



FROM NASA TO EXPLODING PAINT TINS!

BY SYLVIA SISKAMANIS

At Stuart Park Primary School, we believe that all students need an understanding of science to make sense of their world; to make decisions about themselves, the environment and society; and to engage with an increasingly scientific and technological world. In essence, we aim to provide the foundations for our students to become scientifically literate. Our science program, taught by specialist teachers, nurtures the students' sense of wonder and develops their passion for discovering how the world works. Our science program runs throughout the year; however, in term three, the profile of science becomes elevated thanks to National Science Week. This year, with the inclusion of some high-profile

visitors and some awesome shows, science has really taken centre stage!

NASA Visits Stuart Park

The news spread like wildfire. The National Aeronautics and Space Administration (NASA) was coming to Stuart Park Primary School! There was excitement in the air as the students related their enthusiasm to one another. Thanks to One Giant Leap, our students were treated to two visits by NASA scientists. The first visit was from Rachel Zimmerman Brachman from the Jet Propulsion Laboratory. I was extremely excited and wore my special NASA t-shirt in honour of Rachel's visit. Rachel spoke to over 100 of our students about NASA and the study of Mars. She showed the children a

slideshow and spoke about her work and the continued investigations of our nearest neighbour. The students asked very insightful questions and Rachel answered all of them enthusiastically. The children were in awe of Rachel's stories and experiences.

Two days later, One Giant Leap offered our school another visit from NASA scientists. This time the students were treated to not one but three NASA scientists. Once again, our students were transformed to outer space, immersed in a galaxy of space stations, rovers and explorations. What a joyride it was for the students and teachers. One student stated, "I liked how they showed what their first rover looked like and their biggest one which was the size of a truck." Another

student said, “I loved hearing about all the things they have made, the missions and all of the things they are going to do.” I personally was spoiled by the NASA team as they gave me a signed lab coat to keep.

The impact that visits like this has on the students is immense. Guest speakers can more readily utilise techniques that are engaging and sometimes more interactive, since they are a one-time event. Also, the teacher is able to tap into a source that has more highly developed knowledge, expertise, or skill in the area of interest. Research indicates that small changes in approaches and practices to teaching and learning can have a great impact on students and how they learn, connect and thrive as whole persons (Robinson & Kakela, 2006). Similarly, a good visit can have ripple effects that go on for months, sparking further exchanges among students and teachers alike (Berube, 2010). This long-term impact is exactly what I am trying to achieve in my school community – to make the content part of the real world.

National Science Week

National Science Week was two weeks after our NASA visits. This event has become bigger than Ben-Hur at Stuart Park Primary School. Admittedly, it is a stressful week for me, but definitely my favourite week of the school year. I celebrate National Science Week in two ways. Firstly, I abandon my regular science program and bring to each of my classes a special lesson aimed at highlighting National Science Week. We do this by exploring the theme, its impact and importance to the world around us. This is then followed up with some hands-on experiments, made with simple resources found around the house. The children are invited to have a go at the experiments and then replicate them on their own when they get home from school. My aim is to foster a love of science and to show that everything occurs for a reason and it is science that discovers these reasons.

The big finale of National Science Week is the presentation of the Super Siskamanis Science Show! Yes, you

guessed it. I present a science show to the whole school community. This idea began six years ago when I simply wanted to inform the students at a whole-school assembly that it was National Science Week. I decided to do that with the aid of the Diet Coke and Mentos experiment. To my amazement, the children loved it. In fact, they were asking for more. More experiments and more tricks. The following year, I presented three experiments on stage and now, each year, I present a 25-minute science show to thrill, amaze and delight. It is a highlight on our school calendar and draws quite a big crowd. The feedback from students, teachers and parents is really overwhelming. I could not think of a better way to highlight National Science Week in my school. This year was the biggest show I have ever done. I entertained the audience with exploding paint tins filled with bicarbonate soda and vinegar, magic disappearing water and a special guest appearance from Albert Einstein! I even wore my NASA lab coat to mark the occasion.

I love teaching science. We are surrounded by technology and the products of science every day. Public policy decisions that affect every aspect of our lives are based on scientific data. And, of course, the intricate and complex natural world that surrounds us illustrates endless scientific concepts. As children grow up in an increasingly technologically and scientifically advanced world, they need to be scientifically literate to succeed. Ideally, teaching the scientific method to students is teaching them how to think, learn, solve problems and make informed decisions. It is my quest to provide my students with tools to succeed in their future scholastic studies and perhaps choose a career in one of the many fields of science in their adult life. ■

Sylvia Siskamanis is a nationally certified teacher and is the science specialist teacher at Stuart Park Primary School in Darwin. Sylvia’s primary role is teaching science to children in middle and upper primary.

