‘Sasthrayaan’
— Unique Project on Quality Science in Kerala

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The state of Kerala has a historic tradition of being in the forefront of education. Starting from the traditional village schools and then the modern school education systems brought by the Christian missionaries, the state of Kerala is ranked the most literate in the country. Especially in science education and communication, Kerala has spawned several movements like the Kerala Sastra Sahitya Parishad (KSSP) and Vijnana Bharathi, contributing to and popularising science and mathematics.

‘Sasthrayaan’ (Science Craft) is a unique science education programme in a village called Paravur near Cochin, aimed at making science learning a meaningful experience and activity based. All the more exciting is the fact that this unique project is initiated by a local member of the legislative assembly, Mr. V.D. Satheesan, who is professionally a lawyer.

‘Sasthrayaan’ was formally inaugurated by Dr. A.P.J. Abdul Kalam, the former President of India, on 17 December 2011.

Over 7000 students in class 8th and 9th and about 250 teachers from government and aided schools are being exposed to the wonderland of science and mathematics through this initiative. The interactive learning approach or the ‘see and believe’ method in the teaching of science is found to be the most successful and effective method of science education.

As part of this project, we follow the dictum that ‘Science is Doing’. We bring to students the excitement of mathematics following the principle that ‘Mathematics is just storytelling and a young man’s game’.

Sasthrayaan has five components. These include Shradha (extra back-up and special thrust on curriculum-based learning); Mitra (three to five schools having a guest lecture/a visit to a scientific establishment); Suvidha (infrastructure building, better libraries, ICT inputs, labs etc); Vidya (special training for teachers and the most exceptional students, special text books/reference books will be published for 8th and 9th standards focussing on the most difficult portions); and Kriya (exhibitions, projects, competitions and community-based programmes).

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With active support for infrastructural and technical development from several institutions like Centre for Design and Imaging Technology, Bharath Petroleum Corporation Ltd, Indian Space Research Organisation, Defence Research Development Organisation, Rajiv Gandhi Centre for Bio Technology, Kerala Forest Research Institute, Cochin University of Science and Technology, Department of Computational Biology and Bio Informatics (University of Kerala), Gas Authority of India Ltd., Tropical Botanic Garden and Research Institute, Kerala Science and Technology Museum, Department of Education, and many other NGOs and private institutions this project is marching ahead.

The current phase of ‘Sasthrayaan’ is to help the students unravel the mysteries of space science. ISRO has set up a space pavilion in one of its schools displaying several models on rocket technology including hands-on experience of launching water rockets, etc. A model of GSLV with a height of 35 feet is erected in the courtyard of one of its schools.

All these projects were formally dedicated on 26th October 2014 by Dr. K. Radhakrishnan, Chairman ISRO in a meeting presided by Shri Oommen Chandy, Honourable Chief Minister of Kerala. The spectacular success of India’s ‘Mangalyaan’ project has been effectively channelized to inspire the young minds through our classes. A ‘science park’ has been recently set up in the municipality area.

The future projects include Energy Park, herbarium, aquarium, Butterfly Park and an astronomy club. The Sasthrayaan project implemented in one of the assembly constituencies in Kerala could be a model for others also to follow. This may pave a new path in the science education scenario of the country. Let me conclude this article with the following quote, which stands as a testimony to our dreams:

“Few days back, I was in a village called Paravur near Kochi. I went to the village to inaugurate the programme Sasthrayaan – which means science propagation. During the programme, the President of Paravur Panchapayat Board and the local MLA said, that the mission of Sasthrayaan in Paravur is to ensure preparation of 2000 students from different schools towards attaining eligibility for entrance as engineers, scientists, doctors, qualified managers, and Civil services officers. This action will empower 2000 families of the village. My inaugural address to Paravur audience consisting of 5000 students and family members was “Science Empowers the Nation”.

Dr. A.P.J. Abdul Kalam, former President of India

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