Facilitator: Keith Stanfill – University of Tennessee, Knoxville

Panelists:
1. Cassie Bowman – Arizona State University
2. Jenny Retherford – University of Tennessee, Knoxville
3. Shraddha Sangelkar – Rose-Hulman Institute of Technology

Description: Colleges in remote parts of the US or those who want to collaborate internationally need to find clients who can work well with a capstone program even at a distance. The panelists will share their ideas on how to successfully manage remote clients.

Notes:

1. Can we poll the audience to get a snapshot of the background of the audience?
2. Show of hands: how many have worked clients or team members more than
    a. 1 hour away
    b. 1 time zone or out of state
    c. Multiple time zones
    d. Out of the country

Three themes:
1. Finding projects
2. Communication and collaboration best practices
3. When things go bad…

Quick poll:
Worked with a remote client
Out of state
Out of the country

Jenny Retherford
Take-away:
Shraddha Sangelkar

Cassie Bowman

ASU: perspective as the customer/client; sponsor 70 projects annually

Liberating Structures
https://www.liberatingstructures.com/
https://www.liberatingstructures.com/1-1-2-4-all/

Questions from the panelists (a mix of soft and hard questions):
1. How do you find remote or international partners?

Cassie: 6th year; 2018 Capstone Conference–found a lot of the partners; reach out to alumni; CDC
Shraddha: Sabbatical assignment helped established partner
Jenny: local network of engineers (Civil Engineering) has been the network, Engineers Without Borders, Knox ProCore, find existing partnerships to exploit, find out in your local community who is doing remote partnerships
Being open to possible partnerships
Ben Fong (Purdue) Did you take all the projects (15) to the client sites.
Jenny: Students do make at least one trip–most within 3 hours travel time

2. What are the advantages of partnering with clients at a distance? (in spite of all the negatives–make it positive!)
COVID helped improve the remote processes–student and clients are now comfortable with going out in the parking lot and zooming; it is no longer a big deal; finding a way to connect with people;
Inviting other mentors across the country–broadens the students' networks and problem solving skills
OSU: Thailand and Uganda–not designing towards your lived experience;
UTD: how to scale? 248 capstone teams (4-6 students each)–CAPITAL FACTORY (I think this is their website: https://www.capitalfactory.com/) got sponsorships from coast-to-coast; provide mentoring and capital–nine companies sponsored $125,000 in projects
Samuel (RIT) Software engineering, don't charge for projects, some business organizations use RIT as a way to help start up organizations

3. How are international or distant partners different from local ones?
Shraddha: Indian start-up companies working with UG student teams–"India Time"

Jenny: Cultural competencies; 100% committed, 93% available; practical maturity–extremes; traditional solutions don't work; inclusivity–more real conversations

4. What unexpected challenges arise in distance partnerships?

Cassie: time zones are challenging (i.e. AZ does not do DST); now students accepting of working with each other

Shraddha: collaborating with conservative, faith-based organizations–student's assumed Sundays were offlimit

Communication/collaboration

5. (Keith) How do you work effectively across time zones and cultural differences?
6. (Cassie) How has remote and hybrid work due to the pandemic affected remote client-student-faculty-program relationships?
7. (Cassie) How can procedures put in place due to the pandemic (virtual meetings, virtual or hybrid gateway reviews, final showcases, etc) support remote client engagement and ease issues like time zones, student work schedules, client travel obligations, etc, whether the client is always remote or in town?
8. (Cassie) Some programs designate only one student on a team to engage in communication with the client. How does this impact the other students if the client is remote? What are ways all team members can get to know the client so they can equally benefit?
9. What team leadership models work best for working with remote teams and/or clients?
10. (Cassie) What technologies can support remote client-student engagement?
11. (Cassie) What can be learned/applied about remote client-student partnerships from capstone programs for fully-online students?
12. (Shraddha) Are there benefits of intentional in-person get-together for establishing trust and team bonding when part of the team is remote? Are there other ways to simulate the advantages of offline/informal conversation?

When things go bad

13. (Shraddha) What are different ways of handling challenges/disputes over remote communication? It is much easier to get everyone in the same room and talk about it. How do you manage conflict amongst teams when members are remote?

Follow-up Questions from Audience

1. Are there effects on student motivation or connection with students when project sponsors are remote? Do students tend to engage at a different level when the sponsor is remote? Do students tend to 'other' their stakeholders when they are remote? Are there problems with 'white saviors' where students provide solutions that are better suited for their own context than that for their stakeholders? (David Gray - Virginia Tech)
   a. Jenny Retherford hinted at some of this. Students only engaging at a surface level rather than an in-depth, human-centered empathetic design
2. How important are faculty relationships in these remote sponsorships?   Do faculty need to actively maintain/oversee student-sponsor relationships, or do these relationships develop more organically? Are we expected to monitor or nurture this relationship? (David Gray - PhD)
3. Empathy mapping tool: Stanford d.school has a variety of resources on empathic design and a specific empathy mapping tool (and is useful for when a specific user is known) can be found at the following link: (http://dschool-old.stanford.edu/wp-content/themes/dschool/method-cards/empathy-map.pdf). This approach can also be modified in a case where little is known about the user of a design or other key stakeholders, much of which will involve an imaginative process and there are many other empathy mapping tools available online.
4. Encourage clients to get to know the students