARNING - SABL</td>
<td>24</td>
</tr>
<tr>
<td>8</td>
<td>SLM KIT BOX</td>
<td>29</td>
</tr>
<tr>
<td>9</td>
<td>ACTIVE LEARNING METHODOLOGY –ALM</td>
<td>33</td>
</tr>
<tr>
<td>10</td>
<td>SCIENCE KIT BOX</td>
<td>35</td>
</tr>
<tr>
<td>11</td>
<td>IN-SERVICE TEACHERS TRAINING</td>
<td>38</td>
</tr>
<tr>
<td>12</td>
<td>COMPUTER AIDED LEARNING – CAL</td>
<td>47</td>
</tr>
<tr>
<td>13</td>
<td>LEARNING ENHANCEMENT PROGRAMME – LEP</td>
<td>54</td>
</tr>
<tr>
<td>14</td>
<td>ANIMATION VIDEO CDS</td>
<td>57</td>
</tr>
</tbody>
</table>
Quality influences what students learn, how they learn and what benefits they draw from their education. Teacher's task in providing the quality education is a venture. Quality education is a dynamic concept. It evolves with time and is subject to social, economic and environmental conditions. However, the Sarva Shiksha Abhiyan, provides a general framework that guarantees acceptable and adoptable quality education, to all children.

Sarva Shiksha Abhiyan encourages all Schools to focus on the total development of the children, encouraging Sports, Cultural and Project works involving interaction with social and natural surroundings, initiating ICT in schools, activity based learning, exposure to life skills etc., ensures School as a Social institution and hub of community activities.

PATH TOWARDS VISION 2023

"A vision gives you the impulse to make your own art work. Vision entails a task to accomplish."

All round development such as physical, emotional, intellectual and psychological development of children through quality education is the vision of the Tamil Nadu government. The government vision of 2023 is to become India's most prosperous and progressive state with no poverty, and where its people enjoy all the basic services of a modern society and live in harmonious engagement with the environment. Realizing the importance achieving the goals of the Vision 2023, the Government has implemented 14 welfare schemes for the benefit of school students. The Sarva Shiksha Abhiyan with the guidance of the State government is dynamically striving hard to reach the goal. Decline in Drop-out rate in higher classes in the Schools is achieved by Special incentives & Scholarships to the children completing High & Higher Secondary School.
Trimester, Continuous and Comprehensive Evaluation (CCE)

“Everything that is excellent will come when this sleeping soul is aroused to self-conscious activity” - Swami Vivekananda.

Educationalists, worldwide have suggested the need for examination reforms to make the assessment as an integral part of the learning process so that both learning and assessment is stress free. Keeping the above views, the government has introduced Child-friendly Trimester Educational System in schools of the state. In a pioneering initiative to reach the goal of quality in education, the Continuous and Comprehensive Evaluation (CCE) and Trimester Pattern has been introduced to schools of the state in 2012-13 for class I to VIII.

**MERITS**

- Active and involved participation.
- Quality and quantity of learning are inter-related under this pattern.
- Students have active learning experience in science lab and field trip as they experience real life situations.
- It enhances learning with understanding and avoids mere rote memory.
- Interactive teaching enables the child to understand well with so many activities.
- Learning happens faster.
- It's not just a scheduled change but a model for school improvement.
- Enables the learners to learn any topics with involvement and enthusiasm.

**CCE Grading**

CCE grading format is provided to all schools to ensure whether the teachers follow all the Scholastic and Co scholastic activities as prescribed. Each teacher is given a grade based structure on how they have to follow, adopt and maintain CCE in their classroom.
CCE-Records:
The following records are maintained in the schools

- I Can I Did Record
- CCE Record for FA & SA
- Consolidated Register
- Cumulative Record
- Port folio – To keep safe the Children’s creative writing, arts and activities

CCE - scholastic and co-scholastic activities:

Portfolio and Cumulative Record
English Medium sections in schools

Impact of English medium sections in schools:

- Enrollment has been raised.
- Students are retained in schools.
- Parents' dreams have come true.
- Promotes child development.
- Stimulates exploration of reading & writing in English.
- Children learn English joyfully.
- SABL cards in English support the students to learn by doing activities.
- Brought positive impact among the parents and their dreams come true.
- Children are highly motivated to learn English.

Quality Monitoring Tools (QMT)

It is necessary to create mechanisms for monitoring to ensure provision of Quality Education in a systematic manner. NCERT has put in place a massive programme of monitoring the quality dimensions of elementary education throughout the country. As per RTE Act 2009, NCF 2005 and SSA Framework 2011, QMT formats have been redesigned by NCERT which is further modified appropriate to the state and are in use from the year 2013-14.
Almost in all classes, the percentage of Achievement of children is above 97% which shows the efforts of SSA. The schools with less than 79% attendance are visited by the officials for analyzing the solution and take appropriate steps for improvement.

Source: QMT Reports
School visit by State and District officials:

Mrs. Latha., Joint Director, visited PUMS, Kottiampoondi, Vikkravandi Block. Villupuram.

Thiru. Sundararaman, Senior Consultant, SSA, is interacting with children in GHS Alankuppam at Marakkanam Block, Villupuram.

Impact of School visit

- Ensures Quality Education to all School age children.
- Enabled observation of methodologies like SABL, SALM and ALM.
- Facilitated teachers and provided academic support.
- Teachers and students were motivated
- Enabled to observe the training impact in the classroom transaction.
- Regular monitoring increases academic performance and school sanitations.
- Identified training needs.
- Identify civil requirements and other related facilities.
- Grading schools (A / B / C / D / E) on the basis of teacher performance and methodology adaptation has been done
- Increase enrolment of students, identify OoSC and admit in regular schools or alternate centres.
- Provided guide lines for effective utilization of grants.
- Improved sanitation.

Schools Not Visited:

The State desires to ensure every school is visited at least once a month. In rare situations a few schools go unvisited during a particular month. During the review meetings on Fridays at Block level, such situations are discussed and steps are taken to complete school visit. The list of schools not visited every month is collected and reviewed by State Project Director every month. Through this, periodical visit to every school is being ensured.

Periodical Assessment:

Periodical Assessment is an important Quality Monitoring Tool implemented by the state. It is not only to assess and monitor the achievement level of children but also to make judicious assessments of teacher performance and to infer training needs of teachers to facilitate students better and to improve instruction process.
The assessment report reveals that in primary Classes, gradual increase of achievement from 76 to 85% in Tamil reading, 68 to 79% Tamil writing, 62 to 73% in English reading, 55 to 67% in English writing is noticed.

The assessment report shows that the percentage of children who have secured 100% has improved from 60 to 70% in knowledge based sums and 47 to 57% in skill based sums. Within a span of 6 to 7 months the percentage of children securing 100% is increased in skill based and knowledge based sums. Thus the assessment made by BRTEs at the beginning and at the end of the school year is highly helpful to the teachers to work hard to enhance the achievement levels of each child.
The assessment report reveals that in Upper Primary Classes, gradual increase of achievement of children from 80 to 87% in Tamil reading, 65 to 75% in English reading, 68 to 78% in Tamil Writing, 54 to 65 % in English writing is noticed.

The assessment report also shows that the percentage of children who have secured 100% has improved from 56 to 64% in knowledge based sums and 43 to 52% in skill based sums.

In the Phase-I of periodical assessment at primary level 81 and 69 percentage of students read well in Tamil and English, similarly, 73 and 63 percentage of students write well in English and Tamil languages respectively.

In Mathematics at Upper Primary level 56 percent of students do Knowledge based sums well while the percentage has dropped to 43 percent in skill based problems.
### Average Scores of SLAS 2015-16

The average scores of SLAS 2015-16 are given below:

#### Percentage of children in the score range:

Class - 3 - District Wise

<table>
<thead>
<tr>
<th>S.N</th>
<th>District Name</th>
<th>No of Block</th>
<th>Tamil</th>
<th>English</th>
<th>Maths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 to 50</td>
<td>51 to 75</td>
<td>76 to 100</td>
</tr>
<tr>
<td>14</td>
<td>KARUR</td>
<td>8</td>
<td>2.9</td>
<td>23.4</td>
<td>73.7</td>
</tr>
<tr>
<td>15</td>
<td>TIRUCHIRAPPALLI</td>
<td>16</td>
<td>4.05</td>
<td>16.05</td>
<td>79.91</td>
</tr>
<tr>
<td>16</td>
<td>PERAMBALUR</td>
<td>4</td>
<td>1.34</td>
<td>10.56</td>
<td>88.1</td>
</tr>
<tr>
<td>17</td>
<td>CUDDALORE</td>
<td>14</td>
<td>2.6</td>
<td>13.37</td>
<td>84.03</td>
</tr>
<tr>
<td>18</td>
<td>NAGAPATTINAM</td>
<td>11</td>
<td>4.48</td>
<td>15.55</td>
<td>79.97</td>
</tr>
<tr>
<td>19</td>
<td>THIRUVARUR</td>
<td>10</td>
<td>6.64</td>
<td>20.21</td>
<td>73.15</td>
</tr>
<tr>
<td>20</td>
<td>THANJAVUR</td>
<td>15</td>
<td>2.57</td>
<td>9.48</td>
<td>87.96</td>
</tr>
<tr>
<td>21</td>
<td>PUDUKKOTTAI</td>
<td>13</td>
<td>2.6</td>
<td>18.76</td>
<td>78.64</td>
</tr>
<tr>
<td>22</td>
<td>SIVAGANGA</td>
<td>12</td>
<td>4.44</td>
<td>19.61</td>
<td>75.95</td>
</tr>
<tr>
<td>23</td>
<td>MADURAI</td>
<td>15</td>
<td>2.77</td>
<td>15.53</td>
<td>81.7</td>
</tr>
<tr>
<td>24</td>
<td>THENI</td>
<td>8</td>
<td>3.75</td>
<td>15.79</td>
<td>80.45</td>
</tr>
<tr>
<td>25</td>
<td>VIRUDHUNAGAR</td>
<td>11</td>
<td>2.53</td>
<td>16.97</td>
<td>80.5</td>
</tr>
<tr>
<td>26</td>
<td>RAMANATHAPURAM</td>
<td>11</td>
<td>2.1</td>
<td>7.83</td>
<td>90.07</td>
</tr>
<tr>
<td>27</td>
<td>THOOTHUKKUDI</td>
<td>13</td>
<td>3.78</td>
<td>16.42</td>
<td>79.8</td>
</tr>
<tr>
<td>28</td>
<td>TIRUNELVELI</td>
<td>21</td>
<td>1.29</td>
<td>7.96</td>
<td>90.75</td>
</tr>
<tr>
<td>29</td>
<td>KANNIYAKUMARI</td>
<td>9</td>
<td>0.67</td>
<td>2.73</td>
<td>96.6</td>
</tr>
<tr>
<td>30</td>
<td>KRISHANAGIRI</td>
<td>10</td>
<td>1.09</td>
<td>5.76</td>
<td>93.15</td>
</tr>
<tr>
<td>31</td>
<td>TIRUPPUR</td>
<td>13</td>
<td>4.21</td>
<td>14.91</td>
<td>80.88</td>
</tr>
<tr>
<td>32</td>
<td>ARIVALUR</td>
<td>6</td>
<td>1.62</td>
<td>12.4</td>
<td>85.99</td>
</tr>
<tr>
<td>33</td>
<td>Grand Total</td>
<td>413</td>
<td>3.44</td>
<td>16.97</td>
<td>79.59</td>
</tr>
</tbody>
</table>
## Class 3-Tamil

### Students Ability Vs Number of items Answered and Cumulative responses of the Students

<table>
<thead>
<tr>
<th>Students Ability Score</th>
<th>Below 30</th>
<th>30 to 50</th>
<th>50 to 70</th>
<th>70 above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Students</td>
<td>1091</td>
<td>41917</td>
<td>24110</td>
<td>6488</td>
<td>73606</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Students who answered</th>
<th>Easy Items [ Difficulty is 30 to 50]</th>
<th>Difficult Items [ Difficulty is 50 to 70]</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Items Answered</td>
<td>0.09 0.11 0.01 0.1 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.11 0.12 0.13</td>
<td>0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09 0.10 0.11 0.12 0.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Correct Responses</th>
<th>Easy Items [ Difficulty is 30 to 50]</th>
<th>Difficult Items [ Difficulty is 50 to 70]</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.59 87 97.25 99.85 90.73</td>
<td>32.2 73.75 89.13 95.08 80.05</td>
<td></td>
</tr>
</tbody>
</table>
A sample of district wise comparison of Three years (2013-14, 2014-15, 2015-16) SLAS Scores are as follows:
As a special initiative of the State, the "Capacity Building Workshop" was organised and conducted at various levels by SSA, Tamilnadu in collaboration with Educational Initiatives, Ahmedabad. The various levels of the workshop (Primary and Upper Primary) consisted of selective Teacher Educators from D.I.E.Ts and teachers from various Districts of the State. It also was planned in a meticulous manner that it included personnel from all subject specifications. The following are the objective of this workshop:

- To train the team of state resource teachers in conceptual question making for Math, Science & Language
- To ensure good pedagogical practices in the state for developing assessments
- To enable the state resource team to conduct similar workshops at the block and cluster level

Academic Evaluation of children in Tamil, English & Mathematics

- Writing on hearing & creative writing
- Retention of information after listening
- Spelling for grammar
- Express ideas for others to understand
- Spelling
- Basic skills and using the mathematical concepts in daily life
- Assessing scientific knowledge and attitude among students.

State level Training

A state level training was conducted in on 15.12.2016. APOs, District Coordinators, AEEOs, DIET Faculties, High school HMs, Middle School HMs and all the BRC Supervisors were participated in this training.
Block level training

In turn block level trainings were conducted by the BRC Supervisors in all blocks on 16.12.2016. The field Invigilators (All BRTEs, Special Teachers & HMs) is given clear instruction to conduct SLAS.

<table>
<thead>
<tr>
<th>Class</th>
<th>Date of Examination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tamil</td>
</tr>
<tr>
<td></td>
<td>10.00 am to</td>
</tr>
<tr>
<td></td>
<td>11.30 am</td>
</tr>
<tr>
<td></td>
<td>10.00 am to</td>
</tr>
<tr>
<td></td>
<td>11.00 am</td>
</tr>
</tbody>
</table>

Online entry

Exclusive software has been developed with the help of experts for gathering survey data. Data entry work was started in the Block itself by BRTEs and Staff in BRC from 26.12.2016 and completed on 09.12.2016. The report generation is in process and the draft report will be shared with MHRD during PAB 2017 - 18.

PERFORMANCE INDICATOR (PINDICS)

PINDICS – Performance Indicator, is a self assessing tool for teachers to evaluate themselves, through a fore ordained self determining questioner.

Features of PINDICS:

- Self assessment by the teachers in the 1st quarter and III quarter.
- Assessment by HM/CRC/BRC coordinators twice in a year in discussion with the teachers and SMC members.
- It is linked with QMT and consolidated at CRC, BRC, District and state level.
The eight performance standards with Four point rating scale:

1. To plan and design the learning experience acquired by the students.
2. Knowledge and understanding of the lesson.
3. Techniques to enhance the learning process.
4. Inter-personal relationships with others.
5. Professional development.
7. Attendance of the teacher.
8. Cleanliness and hygiene.

PINDICS FORMAT – A SAMPLE

PARTNERSHIP BETWEEN SCHOOLS

SSA has carried out this partnership between two schools— one middle school mingling with a higher secondary/high school. Now 20 students of class 8 or of classes 6 to 8 to meet out the target number from a rural school will get an experience of education in an urban setting while those in cities will get to understand the rural set up. The programme has begun on the month of October and goes on till February, during which 6 reciprocal visits will be made. One school each in rural and partner for the school from urban blocks is selected respectively in the different educational blocks. During this academic year 2016 – 17, 286 rural schools and 286 urban schools have been selected across the State for this programme.
IMPACT OF THE SCHOOL PARTNERSHIP PROGRAM

- The students from different atmosphere (rural & urban) get opportunity to share their ideas, acquire knowledge, social values, and positive attitudes.
- The students are able to make use of the available teaching-learning resources such as laboratories, different teaching techniques, ICT which paves the way for better learning and understanding of the concepts.
- The program helps the participants to identify the positive and negative aspects.
- Develops group and peer learning processes.
- Field visits help the students to enrich their knowledge and participate actively in teaching-learning processes.
- Helps in enriching the cognitive skills.
- Helps in improving the administrative and leadership qualities of the HMs and Teachers.

The progress of 6 reciprocal visits of the rural and urban schools
ACTIVITIES PERFORMED

A warmer done in ADWGHSS – Kattur, BPGHSS – Kailasapuram of Thiruverumbur block and PUMS – Esanakkorai of Lalgudi as a getting to know you activity.

The poem “Yer Munai” – development stages of paddy using real objects

Students were visiting AEC & RI,

Maths projects are being prepared by the students.

Students of PUMS Palayapatti, Dindigul visiting milk chilling

Activities done by the students as a Co-Scholastic Activity
The MHRD has the ambition plan of uplifting the Indian schools to global standards. It has directed the NUEPA to frame guidelines for this purpose. NUEPA has developed the “School Standard and Evaluation” programme to assess the standards of each school at present and improve standards gradually.

In Tamil Nadu, after careful and understanding of the programme and the guidelines of SCERT, State Project Director (SSA), Departments of School Education and Elementary Education and RMSA, the project is implemented from the academic year 2016-17 in all the Government schools in the State with respect to internal evaluation.

**Development of the SSE Framework**

The Framework is developed on the guiding principles of Constitutional values, National Policies on Education, Curriculum Frameworks etc and also resonate the Right of Children to Free and Compulsory Education Act (2009), Rastriya Madhyamik Shiksha Abhiyan and Sarva Shiksha Abhiyan.

The principles of inclusion and equity are considered as the basic premises for developing the framework. The framework is strongly built on the notion of “All children can learn”.

SALIENT FEATURES OF SSE FRAMEWORK

- Identifies Key Domains as critical performance areas and a set of Core Standards under each Key Domain as reference points for evaluation and improvement
- A comprehensive instrument for both self-evaluation and external evaluation
- Flexible and adaptable for contextualization by the states, addressing the needs of diverse schools
- Clear, logical and easy-to-use by the school and external evaluators
- Makes the evaluation process consistent and transparent

Prof. Pranati Panda, NUEPA participated in Shaala Siddhi State preplanning meeting

Orientation Programme of Shaala Siddhi for all Department Directors
## WORKSHOP FOR SHAALA SIDDHI:

<table>
<thead>
<tr>
<th>No. of workshop</th>
<th>Date</th>
<th>Participants</th>
<th>Workshop content</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop-I</td>
<td>05.04.2016 &amp; 06.04.2016</td>
<td>APO, DIET faculty, AEEO, Quality DC, BRTE, HM and teachers from the school in which undergone for pilot study.</td>
<td>□ Shared the experience gained from the particular schools which undergone for pilot study. □ Discussed about Shaala siddhi programme in detailed aspect. □ Planning for implementation of Shaala siddhi in 2016-17.</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Workshop-II</td>
<td>08.04.2016 – 15.04.2016 (at the convenience of the District)</td>
<td>APO, DIET-1, AEEO-1, DC-1, BRTE-1, Teachers-2 and headmasters.</td>
<td>Translation of Framework developed by NUEPA has been done in 4 pilot districts (Domain wise)</td>
<td>DIETs / DPOs of 4 Districts where pilot was conducted</td>
</tr>
<tr>
<td>Workshop-III</td>
<td>21.06.2016 – 23.06.2016</td>
<td>Quality DC, BRTE and a teacher from 4 districts already worked in pilot project.</td>
<td>Module version was finalized in Tamil after the modification and correction in suitable places.</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Workshop -IV</td>
<td>30.06.2016 – 01.07.2016</td>
<td>Faculties from SCERT and DIET, SPO officials</td>
<td>Finalisation of Draft Tamil version of SSE Framework</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Workshop -V</td>
<td>26.8.2016</td>
<td>All Directors and Joint Directors of School Education Department</td>
<td>The first level sensitization programme for all directors and joint directors of school education department has been conducted</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Workshop - VI</td>
<td>19.09.2016</td>
<td>Quality DC, BRTE and a teacher from 4 districts already worked in pilot project.</td>
<td>Planned to conduct orientation programme for district &amp; block level officials and head teachers of all schools. <strong>Prof. Pranati Panda</strong>, Head of USSE, NUEPA participated and guided the officials for effective implementation.</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Workshop - VII</td>
<td>14/10/2016</td>
<td>SCERT, DIET, Quality DC, BRTE and Head teacher from various districts.</td>
<td>Preplanning workshop for Regional level training</td>
<td>State Project Office, SSA, Tamil Nadu</td>
</tr>
<tr>
<td>Orientation Training</td>
<td>21.11.2016 – 30.11.2016</td>
<td>All Head Teachers of Primary, Middle, High &amp; Higher Secondary schools</td>
<td>Framework of Shaala Siddhi in Tamil version, Domain wise discussion and guidance</td>
<td>In all 413 BRCs of the State.</td>
</tr>
</tbody>
</table>

### School Standard and Evaluation:

The School Standard and evaluation will be conducted at two levels:

1. **Self-Evaluation**
2. **External Evaluation**
ZONAL LEVEL TRAINING

NEWSPAPER EXTRACTS

Zonal level training - Salem

Zonal level training - Chennai

Zonal Level Training - Madurai

Zonal Level Training - Thanjavur

An Article is an exposure in the Daily “The Indian Express”
District and Block Level Co-ordination Meeting

District and Block Level Co-ordination meeting is one such activity implemented by SSA to discuss and record the findings of the officials, like CEO, APO, DEO, DEEO, Supervisors I/C, BRTEs and AEOs during their visit to take necessary follow-up activities. This quality initiative has been initiated by SSA Tamil Nadu from August 2015.

Periodical joint Review meetings are being conducted in every block on Fridays on 2nd and 4th Week of every month from 3pm to 5.30 pm. BRC Supervisors i/c, AEOs and all the BRTEs attend the meeting to discuss the issues found in schools during their visits and strategies to be adopted are also been discussed and recorded. Minutes are prepared and submitted to DPC to sort out the issues.
CRC ON STUDENT’S ACHIEVEMENT LEVEL

The teachers are continually updated on the achievement level of the students. SSA has given the cluster level training on “DISCUSSION ON CHILDREN'S ACHIEVEMENT LEVEL”.

Activities carried out through the training:
The following topics have been given most importance and were delivered to teachers through various activities:

- PINDICS
- SLAS
- SHAALA SIDDHI
- Periodical Assessment
- Learning Outcomes and Indicators
- Continuous and Comprehensive Evaluation
- Comprehensive Quality Plan
- Create awareness among teachers on developing good and balanced questions based on expected competency among children.

LEARNING OUTCOMES AND LEARNING INDICATORS

The learning outcomes are generally treated as assessment standards and equated with the expected levels of learning on the part of children. Learning indicators are expected to provide evidences of learning and other changes taking place in child's behavior. These indicators can be used as check points to assess child’s learning at different points of time. The Learning Indicators are expected to help in many ways such as:

- Understanding that learning is a process, focusing on children's progression on a learning continuum,
- responding positively to diversity and helping all children to participate fully and achieve well,
- providing simple guiding points for parents, children and others for understanding the learning by every child,
- Developing a framework for monitoring, learning and reporting the progress of all children.
- Various educational surveys, achievement data over the years indicates a good progress in learning achievements of the children in various subjects.
Primary education has to be approached with a lot of creativity. Development of a child does not happen through textbooks. It should reach a child naturally by means of visual, auditory, kinesthetic, and tactile. With this view, the elementary education is soaring to the skies with the dawn of the SABL methodology.

SABL is more effective and innovative methodology to provide good quality education at primary level. It is aimed at cultivating self-learning skills and allows children to bring out his aptitude and skill that is hidden in them. Children learn from each other practically that leads to participate, understand and exchange ideas. The children are facilitated by the teachers through innovative activities. The bounded duty of an ideal teacher is just to kindle their inner knowledge.

The characteristic features of SABL are

- Meaningful, learning-oriented activities
- Usage of variety of learning materials
- Provision for self-paced and individualized learning
- Opportunities to learn through different modes
- Scope for higher order thinking and critical questioning
- Every child is engaged
Continuous assessment integrated with the learning process

Democratic processes/relationships in the classroom

Equitable and inclusive learning environment

Contextualization to children’s every day world and community

Physical environment conducive to learning

Attention to holistic development

The classrooms are constructed with many activities for the children. The activity in the cards includes games, role plays, discussions, reading, writing, art and crafts, songs, puppetry, field trip, observation, conversation etc.,. Each card has a logo on it, which indicates the nature of the activity on the card and the extent of teacher support required for the activity. Logos are grouped together in group cards based on the extent of teacher intervention needed.

The learning activities within a milestone fall into the following broad categories:

- Preparatory activities
- Introduction/Learning Activities
- Practice activities
- Reinforcement activities
- Enrichment activities or Remedial activities
- Evaluation activities

The concept of the ladder gives the flexibility to the child to progress at her/his own pace.
The classroom begins with children marking their own attendance.
The Arokiya chakra (health chakra) is used to create awareness about personal hygiene.
Weather chart is marked by the children thrice a day to know about the weather and climate of their locality.

Collaborative skill is the need of the hour. The skills are obtained by the child through group discussion, rhymes, songs, stories, conversation, experiments, role play, Games, puppetry, and villupattu.

The classroom space has been made attractive by displaying children's work (FA(a) activities) on string pandhal.

The children feel it as a pride to write on the low level black board. It helps children to remember what they have learnt and for the teachers to correct the mistake then and there. Handwriting is practiced on the board and then on the four lines notebooks with words and phrases from the cards and books.
The Puppetry is used for storytelling and Villupattu are used to convey the social messages through songs with rhythm.

To foster scientific learning in early childhood, active hands-on experiments are very important. This is achieved by doing experiments. It develops scientific thinking, allow children to ask questions, probe for answers, conduct investigations and collect data rather than making the children to memorize the facts.

Projects in science help the children to become independent workers, critical thinkers, and lifelong learners. They analyse and come to a conclusion.

An empty space is provided in the ladder so that the teacher could give remedial teaching for the Late Bloomers and enrichment activities for fast learners.

Assessment is inbuilt in the ladder. This happens in a natural and non-threatening way. Children completion of milestone and their achievement position is marked in achievement chart.

The teacher acts as a ‘facilitator’ of learning rather than as an authoritative figure and dispenser of knowledge. The teacher being seated at the same level as the children encourages better rapport between children and teacher.
In today’s society, the prevailing aspiration of the people is “craving to learn the international language English”. English serves as a link-language in the country. The rural children have got a platform to learn English for their better future by the commencement of parallel English medium section in the government schools. The children recognize the logos in English and are very enthusiastic in using English phrases, maths and science terms during the teaching learning process in the class. The parents are happy about their children receiving quality education in English free of cost. Great response and good support has been received from the community after the introduction of English Medium.

**The voice of the Grand parent:**

Mr. Mookaiah – The grandpa of a Child Rajaram in PUMS Narasingapuram, Theni district.

As my son and daughter-in-law are in Kerala, I take care of my grandson. I enrolled him in the neighboring Matriculation school and paid a lump sum of fees. But, I find my grandson is unable to read or write even a very simple content. Later I reasoned out that he is not given individual care in the crowded classroom and of course, at home also as we are illiterates. Fortunately, I came to know about the English Medium sections in our Union School and immediately I enrolled him there. At present, my grandson is good in his competencies as he is given individual care through the cards that he has missed in his previous school.

**Minority Medium**

“Education is apart from caste, religion, creed and language”

Government of Tamil Nadu has given equal importance to other languages such as Urdu, Malayalam, Telugu and Kannada which are widely spoken in Tamil Nadu, by establishing schools with minority languages as medium of instruction. Due to this many parents who hesitated to send their children to Tamil medium school, have now started to send them regularly to their minority medium schools.
Supplementary Reader

“There are many little ways to enlarge your child's world. Love of books is the best of all”. SSA Tamil Nadu has been playing an instrumental role in the provision of supplementary books. Each classroom has a reading corner with many books for children to access any time they want or with books displayed on the string with attractive pictures. It inculcates the habit of reading among young learners. Tamil and English stories of supplementary readers have helped learners to improve their fluency and accuracy of languages. Supplementary books of scientific facts have triggered an interest in science among children. So when the child reaches the supplementary logo, the teacher prescribes the book appropriate to that milestone to the child. Children also read books lunch break. It develops vocabulary enrichment, general knowledge, higher order thinking skills etc. It has improved attention spans and better concentration among the children. 83 new set of books about animals, birds, fantasy, insects, moral values, alphabets, numbers etc., has been provided. The books displayed in the class create a print rich environment. Newspaper and children's magazines are also kept so that children from rural background are exposed to print environment. Children have an easy access to supplementary books with freedom to browse them. It creates an opportunity to share the pleasure of reading with teachers and peers.

SLM Kit

“The roots of education are bitter but the fruit is sweet”- Aristotle

To make Mathematics interesting a self learning material kit has been provided to the primary schools to introduce the concepts, skills and thinking strategies that are essential in everyday life and to support learning across the curriculum for the children. Children learn the basic arithmetic in a playful manner. Children of primary classes acquire basic arithmetic skills by seeing, touching, hearing and doing. They learn basic skills like addition, subtraction, multiplication and division. The number rods, sandpaper numerals and spindle board are very useful to the beginners.
Children feel the shape of the numbers when they trace the sand paper numerals. They touch and sense the way of writing the numerals. Children like these materials so much that they practice by themselves again and again without seeking the support of the teachers. Children understand the concept of place values. Different coloured beads attract the little minds and force them to do the next activity automatically.

Spindle board provided in the kit box effectively introduces zero to the children. The highlight of the SLM kit box is it's variety of tools. The kit comprises of materials like beads, wooden blocks of different shapes and sizes (3D objects), abacus etc., Children learn to identify colours and shapes, to differentiate sizes, to count, to add, to substract etc.. The 38030 SLM kitboxes have been distributed to all the primary schools. The kit has shaped the children to do the arithmetic sum without mistakes which paves them to twitter as “Ramanujars and sakunthalas”.

**Voice of Mrs. Radha, Teacher, Pums Manjabakkam. Puzhal block**

I find my I Std students enthusiastically learning numbers using number rods and spindle board. The coloured beads attract the little minds and force them to learn Maths at ease. The usage of SLM kit has attracted many reluctant students towards learning Maths.

**Grading of SABL Schools**

Grading is a comprehensive process which takes all aspects of the schools into account. The academic achievements and SABL implementation are assessed by a specific well-designed school grading format consisting of 22 parameters. Various aspects and activities of SABL classrooms and children are evaluated to trace the pitfalls and formulate the remedies. More importance is focused to the attainments of the children rather than infra-structure. 75% of marks have been allotted to assess achievement of children. Achievement of children in reading and writing skills in languages and basic arithmetic skills of the child are assessed.
The remaining 25% of mark is allotted to assess SABL classroom settings. BRTEs keenly observe each and every SABL activities in the school and reiterate the areas they need to improve. Every month the schools and teachers are graded. Progress in any form could be ensured only through comparison.

**District Initiatives**

In Theni, an initiative has been taken by the supervisor of Theni block. Every month in SABL – A grade teachers were segregated and a list was prepared. After 3 – 5 months, the list was consolidated and the teachers who maintained their classes in A grade regularly were identified. The names of the teachers were exhibited in the notice board with photos. This was brought to the notice of venerable District Collector to award the teachers with certificates. On 2nd Jan 2017, District collector gave the certificates to the respective teachers with the presence of other teachers in the Block. This attempt has motivated other teachers to work with more confidence to get this award for them in the forth coming years.

**Feedback from officials from othe states:**

An educationalist from Bangladesh Mr. Fazlur Rahman, Director General, National Academy Primary Education, Bangladesh along with his ten member team officials visited PUPS Vallakottai.
They expressed their ideas about the SABL classroom. They were highly pleased with our SABL methodology and kept a keen observation of the methodology and the classroom interaction and also mid meal system, sanitation which is a parcel of the elementary education. They appreciated our joyful learning system which had inbuilt quality in it.

**Visit by MHRD secretary**

The MHRD secretary, Principal Secretary of our state, State Project Director – SSA visited CPS Manjakolai on 31.01.17. The SLM classroom was widely appreciated by the MHRD secretary. The children did the problems on place value given by the secretary using SLM. They also read the conversations in the card. The MHRD secretary appreciated the innovative initiatives taken by our state to improve the quality of education at primary level.
Active Learning Methodology

Active Learning Methodology an innovative pedagogy has been implemented across the State in upper primary classes the prominent goal of ALM is to ensure quality education whereby the children are no longer passive listeners to the lectures of the teacher. It provokes the creativity of children so that they can better exhibit their talents and understand the core of content

ALM
- Enhance students creativity
- Enrich students critical thinking
- develop students leadership qualities
- build students self confidence
- improves students skills

The steps of ALM

Motivation:

Based on the content of the lesson it can be either in the form of storytelling or by recalling, posing questions, current situations and day to day life activities should be done in the beginning. TLM to be used wherever necessary.

Reading First the teacher reads the lesson with proper stress & intonation and the student follows and underlines the unknown words. Teacher gives the explanation and meaning of the underlined words.

Mind Map:

Students draw their own mind map that focuses of the concepts of the lesson rather than the colours & shapes. One group presents the mind map to the whole class and if the concepts are left by the students the teacher presents his/her mind map to the whole class.
Consolidation & Presentation:

Students consolidate the mind map using any one of the method of consolidation. Any group can present the consolidation except the group that presents the mind map. Left out points are consolidated and presented by teachers.

Reinforcement:

The teacher sets the reinforcement activities related to the lesson.

Diagrams / Charts; Recap by students/teachers; Experiment / Observation; Written work are done in this step

Evaluation:

The teacher evaluates the achievement level of the students through activities and written slip test.

The teacher also sets the evaluation activities according to the student's individual talent.

Remedial Teaching:

During Evaluation the teacher detects the late bloomer among the students and designs the remedial teaching lesson plan suitable for that student.

Writing:

The teacher sets the writing tasks for students covering the main concepts of the lesson and also develops the habit of using library.

Follow Ups:

The teacher designs and sets the project work for the students according to their lesson and assigns 1 or 2 projects per term. Through the guidance of the teacher the students do the projects either individually or in groups.

The follow up activities are designed in the way to develop the higher language skills such as writing poems, essays, letters, discussions etc.

Thus the steps of ALM integrated with CCE have reflected as the good method of teaching-learning process.
CCE in ALM -- CRC Level Training

Active Learning Methodology is followed as a teaching and learning methodology in upper primary sections, whereas CCE is an Evaluation tool adopted in both primary and upper primary classes. SSA and SCERT brought in some modifications in the practice of ALM integrating CCE to make it more practical and flexible. The number of steps have been reduced and made common for all subjects.

The central focus of the training was to reinforce the methodology with subject-wise lesson plans. The significant points in following the ALM steps were explained briefly and the consequences of skipping the steps were discussed through worksheets. Brief notes on incorporating CCE in ALM were provided for refreshing and better understanding. A model lesson plan was demonstrated with mind maps for each subject and discussion activities were followed up regarding the classroom application. The teachers were involved in lesson plan activities in the training.

'DO AND DISCOVER' – MOTTO

Active learning methodology implies different types of activities in different subjects. Teaching science at middle school level has been shown direct experience by using the science kit box. Using the science kit box becomes part and parcel in the science class. Science requires always practice, because it makes the students to understand the concept better. Tactile type of learning is enhanced by doing variety of practical work with interest. Science kit box provides opportunity to apply their learning practically in their day to day life. Divergent thinking is induced in the usage of kit box. This kit box diverts the path of learning by imagination into learning by doing.
Maths kit: “Teaching is the ability to inspire learning”

Maths kit box materials have been distributed to all the schools with upper primary section. This three-day training was conducted to enable the teachers to use the materials appropriately in the classroom. These materials are primarily focused on three areas such as Number System, Algebra, Measurements and Geometry. Appropriate use of the materials would simplify the learning of abstract concepts into concrete perception. Every material was explained clearly and demonstrated practically with sums.

The Math Kit communicates the concept in a better way. It creates interest in learning the concepts. It improves Mathematical proficiency.

Animation video cd's

Visual aids can easily transmit the ideas that the teacher wants to convey students can remember it easily and retains for a longer period and it will enhance the Learning skills, achievement, and creativity and innovative ideas of children's considerably so the hard concepts were identified in Science And Mathematics In Upper primary Level and the animated cd's were designed and prepared by the government school teachers by giving them adequate training.
GRADING OF SCHOOLS

Grading is a continuous process of assessing the quality education provided to children through ALM. All the BRTEs during their school visit monitored the ALM activities. According to the classroom activities marks will be provided in the grading sheets. The role of the BRTE is to provide strategies to promote activities that involve students in taking active participation.
In-Service Teacher Training

SSA – Tamil Nadu provides In-service training programmes for the teachers every year to enrich their skills and to enhance their professionalism. Training is a continuous process and a source of inspiration for them to get various needs fulfilled as and when required. It sharpens their knowledge, keeps them confident and self-motivated. In order to improve these academic performances, the trainings are planned and executed systematically.

1. **Best Practices of Teacher Training:**
   - **SLAS analysis:** On the basis of the results of SLAS conducted, the challenges that the children face in competencies are diagnosed. Activities are included in training modules to address these challenges.
   - **Facilitating to LEP Materials:** The training module also carries the working instructions of all the Learning Enhancement Programme materials provided to all the schools like the SLM Kit Box, the Supplementary Books for Primary and the Science and the Maths Kit for the Upper Primary classes, etc.
   - **Inclusion of Worksheets:** Worksheets have been included in the trainee module to ensure the understanding of the trainees regarding the content delivered. The answers for the worksheets were provided in the trainer module.
   - **The inclusion of the worksheet is found to be very useful and effective. It helps the teachers to consolidate what they have learnt and the resource persons to summarize the session effectively.**
SPD and JD, SSA interacting in Preplan Workshop for Training Module development

- SSA and SCERT work together in planning and executing the training programmes.
- SCERT officials render their ideas and suggestions in deciding the topics and preparing the modules.
- For each topic, both trainer and trainee modules were prepared separately for cascading to ensure the successful content transaction.
- In the beginning of the academic year, preparation of the training modules was completed.
- For timely distribution, printing of the modules was entrusted to Tamil Nadu Text Book and Educational Services Corporation.

1. CONTENTS OF THE TEACHER TRAININGS AND CLASSROOM TRANSACTION

BRC and CRC level training programmes are conducted for the Primary and Upper Primary teachers. The details of the training contents and classroom transactions are described below:

2.1. BRC level Training for Primary level teachers:

2.1.1. Mental Arithmetic Skills and SLM Kit Box Training- 2 days

The training was designed to equip the Primary teachers with the skills required to teach Mathematics effectively at primary level. All the activities were prepared to enable the teachers to identify and address the issues arising out of mathematical problems, with the help of SLM Kit box materials. The participants were involved in discussion and practice activities.

All the materials in the Kit Box were made use of during the training to train the teachers in a better way. The four basic arithmetic functions were reinforced in this two day training.
2.1.2. Utilization of Local Environment Resources in Science Teaching – 2 days

This training aimed at developing scientific attitude in the minds of the students at primary level. The central focus of the training was to utilize the locally available resources in science experiments. It develops the curiosity of children as well as makes it easier and more relevant in the context of learning Science. In order to weed out the difficulties that the teachers encounter during science teaching, each activity was illustrated with examples.

2.1.3. Enriching LSRW Skills in Tamil – 2 Days

The training focused on developing the children’s Tamil language proficiency through the practice of skills such as Listening, Speaking, Reading and Writing. Various activities like storytelling, singing rhymes, dialogues, picture-matching, puzzles, group discussion, dictation, enacting dramas etc. were incorporated in the module. The teachers were given practice in the training sessions to adopt the activities effectively in the classroom.

2.1.4 Professional Development Programme in English- 4 days

*Professional Development Training for English Teaching* was provided to the teachers with the view of strengthening reading and writing skills. This training motivated the teachers to inculcate positive attitude among the children at primary level. It suggested various ways for the teachers to engage the children to be exposed to English to the maximum extent in the classroom with the English atmosphere.
2.2. BRC Level Training for Upper Primary Teachers

2.2.1. Utilization of Local Environment Resources in Science Teaching – 3 days

The module for this training was prepared to enable the teachers to teach Tamil Grammar through activities. A range of grammatical items and relevant activities were dealt with in the training. The worksheets were designed in a way that they could also be used to give practice for the students in grammar.

The RPs demonstrating Science Experiments

This training focused on teaching scientific concepts using locally available resources and the apparatus provided to schools. Several experiments were demonstrated for the participants with the resources like plants, creepers, vegetables, fruits, salt, water bottle, lime, egg etc. Besides, the teachers were trained to use the Science Kit Box apparatus like Microscope, Periodic Table etc.

Trainees are completing the worksheets given in the module

The module for this training was prepared to enable the teachers to teach Tamil Grammar through activities. A range of grammatical items and relevant activities were dealt with in the training. The worksheets were designed in a way that they could also be used to give practice for the students in grammar.
2.2.3. Building Maths Aptitude and usage of Maths kit through ALM - 3 days

The Trainees are given practice with Maths Kit and an explanation given through PPT

This three-day training was conducted to enable the teachers to use the materials appropriately in the classroom. These materials primarily focused on three areas such as Number System, Algebra, Measurements and Geometry. Appropriate use of the materials would simplify the learning of abstract concepts into concrete perception.

2.4. Professional Development Programme in English - 2 days

Micro Training sessions and the display of materials provided

Two days training was provided to the Upper Primary teachers on strengthening reading and writing skills in English. This training aimed to motivate the teachers to inculcate positive attitude among the children at upper primary level on developing the four basic language skills of Listening, Speaking, Reading and Writing. Lot of innovative activities related to reading and writing had been incorporated in the training module.
2.3. CRC level Training for Primary Teachers

2.3.1. Strengthening of SABL – 2 Days (Term I & Term III)

This training was planned for 2 days at Cluster Level as the module had been designed in such a way to cover the important aspects of the methodology. The subject wise demonstrations and model classes were incorporated to reinforce SABL with better understanding. The worksheets in the module helped assess the trainees’ participation and understanding of the content.

2.3.2. Developing Handwriting Practice and Drawing Skills

This training focused on developing the children's handwriting skill both in Tamil and English. The trainers were enlightened with various stages and techniques involved in developing the handwriting skills. Practice was given to the trainees to write words and sentences with legibility and speed in the spaces provided in the training module.

2.3.4. Peace and Value Education & Puppetry and Story-telling

The State Project Director and the Quality Consultant from EdCIL, MHRD visiting the Puppetry Training
This training module was evolved to enrich the art of story-telling through which the values can be inculcated in children. The teachers were given training to adopt different skills in story-telling. The values to be taught to children in each class and subject were listed out in the module. The teachers were also trained to make different types of puppets to be used for story-telling.

**2.3.5 Discussion on Children Achievement**

This training was provided to make the teachers understand better about different Quality Monitoring Tools (QMT) that are used to assess the performance of the schools in various areas. The teachers were guided to formulate the expected learning outcomes and indicators so that they could prepare the School Development Plan (SDP).

**2.3.6 Conservation of Eco-system & Health and Hygiene**

In accordance with the recent initiative of the Central Government, various activities promoting cleanliness in schools have been carried out under the banner of 'Swatch Bharath and Swachh Abhiyan'. These activities were channelized by SSA in terms of organizing training programmes for the school teachers. This training focused on creating awareness among children about its significance.

**2.4. CRC Level Training for Upper Primary Teachers**

**2.4.1. CCE in ALM**
The central focus of the training was to reinforce Active Learning Methodology (ALM) with subject-wise lesson plans. The significant points in following the ALM steps were explained briefly and the consequences of skipping the steps were discussed through worksheets. Brief notes on incorporating CCE in ALM were provided for refreshing and better understanding. A model lesson plan for each subject was demonstrated with Mind Maps.

2.4.2. Preparation for Competitive and Talent search examination – 2 days

(Term II & Term III)

This training was conducted for 2 days (Term II & Term III) at CRC level and more emphasis was laid on discussing and analyzing the contents in the question papers. The teachers were enlightened with knowledge of all the information like eligibility, syllabus, fees, and manner of preparation for the various scholarship examinations held at schools.
2.5. School Leadership Development Programme

The comprehensive development of a school is an output of team work and commitment by the whole school community. The Head teacher of the school plays the central role in directing the activities and takes primary responsibility in the school performances.

Target and Achievement of In-Service Teacher Training 2016-17

<table>
<thead>
<tr>
<th>S.No</th>
<th>Training Topic</th>
<th>Target</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Developing Arithmetic Skills and SLM in Maths - 2 days</td>
<td>27256</td>
<td>39887</td>
</tr>
<tr>
<td>1</td>
<td>Utilization of Local Environment Resources in Science Teaching - 2 Days</td>
<td>21341</td>
<td>31249</td>
</tr>
</tbody>
</table>

Target & Achievement - BRC Level Training - Upper Primary

<table>
<thead>
<tr>
<th>S.No</th>
<th>Training Topic</th>
<th>Target</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Utilization of local environment resources in Science Teaching - 3 days</td>
<td>19522</td>
<td>18911</td>
</tr>
<tr>
<td>2</td>
<td>Teaching of Tamil Grammar</td>
<td>17598</td>
<td>17338</td>
</tr>
<tr>
<td>3</td>
<td>Building Maths Aptitude and usage of Maths kit</td>
<td>19837</td>
<td>19207</td>
</tr>
</tbody>
</table>

Target & Achievement - CRC Level Training - Primary

<table>
<thead>
<tr>
<th>S.No</th>
<th>Training Topic</th>
<th>Target</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enriching Training on CCE in SABL</td>
<td>46911</td>
<td>63456</td>
</tr>
<tr>
<td>2</td>
<td>Developing Hand writing Practice and Drawing skills</td>
<td>46911</td>
<td>63618</td>
</tr>
<tr>
<td>3</td>
<td>Peace and Value Education &amp; Puppetry and Story telling</td>
<td>46911</td>
<td>62799</td>
</tr>
<tr>
<td>4</td>
<td>Discussion on Children Achievements</td>
<td>46911</td>
<td>62831</td>
</tr>
<tr>
<td>5</td>
<td>Conservation of Eco-system and Health and Hygiene</td>
<td>46911</td>
<td>61034</td>
</tr>
<tr>
<td>6</td>
<td>Enriching Training on CCE in SABL</td>
<td>46911</td>
<td>62795</td>
</tr>
</tbody>
</table>
As on 31st December of 2016 an amount of Rs.1402.17 (in Lakh) has been incurred for Teachers Training.

SSA Tamil Nadu has provided CDs and DVDs to schools where computers have been provided to engage students to have interactive sessions based on concepts / skills already taught in regular curriculum.

### Activities under CAL – 2016-17

**Procurement of Hardwares/Softwares**

**Rashtriya Avishkar Abhiyan activities under CAL**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Training Topic</th>
<th>Target</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enrichment Training on CCE in ALM</td>
<td>83348</td>
<td>74561</td>
</tr>
<tr>
<td>2</td>
<td>Developing Hand writing Practice and Drawing skills</td>
<td>83348</td>
<td>75462</td>
</tr>
<tr>
<td>3</td>
<td>Preparation for Competitive examination</td>
<td>83348</td>
<td>74557</td>
</tr>
<tr>
<td>4</td>
<td>Discussion on Children Achievements</td>
<td>83348</td>
<td>75152</td>
</tr>
<tr>
<td>5</td>
<td>Conservation of Eco-system and Health and Hygiene</td>
<td>83348</td>
<td>73863</td>
</tr>
<tr>
<td>6</td>
<td>Preparation for Competitive examination</td>
<td>83348</td>
<td>66338</td>
</tr>
</tbody>
</table>

As on 31st December of 2016 an amount of Rs.1402.17 (in Lakh) has been incurred for Teachers Training.

### Computer Aided Learning

**Efficacy of CAL programme in Schools**

SSA Tamil Nadu strives to lay emphasis to the above statement and ensures building up a strong career to the future generation by opening the window of usage of computer technology at school level. The Upper Primary Schools provided with computers are a great source to the students to integrate technology in their learning. It enables the teachers to amalgamate the training provided to them on usage of computers thereby encouraging them to develop e-content for smaller concepts and use as an aid in teaching-learning process.

**Fascinating e-content**

SSA Tamil Nadu has provided CDs and DVDs to schools where computers have been provided to engage students to have interactive sessions based on concepts / skills already taught in regular curriculum.
**Schools with CAL in 2016-17**

Utilizing the amount sanctioned, 588 schools have been provided with 3 computers, 12 schools have been provided with 2 computers and 10 schools have been provided with 1 computer. Totally, 610 schools have been provided with 1798 computers. Procurement has been done through ELCOT and an amount of Rs.742.646 lakh has been released to ELCOT. All these 610 schools have been provided with computers at the door step of the schools through ELCOT.

**PUMS – Thangalikuppam – Cuddalore District – Own initiative of the teacher**

**RASHTRIYA AVISHKAR ABHIYAN ACTIVITIES UNDER CAL**

Within the approved outlay of RS.749.982 lakh for RAA activities under CAL, activities like Project Based Learning, Techno Club –Competition for students, Science Exhibition and Science kit for Upper Primary schools have been carried out as approved in the 50th EC meeting

**Project Based Learning**

For the year 2016-17, under Project Based Learning, 39 projects from SSA Tamil Nadu have been selected in the Most Inspiring 100 stories in the Design for Change “I CAN” National Level Contest. Among these, six projects have been selected in top 20 category which has won wide appreciation. Two winning projects in the Top 20 category have won a Cash Grant of Rs.50, 000/- and the remaining three schools and one more in the top 30 category have been awarded with a Cash Grant of Rs.15, 000/- . The jury mention category has won Cash Grant of Rs.10, 000/- and the remaining schools in the Top 100 category have been awarded with Disney Cash Grant of Rs.10, 000/- .
(ii) Science Exhibition at CRC Level on the topic “Science, Technology and Mathematics for Nation Building”

In a view to meet out very well the objectives of RAA and to create a platform for the children to acquire the objectives of RAA and to encourage and enable the students relate science with daily life experiences, Science exhibition have been conducted at Cluster (CRC) level at the unit cost of Rs. 10,000/- per CRC.
Newspaper Clippings of Science Exhibition

Students showcase their scientific temper
Techno Club – Competition for Students

Techno Clubs in Schools

In line with RAA, to motivate the teachers and students to integrate technology in their classroom transaction, Techno Clubs have been formed in all the Government and Government Aided Middle Schools and Government schools with Upper Primary Sections.

Competition for Students on Integration and Usage of Technology

On formation of Techno Club in the schools, to invite active participation and involvement from the students, competitions have been conducted at Block and District level for Class VIII students on integration and usage of technology and the best three students in each level have been awarded with Cash grant along with certificates.
(iii) Microsoft Training for 2016-17

For the year 2016-17, the training programme is being conducted in five districts (Perambalur, Pudukottai Ramanathapuram, Thiruvannmalai and Villupuram) from August 2016. The training programme is conducted in batches where twenty teachers are trained in each batch for five days. A lot of emphasis is given on creating lesson plans for class room teaching.
With a view to promote Science teaching transaction in upper primary classes, SSA Tamil Nadu has been providing Science kit box consisting of 26 materials to 2692 Upper primary schools covering all districts in the academic year 2016-17.

There are many little ways to enlarge your child’s world. Love of books is the best of all.

SSA Tamil Nadu has been playing an instrumental role in the provision of supplementary books. Each classroom has a reading corner with many books for children to access any time they want or with books displayed on the string with attractive pictures. It creates a print rich environment. It inculcates the habit of reading among young learners. Tamil and English stories of supplementary readers have helped learners to improve their fluency and accuracy of languages. Books on Scientific facts have triggered an interest in science among children. Reading develops vocabulary enrichment, general knowledge, higher order thinking skills etc. Children have an easy access to supplementary books with freedom to browse them. It creates an opportunity to share the pleasure of reading with teachers and peers. New set of books about animals, birds, fantasy, insects, moral values, alphabets, numbers etc., are to be provided to primary schools at the cost of Rs. 570.45 lakhs. By effectively utilizing the resources and talent available within the system, 50% savings in cost have been effected as compared to procurement of similar readers from private publishers. An amount of Rs. 5,70,33,089 has been paid for printing of books.
SLM Kit

“The roots of education are bitter but the fruit is sweet” - Aristotle

To make Mathematics interesting a self learning material kit has been provided to introduce the concepts, skills and thinking strategies that are essential in everyday life. Children learn the basic arithmetic in a playful manner. Children of primary classes acquire basic arithmetic skills by seeing, touching, hearing and doing. The number rods, beads, wooden blocks of different shapes and sizes (3D objects), abacus, place value board and sand paper numerals are very useful to the beginners. Children learn to identify colours, shapes, to differentiate sizes, to count, to add, to subtract etc.. Children like these materials so much that they practice by themselves again and again without seeking the support of the teachers..

The 38030 SLM Kit Boxes have been provided to all the primary schools for STD I and II at the cost of Rs.1283.51250 lakhs. The kit has shaped the children to do the arithmetic sum without mistakes which paves them to twitter as “Ramanujars and Sakunthalas.

Mapping Worksheets

Spatial thinking allows students to comprehend and analyze phenomena related to the places and spaces around them. It is the most important skill that children can develop as they learn social and environmental sciences. To develop the spatial thinking at the early stage by knowing the directions, surroundings, places, rivers, resources, mountains, latitude, longitude etc., worksheets for mapping are prepared by the government school teachers and are provided to children in classes III to V during 2016-17. The children are exposed to usage of the Outline maps and it will help them to remember the location for longer time. Mapping worksheets are to be provided to 1632700 children for STD III to V at a cost of Rs.2,18,25,175.
MATHS KIT UPPER PRIMARY

“The only way to learn mathematics is to do mathematics” - Paul Halmos

Mathematics is one of the most important subjects for our life. In order to make it easier and practical oriented, Maths kit box are provided to upper primary schools. These materials are primarily focused on the areas such as Numerical System, Algebra, Measurements and Geometry. These tools are designed to involve the students, promote interaction, and faster learning with better comprehension. 8603 Maths Kit Box have been distributed to all the middle schools at a cost of Rs.632.57859 lakhs.

Science Kit box

“The science of today is the technology of tomorrow”.

Children are naturally curious about the world and want to explore as much as they can. They always prefer that science learning is something to be explored rather than to be imparted to them theoretically. To nurture their exploration attitude and unearth their innate capacity, science kits can be an invaluable tool for building skills and expanding knowledge.

Science kits help the students to

- Hands-on learning by using their hands and applying their mind
- Provides experience for deeper understanding of concepts
- Triggers curiosity and encourages self learning

Keeping this in view, SSA Tamil Nadu has been distributed 2908 Science kit box at the cost of Rs.149.035 Lakhs to all the Government Middle schools.
“Animation can bring pleasure and information to people of all ages everywhere in the world.” - Walt Disney

Education is very vital, it is necessary for everybody. Teaching and learning are the important element in education. Teaching through lectures are abstract and rather difficult for the brain to retain, whereas visuals are concrete and, as such, more easily remembered, the effective use of visuals can decrease learning time, improve comprehension, enhance retrieval, and increase retention.

So SSA Tamil Nadu has been taking constructive steps to improve the quality of education, one among them is preparation of Animated Video Modules. For this purpose twenty government school teachers of science and math with computer knowledge were selected and they analyzed the subjects carefully and find out the difficult spot where the students need further clarification. Training was given to these selected teachers in animation work. The pictures and dialogues were prepared by them under the inspection of experts in relevant field. The CDs are to be provided to all upper primary schools. The preparation and distribution cost of CDs to all schools is to be done at a cost of Rs. 20.00 Lakhs.