

Reducing Student Aversion to Strategic Networking

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Abstract

Strategic networking is an important practice for both students and professionals, and it is essential for those professionals who will enter management and leadership roles. Nonetheless, research and anecdotal experience have indicated that both students and practicing professionals shy away from strategic networking, a stance that can hinder their careers. This paper reports on work-in-progress of design and evaluation of course interventions to promote strategic networking among undergraduate engineering students. These experiences are part of a course in Engineering Leadership at Texas A&M University. This paper offers first a literature review and then detail on our course content, networking activities, and a reflection connected with effective strategic networking for this class. Mixed-methods analysis of the results of student surveys provide insights of student opinions about strategic networking before and after they experience the course material and activities. The second of these surveys explores the effectiveness of each intervention as perceived by students. This latter survey also explores the potential positive effect of portraying strategic networking to doing good for others. While the students' first survey opinions were slightly on the positive side of neutral about strategic networking, they nevertheless evidenced concerns over the ethics and authenticity of strategic networking and lack of skill in practicing it. Course content was oriented in part to portray strategic networking as a practice that benefits others and promotes worthy causes; it is servant leadership in practice. Student perceptions noticeably improved after experiencing the content. We also learned that a focus students benefited most from portrayal of networking as an ethical practice of servant leadership and by assisting skill development. It is important for workplace teams and their organizations for individual engineers to be effective practitioners of strategic networking. The paper concludes with guidance for instructors in helping students with the important skill of strategic networking for students throughout their time at college. Engineering faculty can equip students with practical and proven guidance and support to develop critical leadership skills for the workplace as they begin their careers.

Introduction

When both students and working professionals contemplate professional networking, they frequently feel angst. Fully 80 percent of people [1] hold attitudes that prevent them from networking in any way or from networking successfully. Nevertheless, most college students know they *should* participate in professional networking, but such knowledge does not overcome their avoidance of it. Students typically misunderstand genuine networking and lack effective knowledge and skills in it, even when they feel comfortable doing so. However, the recommendation that students network is too crucial to overlook or postpone; professional networking is essential to a thriving career in both the short- and long-term. A LinkedIn [2] study revealed that 70% of people were hired by an organization where they already had a connection. For engineers, networking is crucial. As they advance in their careers, they will likely take on management and leadership responsibilities where a robust network truly benefits their team and organization. Therefore, we educators have a responsibility to assist our students in developing their knowledge in, and comfort level with professional networking skills. As a result, at Texas A&M University, we include professional networking in our engineering leadership

course.

We previously presented the results of an initial exploration into student perceptions about networking [3]. In this paper, I will outline the engineering leadership course and our content on networking, then explore professional networking and its importance, and lastly offer results of and discussion on two surveys from the Fall 2023 course on student perceptions about networking. All this is intended to assist faculty and students as preparation for fulfillment and success in whatever they undertake, both during and after college.

Background on Engineering Leadership Course

Enrollment in our engineering leadership course typically runs over 80 students per semester. The course includes two credit hours of lecture and one for laboratory. We aspire to help students grow in skills for emotional maturation, collaboration, and team and organizational leadership. Our framework is the remarkable similarity of engineering and leadership skills [4]. When we appreciate the pertinent characteristics of people as individuals and in teams, we take advantage of skills in the engineering skillset, e.g., systems thinking, problem solving, and creativity and innovation. Although engineers resist common archetypes of leadership as in conflict to the engineering identity, nevertheless they value superiors who demonstrate *servant leadership with technical mastery* [5]. Importantly, this phrase describes the model for engineering leadership.

Ibarra's [6] outstanding *Act like a leader, think like a leader* is a required text. As the title suggests, we learn leadership by practicing it. Ibarra devotes one of her five chapters to networking, thus underscoring its importance.

Our course uses emotional intelligence as a critical foundation for leadership skills. Accordingly, much content and many activities in the course connect to students' emotions. Knowing the common anxiety over networking, it is worthwhile to make networking appear more familiar and less intimidating. Two points demonstrate this approach. First, right at the start of the first live lecture meeting we have an enjoyable icebreaker in which students meet a new classmate. Upon reconvening, I announce, "Congratulations, you've just practiced networking!" to clue them in on the previously unstated reason for the exercise. Second, we emphasize that they *already* have a network in place as they enter the course. Underscoring its significance, Coleman [7] asserts that a person's existing network is the only one needed to find valued work.

Students focus on networking in one reflection assignment. To again connect to emotional intelligence, they report their level of comfort with networking. Students also commit to two networking outreach activities: 1) to re-establish a connection with an existing but dormant contact, and 2) connection with a new contact. The existing connection is someone with whom they had no interactions in the past year. No limit is placed on the nature of the second contact. We construct these efforts for little risk and to mitigate distasteful feelings of inauthenticity. In other words, we can network and meet new people while *doing something else*. At the end of the semester, students report on their activities of personal growth, including their networking experiences and perceptions.

Exploration of Networking

It is helpful to address the nature of networking and its significance to engineering students and

practicing engineers. While this paper focuses on *strategic or professional networking*, there are two other types: *personal* and *operational* [6]. Personal networking includes our circle of family, friends, and those associated with personal interests. Operational networking is practiced as part of one's work. A student's operational network consists of faculty, staff, and other students, and related individuals, e.g., a company sponsor for the senior design project. Unless otherwise noted, we use the term *networking* to mean strategic, career, or professional networking.

Very little has been published in the areas of preparing engineering students to engage in networking. One university program [8] for engineers included content on the importance of and tips for networking. This publication, nor any others researched, clearly addressed students' reluctance for it, nor the necessity for helping students move through their negative emotions and aversion. Likewise, to help reduce student aversion, no published work could be found on viewing networking as a servant leadership practice.

Ibarra defined *strategic networking* as behaviors that are, "aimed at building, maintaining, and using informal relationships that possess the (potential) benefit of facilitating work-related activities of individuals by voluntarily granting access to resources and maximizing common advantages" (see also [9]). The activity that establishes a direct link between networking and leadership work is *facilitating*. To ensure that their teams and organizations are working efficiently and on time, engineers and engineering executives need strong networks at their disposal. Although they can demonstrate leadership in entry-level roles, engineers are more likely to move into supervisory roles where it is expected of them. The average engineering career advances by a succession of promotions, as shown by Hoschette [10]. Over time, their employment shifts from needing strong technical capabilities to demanding strong management and leadership abilities.

There are numerous definitions of leadership (see, e.g., [11]), but facilitating focuses on what individuals, no matter the title, do to promote helpful work and collaboration with others. To return to a foundation of our course approach, we simplify the term and connect it to engineering. A generic definition of the *engineering method* applies equally well to both engineering and leadership: "the strategy for causing the best change in a poorly understood or uncertain situation within the available resources" [12]. In other words, engineering, and leadership both concern innovation and optimization. Engineering operates with physical and logical systems, while in contrast, leadership operates with social systems.

Servant leadership is integral to the engineering leadership prototype; therefore, we emphasize its connection to networking. Truly, one's network offers an important facet of service to colleagues. Effective outcomes for teams and organizations depend on the vigor of the networks of both superiors and subordinates. As Ibarra notes, there are benefits gained when an individual, notably the manager or leader, has a robust strategic network. These benefits include the ability to marshal information, support, or other resources. The timeliness of accessing connections offers as she calls it, *connective advantage*; we quickly connect and apply resources where and when needed. Without such resources, solutions may take much more time to develop and be less advantageous.

Addressing Challenges and Traps

Both students and professionals may present with needs that must be addressed or overcome to help them feel more comfortable and proficient with networking [6], [13]. These needs include: 1)

misunderstandings, 2) poor attitudes and beliefs, especially concerning the ethics of networking, 3) engaging with limited networks, 4) lack of skill, and 5) failing to make time for it [14], in part because the payoff is likely delayed. Ibarra describes these as *networking traps* to emphasize that individuals become trapped and fail to engage in this important effort.

Confusion about networking leads to poor attitudes and beliefs, so we merge treatment of them. Both students and professionals believe that the purpose of networking is to find my next job. However, such a focus readily leads to the belief that networking is one-sided, unethical, inauthentic, and manipulative. We praise students who are sensitive to such red flags as it demonstrates integrity. However, without judgment, this conclusion is off target. We network to develop authentic and meaningful connections that are mutually beneficial over time, i.e., reciprocity fuels networks. Baber, et al. [13] highlight this aspect in their definition of networking: “the deliberate and discretionary process of creating, cultivating, and capitalizing on trust-based, mutually beneficial relationships for individual and organizational success.”

We advise students to approach networking as something that happens naturally while doing something else, e.g., participating in a club activity, to help them feel less anxious. Clark [15] suggests a one-year *no-ask* approach with new contacts to establish genuineness. *No-ask* means to refrain from requesting any favors, even subtle ones, until a year has elapsed after the initial encounter. This encourages focus on developing a sincere friendship or cooperative relationship without any ulterior motives. Students can preserve a consistent ethical identity when they adopt this mindset [16].

However, students may legitimately worry what they can contribute to developing professional relationships. Consequently, Grant [17] and Clark [18] both recommend a more honorable *giver* mentality. Serving as a volunteer with professional engineering society chapters is a great approach for students to be a *giver* [19]. In doing so, students get prime access to contacts that can help them in the short-, medium-, and long-term—such as that first internship or permanent job. Chapter officers will cheer over having student volunteers. Furthermore, students that exhibit a giver mentality make a strong impression on recruiters.

Normally, students regard themselves as the most “junior” person in their network. When we suggest they become mentors, they believe that such a role requires years of experience in the workplace. However, networking with people in roles that are both junior and senior are important to us at all stages of life. Both high school students and college freshmen and sophomores can benefit from the connections and mentoring that upper-class university students can provide. We suggest they consider the satisfaction of suggesting a qualified mentee to an employer during their own internship—such a recommendation helps the employer and demonstrates that one has *both* a robust network and a giver attitude!

Another misconception is that networking is only a piece of a job search and not real work. Furthermore, for engineers, networking appears to have no “technical” function. These misconceptions are unfounded, though, as people and the resources they may provide influence everything an engineer does in the workplace. A strong network enables one to quickly muster superior resources and to do likewise for others. In summary, genuine real work requires and greatly benefits from networking.

In their networking assignment, the starting (dormant connection) network challenge is straightforward—simply reconnecting, e.g., with a friend, teacher, or coach from high school. For the final (new connection) challenge to our students, we strongly recommend getting around individuals in a desirable industry or industry segment. The *getting around* activity is espoused by Coleman [20] as the *proximity principle*—it is far easier to connect with others when we are in the same space, physical or virtual, e.g., through a social networking affinity group. Social network platforms, notably LinkedIn, provide relatively easy ways to connect with others. The most beneficial aspect of LinkedIn is from one’s activity on the platform, not from the number of connections [21].

What may be most helpful to students is to encourage them to explore their existing network’s weak, e.g., second- or third-order links—these are far more effective than their strong links [7], [22], [23], [24]. As a fictitious example, a student’s best friend’s mother has a friend who works at Google. The mother provides an introduction, and the rest is up to the student. Therefore, students should not write off the potential power in their existing networks, even among families and friends.

In the end, one’s identity plays a crucial role for ease and proficiency in networking. Baber et al. [13] suggest three methods to create and nurture a new persona for networking: to reframe networking as means to 1) give and teach, 2) take a risk (and recognize the benefit) when reaching out, and 3) strengthen the culture of collaboration.

Student Perceptions

Emotional intelligence is premised on the foundation that all change starts with self-awareness, and most importantly one’s relevant emotions. We practice this position by a query of student perceptions on networking and the extent to which course content and activities may have helped them. As reported in our previous paper, we implemented two simple surveys to gain insights on these questions. To expand on the previous work, this paper reports the results of more in-depth surveys.

In Week 1, we invited students to complete a brief three-question survey. Table 1 provides the first two of these questions posed in Week 1. (Note: all tables and the figure are in the Appendix.) A Likert-scale was used for Question 1. The second question was directed to identify particular “pain points” about networking; terms in parenthesis provide shorthand descriptors used in Table 2. The final question offered an open-ended opportunity to share their thoughts— “Feel free below to write in anything you wish to say about your feelings about networking.” For the Week 1 survey, $N = 77$.

In Week 12, after all networking content and activities were done, we offered a nine-question survey. Likert-scale questions for each survey are provided in Table 2. The final question was the open-ended, “Feel free below to write in anything you wish to say about your feelings about networking and how those feelings may or may not have changed during this semester.” For the Week 12 survey, $N = 66$. The lower number for the second survey is attributable to lower attendance for that lecture meeting.

Quantitative Results of Surveys

Tables 3, 4, and 5 provide the quantitative results of student surveys. Table 3 offers a comparison of the overall student perceptions as they changed between Weeks 1 and 12. The first survey demonstrated that the comfort students felt was modestly positive. By Week 12, their level of comfort

had increased substantially; the magnitude of this increase tracked with their perceived benefits of the course. Notably, the mode for perceived course benefits was, “Very helpful.” The mean of the comfort level with networking increased by 25.5 percent from Weeks 1 to 12 and by 34.5 percent within the Week 12 survey, based on the recalled Week 1 comfort. Curiously, the recalled comfort level reported in Week 12 was markedly lower than the actual reported values in Week 1. Table 4 provides detail on the specific pain points for students in Week 1, ranked according to results. The single highest area of reluctance was believing they had nothing to offer in networking. This response was closely followed by perceived skill deficit and social discomfort.

Table 5 illuminates the Week 12 student perceptions on the benefits of specific course content and practices. All surveyed activities were viewed as beneficial. The standouts in the rankings are, in order: 1) seeing networking as an ethical practice, 2) understanding it as a practice of servant leadership, and 3) experiencing the usefulness of the outreach activities done in a class assignment.

Qualitative Results of Surveys: Themes

The open-ended question in the Week 1 survey elicited a range of comments. A respectable number of students indicated comfort with and/or enthusiasm for networking. Many students expressed high levels of anxiety about initiating connections. Consistent with the quantitative results, most responses can be characterized as reluctance or resistance to network that one can surmount situationally, e.g., when so motivated. Students recognized the importance of developing one’s network, but there were concerns over perceived inauthenticity and using others for personal benefit. Some were open to practice networking but felt they lacked knowledge and skills for it. Others stated that the practice felt forced and that there was an implicit *quid pro quo* expectation to it. Finally, a few disliked the prospect that networking attempts might not lead anywhere. Here following are a selection of negative or reluctant specific student comments—these would suggest their pain points on networking.

- “I am awkward.”
- “I feel like I’m taking advantage of someone or abusing their time.”
- “I feel like it’s just forced and I don’t like the idea of only talking to someone cause I want something from them. I’m more comfortable working with someone when they genuinely inspire me...”
- “Not really sure exactly how networking is supposed to work. Is it just a hey, can you get me a job?”
- “Networking has had a small bad taste in my mouth just due to how many people who seem to prioritize networking over any actual proper work.”
- “The idea of networking itself does arise certain feelings of inauthenticity for me... While networking... can be beneficial, I dislike the practice.”

The Week 12 survey demonstrated that there had been a shift in the students’ feelings about networking. Overall, their comments ranged from mildly to enthusiastically positive. In keeping with the quantitative results from the Week 12 survey, many students reported that the course content had a beneficial effect on their level of comfort with, perceptions about, and skills in networking. A few students expressed a desire for more networking practice to be incorporated in the course. Here following are a selection of specific student comments.

- “I feel like there should have been hands-on experience with networking rather than just reading about it.”
- “I definitely saw networking as an inherently worrisome and scary thing, but I ended up changing my perspective once I learned more about the positive benefits intertwined with servant leadership and good networking skills. The fact that I can apply my network to benefit not only myself, but the rest of my team members and/or my close friends and family, is a great thing to learn about.”
- “I enjoy the fact that I can stop viewing it as a serious task and that I am allowed to be casual and ‘fun’ with it.”
- “Despite initially believing relationships should start spontaneously, I found that networking can still be genuine.”
- “Before taking this class, I felt quite comfortable with networking. However, after learning more about it during this class, now I feel more prepared to grow my network.”
- “My feelings on networking have definitely changed for the better due to this course.”

Discussion

We ask students in our engineering leadership course to explore their paradigms about leadership. This examination is in keeping with our foundation: leadership and engineering share much in common, and therefore there is already a leader in every engineer. As workplaces continue to evolve from a centralized leadership model to one that is decentralized and agile, it becomes increasingly imperative that all members of an organization demonstrate leadership as appropriate to context. Furthermore, the prototypical engineering leader practices servant leadership. These perspectives focus our treatment of networking. Accordingly, having the heart of a servant in the practice of leadership, one benefits greatly from having a robust network to with which we can marshal people and resources to satisfy a need. As previously stressed, trust and reciprocity are the foundation of solid networks.

Considering the mean and mode ratings in the student assessments, students perceived the content and activities of the course to be positive. To promote student involvement through “easy wins,” we purposefully included simple and low-risk exercises along with the course material. We try to reduce the friction to forming the habit, just as we would with any new one. The content was presented in a way that aligned with the four intrinsic motivation aspects [25] that are covered in the motivation module, to engage positive emotional energy. These intrinsic motivators are: 1) progress, 2) meaningfulness, 3) competence, and 4) choice. People are more inclined to undertake and invest fully in an activity when they find intrinsic motivation in it; they gladly participate in what they truly want to do! Using social networks, particularly LinkedIn, networking with early career professionals (because to their similar ages) and using weak links (second- and third- order) in operational and personal networks are some other specific recommendations for easy wins with low friction.

Recommendations for Faculty

We commend the many engineering faculty who already promote networking to their students. However, faculty can provide additional help by addressing and mentoring students through the common challenges and traps they encounter. Such mentoring need not be complicated or elaborate; it can be very valuable to inform students and validate their concerns and then suggest reconsidering

beliefs that may hinder them. Here following are multiple ways to facilitate engineering faculty conversations with students.

- *Explore and validate aversion.* Ask students to articulate and explore their emotions about networking—emotional intelligence starts with self-awareness. Validate their discomfort for networking; they experience it for legitimate reasons. They consider themselves novices at an important endeavor. Their anxiety may be social and may also be from perceived lack of competence or skill. Such students are not alone; these perceptions are common.
- *Validate ethical concerns.* Engineering disciplines uphold ethical standards, and we want our students to practice these as well. To address these concerns, inform them that good engineering practice benefits their colleagues with active networking. Teams and organizations rely on robust networks built on trust and reciprocity.
- *Validate authenticity concerns.* Support students in being authentically themselves—it is the only way that worthwhile relationships prosper.
- *Suggest expanding their understanding.* Networking is about far more than finding that first permanent job or internship. Team membership and leadership of engineering projects benefit from on healthy networking—it is real work, and a vital ingredient of engineering work throughout their careers.
- *Connect to servant leadership.* While many may not be familiar with servant leadership, everyone knows how heartening it feels to do good deeds for others. Having the attitude of a giver helps diminish ethical concerns. An excellent way to be a giver is for students to volunteer in professional societies organizations; they can be creative in their giving.
- *Reduce friction.* A way to reduce friction in networking is to approach it as something that happens naturally while doing other things, and it can even involve “fun” activities. It is uncanny how many valuable connections can result from membership in non-engineering organizations. Participation in professional (not only student) chapter functions of engineering societies and volunteering brings students in proximity with people who can become valuable connections.
- *Identify easy wins.* Help students recognize there is power in their existing networks; their “weak” contacts offer some of the best potential for valuable connections. Activity on LinkedIn provides a low friction means of connecting.
- *Tie to intrinsic motivation.* Intrinsic motivation draws individuals naturally into an activity. Encourage students to engage in the intrinsic motivators identified above: meaningfulness, choice, competence, and progress. These provide the positive emotional fuel that benefits anything we invest ourselves in.

Limitations and Future Work

The subject research built on our earlier exploration and provided valuable information. We now have a better concept of what aspects of networking, notably servant leadership, to emphasize in our course. We are also initiating activities within the course laboratory for networking role play and a *network sharing* event. In this latter event, we will encourage students to make tentative “matches” of an existing connection of one student with an interest of another student. Recently, I became aware of Coleman’s [7] emphatic belief that anyone can find their next job through their existing network. In Spring 2024, we will give students an opportunity to put this belief to the test. Through subsequent surveys, we will continue to improve the positive impact of the content and activities.

Summary and Conclusions

Strategic networking is a critical and beneficial skill for every professional, including engineers. In this paper I have presented the perceptions of students in our engineering leadership class concerning networking. We first surveyed their comfort level and identified their pain points about networking. After exposure to course content and activities, we surveyed how their attitudes and perceived skills may have changed. Students generally understand the importance of networking, they nevertheless express anxiety, lack of skill, ethical and authenticity concerns, and confusion over its purpose. They also feel they have nothing to offer potential connections. Our investigation demonstrated that student attitudes and perceived skills improved perceptibly. Furthermore, we learned that their greatest reported benefits came from framing networking as congruent with servant leadership, demonstrating that it is an ethical activity as it is based on reciprocity and authenticity, and giving them an assignment to build their networks. We will expand our efforts going forward. Strategic networking is essential to the careers of our student engineers; we need to help them move through their struggles related to this topic that involve emotions, concerns, purpose, and skills. Faculty can employ several simple methods to guide and mentor their students into greater comfort and proficiency in networking.

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Appendix

	Question
Q1, Week 1	<p>Please select the answer below that most closely matches how comfortable you feel about networking.</p> <p>Range: 1 = very uncomfortable, to 7 = very comfortable</p>
Q2, Week 1	<p>No matter how comfortable you may feel about networking, which of the following capture or most closely capture any negative feelings or thoughts you do have about it? Check as many answers as may apply for you.</p> <p>A - I do not have time for networking, and/or have more urgent things to do. (Lack time)</p> <p>B - I do not have skills for networking. (Lack skills)</p> <p>C - There are few or no available opportunities for networking. (Lack opportunities)</p> <p>D - I feel uncomfortable meeting and/or interacting with new people. (Social discomfort)</p> <p>E - I believe that networking involves using people, and/or it feels unethical. (Ethical concern)</p> <p>F - I believe that networking is inauthentic. Relationships should form spontaneously. (Authenticity concern)</p> <p>G - I believe I have little or nothing to offer others in a networking situation. (Nothing to offer)</p> <p>H - I have no discomfort with and/or limited negative feeling about networking. (No discomfort)</p> <p>O – Other. (Other)</p>

Table 1. Week 1 survey questions.

	Question
Q1, Week 12	As best you can remember, <i>at the start of the course</i> , how comfortable did you feel <i>then</i> about the prospect of networking? Select the answer that most closely matches your feelings then. Range: 1 = very uncomfortable, to 7 = very comfortable
Q2, Week 12	How comfortable do you feel <i>now, at the present time</i> , about the prospect of networking? Select the answer that most closely matches your feelings <i>now</i> . Range: 1 = very uncomfortable, to 7 = very comfortable
Q3, Week 12	On the perspective that networking is an ethical practice, please indicate your level of agreement with the statement: "The fact that we presented the perspective that networking is an ethical practice, has increased my comfort with networking and/or the desire to practice it." Range: 1 = strongly agree, to 7 = strongly disagree
Q4, Week 12	On the perspective that networking is one way to practice servant leadership, please indicate your level of agreement with the statement: "The perspective that servant leadership includes the practice of networking has increased my comfort with networking and/or the desire to practice it." Range: 1 = strongly agree, to 7 = strongly disagree
Q5, Week 12	Please indicate your level of agreement with the statement: "The fact that this class has promoted networking by connecting with and/or mentoring others who are more "junior" to me, has increased my comfort with networking and/or the desire to practice it." Range: 1 = strongly agree, to 7 = strongly disagree
Q6, Week 12	Please indicate your level of agreement with the statement: "The content about networking in the <i>Act Like a Leader</i> book was helpful for me to feel more comfortable with networking or more willing to practice it." Range: 1 = strongly agree, to 7 = strongly disagree
Q7, Week 12	Please indicate your level of agreement with the following statement: "The activities on networking in this course (outreach activities) were helpful for me to feel more comfortable with networking or more willing to practice it." Range: 1 = strongly agree, to 7 = strongly disagree
Q8, Week 12	Select the answer below that most closely matches your reaction to or evaluation of the course content and activities about networking. Range: 1 = very unhelpful, to 7 = very helpful

Table 2. Week 12 survey questions.

	Week 1		Week 12		
	Comfort with networking		Recalled comfort with networking	Comfort with networking	Benefits of course content, activities
Mean	4.55		4.24	5.71	5.65
Median	5		4.5	6	6
Std. dev.	1.44		1.76	0.97	1.23
Mode	5		5	6	7

Table 3. Quantitative results of Weeks 1 and 12 survey questions: overall.

<i>Negative feelings about networking</i>	<i>Number of selections</i>
Nothing to offer	31
Social discomfort	29
Lacking skills	29
Authenticity concern	22
Ethical concern	20
Lacking opportunities	19
No discomfort	14
Lacking time	13
Other	2

Table 4. Quantitative and ranked results of Week 1 survey questions: specific negative feelings.

	Benefit of NW as ethical	Benefit of NW as servant leadership	Benefit of NW outreach activities	Benefit of connections with “juniors”	Benefit of Ibarra book
Mean	5.62	5.45	5.41	5.20	4.98
Median	6	6	5	5	5
Std. dev.	1.20	1.25	1.36	1.41	1.54
Mode	6	6	5	5	5

Table 5. Quantitative and ranked results of Week 12 survey questions: specific content and activities.

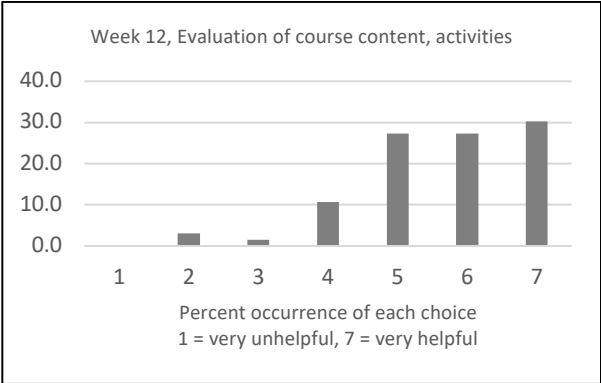
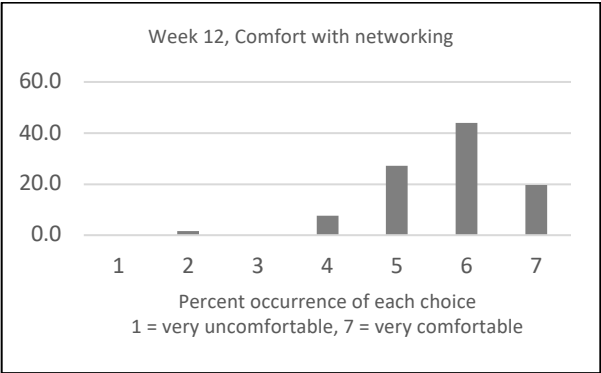
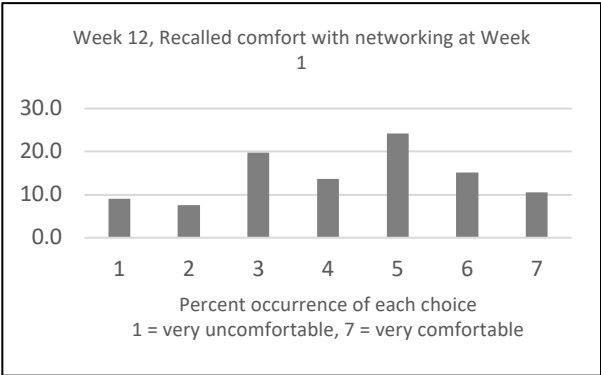
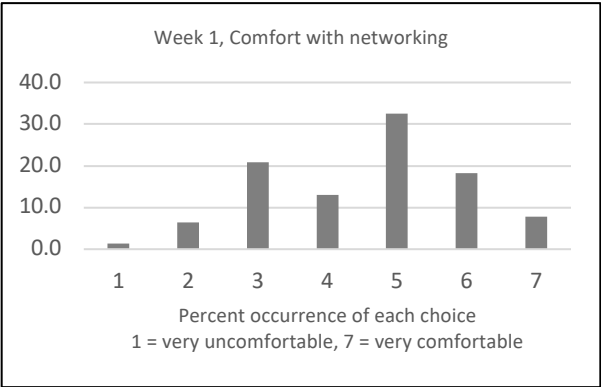


Figure 1. Results of survey questions.