



Teacher at Sea Program - Expedition 302 - ACEX A Teacher's Experience of Ocean Drilling

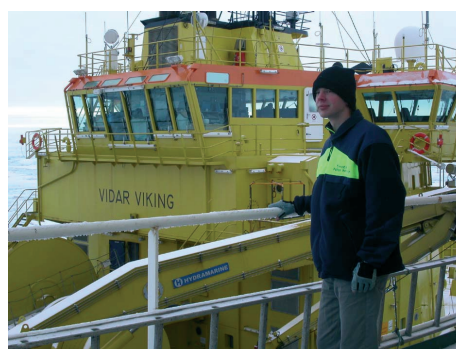
In the beginning of last summer something very special happened to me, I was selected to take part in the Arctic Coring Expedition (ACEX). Being a teacher in an upper secondary school in Sweden (Järfälla NT-Gymnasium) opportunities like these to have first hand contact with science are rare and this expedition in particular seemed very interesting both from a scientific viewpoint and because of its setting in the Arctic Ocean. Time for preparation was short however, and there was only barely enough time to manage health controls and insurances and to study the world of oceanography. Even though I am quite a curious science teacher and try my best to keep up to date on new research, I found that this field was largely unknown to me. In fact, I did not even know about ECORD prior to my involvement and one of Sweden's major encyclopaedias does not yet list IODP as a searchable word. My studies were very rewarding and even before I set foot upon the expedition ships I had learnt a lot about the oceans and climate research that was directly applicable in my school classes.

The expedition itself was of course quite an experience and I was allowed to take part in most of the activities from the drilling to the analyses and the science meetings and ice management. Dealing with the ice on this mission felt like a science in itself and it was very interesting to follow, especially when new methods of ice reconnaissance were tested and evaluated. There were also a lot of questions in my mind about how the actual ocean drilling was done that were answered when I was on board the drill ship and could see the process myself. Although my theories of how it was done were close to the truth, the realities of being on the drill site were a lot harder to imagine without actually being there. I was amazed at the wide range of different analyses available to study the sediments, from simple colour comparisons to more advanced methods like different isotope measurements. Still, maybe the contact with the scientists themselves, talking to them about their research and their lives as scientists and watching their ways of presenting their findings was what I appreciated the most.

In all, I have returned to my school loaded with a lot of material useful for many different situations in the education at home. Samples from diatoms in the Arctic ice have provided comparisons between life in Swedish and Arctic waters. Pictures and movie clips from the Arctic have been invaluable in explaining the role of the Arctic in global climate and the Arctic ecology and also for raising the interest of my students on many topics around the oceans and ocean drilling. Maps have been useful in many ways including among other plate tectonics, an issue relevant to the expedition in studying the geological origin of the drill site on the Lomonosov underwater mountain

range. The list of course goes on from there and I have also been giving talks about the expedition to different interested groups outside of the school world. Although the mission itself is over, I think my own mission of turning information from the cruise into school curriculum material is something that I will be continuously doing for a lot of time to come.

*Erik Zetterberg, Science and technology teacher
Järfälla NT-Gymnasium, Sweden*



*In front of Vidar Viking during refueling
(Kathy Couchon © IODP).*



*Ready for ice reconnaissance in front of helicopter
(Kathy Couchon © IODP).*



*Investigating agglutinated foraminifera through
the microscope (Kathy Couchon © IODP).*

The central goals of the IODP Teacher at Sea Program include 1) providing teachers with an opportunity to participate in seagoing research experiences, 2) translating scientific results into useful teaching resources and 3) distributing these resources to classrooms. During the Arctic Coring Expedition (IODP 302), Erik Zetterberg, the European teacher selected for the IODP Expedition 302, has found financial and educational supports provided by ECORD and ESSAC respectively.

Watch the ECORD website for the next opportunity for a teacher to participate in IODP science!

www.ecord.org/pi/public-info