

Cal Poly Women in Construction Youth Outreach: Girl Scouts in Construction Program

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Construction is, historically, a predominately male-dominated major, but today, countless efforts are made to change this. Girl Scouts in Construction was created to help the Cal Poly Women in Construction Club increase their youth outreach. This event was hosted to give a positive-hands on construction experience to increase construction exposure to girls at a young age. Through organizing this event, the connections between the Cal Poly Women in Construction Club and the Girl Scouts of California's Central Coast, National Association of Women in Construction, Cal Poly Construction Management Department, and a few general contracting companies were all strengthened. At this event, Girl Scouts learned about framing, painting, mixing and curing concrete, safety when performing construction activities, and had the opportunity to ask current industry members and Cal Poly students questions. Along with the execution of the event, all of the documents and processes used to organize the event that also includes lessons learned and areas for improvement were collected, so that future Cal Poly students can easily recreate this event.

Key Words: Construction Management, Girl Scouts, Women in Construction, Outreach, Youth Outreach

Introduction

The lack of female presence in the construction industry is plain to see, especially when reviewing the statistics, and it is well acknowledged that a change is needed. This project aims to help make that change by following up on Melissa McGrath's, Cal Poly Construction Management Alumni 2019, senior project "Construction Outreach Event with Girl Scouts of the USA and Cal Poly Women in Construction." McGrath's research greatly helped in organizing Girl Scouts in Construction as she initiated contact with the Girl Scouts of California's Central Coast (GSCCC), made contact with Cal Poly's Society of Women Engineers (SWE) who have previously put on similar events, and identified the best type of activities for the Girl Scouts to do during this event. Sixteen Girl Scout Brownies (second and third graders) were invited to the Cal Poly San Luis Obispo campus to learn about basic construction in a hands-on, collaborative, and safe learning environment.

Process

Pre-Planning

This project began with the creation of a schedule and budget to prioritize activities and give a reference point during donor outreach. Both the schedule and budget were incredibly useful throughout the execution of this event to ensure that nothing was forgotten and for financial tracking

purposes. They were created nearly four months prior to the targeted event date, but three months should provide sufficient time.

The schedule included nearly everything that needed to be done to put on the event from the confirmation of donors to the order of custom patches to award the Girl Scouts. Attached to each necessary action was a “general lead time” and “applied lead time” that provided the “target” date of completion in relation to the date of the event. The “general lead time” was the time that action items generally needed to be completed before the event. While the “applied lead time” adjusted the “general lead time” to allow the “target” date to fall on a weekday.

This schedule was created in an Excel document and set up so that anyone else who would like to organize this event can simply input their desired event date, and all other lead times will automatically update. The “applied lead time” can then be modified as needed at this time.

The budget included everything that would be an expenditure for the event, from table rentals to hair ties to concrete. Most items were simple to find costs online long before the event like the name tags, snacks, volunteer t-shirts, etc.; however because the activities were not yet determined, an estimate of \$150 for each activity was used as a place holder.

Financial Support

This project relied heavily on industry donations. An email describing the event and requesting support was sent out to the Women in Construction Club Industry distribution list. From that, the event received about half of the required funding. Construction Management Department’s California Center for Construction Education Program Manager, Rachele Smith, helped to gain more support for the rest of the project.

Following the event, thank you cards with photos from the event were sent to the industry sponsors with a note describing what materials their donation helped to buy.

Girl Scouts of California’s Central Coast

Girl Scout Program Management

Contact with the GSCCC about the event began with an email to Dana Richards, Program Manager, confirming that the Girl Scouts in Construction event date was not on the same date as another important Girl Scouts event. Following Dana’s confirmation, an SU/Troop Event Calendar Request Form was submitted five weeks before the event registration deadline as required. A flyer advertising the event to the Girl Scouts and Parents as well as a google form to register were prepared as a part of the submission. The event was approved by Dana about a week later.

The GSCCC handled the publishing of the event to their calendar and social media. Sign-ups for the event were slow in the beginning but began to pick up. By the time of the event, six Girl Scouts were on the waitlist for this sixteen Girl Scout event.

Following the event, photos were shared with Dana Richards for her use.

Girl Scout Parent and Supporter Correspondence

A week before the event, the Girl Scout parents and supporters received an email with all the information needed for the event compiled into a one-page document they could print and take with them to the event for reference. This document included: things to bring, campus map, information regarding release forms, where to park, what to wear, and what to expect at the event. Following this initial email, the parent's individual questions were answered as needed in a timely manner.

After the event, an email was sent to all parents and supporters that registered a Girl Scout requesting their address so that the Girl Scout's custom patch could be mailed to them. A week later, Girl Scouts received those patches in the mail.

Campus Coordination

Coordinating the event with the Cal Poly campus administration began with filling out an E-plan. Because this event involves minors, the E-plan needs to be approved two weeks before the event. The E-plan for this event was submitted about four and a half weeks in advanced and was approved a week and a half before the event. Once the E-Plan was submitted, there were five actions that needed to be taken before getting the event approved. First, a food waiver form was required because the event was not using a certified or approved caterer to provide individually packaged snacks. Second, a facilities service request needed to be put in to rent tables for the Girl Scouts to work on. Third, to ensure that parents had a safe place to park nearby during the event, the author emailed and worked with the visitor center to come up with the most affordable and convenient parking plan. Fourth, to ensure the safety of the minors, Melissa Bullaro, Director of Risk Management and Administrative Services at Cal Poly, provided release of liability and photo release forms as well as a consent to medical treatment form that the Girl Scouts and their parents needed to fill out prior to the start of the event. A follow-up meeting with Chip Neuenschwander, Assistant Director of Student Clubs and Organizations, was held to confirm all event risks were properly managed. At this time, a volunteer training packet was provided to ensure volunteers understood how to interact and communicate with minors appropriately. Fifth, the venue space needed to be confirmed with the department scheduler/administrator, Jenay Reynolds-Sebbach, as the Simpson Strong-Tie Lab is a department space. The written confirmation was then sent to ASI E-plan for approval.

Event Volunteers

An email was sent to Cal Poly Construction Management students with a link to sign up to volunteer at the Girl Scouts in Construction Event as well as six Cal Poly WIC alumni that were also invited to come back. By the time of the event, there were more people interested in volunteering for the event than Girl Scouts attending the event.

A volunteer meeting was held five days before the event to hand out shirts that identified them as volunteers, go over the activities, and review the campus administration's volunteer youth training.

Volunteers were assigned jobs prior to the event. During the registration time, two volunteers signed Girl Scouts in, ensuring they had the proper forms signed and name tags, two volunteers walked around campus looking for any parents that may have gotten lost, and the rest of the volunteers talked and played games with the signed-in Girl Scouts and parents and supporters until the event started. Once the event began, two volunteers were assigned to each of the four groups to work closely with the Girl Scouts. Each group was assigned another volunteer to provide any extra assistance that came up as needed.

Material Preparation

Shirts used to easily identify event volunteers were ordered in advanced along with custom patches to award the Girl Scouts with. The patches arrived two days after the event, so to ensure the Girl Scouts would still be awarded something Megan Moloney, 5th year architecture student, laser-cut small tokens with the WIC club logo on it and rulers that said “Girl Scouts in Construction.”

Once the exact activities were decided, materials were bought, prepared, and tested to ensure a smooth event. For the framing activity, 1”x8”x6’ and 1”x3”x8” pieces of pine wood were cut into 4” and 8” pieces that would be nailed together. Once cut, they were sanded down to avoid any potential for splinters. These pieces were then taped together into a kit for each Girl Scout. Following the assembly of the boxes, each girl painted their box. This activity did not require a lot of preparation, just pouring the different colors of paint into four different tubs just before the activity for each group. For the last activity, concrete was divided into four buckets, one for each group, and cut string for each Girl Scout to shape their concrete into a pumpkin. The string was placed into a disposable cup with a sock that made up the concrete activity kit.

Deliverables

The deliverables for this project was the proper execution of the event and the event guide to recreating Girl Scouts in Construction.

Lessons Learned

The concrete activity proved a bit trouble-some with a lack of space to move and quick setting concrete. This activity needed to be physically spread out more than it was to allow more space to move around, particularly for the volunteers to provide better assistance to the Girl Scouts mixing concrete. The quick setting concrete also proved itself to be very a quick setting as it hardened before the Girl Scouts could form it. Using regular concrete in a more spacious set up would greatly improve the execution of this activity.

Requesting to rent facilities tables is an unnecessary cost. The tables were not delivered even though delivery time and location was confirmed, so we made do with the tables provided in areas nearby.

Registration fees should be collected from Girl Scout parents and supporters in advanced to ensure Girl Scouts do not register but fail to be present for the event.

Finally, the Women in Construction club can handle hosting more Girl Scouts. With plenty of Girl Scout interest and participating volunteers, this event can easily grow in future years.

Photos



Welcome Talk - Briefly discussed why we were there and how to be safe.



Welcome Talk - A Stretch and Flex was included to warm the Girl Scouts up.



Activity 1: Framing - Pine box kits prepared for Girl Scouts with hammer, gloves, eye protection, and finish nails.



Activity 1: Framing - Girl Scout pictured above (8 years old) assembling her box with close support from volunteer.



Activity 2: Painting - Girl Scout paints the box that was just assembled.



Activity 2: Painting - Girl Scouts independently paint their boxes as they like.



Snack Time - Girl Scouts patiently line up to receive the snacks provided to them.



Snack Time - Girl Scouts ask current students and industry questions about construction.



Activity 3: Concrete - Girl Scouts mix their concrete and volunteers help distribute concrete.



Activity 3: Concrete - Volunteers assist Girl Scouts in forming their concrete into pumpkins.



Closing Talk - Briefly talked about what the Girl Scouts learned and most enjoyed.



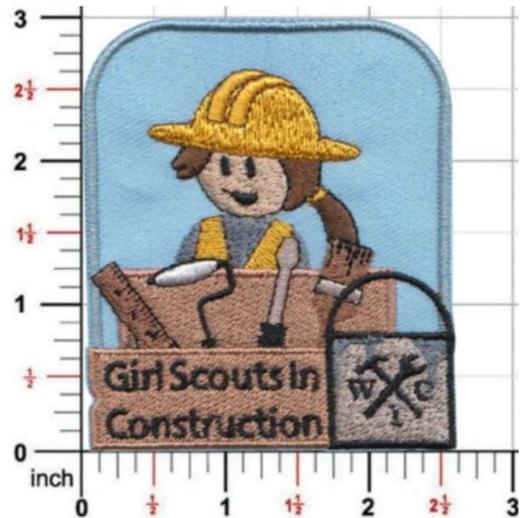
Closing - Group volunteers awarded the Girl Scouts in their group with tokens and took group photos.



Closing - Group photo of all Girl Scouts, student and Alumni volunteers, and event advisor.



Sponsors & Volunteer Shirts - Two posters were hung during the event to recognize sponsors. Shirts were designed to clearly identify volunteers.



Custom Patch - Specially designed Girl Scout in Construction patch mailed to Girl Scouts after event.



Tokens - Awarded to Girl Scouts in place of the embroidered patch.

References

McGrath, M. (June 2019). Construction Outreach Event with Girl Scouts of the USA and Cal Poly Women in Construction.