

The Secret of Becoming a Successful Science Teacher

Rekha Guruge



Science is a practical and an interlectual process which conducts observations and investigations of the structure and behavior of the physical and natural world. You would understand that this definition is not the ideal explanation of science. You may have your own specific definition of science. If so what is the definition that you can give for the term “science teacher” I will not hasten to ask that question from you. This is he cause I have a story to relate.

I was born in the Southern

Province and initially I studied at Baddegama Christ Church Devi Balika Vidyalaya. Then I stepped into the educational field as a novice science teacher. Then I studied as a student of the first batch of Siyane Educational Science Faculty. This was something I was dreaming of. It was when I was in the Central Province that I learned the foundations in science teaching as a practical science teacher. During an era when student centered educational system was being introduced. I must state here that one question that arose in my mind innumerable

times when I was teaching science subjects in the class room and in the laboratory, was that is it only in the class room and the laboratory that the scientific concepts be established well and truly in the minds of students? And in answer to my question I realized that in order to enlighten the students the National Science Foundation (NSF) implements different kinds of teaching programmes. From that day I felt enlightened. NSF has shown that through drama and acting it is possible to instill in the minds of students the scientific concepts which are otherwise not easy to teach.

At that time I was a teacher at Matale Sri Sangamiththa Girls School. I was in charge of the science association and I together with the teachers of science and aesthetic studies produced science oriented dramas. The dramas that were produced on various themes such as the power crisis, innovations for sustainable development and climate change were presented at the World Science Day, and won prizes. Without stopping at that, we got an opportunity to show these dramas to the other children of the country



World Science Day - 2013

The Secret of Becoming a Successful Science Teacher

over the National Television. This was done with the cooperation of the NSF and National Television. It was quite obvious that it is possible to instill in an indelible manner the scientific concepts through science oriented dramas. I realized that through these dramas I have been able to achieved something more successful as a science teacher in the classroom.

Science oriented drama production was not the only opportunity provided to me by the NSF a science teacher, as NSF had also launched programmes involving *viridu*, oratory, posters, digital narrations, role acting as well as science research projects. When these were presented by students, and when they won certificates, received credits or won medals, the students were overjoyed. I experienced immense pleasure by carrying out these programmes. Even children who were not very fond of science subjects began to like these subjects, and were motivated to produce such programmes. These undoubtedly helped to bring about a change in the teaching methods that I has been practicing so far.

When I saw their enthusiasm, I realized that NSF had launched a valuable programme to popularize science.

All though physics, chemistry and biology are considered separately they are the various component disciplines that have to be taught under the subject of science. We

are aware that various investigations have been carried out, and continue to be carried out. The student who is presently studying in the class room today may in the near future be looking for a solution to an environmental problem or introducing a new invention, or inventing an environmentally

Another activity that I very fondly directed the children was the science project competition, where children in groups or as individuals participated in various research activities that were even beyond my expectations. This was a collective activity which involved all science teachers, and providing



friendly machine as a solution to the power crisis, or introducing a new pesticide. It is the science research project programmes introduced by NSF that provided the answers to the question raised by me and many other science teachers on how a science student in the classroom could be motivated towards innovations in science.

opportunities for many children to participate. The students of our school were able to reach even international levels solely due to the encouragement provided by the NSF.

Another great achievement to our school was the development of a plant extract based insect repellent which was effective to repel cockroaches. This winning group project enabled all students who conducted the project to participate in the Intel International Science and Engineering exhibition that was held in the United State of America. This was an achievement for the school. Another student successfully conducted a science



research project to find a suitable colour trap to control the pests causing chilly leaf curl. As a result of this achievement, I got an opportunity to accompany her for participation in the Taiwan International Science Exhibition in 2012. Our participation was entirely sponsored by NSF. On this occasion she represented Sri Lanka and was placed in the 4th position which gave me immense pleasure to witness her receiving the certificates and the cash award. I had never experienced such pleasure before being very fortunate to have worked with the NSF in order to make a comparative analysis of the science education in Sri Lanka and another country.

Another unique programme of the NSF is persuading the school children to study the scientists of their liking and produce dramas portraying them to highlight that students themselves have the potential to become scientists. As a teacher I had not thought of this aspect before. However I saw the pleasure, and enthusiasm they displayed in collecting such

information and talking about scientists, and their willingness to carry out investigations through this activity.

The School Principal and staff of Sri Sangamiththa National Girls School were thrilled when the school's Science Society won the highest Five-Star award granted by NSF. All these achievements were possible because of the co-operation extended by everyone in discussing, analyzing and coming to conclusions.

I am happy humbly to state that in this matter I followed the traditions set by NSF. I value the co-ordination ability, competence and the friendliness of this institution. It gave me great pleasure to receive the competency certificate awarded to a teacher in the year 2008 for promoting science among school children under NSF merit awards scheme. It made me very happy when in the year 2010 I received the National Award for teachers for promoting science among school children. Since this is a once in a lifetime award for a teacher,

I consider this opportunity as a unique event.

While being engaged with all these extra curricular activities, I am happy to have been able to conduct my teaching activities, and duly complete the syllabus. In appreciation of this achievement, I was presented with certificates for enhancing the GCE O/L science results at the Matale Regional Science Day.

As a result of being enriched and strengthened physically and intellectually in 2011, I organized a series of competitions for a Science Day with the co-operation of science teachers of Sri Sangamiththa Girls National School. These competitions included items such as dramas, *viridu*, posters, composing songs, character acting, knowledge assessment and composing science fiction. The winners were awarded gold, silver and bronze medals and certificates. Simultaneously a science journal was launched. The theme of the Science Day was "Towards a Green World through scientific wisdom".

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The above is a part of the theme song. I recall this Science Day event with extreme happiness. The visit by the learned scientists from the NSF to our school, who accepted. Our invitation to participate on that day made everybody happy

The Secret of Becoming a Successful Science Teacher

specially considering the fact that our school is located in a far away place from Colombo.

The visit by scientists of NSF, who humbly accepted our invitation to participate in the event, and travelled all the way from Colombo, gave us encouragement and strength. I recall with much respect the presentation regarding the activities of NSF, which was of great value to the teachers and the students. There were teachers and students representing other schools in Matale who participated in this science day. The guest who was invited to deliver the main speech was also a Sri Lankan scientist selected by NSF. The speech delivered contained very valuable information for all of us. We thank NSF with affection and devotion for the continued encouragement of the students as well as the teachers. NSF serves the nations' children like the shadow of a huge Banyan tree providing shade to all.

In retrospect there is something that I must say without any reservations. As a science teacher I was not restricted to the classroom or to the laboratory. I took the science students out of the confines of the classroom to the outer environment. There I truly directed them to activities.



Through these I gained experience to teach them practically to carry out investigations, and show them what their role should be in the modern world. I very humbly say that all these made me become a successful teacher. There is a voice within me saying, that the secret lies not only in my own efforts. It is also NSF which planted the seed of the tree of success initially, watered it, tended it and providing the necessary protection. It is important to acknowledge NSF for this effort. I do not hesitate to proclaim to the world that NSF was the secret of my becoming a successful teacher.

In order to make a chain, its links should be firmly welded. I feel that the NSF is doing this welding. It has assembled the teachers

and students of a large network of schools at the zonal and regional levels to one location and uniquely propelled them to the stage to display their skills and competence at the national level. NSF has generated enthusiasm for science subjects among the students

and unified them with the modern scientific world. Thereby it has facilitated Sri Lankan teachers and students to reach other continents in this field. But NSF has not stopped there. It also powered the way for Sri Lanka to place its mark in the world scene of science. It has helped to polish up the role of teachers like us. NSF our dear brother, thank you very much for all that you are doing for the teachers and students of science, and for the upliftment of science in Sri Lanka.



Rekha Guruge

M/Christ Church National School
Matale
sasajaya93@gmail.com
0714471867