

## **Learning Enhancement Program :**

Learning Enhancement Programme has been in the State since 2010-11. LEP is planned for all the classes of elementary level. It is planned for the next three years that is up to the academic year 2015-16. The activities planned under Learning enhancement programme provides additional support in making the State's flagship programme Nali-kali more effective in the classrooms. It also enabled the State to extend the Nali-kali programme for Urdu schools from the academic year 2013-14. Under LEP, additional resource materials are planned to enhance the teaching-learning process of language, Mathematics and EVS in lower Primary schools and teaching –learning of science education, Geography and Maths in Upper primary schools.

Learning Enhancement Programme is integrated into the overall State academic programmes. As seen from the table below, all the activities approved during 2012-13 and the activities proposed for 2013-14 encompass the overall programmes of the State. Nali-kali is a state intervention and the support provided under LEP enhances the quality of implementation and the class room transaction. To provide equity for all students of the State, Nali-kali is extended to all the Urdu schools across the State for classes 1 &2 from the academic year 2013-14. Mobile science labs and Science centers enhances the quality of science teaching –learning process. Similarly every programme undertaken is supporting the broader pedagogical activities of the State. Hence, as the name suggests, the activities enhances learning.

### **Following are the intended out comes at Primary level:**

- Students learn joyfully and in their own pace
- Students learn hand on
- Students enhance their literacy and numeracy skills.
- Teachers facilitate the teaching-learning process keeping in view the individual differences
- Teachers diagnose the deficiencies and plan for corrective measures

### **Following are the intended out comes at Upper Primary level:**

- Students learn hands on
- Apply the concepts learned in class in real life situations
- Help to plug the gaps
- Students learn hand on

### **Activities under LEP and the Linkages with curriculum at different grade levels:**

Activities under LEP are consciously linked with curriculum at different grade levels. This has happened since the LEP is in place in the State. To justify and substantiate the above, the

activities undertaken in LEP are listed in the table below and explained about their linkages to the curriculum.

**Provision of Teaching Learning Materials to enhance quality:**

**Nali-kali plastic and wooden materials:**

Nali-kali is an activity based teaching and learning process. In addition to cards and other supporting materials, wooden materials were supplied to all the schools. These wooden materials are designed and developed by the Resource group (practicing Nali-kali teachers) based on the competencies in Mathematics and Language.

**Supply of Drawing books and Crayons:**

The Executive Committee has approved to provide colour crayon boxes and drawing books to all the students of classes 1 to 3 in Government schools. Drawing and painting are extremely useful activities for children who begin to learn writing. Curves, half-circles, full circles and other geometrical shapes become familiar to children through drawing exercises. Finger dexterity, good handwriting in the later years, perception of colours, colour differentiation, colour combinations, neatness in writing/drawing/colouring and similar are essential for a growing kid.

The drawing books are customized based on NCF 2005. The drawing books and crayons will be supplied during this academic year for all the students of classes 1 to 3 of all the Government schools in the state.

**Enhancement of Geography teaching – learning process:**

Social Science being the next lowest performing subject after mathematics needs focused intervention. Geography being a vital portion of Social Science along with History and Civics has been identified as one of the challenging subject for the teachers to teach rather than the children to learn.

To teach the concepts of Geography in a systematic manner the **Geography Kit comprising of 08 Charts, 09 Maps and 4 models** was prepared and distributed to the Upper Primary schools in the academic year 2012-13. **Geography kit** helps the teacher to have mastery over the subject matter. **The Geography kit will help the teachers in upgrading their content and methodology; make teaching easy, interesting and effective.**

The Geo kit was prepared with the technical guidance from the Professors of Geography and who are into advocating Geography teaching-learning process in schools.

**List of materials supplied under Geo kit:**

## **MODELS**

1. Working model of Solar system.
2. Samples of important minerals, rocks and soils.
3. A portion of the globe showing layers of the earth
4. Model of globe showing longitudes latitudes and pressure belts.

## **CHARTS**

1. Important land forms and natural regions
2. Earth and its Motion
3. Lithosphere ,Weathering and Denudation
4. Earthquakes and volcanoes
5. Ocean currents
6. Humidity and Rain fall
7. Hydrosphere and its layers
8. Rocks and their formation

## **MAPS**

1. Asia
2. Africa
3. North America
4. Australia
5. Europe
6. Antartica
7. South America
8. Physical Features of India
9. Physical Features of Karnataka

## **Mobile Science Labs and centers and introducing the Lab in the Box concept (LIB)**

### **Mobile Lab and Science center activities:**

**Mobile science labs** are vehicles manned by a driver and two instructors that carry experiments and travel long distances to remote rural schools to exhibit concepts and involve children and teachers in hands-on science. The instructors teach scientific concepts through simple and innovative experiments. The sessions emphasise interaction and questioning. While most experiments are simple in nature and use material that is commonly available, the lab also has complete working models of the entire solar system. Children are able to relate better to concepts explained through interactive demonstrations rather than through rote learning. They learn about astral bodies, rotation and revolution, effect of gravitation, eclipses etc.,

**Science center** acts as a 'HUB' of all Science initiatives in a district. Disadvantaged children of immediate surrounding (10 km) visit the center along with their teachers to undergo various training-learning activities and to clear their doubts. A typical center will also act as a resource mobilization unit of Agastya which identifies local teaching resources, model making units, and other resources such as funds, student talents etc. While assessing the



'educational need' of the area, the center is actively involved in the dissemination of various Teaching Methods, and 'Knowledge' acquired by Agastya and its members through its Demo Sessions, Science Fairs and Teacher Training Sessions. The Center parallelly focuses on the development of 'leadership' among its beneficiaries; under-privileged children and teachers of the region. It attracts many luminaries who contribute to the cause, support and spread the message of Agastya hands-on education methodologies. The center also monitors Agastya curriculum and Teaching-Learning Methods [TLM's] and it holds following day to day activities:

- Science demo sessions
- Activity based learning
- Science Fairs / Mega Science Fairs

- Project based learning
- Summer /winter camps
- Teacher training
- Meet the Scientist Programs
- Impact study
- Monitoring and evaluation of the program of the district
- Government liaison
- Science Club coordination
- Young Instructor Leader program (Children-Teaching-Children)
- Community (Visits) teaching program

In addition, the Mobile Lab team (Mobile Lab (s) with 2 instructors + driver) deployed in the area report to the center and all their activities are monitored by the Center Head.



25 districts are allotted to Agastya International Foundation, 1 district to KGBV and 1 district to KRVP to implement Science Mobile Labs and Science Centre.

Photos of Science Center activities:



*Children exposed to hands-on science in Agastya Science Center*



