TIMES OF MALTA

Science on Stage helps create 'community of science teachers'

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"Science is moving more rapidly than ever; one groundbreaking discovery chases the next at an incredible speed. School teachers have trouble keeping up with the pac, and many pupils call science 'boring'. Students may suddenly want to talk about a discovery on Mars, a medical breakthrough or a natural disaster. On such days it would be a shame not to put textbooks aside and capitalise on that curiosity." - Eleonor Hayes, editor of Science in Schools.

"Motivating more young people to take an interest in understanding and learning science at school is important not only because science careers are exciting and rewarding but also because young people need to know about how science and technology is changing our world - their world." - Stephen Parker, head of Education and Science in the European Commission's Direction Science and Society.

As a science teacher, I was constantly aware of my own limitations. What was taught as known fact and printed in science textbooks might become obsolete by a new discovery or invention. What I was teaching my students from the textbooks might be challenged by a student who had watched a more current documentary on Discovery Channel.

I was also concerned with trying to find ways in which I could motivate my students to learn science. My students were constantly telling me that "science was boring" and "science was difficult" and, in the case of the girls, that "science is more for boys than for girls... because they want to become mechanics and engineers and we only want to find work until we get married".

I tried hard but on my own it was very difficult to come up with new ideas and new projects... and the resources I had available were very scarce. I tried to reflect on my teaching and to discuss with my colleagues what I was doing, what was successful and what was not so, and I constantly tried to develop a pedagogy which was relevant and interesting for the girls I was teaching.

I wanted them to gain a view of science which would help them understand what was going on in the world around them and enable them to make responsible choices and decisions as citizens of the future. I also wanted to help them take an interest in science careers. I did my best but I felt alone and often I felt that I needed a challenging environment which would give me new ideas and keep me up to date with all that was going on in the world of science.

Today, Science on Stage fills this need which I felt as a science teacher. This project gives every science educator the opportunity to learn from others and to share with others our own successful practices. The Science on Stage programme offers European science teachers

the chance to exchange successful and innovative teaching methods and materials. The goal is to strengthen the awareness and interest of young people in science and technology, by increasing the attractiveness of science lessons through the promotion of exciting ideas.

Science on Stage is being locally launched by the Maltese National Steering Committee. This committee, chaired by Chris Schembri, is made up of science teachers, members from the Education Division's Science Centre and the University of Malta's Faculty of Education and Faculty of Science. The committee is responsible for the organisation of events, workshops, and competitions among science teachers.

The main aim of these events is to raise a national awareness about science teaching, identify exemplary practice and award outstanding science projects.

Science on Stage, Malta has to date supported a number of successful projects. The Home-Sci-Home was organised by Miriam Teuma and her team of teachers from the Science Centre of the Education Division. This team of dedicated science teachers managed to convert a Gozo farmhouse into a Science Dream House.

Rooms were set up as Science Discovery Centres and children and adults of all ages had a wonderful time finding out about how solar panels work; making a model volcano spume lava; seeing how we measure temperature; and how chocolate changes its state when

making yummy fondue and how pastry becomes hard when we bake cookies.

Another project supported by Science on Stage is the introduction of a Science Club at Stella Maris College Junior School. This project, run in collaboration with the Faculty of Education, will allow the students at Stella Maris to make use of their break time to explore and experiment with magnets and building circuits, with finding out how rockets work and creating their own rockets. The aim of this project is to make science fun for students so they can start to enjoy their science lessons more. It will also be a learning opportunity for teachers who can experience how to use hands-on science.

A third project was an international visit where students from St Joseph School Blata l-Bajda, Stella Maris College and St Agatha's College visited Culham Nuclear Centre and experienced first-hand the work of professional scientists and researchers.

Science on Stage Malta also organised an astronomy in-service course for science teachers. Further projects in the pipeline include the organisation of an open day at the Faculty of Science. The Faculty of Science will be opening its doors to secondary students to experience first-hand what it would be like to continue further studies in science.

These successful projects are only a few examples of exemplary practice in science teaching currently taking place in schools. I am sure there are many more and Science on Stage is an opportunity for any science educator to develop a project and share the experience of good and successful teaching. The great advantage is that, if projects are considered to be exemplary practice, they can be selected to participate in the next international event of Science on Stage which will be held in Grenoble in April.

The selected science teachers will present their experiences of exemplary science teaching or outstanding projects that they have developed, in Grenoble. This is a unique opportunity where, through a series of lectures, workshops and on-stage activities, intense information exchange can take place between participants from different European countries.

Dr Chetcuti is senior lecturer in Science Education at Faculty of Education within the University of Malta.

Science on Stage will be officialy launched in Malta at the University Residence, Lija on Tuesday, October 10, at 1 p.m. All science educators are invited to attend. The launch will offer every science educator the opportunity to become part of a national and international community of science educators.