

WoW Ambassadors- Promoting Welding Education and Careers

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Introduction

Mentoring programs for youth have become increasingly popular and widespread. Researchers often reported positive relationships and outcomes resulting from mentoring programs (Scogin & Stuessy, 2015; Garcia-Melgar & Meyers, 2020). Some of these positive relationships and outcomes with mentors encourage students to enroll in Science, Technology, Engineering and Mathematics (STEM) courses and programs; consider career choices in these disciplines; and improve students' engagement, retention, content knowledge, and attitudes toward STEM subjects and courses (Bowling et al., 2015; Scogin & Stuessy, 2015; Cutucache et al., 2016). Therefore, it is critical to increase the number of female-driven mentorships in the welding industry. This innovative idea describes the creation and implementation of the Women of Welding (WoW) ambassadors. The purpose of the WoW ambassadors is to encourage women to pursue educational and career opportunities in the welding industry.

How It Works

The WoW Series is a grant funded project that has two major components, the first component of the project is the creation of a WoW camp for high school girls interested in the welding industry. The five-day camp is designed to provide a safe environment, where campers can extend their knowledge and perfect their welding skills under the guidance of women from the welding industry. Campers learn a new welding process each day through a lecture and laboratory practice in the morning, career spotlight speakers at lunch, application activities in the afternoon, and keynote speakers at night. The second component of the project and the focus of this innovative idea is the creation of WoW ambassadors. A call for WoW ambassadors was put out by the project directors (PD) in the agricultural mechanics classes and related clubs. The WoW ambassadors must be female, pursuing an agricultural-related degree. Individuals submitted applications and were selected based on prior welding knowledge and communication skills. Through this project, WoW ambassadors worked with the PD on the planning and development of the WoW camp. Leading up to the camp, WoW Ambassadors assisted with recruitment through social media, flyers, national listservs, and recruiting at major agricultural mechanics event throughout Texas. After the application deadline, WOW ambassadors selected 28 girls to attend the camp. During this process, the ambassadors focused on the campers' welding experience and future plans. In addition to the recruitment and selection process, ambassadors helped create and plan the camp schedule. This involved finding and contacting female guest speakers in the welding industry to build a sense of belonging.

During the week of the WoW camp, the ambassadors managed the registration table and greeted the campers while the project directors met with parents/chaperones to ensure all paperwork was complete. The ambassadors assisted with the daily logistics including confirming all participants were on the bus to and from campus, setting up supplies and machines as welding processes changed. The ambassadors also led some of teaching demonstrations and assisted

participants who needed individualized assistance. The ambassadors worked diligently to coordinate meals and snacks on campus and at the hotel by setting up, clearing, and cleaning. The ambassadors serve as a point of contact for personal and private needs of the campers, and overall time management of the camp. Furthermore, ambassadors lead a college panel discussion for the participants to learn about college life as a possible education path. Ambassadors then stayed every night during the campers' free time at the hotel in case of emergency. Ambassadors conducted bed checks nightly to confirm the campers were in their assigned hotel rooms.

Results to Date

Four undergraduate agriculture majors were selected to serve as 2022 WoW ambassadors. One graduate and two undergraduate students were selected in 2023, with two returning from 2022. The ambassadors assisted with the application development, distribution, recruitment, manage social media, and camp operations. The ambassadors reviewed applications and personally contacted applicants to inform them of their status. The ambassadors interacted with every secondary female that participated in the major agricultural mechanics events held in the spring of 2022 and 2023. The number of participant applications has increased over the past two years and the number of students interested in pursuing a degree at Texas State University has increased.

Future Plans/Advice to Others

The funding for the WoW camp and WoW ambassadors expired at the end of 2023. Pursuit of external funding is ongoing and if unsuccessful, funding for future WoW camps will be shifted to a \$2,000 camp registration fee per camp participant. We recommend that future camp participants pursue an industry supported scholarship to attend the camp. We have had multiple industry partners who have indicated that they are interested in providing scholarships for participants. We have accounted for an increase in the number and amount of WoW ambassador scholarships and travel stipends in the camp fee to ensure the ambassadors continue to receive financial support for the considerable time and impact that they provide to the camp's success. We recommend others create a daily and long-term responsibilities checklist for the ambassadors. We also recommend the incorporation of Junior WoW Ambassadors comprised of former WoW camp participants that can assist by serving as team leaders, near-peer mentors, and teaching assistants.

Cost/Resources Needed

The WoW camp project was funded by a USDA-NIFA-WAMS grant program for two years at \$99,999. All expenses from faculty salaries, travel, indirect cost, hotel expenses, food expenses, and materials and supplies costs equaled around \$25,000 per year. The overall WoW ambassador stipends equaled \$6,000, resulting in each of the four WoW ambassadors receiving an overall total of \$1,500. The department and student organization provided funding for the

ambassadors to attend the major agricultural mechanics/welding related events to recruit for the department and the WoW camp.

References

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