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ANDRILL's Education and Outreach Programme 2005-2008: MIS and SMS Project Activities during the 4th IPY

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ANDRILL's Education and Outreach Programme 2005-2008: MIS and SMS Project Activities during the 4th IPY

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Abstract - A key goal of the ANDRILL programme's education and outreach (E&O) activities was to engage the public in, and inform it about, our scientific endeavour to uncover the behavior of Antarctica's ice sheets over the past 20 million years. We recognized that a critical component of ANDRILL's research effort was to ensure that our motivation, methods, and results were conveyed to non-experts in a clear and understandable manner. This effort benefited from several factors: a synergy between scientists and educators generated by the 4th International Polar Year (IPY); the allure of the Antarctic region as one of Earth's few remaining frontiers; a desire to understand and respond accurately to climate change discussions; and the interest of many nations and institutions to enhance science and environmental literacy in schools and across broad public audiences. In order to achieve ANDRILL's E&O objectives, we developed a diverse range of education and outreach projects, established key partnerships with a range of informal science education outlets, implemented a communication network of educators and scientists, and sparked the curiosity and interest of students while promoting understanding and a prospect of continuing engagement. A central component of ANDRILL's E&O activity, the on-ice ANDRILL Research Immersion for Science Educators (ARISE) programme enabled 16 science educators to participate in ANDRILL's scientific activities and gain first-hand experience in a multi-national scientific drilling programme. ARISE participants then used knowledge gained from this experience to develop innovative and exciting learning approaches for the public. Partnerships with established teaching and learning institutions and programmes provided excellent opportunities to broadcast content to a broad audience. Interest in ANDRILL from the popular media was high and resulted in the production of several film documentaries involving ANDRILL science, audio programmes, and print articles in newspapers and journals. ANDRILL's education and outreach materials and programmes are available at http://www.andrill.org/education.

INTRODUCTION AND OVERVIEW

The ANtarctic geological DRILLing programme (ANDRILL) developed an extensive and innovative education and outreach (E&O) programme as a key component of its overall scientific programme for the McMurdo Sound Portfolio (Harwood et al., 2006). This inaugural effort led to the successful recovery of the two longest drillcores in Antarctica, the complementary McMurdo Ice Shelf (MIS) and Southern McMurdo Sound (SMS) Projects (Naish et al., 2007; Harwood et al., 2009), that record a history of climate, ice sheet and geological changes. A primary goal of the integrated E&O effort was to engage the public in both the scientific and technical aspects of the drilling programme through the use of effective and innovative materials and approaches. In addition, we wanted to provide members of the

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