STAIRSTEP

Roadshow Memorial High School
March 28, 2013

STAIRSTEP visited Mrs. Price’s classroom at Memorial HS with two Lamar PH STST students, Keeley Townley-Smith and Jessica Plaia, their mentor, Dr. C. Bahrim, and his son, Alex. PPT presentations about the research and outreach done in the five disciplines of the STAIRSTEP (STST) program and brief presentations of careers in Physics and benefits of having a science degree were given in front of 25 students and their teachers. Demos with light, electrons, magnets, and Van de Graaff caught students’ attention.

Physics STAIRSTEP organized a short visit to Memorial HS in Mrs. Price’s classroom from 2:00 to 3:15pm. There were approximately 25 high school students in the classroom and their teachers. Each student received a flyer with more information on the STST program. We went at Memorial with two STAIRSTEP students, Jessica Plaia and myself along with our mentor, Dr. C. Bahrim and his son, Alex.

The session started with an overview of the STAIRSTEP program and its five disciplines given by our mentor, Cristian Bahrim. He also gave examples of job opportunities and benefits of having a Bachelor's degree in Physics, Computer Science and Earth Space Sciences.

I gave a brief presentation on careers in physics, talking about the different fields and the high salaries associated with physics jobs which caught a few of the students’ attention.

Jessica and I helped with handing out information on the STAIRSTEP program and assisted with the set-up of the different demonstrations. Alex took pictures and assisted with transporting the equipment.

Dr. Bahrim demonstrated electron diffraction and diffraction of light with different patterns. He showed how electrons were affected by the magnetic field and demonstrated how like poles repel each other with magnets. Several students became very interested in the magnets. We also had a demonstration with the Van de Graaff which really caught the students’ attention as it caused my hair to stand up and I was able to shock students. A couple of students volunteered to play with the

Keeley Townley-Smith (event coordinator)
Van de Graaff as well. Lastly, we ended with a presentation on lasers and talked about total internal
reflection and demonstrated it with a glass prism and a tank filled with water.

At the end of the session, Mrs. Price thanked us for coming and sparking an interest in a few
students. She requested contact information so that she could give some of her other students who
were interested in engineering information about Lamar and STST.

I believe that the event was successful because we were able to catch the attention of a few
students. Originally, we thought that our audience would be a senior physics classroom but it was just
a regular class. Regardless, we exposed the students to the benefits and cool parts of science. Mrs.
Price even said she was amazed of how enthusiastic some of the students were when we did our
demos.

My only suggestion for improvement is more preparation in the demos so that myself and
Jessica could do them for the roadshows.