Science Club Project Ideas

Demonstrations of experiments and talks by visiting scientists:
The club could liase with scientists from NECSA and other nearby scientific institutions who could visit the schools to speak to learners about exciting topics and show them some "science in action". This could also be an opportunity for learners to ask about careers in science.

Brainstorming sessions/forum discussions for eager young scientists:
The club could organise for its members (and other interested learners) to meet for talk sessions where current scientific topics could be discussed. This session could be used to talk about ideas that might help solve some of the world's many problems. With a little more initiative, real scientists and university students could be invited to sit in at these sessions.

Bridge building competitions:
Such competitions are relatively simple to organise and yet extremely fun, educational and enjoyable. For example, give participants 4 sheets of A4 paper and ask them to build a bridge across two desks. Then test each bridge by hanging a bottle from it and slowly filling it with water. The bridge that can hold the most water wins. As you can imagine, bridges are not the only things one can build. The competition could deal with wheels; catapults; towers; steam cars - just about anything. To make it more interesting, invite a professional engineer to test the bridges and to explain why some designs work better than others.

Inter-school project exhibitions or science fairs:
The most exciting part of such a club is the opportunity to meet people from other schools. If neighbouring schools were encouraged to form similar clubs, then these clubs could communicate with each other and form some joint organisation with representatives from each school. This larger group could then organise much bigger projects such as regional science expo's and other interesting inter-school events.

Problem-solving challenge:
This is an easy-to-organise event that would be fun as well as intellectually challenging. The club could find interesting mathematics or science problems that lie within the capability of the targeted learners and offer small prizes to those who can solve them. Depending on the level of difficulty, there could also be prizes for group entries.

Mini research projects:
Many learners may exhibit great interest in a certain aspect of science but lack the motivation to pursue it. By providing some incentive for them (e.g. obtaining partners from industry who may also be interested in a certain topic) the club will facilitate and encourage these learners to research topics that they find interesting.

Tours/excursions to scientific institutions such as NECSA:
Most scientific institutions such as NECSA would welcome the opportunity to take learners for a tour of their facilities, especially if they were approached by a structured organisation such as a science club. In this way learners can have the opportunity to visit and see for themselves what goes on in the scientific world. The science club could also arrange for tours to universities where learners can obtain an idea of what career they would like to pursue.

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"Lending Libraries" for sharing of laboratory equipment and texts:

Many of our schools have poor scientific facilities such as laboratory equipment and texts. The science clubs from different schools could communicate with one another and establish some sort of lending programme whereby all schools involved would benefit. Such projects may even inspire outside organizations to sponsor more equipment to such a group of schools.

Student exchange programmes:

Depending on how far and wide this idea spreads, science clubs could organise that certain students visit other schools from different communities via exchange programmes. In this way they can bring back ideas and information from other schools and thus benefit from other learners' experiences. This helps not only build the experience of the learner but also helps bring the people of the country closer together.

Buddy scheme:

Scientist/engineers in industry could offer to mentor/buddy learners. Ideally the learner would be such that he/she is keen on pursuing the same or similar path that buddy has taken. This allows for closer communication with scientists, dealing with more individual focus. One scientist/engineer could be a buddy to many protégés.

Extra Tuition:

Collaboration between the participating schools would allow for sharing of teaching methods/ideas. This could possibly be extended to extra tuitions with the best practices being transferred among schools.

Peace Garden:

Start a peace garden where you would grow food for children at school or the local community. This project would incorporate numerous other mini-projects such as: recycling, monitoring rainfall and weather patterns, experimenting with different seeds, irrigation systems, etc.

Translational learning:

Turn as many aspects of syllabus into something practical, for example:

- look at wiring diagram of school to find parallel/series circuits and find ways to optimise this.
- look at possibilities of hydro-electric schemes
- build steam cars
- lend support to peace garden by testing alkalinity in soil or pollution levels in water
- build a web-site for the school

Basically finding ways to relate the things we learn in the classroom to real-life situations.

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