ASME Diversity Action Grant Report

ASME student sections that receive funding through the Diversity Action Grant (DAG) program must complete and submit this report to ASME'S DAG Review Committee by no later than June 3 of the academic year in which the support was granted. Any unused funds must be returned to ASME with the report. ASME student sections that fail to submit a timely report may not be eligible to receive DAG funding for future proposals.

The outline below is the minimum required info your report should include. Additional information regarding the project, including photographs, copies of marketing materials and additional text, may be included with this project report.

NOTE: if there are personal details you do not want included when reports are published on-line, please specify and it will be removed (i.e. names, contact info).

PICTURES: if you are including photos, please be sure to include in your email that ASME has permission to use and post the images on its website.

F g
Date:April 21 st , 2015
Student Section:South Dakota School of Mines and Technology
Student Section Chair/Contact:Jeremy Adams
Address:24 E. Kansas City St., Rapid City, SD 57701
Telephone:307-290-0874
E-mail:Jeremy.Adams@mines.sdsmt.edu
ASME Student Section Advisor:Jason Ash
Address:501 E. Saint Joseph St., Rapid City, SD 57701
Telephone: <u>605 – 355 - 3736</u>
E-mail:Jason.Ash@sdsmt.edu
Summary of DAG Project- Wilson Elementary
ASME DAG Funding: \$_1000 Total Project Budget: \$_1000
Partnering Organizations: SDSM&T ASME Student Section Only
Attendance: Total60 Women28 Minorities12
ASME Section/Region Reps11(Including Advisor)

ASME Diversity Action Grant Report

Project Title: Wilson Elementary Science and Engineering Exhibits

Project Description:

On March 19th, 2015, we attended Wilson Elementary and enjoyed completing our outreach project with the 4th grade science students. This outreach project provided a hands-on opportunity for the kids to get engaged in the wonders of mechanical engineering. At the Wilson Elementary School, 10 members of our student section divided the classroom into 5 separate, rotational groups. Each group was able to attend each of the 5 stations where our members explained a pulley system, robotic arm, gear assembly, electromagnetic motors, and a fully operational quadrotor helicopter, which showed the kids how each station worked together to produce a functional robot. All 5 experiments were unique and allowed the students to ask questions to get an understanding of the basics of engineering.

Project Goal/Objective and How Achieved:

The goal was two tiered: introduce the kids to the phenomena of gravity, friction, gears, pulleys, motors, and electronics; and spark their imaginations with respect to the endless possibilities within the mechanical engineering discipline. So as to complete this goal, this year's project was carried out by engaging in more hands-on projects and helpful presentations that reflected mechanical engineering the diversity this field of study/career path requires. Furthermore, we presented a slide show on how to become a mechanical engineer and what they do. That said, the presentation got the kids' attentions, while the stations allowed the kids to be involved by getting a hands-on, Q & A filled learning experience.

Evaluation of Program's Success:

The best way to gage the success of any goal based project is to consider the end result. With the students and teachers learning being that goal, we based the project's success on the students' reactions and the teacher's feedback. This year, as in the past, we received thank you cards from each student who had the chance to participate in the event. Each card was unique and provided our chapter the motivation to want to continue introducing science and engineering in the classroom. The thank you cards and the teacher's request for us to return the next academic year pays testament to the project's success.

Other Comments/Observations/Pertinent Info:

At the end of the outreach event we gave out gift bags that included a calculator, ruler, mini notebook, aero prop, and pencils.