

Student Mentorship: An Essential Practice

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As an industry that relies heavily on strong relationships, contractors must learn to be effective communicators. At California Polytechnic State University, San Luis Obispo (Cal Poly SLO), there are several majors that provide students with a peer mentorship program; however, the Construction Management Department lacks one of these programs. Previous research conducted by Construction Management students at Cal Poly SLO revealed a significant demand for peer mentorship relationships (Gauna, 2017). The purpose of this paper is to determine what logistical approaches should be initiated to provide students with this valuable resource. This research was conducted by utilizing a nine-question survey to Construction Management students and faculty. This study concludes that students prefer having first-year students work with third-year students and second-year students work with fourth-year students. Students are also in favor of having meetings monthly and reassigning mentors annually. Additionally, students respond positively to having face-to-face interactions with their peers through planned events. When these approaches are combined with strong leadership, younger students will have a valuable resource, student mentors will learn new skills, and lasting relationships will be developed.

Keywords: Mentorship, Collaboration, Communication, Construction Management, Peers

Introduction

Among almost all industries, companies have accredited their success to the ability to attract people through communication and involvement. The core philosophy of “Learn by Doing” at Cal Poly SLO is embedded in all that students do. For some younger students, taking the step into this culture can be overwhelming and intimidating. To help students jump in with both feet, many majors use the method of mentorship. Having a friendly face of someone who has experienced similar situations can ease unnecessary tension and stress. The success of businesses often thrives on this practice of mentorship.

The Construction Management Department at Cal Poly SLO often reminds students that the construction industry heavily depends on creating and maintaining strong relationships with subcontractors, architects, and clients. Implementing a peer mentorship program among Construction Management students would encourage the development of the relational skills that are required of contractors. Additionally, the opportunity for students to be a mentor could be helpful in learning to teach and engage younger students with less experience, which is a valuable skill in the workforce. Students being mentored will be given another perspective from upperclassmen. These relationships could help students get involved earlier and potentially raise academic success among the younger students.

In past studies regarding mentorship within the Construction Management Department, results have shown overwhelming support of a mentorship program within the department. A previous Cal Poly SLO student, Savannah Gauna, conducted surveys with respondents from the Cal Poly Women in Construction Club (WIC) and from professionals in the construction industry. All respondents answered that they “Agree” or “Strongly Agree” that a mentoring program would help students to excel in the industry. The study also found that students would prefer having mentors within the Construction Management Department rather than with industry members (Gauna, 2017). This survey gave great insight for the club. However, this study was focused on a small group of 11 students, all of whom are women. Additional studies regarding WIC mentorship followed in the next two years. The studies were conducted by WIC members Linnea Lavorico and Alexa Heien. Their projects studied the results of having an industry mentor program within the WIC club and analyzed the results after a nine-month period. Alexa Heien conducted her study through a survey to the WIC members to see results of the program. Of her survey, 87.5% of the

eight responses received answered that their mentor had not helped them academically (Heien, 2019). In conclusion to this study, Heien determined that students were not in consistent contact with mentors and felt that that it was not helpful.

Although the results showed that the mentorship program was not successful, students have consistently reported the need for a mentorship program. Because there is no peer mentorship program despite the demand for one, it is safe to assume that there has not been progress due to poor execution or a not knowing what students need. Since this study conducted in Winter of 2019, there has been no further research.

Literature Review

Outside of the Construction Management Department at Cal Poly, there have been many other attempts at creating a successful peer mentorship program. In 2003 at Western Ontario University, a study was conducted regarding a peer mentoring program for incoming first year students. The study was conducted over a year for 983 students. First, students were given a survey where they reported their majors and a self-reported academic motivation scale. After being divided into majors and 'motivation levels', half of those students were selected to participate in the mentoring program, while the other half acted as a control group. First year students were matched with upperclassmen peer mentors who shared the same career path and typically the same major. A kick-off event was held at the beginning of the semester to introduce and engage students. During the year, peer mentors would meet with their students on a weekly basis. Mentors were given support by 'mentor team leaders', faculty, and the Program Coordinator. The mentors were encouraged to share experience and stray away from tutoring their mentees. This program was very successful and found that "mentored students who continued to participate midway through the second semester had significantly higher grades than did students in the control group" (Rodger, 2003). Additionally, the study found that there was a greater sense of belonging among these students, which helped students have reduced anxiety and more motivation to be involved with their academics.

Not only have these relationships shown to be beneficial to those mentored, but also those who are mentoring. Research among those in the nursing career have found many benefits for people being mentors. According to one interview, the benefits of being a mentor were the "positive impact on [the] person or practice, personal satisfaction, professional success, and organization and professional contributions" (LaFleur, 2010).

Although there have been many successful peer mentorship programs in the past, they can often have adverse effects. Utah Valley University conducted a survey regarding mentor relationships among students, mentors, and instructors. Although many benefits were found, also many risks presented themselves as well. In an interview with one of the mentors from the study, "there is a huge risk of depending on that person too much, using them as a crutch.... They're there to help, but they're not there to hold your hand through everything" (Colvin, 2010). This was a common theme in the findings among other challenges. Differences in personalities also led to issues among these students.

Research has shown that mentor relationships must be balanced. Mentors who are too involved can create dependency, while distant mentors can forget their commitment. From the study at Western Ontario University, it is evident that when approached correctly, setting clear guidelines, and persistent accountability, the benefits of peer mentorship are incalculable.

Purpose of Study

The purpose of this study is to understand why the mentorship program attempts in the Construction Management Department at Cal Poly have not been successful in the past. Other schools and programs have noted the benefits and risks associated with certain approaches. Nonetheless, it is important to understand what is desired by students and faculty. Not only have studies shown that peer mentorship programs have many short-term benefits, but long-term advantages after college as well. Mentorship programs have shown to provide students with better, longer-lasting, and more helpful relationships. This project was conducted through a survey to students and faculty to find what approach is going to provide a successful mentorship program in the department.

Methodology

Given the circumstances with the COVID-19 pandemic, the only viable way to receive a strong pool of responses was through a survey. The survey consisted of nine questions that is attached as Appendix A at end of the document. The survey target group was all Construction Management students and faculty. Before sending the survey to students and faculty, the questionnaire was reviewed by five other Construction Management senior students and two Construction Management faculty members. The responses to the survey were collected over three weeks. The survey was sent on April 24, 2020 and had forty two respondents.

The survey was distributed through a few mediums. First, the survey was sent through an email to the Construction Management Department at Cal Poly SLO. The survey was also sent as a text message to a group twenty-seven Construction Management students who were in a support surveying class. Additionally, the survey was sent to a small group of nine Construction Management students who were in a freshman-level class that was taught by this researcher in Fall 2019.

The first question of the survey asked if the respondent was a Construction Management faculty or student. The second question asked what year the student is if applicable. These first two questions were to understand any biases of the respondents. Although the responses were anonymous, each response was able to be viewed and analyzed individually. This gave more understanding of respondents' answers, given their circumstances. This surveyor decided not to ask additional questions regarding demographics because he saw it as an unessential characteristic.

The purpose of this study was to find the logistical approach to creating a peer mentorship program specific to the Construction Management Department at Cal Poly SLO. The survey aimed to find how students should be matched, how often meetings should occur, and if the program should be mandatory. Additionally, the main objective of this study is to take a step towards developing a successful resource for all Construction Management students at Cal Poly SLO.

Results

Out of the 42 respondents, only 3 were faculty members and 39 were students. To avoid skewing the results, the 39 student responses are the only responses analyzed. Each question of the survey is broken into its own section to understand the results individually and how responses differed depending on the student's context. The breakdown of the survey is divided into three sections: Initial Response, Logistics, and Incentives. The first few questions were regarding what background of the student's responses. Of these 39 responses, 4 were first-year students, 12 were second-year students, 13 were third-year students, and 10 were fourth-year students or older (see Figure 1). This breakdown is mostly even, except for a low representation of first-year students.

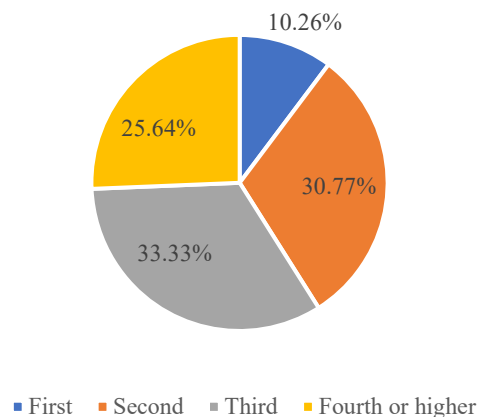


Figure 1: Student Breakdown

Initial Response

Questions that make up this section include numbers 3, 7, and 8. Question 3 asks if the respondent thinks a mentorship program would be beneficial. Studies from both from Cal Poly and other resources have shown the consistent response that mentorship programs are beneficial in concept. This question was asked to understand if there were any strong biases against mentorships. All 39 student responses answered that they believed a student mentorship program would be beneficial to the Construction Management Department at Cal Poly.

The next question, number 7 asked if the respondents would be personally committed to meeting with their mentor or mentee without the help of the department. From this question, all but one student responded that they would be committed without any aid. If this survey group is representative of all Construction Management students, it is evident that students are extremely passionate about creating and maintaining these kinds of relationships. Although this is exciting, past research has shown that without structure and assistance, programs will either wither away or are misused. Like question 3, this question was to gain more understanding as to how the respondents felt about the general concept.

Question 8 had more variety in its answer. It asked if the students wanted the program to be mandatory. The responses, seen in Figure 2, are divided, but have a majority not in favor for making the program mandatory. The first-year respondents had 3 out of the 4 responses against making the program mandatory. First-year students may have answered this way because having a mentor to constantly meet with might feel overwhelming. However, from the responses from question 3, having the resource available is something that all the first-year students are in favor of. The second, third, and fourth-year respondents are split on the question of having the peer mentorship program mandatory.

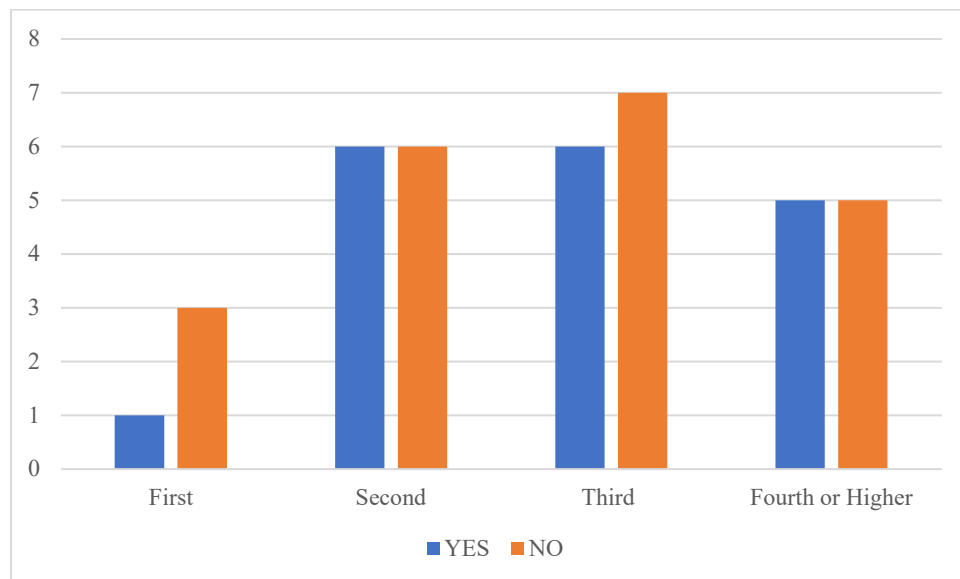


Figure 2: Mandatory program

Logistics

Questions 3, 7, and 8 covered the main interest in a program. The next set of questions cover the logistical approach to how a peer mentorship program ought to be conducted. Questions 4, 5 and 6 ask important questions about the assignment of mentors, the frequency of meetings, and the necessity and frequency of reassigning mentors. Question 4 asks about how mentors and mentees are to be assigned to one another. The options given to the respondents were:

- Option 1: First-years with Third-years. Second-years with Fourth-years (and higher)
- Option 2: First-years with Second-years. Second-years with Third-years. Third-years with Fourth-years (and higher)

- Other (the option to write other breakdowns)

Out of these three options, thirty respondents chose Option 1, nine respondents chose Option 2, and zero students chose the Other option (see Figure 3). Option 1 seems to benefit over Option 2 since it allows students to be mentored for two years before becoming a mentor. This approach would allow students to take time to understand what the mentor’s roles are before stepping into a position of influence. A benefit that Option 2 would have over Option 1 is that it allows students to be closer in class rank to those they are working with. This circumstance could be helpful for students to remember valuable advice for those that they are mentoring.

Although faculty responses are not being analyzed in the statistical data found in this survey, as an antidote to this finding, one response recommended another option that could be helpful. The response recommended an approach through a shared interest to help foster lasting mentorships. Perhaps when assigning mentors to mentees, the class rank breakdown should conform to Option 1, but also incorporate shared interests.

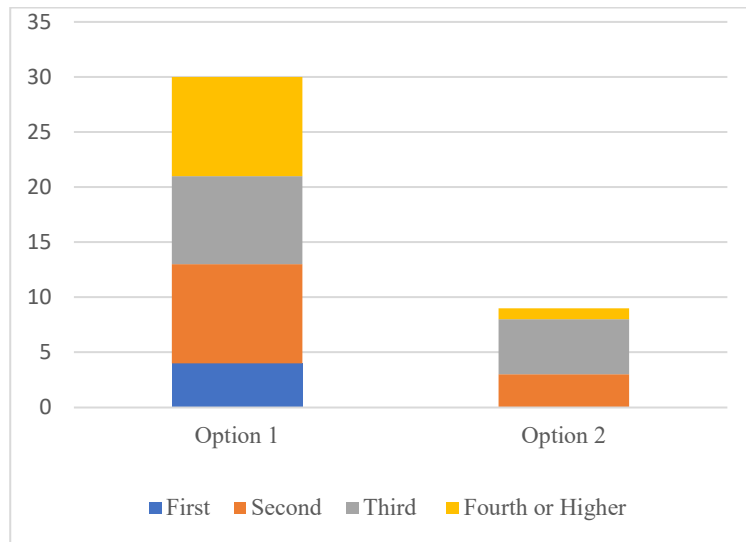


Figure 3: Assigning Mentorships Breakdown

Question five asks about meeting occurrence between mentor and mentee. This question was designed to understand what amount of time would allow students to foster these relationships. As seen in Table 1, the most highly rated response was monthly. A total of 4 students chose weekly (10.26%), 22 students chose monthly (56.41%), 13 students responded quarterly (33.33%), and zero students responded yearly.

These results show that having meetings once a week would be overwhelming or tedious for most students. Additionally, no students feel as though they could foster a relationship by meeting once a year. Naturally, the most frequent response is monthly.

Meeting Occurrence				
	Weekly	Monthly	Quarterly	Yearly
First	0	2	2	0
Second	2	7	3	0
Third	1	8	4	0
Fourth or Higher	1	5	4	0

Table 1: Meeting Occurrence

Lastly, question 6 asks respondents about the frequency of reassigning mentors. The options available to this question included:

- Once a quarter
- Once a year
- Never

Reassigning new mentors has many benefits and drawbacks. A benefit of reassigning mentors often is that mentees are given opportunities to learn more from other students very quickly. Another benefit of switching mentors often is if there are differences in personalities in certain relationships, students do not have to be stuck with the same person. However, a drawback is that this fast pace of reassigning mentors is that relationships may not have enough time to fully develop, which could prevent students from making lasting relationships.

The results from this question was somewhat diverse as well. Nine students suggested that mentors be reassigned once a quarter. Twenty-five students suggested that reassignment happens once a year. Only five students said they never want to reassign mentors. Because the responses are so divided, perhaps a hybrid is the best approach for the peer mentoring program. One potential approach could be to reassign mentors once every year unless specifically requested that the students want to maintain their mentoring relationship.

Incentives

The last question of the survey asked participants to check all the boxes what incentives would lead to the most successful peer mentoring program. The incentive options that were available were:

- Implementing program into PACS Form
- Meeting in-person and signing a form for authentication
- Having BBQ's or social events to meet with mentor/mentee

The total votes for implementing into PACS form was 14, meeting in-person and signing a form had 30 votes, and having a BBQ or social events had 34 votes. Because most students responded that they are not in favor of a mandatory program, these approaches can help guide students through the relationships. The most popular approach is by having social events. This would incentivize younger students to get involved. Approximately 77% of students also voted for meeting in-person and signing a form for authentication. Because the social events option and meeting in-person option had the most votes, it is understood that face-to-face contact is the best way to create a strong and lasting relationship.

Conclusion

This survey of Cal Poly Construction students had many interesting findings on how a peer mentorship program ought to be conducted. Nonetheless, there are always factors that could have impacted these results. The first concern for the accuracy of these results is the pool of respondents. Presumably, the students who responded to online survey have certain characteristics that would also lead them to be more optimistic about the mentorship program. Unless conducted in a random controlled environment, this aspect is not possible to factor out. Therefore, it is unlikely that another survey would yield different results.

Past studies done through the Construction Management Department at Cal Poly SLO have shown there is a large demand for a mentorship program. Successful programs, such as the one at Western Ontario University have found that students who have mentors find more academic success than those who do not. With the correct planning and execution, Cal Poly's Construction Management Department can find the same success. In whole, the logistical approach to a peer mentoring program in the Cal Poly Construction Management department is divided into three general conditions: the assignment of mentors, the frequency of meetings, and the frequency of reassigning mentors. The findings from this research are most in favor of having first-year students work with third-year students and second-year students work with fourth-year students, having meetings monthly, and reassign mentors once a year. Additionally, having face-to-face interactions among students will boost incentive to maintain a strong and consistent relationship. It is this researcher's belief that it is imperative to have mentors meet frequently to assess the relationships and ensure that they are serving their purpose.

Future Research

The findings from this research paper should give enough information for future students to implement a departmentwide program. The *Logistics* section of this research paper provides key information on how to approach building a peer mentorship program. Should this program be pursued, there will need to be plenty of coordination with a CM faculty member. Another possibility to further understand what is required to create a strong mentorship program is a study of a smaller group of students. Having an incubation period where students can be paired up for a quarter could provide some strong findings. Although, peer mentorship programs require a lot of time, patience, and persistence, the benefits are immeasurable.

Resources

Colvin, J. W., & Ashman, M. (2010, May 26). Roles, Risks, and Benefits of Peer Mentoring Relationships in Higher Education. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/13611261003678879>

Heien, A. S. (2019). Construction Management. Student Perspectives on the Women in Construction Club's Industry Mentorship Program. Digital Commons

Guana, S. M. (2017). Construction Management. Creating a Mentoring Program for Members of the Cal Poly Women in Construction Club. Digital Commons.

Lavorico, L. (2018). Construction Management. Creating and Implementing an Industry Mentorship Program Within the Women in Construction Club. Digital Commons.

Rodger, S., & Tremblay, P. F. (2003). The Effects of a Peer Mentoring Program on Academic Success Among First Year University Students. The University of Western Ontario.

Lafleur, A. K., & White, B. J. (2010). Appreciating Mentorship: The Benefits of Being a Mentor. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/21057294/>

Appendix A

CM Mentorship Program Questionnaire

1. Are you a CM faculty or CM student?
 - CM Faculty
 - CM Student
2. If you are a student, what year are you?
 - First
 - Second
 - Third
 - Fourth or higher
 - N/A
3. Do you think it would be beneficial to have a student mentorship program in the CM department?
 - Yes
 - No
4. What would be the most beneficial approach for assigning mentors to mentees?
 - Freshman with Juniors & Sophomores with Seniors (& 5th year + students)
 - Freshman with Sophomores; Sophomores with Juniors; & Juniors with Seniors (5+ students)
 - Other
5. How often should meetings occur?
 - Weekly
 - Monthly
 - Once a Quarter
 - Once a Year
6. How often should mentors/mentees be reassigned?
 - Never
 - Once a Year
 - Once a Quarter
7. Would you be committed to meeting with your mentor/mentee without the help of the department?
 - Yes
 - No
8. Do you want the program to be mandatory for all CM students?
 - Yes
 - No
9. Check all boxes that would be necessary to a MANDATORY program's success
 - Implementing program into PACS form
 - Meeting in-person and signing a form for authentication
 - Having BBQ's or social events to meet with mentor/mentee