A Moveable Museum

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Del Mar College (DMC) is a two-year college in Corpus Christi, Texas. We have a lot of the pieces in place needed to create a strong program in support and preparation of students for transfer to four-year colleges, the geotechnical workforce, or geoscience careers—but we could use some new strategies for putting the pieces together.

Del Mar College is a Hispanic-Serving Institution with an enrollment of about 12,000 students per semester. Although there are only three Geology faculty at Del Mar College, we enroll more than 1000 students each academic year in our Geology classes. (Presently we teach only Physical and Historical Geology, but will be adding Oceanography soon.)

My current focus is recruitment rather than preparation. Almost all of our Geology majors are recruited from students who are initially intent on simply fulfilling their core science requirements. Since I've been primarily teaching Historical Geology the past few years, I've been getting students excited about Geology as a career using fossils and other unique teaching specimens. Most of my students have never been to a museum, so I bring the museum to them. I used to prowl gem and mineral shows—now I prowl online. I invest much time cultivating relationships with fossil dealers and have acquired many excellent teaching specimens from various Internet sources and auctions. (I only buy legally obtained specimens from reputable sellers.) I have an extensive collection to show to students, which includes specimens from famous fossil locales including the White Sea (Ediacaran), Burgess Shale, Chengjiang, Solnhofen, Bundenbach, Messel, Bear Gulch, Mazon Creek, Hell Creek, and La Brea. Students can examine and hold dinosaur footprints, dinosaur coprolites, dinosaur gastroliths, dinosaur eggs, dinosaur bones and teeth, and even fossil dinosaur skin, as well as sediment from several K/T Boundary sites representing the asteroid that may have wiped them out. I also have samples of the Cape York, Allende, Canyon Diablo, and Odessa meteorites, as well as Lunar and Martian meteorites. Pictures alone don't do these types of specimens justice. This approach may be helpful--the number of our declared Geology majors has almost tripled in the last five years!

On the preparation side, these are some of the pieces:
1. Our best asset is our relationship with two nearby four-year universities that are part of the Texas A&M System, including Texas A&M Corpus Christi (TAMUCC), to which the majority of our Geology majors transfer. I am very fortunate that Dr. Tania Anders from TAMUCC will also be attending this workshop. We are always exploring new ways to create a better relationship, and we hope to learn a few new tricks at this workshop.

2. I have more than a dozen years experience as a professional geologist in mineral exploration and oil and gas exploration and production, and was employed by companies ranging from the very large (Exxon) to the very small (myself, as an independent consultant). Because of this varied professional background, I can realistically advise students about life as a professional geologist.

3. South Texas has a thriving professional geological community, and the boom is on, concentrated presently in horizontal drilling and fracking of the Eagle Ford Shale. This community presently offers our students both scholarships and internships.

4. We started a Geology Club at Del Mar College for our students this past semester. We are investigating various ways that this can help with recruitment and preparation.

5. I am the coordinator of the Del Mar College Department of Natural Sciences Friday Science Seminar Series. 3-5 times per semester, I schedule presentations by local/regional professionals for DMC faculty and students. Not too surprisingly, many of these are geological in content. We upload presentations as streaming video to our website (http://www.delmar.edu/ns_lectures.aspx). Talks are also shown repeatedly on Del Mar College's educational cable-TV channel, and in this way reach a much wider audience.

I hope to learn or steal as many ideas as possible at this workshop that can help with taking these pieces and developing new strategies in support and preparation of our students for transfer to the local (or other) four-year colleges, entering the geotechnical workforce, or the pursuit of geoscience degrees.