

Sci-Enza teaches Miami, Florida (USA) a thing or two

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Posted on 28 July 2009



PEOPLE FIRST: Adding value at the Mae Jemison reading room at the University of Pretoria campus in Mamelodi

Sci-Enza science centre was able to contribute something of value to the University of Miami (USA) delegation that visited the centre from 21 – 22 July 2009 on an educational excursion.

Some of the shared experiences in the field of education and community outreach that reinforced this notion were the large classroom numbers, language barriers and contextualized cultural diversity.”

That’s the message from the University of Miami’s Prof Michael Gaines who was accompanied by seven graduate students and teachers as they recently visited the University Of Pretoria. The educational tour formed part of a project funded by the National Science Foundation (NSF) called: Science Made Sensible (SMS): Teaching graduate students to communicate science and middle schoolers to experiment through shared classroom experiences.

“Places like Sci-Enza attract both students and families. That is something of interest to us. Apart from similar shared experiences and challenges with regard to grooming effective science communicators, we are also involved in reaching out to the community. I believe there is something we can learn from Sci-Enza,” says Prof Gaines.

Recent doctoral graduate and terrestrial ecologist, Dr Tiffany Plantan also believes that Africa can teach America something, just as they can deposit something worthwhile into the continent. “We are here to learn from each other, exchange ideas and share experiences. Just as I stepped into Sci-Enza I could see that it is a great hands-on place where people can get very excited about science”.

“Back in our community we have the Miami Science Museum which offers displays and is not as hands-on. I would like to return with a better understanding of how to do the best with the facilities that we have,” says Dr Plantan, who conducted a considerable part her PhD research in South Africa.

Ms Deshanna Brown, a middle school teacher from Miami, Florida said that the role that NYS (=??) graduate students at Sci-Enza play is important. “University students are brought in from next door to assist in teaching science in a very informal manner. What I love about it is that it takes the ‘school’ out of science and kids can have fun with it. Young scientists are role models for the learners to pursue a science career,” added Ms Brown.

The SMS group accompanied NYS students on an outreach to the Mae Jemison reading room at the Mamelodi campus of the University of Pretoria on 22 July 2009. High school learners visiting the reading room had the opportunity to learn more about the Moon and astronomy in the light of the 40 year anniversary of the Moon landing and as part of the celebrations of the International Year of Astronomy 2009.

Sci-Enza interns and SMS teachers collaborated to present learners with a fun filled programme. Learners were delighted to share an experience with real astronauts by enjoying space ice cream sponsored by the US embassy.

Albert G. Hayward II, a graduate student in developmental neurobiology from Miami said that he could learn from the informal and engaging method of teaching science used by Sci-Enza and would like to incorporate more thereof in the US.

Sci-Enza staff shared their involvement in various science related projects undertaken by the centre with the visitors from Miami such as the Teacher Mentorship Programme (TMP) where qualified teachers reach out and assist science and mathematic teachers in disadvantaged schools around Pretoria, "UP with Science", a science enrichment programme for Grade 10 to 12 learners, and the Technology Research Activity Centre (TRAC) that offers a selection of curriculum-related worksheets and electronic equipment to perform the practical component of the Physical Science curriculum.

"It was an opportunity to compare experiences, share resources and try to come up with solutions to the problems that face all of us in the field of science communication and education" said Ms Rudi Horak, manager of the Sci-Enza science centre.

The SMS participants divided their time in South Africa between research and education activities during the three week visit to the country, the last week of which was spent in Pretoria. The SMS teachers spent mornings at the Sunnyside Primary and East End primary schools where the US teachers were paired with South African teachers to develop curricula to be used in both South Africa and Miami.

"We all have the challenge to find out how to maximize the resources that we have. It is also our duty to alleviate the community problems – where we can - such as when we use computer assisted laboratories to help students and invite them during school holidays to learn more about the sciences," concludes Ms Horak.

<http://web.up.ac.za/default.asp?ipkCategoryID=3523&articleID=2555>