

Report on The Maury Project July 2010

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I was fortunate enough, through the generous funding of the Canadian Meteorological and Oceanographic Society (CMOS) and the Canadian National Committee/Scientific Committee on Oceanic Research (CDNC/SCOR), to participate in the Maury Project 2010 Summer Workshop. This project took place at the US Naval Academy (USNA) in Annapolis, Maryland during July 2010 and is run jointly by the American Meteorological Society (AMS) and the USNA.

What is the Maury Project? It is “a pre-college teacher enhancement program to promote the understanding of the physical foundations of oceanography.” The program’s mandate includes 1) giving the participating teachers the background information and links, and the activity ideas to present a wide range of oceanography topics to their classes, and 2) a strong desire to have the participating teachers act as “ambassadors” of the program, to encourage other teachers to participate in future Maury Project summer workshops. Who is “invited”? Any teacher who has an interest in new ideas, and has some experience in using outside-the-classroom sources to teach their curriculum is invited to apply. This year’s group of 24 teachers was an eclectic mix – fairly evenly split along gender lines, ranging in age from mid-20s to 63 with teaching experience from 4 to 40 years in elementary, middle, and high school, from all over the United States (from Alaska to Texas, West Virginia to New Mexico, plus the single Canadian).

Initially I wondered what we would do for an entire two-week workshop – lots! Over that time, a wide range of topics related to oceanography was covered: a) information on Earth’s individual oceans; b) currents (wind-driven and density-driven); c) waves (shallow and deep water); d) tides; e) coastal upwelling; f) El Niño and La Niña; g) satellite remote sensing of the sea level; and h) ocean sound. Material was covered extensively on-site (classroom and lab) and off-site. Off-site activities included tours of the National Oceanic and Atmospheric Administration’s (NOAA) Science Center and research library, the National Centers for Environmental Prediction, the National Ice Center, along with a “hands-on” beach study and a research cruise on a naval vessel (using oceanographic instruments).

Being from the Interior of B.C., one might wonder how much of this workshop I might use in the classroom. Although all topics were interesting, I did have my favourites and will use them in my junior Science and Biology curricula. The Science 10 and Earth Science 11 curricula would very much benefit from the info and activities associated with ocean currents, waves, and El Niño/La Niña. My Biology 11 course could use the material showing the relationships between

climate and biomes with ocean temperature, depth, and movement. ANY science, or math, class could incorporate the data collecting and graphing (plotting and interpreting) activities offered in a number of the modules. As seen by the diversity of the participants, the material covered by the modules of the Maury Project could be used to different degrees depending on the grade level taught. Many of the presenters alluded to the academic and career opportunities in the area of oceanography. What was also very interesting (and practical, considering our venue) was that the practical importance of each topic discussed was given as it related to the Navy, shipping in general, and the environment.

As far as the experience as a whole was concerned this was truly “once-in-a-lifetime”. The teachers I shared this time with were a great bunch of people, willing to share teaching and life experiences. I now have an excellent, and diverse, network at my disposal. As we do our local presentations, we can share, critique, and offer ideas and suggestions. As far as the organization of the workshop is concerned, David Smith was impressive! His control of the materials, pacing and venue access (with the help of his immediate team and those with the USNA, the AMS and NOAA) was excellent. The presentation of the modules (background information and activity demonstrations) done by Don McManus and the USNA instructors was top-notch. Don’s enthusiasm, sense of humour and pacing were outstanding and infectious. It will now be my job to glean all of this material and do my bit to introduce the Maury Project to my colleagues. I only hope I can do the job half as well as these people have.

I would like to close this report by saying thank you to CMOS, CNC/SCOR and my contact Sheila Bourque. I appreciate the opportunity to participate in the Maury Project experience. I would recommend it to anyone – to elementary and high school teachers, to veterans and especially to new teachers. It is truly worthy of continued funding from CMOS and CNC/SCOR. Thanks again.

Photos – 1) Testing water turbidity with a Secchi disk.

2) Doing a beach/shore topography survey.

3) Taking a water sample of Chesapeake Bay.



