



Acting Antarctica: science on stage

Piera Ciceri, Paola Tizzoni, and Luigia Pierro

IC Alighieri, Secondary School "Ottolini", (Mi), Italy (pieraciceri@gmail.com)

Key-words: Polar science, Earth science, Theatre, Hands on activities

The legendary Antarctic Expedition of sir E. Shackleton and his crew of 27 aboard the Endurance (1914/16) trapped in the Antarctic ice has become the starting point to learn about Polar Science and Climate Change.

While the students were involved into this incredible adventure by the astonishing images of the Australian photographer Frank Hurley (who joined the crew), they discovered the world in which this story happened.

Students were then involved in hands-on activities and role plays and have become the writers of the play "Uomini a scienza ai confini del mondo". They act the story of Shackleton's expedition and they tell at the same time to the audience about ice pack, ice cores and their role in understanding the past of the climate, physical and geographical characteristic of polar regions, thermal phenomena related to adaptations of polar animals, solar radiation at different latitude, day/night duration.

The theater was the place to "stage" some scientific experiments and to explain the current research carried out in polar regions and their importance in climate change studies and to stress some similarities between Antarctica and space.

The project was carried out from teachers of science, letters and geography and was born in collaboration with the "Piccolo Teatro di Milano" and the association "Science Under 18" with the support of a professional actor and director and was played for other schools at "EXPO 2015" in Milano (Italy).

In our opinion drama activities improve reading comprehension, and both verbal and non-verbal communication skills. To be able to write and to act, students need a deep understanding of contents. Arts, including theatre, are a good key to involve emotionally students. To have an audience different from their own teachers and classmates offers a real task and the opportunity to play and let grow real skills.