

ALOs (Agastya Like Organisations)

a g rao

'It is easy to come with a new idea, the hard part is letting go of what worked for you two years ago, but soon will be out of date'
- _Rojer von Oech

Agastya is a well known organisation run by Agastya Foundation at Kuppam (AP) near Bengaluru. See their website:

<http://www.agastya.org/>

Agastya reaches to a large number of village children with contemporary Science education. **In spite of the impressive and significant work done by Agastya, a conflict remains.** Village children who get good inputs in Science in the current educational curriculum framework have difficulty in pursuing college Education due to Social and Financial constraints. Only 10% are able to go to higher studies. Education imparted, does not enable the rest 90% to get employment easily. This question was discussed with their chairman Mr. Ramoji, who was equally concerned about it.

Following report is an outcome of such concerns, meant for any new set up which can come up on Agastya model.

Some challenges for ALOs and how to meet them

- 1.0 How to unleash the creativity in children ?
- 2.0 How to plan 'doing with hands' as a basis for learning ?
- 3.0 How to lay a base for 'Kamai' or 'earning' in school ?
- 4.0 How to change the mind sets of present Teachers and Parents ?
- 5.0 How to inculcate skills for 'Future Living' ?

1.0 Unleashing creativity in children

Well to do children are getting more and more opportunities as they get more freedom to learn. Problem of curtailment of freedom to learn is increasing in economically and socially weaker sections as they are accepting the schooling as sole means to success. ALOs can create semi formal structures for creative learning of weaker sections in society.

1.1 Play and Learn Labs

Play formats in all subjects like Science, Maths and Arts need to be created. Making experiments as well as provision for making 'mistakes to learn' need to become part of play and learn lab activity. Teachers will only act as Catalysts and Mediators when required and not as INSTRUCTORS.

For example Children can be given Mirrors(mirror coated plastics) of different sizes to make a

- kaleidoscope
- periscope
- New scopes to ware and walk like seeing rear view or side view

1.2 Large open structures can be designed and introduces. Principles of Science and engineering will be part of incorporated as part of these structures.

Children should be able to enter, climb, play around these structures with out supervision and Experience some science principles. Mediations to notice the principle will be done

later through 'Discussions' on what they have observed.
Some of the science museum gadgets like sound pipes, mirrors, etc can easily be converted into play and learn mode.

- 1.3 We can think of a 'INTER DESIGN' format used by ICSID (International Council for Societies of Industrial Design) in which national and international designers, architects and Design students are invited for 10 to 15 days to generate ideas, make models, prototypes etc, UNESCO has sponsored such events. National Innovation Mission can be tapped for funds for such events.
- 1.4 Bamboo as structural member can be a theme for building innovative structures by children along with Design and architectural students who can be invited for workshops. geodesic domes, large fractal structures can be good starting points.
- 1.5 Some ideas from 'Bala' project where Maths has become part of school buildings and some ideas from other Science museums can be emulated.
- 1.6 A 3D wall can be built on Mendeleev's periodic table.

2.0 Inculcating 'Doing with Hands' Culture

Dirtying hands is still unrelated to studies and learning in our culture. There is a fear of braking things or handling equipments in labs. Art and Design allow more freedom in their pedagogy to freely build and even brake. We need to find formats to encourage doing and learning in all areas.

2.1 Studio Culture

We can have various studios in ALOs and let them percolate to local schools.

Wood studio,
Metal studio,
plastic studio,
ceramic/clay and plaster studio,
Bamboo studio,
Electronic tinker toil studio

are some of the possibilities.

Children will build using specific materials, learning and exploring properties and disciplines of each area.

2.2. Products like solar cookers of different designs can easily built by children.

Cooking with their own solar cooker and eating can be exciting experience for children

3.0 'Kamai', Earning while learning and after schooling

ALOs can set-up model production units in which children can participate. The units can be based on local trades or crafts like pottery, carpentry, furniture making, Agarbatti making, Weaving, Bakery, Food-processing like making pickles, Pappad making etc.

New improved hygienic eco friendly appropriate technologies can be incorporated in these Units in these manufacturing labs. Passed out(or failed) students can be engaged as apprentices. School children can learn Science, Maths, Engineering etc. They also will learn skills of 'Kamai' by actually working.

Local upgraded entrepreneurs/production units can be used for apprenticeship training for children. This would greatly help for 90% children who are not socially and economically equipped for expensive college studies.

Management and entrepreneurship skills can be offered by ALOs for selected children.

4.0 Influencing mind sets of Parents and Teachers.

Main hurdle in creative growth of children is the mind sets of Parents and Teachers.

4.1 Teachers need to be trained through Creativity and problem solving workshops.

4.2 Local school teachers can be brought on a scholarship/deputation for periods of 1 to 6 months to work at ALOs. It will be a QIP programme where local teachers will get exposed to better work culture. It will also become apprentice training for them. They can become a cadre of **change agents** in the local schools attached to ALO as alumni.

4.3 Teacher competitions for innovation in teaching can be held by ALOs as cultural events.

5.0 Skills for future Living

Future will be full of digital technologies, gadgets like computers and mobiles, net use and global communication.

5.1 All teachers and children need to be trained in basic computer and net search skills through short workshops.

5.2 Narrative modes and language labs can be used. Theatre practices can be effectively used for language learning
