

Facilitator:

Shraddha Sangelkar - Rose-Hulman

Pronouns: she/her/ella

Assistant Professor of Mechanical Engineering

Panelists:

Sindia Rivera-Jiménez – University of Florida

- Pronouns: she/her/ella (Why this matters?)
- Assistant Professor, Department of Engineering Education
- Affiliate Faculty, Chemical Engineering Department
- Not mental health expert but experienced challenges w/ students during covid

Olga Pierrakos – Wake Forest University

- Founding chair at Wake Forest
- Teaching capstones for over 15 years
- Not mental health expert but experience working with psychologist and social scientists, learned from them

Camisha Kibble – University of Texas at Dallas

- Clinical psychologist w/ the student counseling center at UDT
- Drama and community resilience in BIPOC and other communities
- Mental health expert

Evan Alexander – Northeastern University

- Student
- Also not expert but experience with friends

Description of the Panel: COVID disruptions have caused unprecedented levels of stress in our students, and mental health struggles have increased even as students have returned to campus. Capstone is a unique project-based class where one student's absence can impact the team performance. Unlike other courses, it is specifically challenging in capstone because one project runs over multiple terms with a team and a client. There is not only impact on individual grades but also on the overall team deliverables. A student withdrawing from a course has further implications on team projects so we can explore some strategies to navigate this challenge. Professional and student panelists will share their thoughts on managing this thorny problem.



Some of the Questions for the panelists:

- 1. How do you identify mental health struggles early, before the situation escalates?
 - a. How to be proactive? What do you see in the classroom that is a trigger?
 - b. OP: Build a relationship with students; look for changes; coming late, missing assignments. At Wake Forest, they have a care team they can refer students to, or where you can check in on how they are doing elsewhere
 - c. SRJ: not all students present that way; had challenge with one student she knew well had scary outburst - had to tell him to immediately leave the class and then refer the student. Had to go through a 3rd person to have them reach out to him so he knows when ready he can reach out to her and apologize and start over
 - d. CK: many places have a care team, and they work with the university counselors. Some faculty have walked students to the care center, or a very strong recommendation
 - e. EA: isolation and not showing up can be common warning signs can ask if that person is not showing up in other contexts as well.
- 2. How to reduce impact on capstone project outcome?
 - a. How do you train or prepare other students on the team to handle challenges and transitions when a team member is struggling with mental health?
 - i. Communication and trust
 - ii. Conflict management strategies
 - iii. CK: the capstone programs work with her department to do guest lectures on team dynamics and handling challenging situations. Be explicit about why you are doing things; "we're breaking this project into parts and structuring this deliverable to reduce the stress". Also training the rest of team mates to recognize warning signs.



- iv. OP: set the stage and culture here to support; take a mental health/sanity day if you need it. Will push and challenge you, and it will be hard.
- v. EA: some students may be hesitant to reach out to professors worry it would change the team dynamics. But they might be willing to talk to the CARE office
- vi. SM from RTI: likes using engineering coaches from industry they don't know though about university resources that are available.
- b. What are some of the effective strategies to **redistribute the workload** on the team when such a situation arises?
 - EA: meet as a team, identify what the student was working on, determine how to redistribute the workload
 - ii. OP: have to also support the team and rescope the project and reassign as needed. Has never noticed/seen this lead to resentment.
 - iii. EA: can save a stretch goal or something minor for that student when they come out
 - iv. SRJ: has each student track their hours per week, so they can think about how they flex from one week to the next; for each deliverable
 - v. Rachel H of U Denver: if a student has to leave for a bit and can't make up the work, just have a conversation with them about what grade they think they deserve and why.
 - vi. Sarah Brown of RIT: have to be transparent about it, and what you assign that student, but the team can still have issues trusting them with an important part
 - vii. SS: Having an explicit policy with absences and what happens when they miss a certain number of classes.



- c. What are some effective strategies to **re-calibrate project expectations** with the client/sponsor if such a situation arises?
 - OP: always have to be communicating and setting expectations anyway. If you model compassion working with the students, they can support that
 - ii. SRJ: generally not share any specific student issues with the industry mentor, since there are privacy concerns; generally reach out to company if something severe is changing (student leaving team).Can reach out to rescope, but there are many reasons to rescope.
- 3. How do you, as an instructor, maintain your sanity while dealing with your student's mental health challenges?
 - a. How much and should you play the role of a counselor?
 - i. Capstone instructors not a counselor, but need to be able to identify warning signs. And you can get them the help they need
 - b. How to balance your role as objective evaluator while being a supportive faculty mentor?
 - i. OP: to prep the students prep them that you will be evaluating them the same as other students; be up front and clear.
 - ii. SRJ: gives a lot of intermediate deliverables, each is out of 10, but all the grade comes from the final project. Then she can give a 5 out of 10 and have it be a warning shot about what track they are on
 - iii. Laura: we shouldn't be changing standards when dealing with the students they don't want it either. The rubric won't change, but you can support them differently.
 - iv. CK: shame (I am something bad) vs guilt (I've done something poorly); growth vs fixed mindsets. Attribution errors things they do



well are just easy vs something they do poorly means the are bad. How to help them identify their strengths.

- c. SRJ: is careful to be in communication with her supervisor about how she knows what is going on and what she is working on, so that she doesn't get negatively impacted in a student eval from a student that had an issue. Talk to your peers - coordinators in other departments/universities. Go for a run. Don't let yourself be isolated
- d. OP: showing trust and compassion ...
- e. ?: if student reaches out, let them know their family/health/etc is the most important thing. He can work with team/sponsors as needed. If a student doesn't reach out to you, just disappears have to reach out to the Dean, etc. Can still push the students, but note that the class is not as important
- f. CK: all the therapists/counselors have their own therapist, can reach out to peers. Prioritize and schedule self care. Remember to celebrate the small victories. Can reflect those victories back to client helps counter imposter phenomenon
- 4. How are universities dealing with hiring counselors and amping up university resources for student counseling?
 - a. CK: aware of the issues, trying to staff up. Offer workshops and other options for students to get help. Also offering groups, eg, social skills and connection. Bringing on more contract staff. External councilors/community resources they can refer someone too. Check in with how your individual referral student center is doing in even if they are slammed, still refer because they can always do an intake and triage/refer as needed, and it will still be the fasted option. Some offer youTube channels, etc. See the links from UTD in the resources below



- 5. How much extra time or **accommodations** are reasonable while still maintaining rigor in the classroom and meeting project expectations?
 - a. OP: uses Mastery based grading. For intermediate deliverables, if the student gives the first draft an honest effort, they can get a 70%, but can go back and resubmit within a timeframe.
 - b. SRJ: have ideas/options on hand for being flexible. EG, negotiated that if a student has to do their own project, they are not graded on teamwork in that aspect or elsewhere....
- 6. Should you set your foot down so that the student can rise to the challenge tough love? Or back off? (Camisha's perspective)
 - a. OP: it depends.
 - b. SRJ: make it clear up front that I am not their mom if only nice during the class, then can't give a bad grade at the end... have to set clear expectations. This is a professional setting.
 - c. RH of UDT: What about for extreme presentation anxiety? Do we say they don't have to present?
 - i. OP: try taking away the grade and pressure?
 - ii. Rachel H: validate their feelings, so they are seen, then ask what you can do to support them so that they could present.
 - iii. SRJ: help them practice a whole lot practice on their own 3 times, do it in OH, then grade them. Grading for improvement. Groom them to feel comfortable with that
 - iv. CK: if you get to the point of they have an anxiety attack during the presentation, then it's a step backwards; help them work up to that



- stage. Exposure is one option. Just have them record their voice, then just present in the next room, then record the presentation, etc.
- v. ??: remind them that they are the expert on their project and what they've done. Not the expert on the topic, but yes on the project, and that's what they want to know
- vi. ??: share tips with them on how to present provide some tips, just look at me during the presentation. If they never reach out, then can't be very accommodating tough love. Assigns some D- just to not need to have the student go through again
- vii. Research by Allison Woodbroks of Harvard Business School shows that maybe actually increasing anxiety/energy to get hyped up before a presentation can be helpful
- viii. SS: when you show someone tough love, then you see a delta between what you want and where they are at. If they are able to decrease the delta, then good, if not, then you need to try something else refer them, etc
- 7. Do these issues (student mental health) impact younger faculty on tenure track, or female faculty (who may be perceived as petite/weaker) more severely?
- 8. How flexible should we be for allowing for make-ups or changing the rubrics. Is it just one more thing they have to do / can fail at?
 - a. SS: depends on the size of the class can't customize too much in a large class
 - b. SRJ: really likes rubrics and the students do as well to establish expectations. But remind them that these rubrics are for the final deliverable, not for this checkpoint



- c. OP: doesn't share rubrics, trying to prepare them for real world. can use them herself to check bias or for ABET. May provide samples that correspond to a grade. But does provide check-points
- d. Julie Steinb... @: when grading, does take into account the wholistic factors, both about harder projects vs not. For example, how would they be graded in a professional setting about how they did in light of what they faced.
- 9. What should we be doing differently for capstones given the rise in mental health challenges
 - a. SS: using a rubric and lots of documentation is helpful for justifying any complaints that come up or for the chair
 - b. SRJ: has too many teams to do a wholistic approach
- 10. ??: What is helpful to have from a student perspective that could help the faculty catch issues early?
 - a. Syllabus and expectations can be helpful. Rubrics agreed are helpful but may not be realistic
 - b. Maybe have a form you send out, part of it is a check button on how are things and would you like to have someone check in with her
- 11. ??: What we see is that a lot of students are wanting students to rely on each other. We've seen a critical indicator of success is being friends outside of the project; having a social budget? How much do we impose vs recommend that?
 - a. OP: they like that flexibility. Gives the students 4 days of free pass to use throughout the program in case they have a bad day.
 - b. SRJ: Social cohesion is important, but task cohesion is the most important. If you have the fifth student that has outside responsibilities, but the other 4 are meeting socially, it will hurt team dynamics.



c. ?? w/ SH at Smith: those social activities are counted as hours worked that week, and can be during business hours.

12. Summarize

- a. OP: set the stage, set the culture tap into they know; how do the student athletes get ready to perform at the next level. How do professional singers, etc get ready to perform at the next level.
- b. SRJ: every case is not the same, reach out to your peers/supervisor/counseling center. Be familiar with the resources students can't have. Be a constant learner.
- c. CK: put on your own O2 mask first, take care of yourselves.

13.

Resources to share:

- Wilson, S. A., & Hammer, J. H., & Usher, E. L. (2021, July), Faculty Experiences with Undergraduate Engineering Student Mental Health Paper presented at 2021 ASEE Virtual Annual Conference Content Access, Virtual Conference. https://peer.asee.org/37180
- Wright, C. J., & Hargis, L. E., & Usher, E. L., & Hammer, J. H., & Wilson, S. A., & Miller, M. E. (2021, July), *Identifying Engineering Students' Beliefs About Seeking Help for Mental Health Concerns* Paper presented at 2021 ASEE Virtual Annual Conference Content Access, Virtual Conference. https://peer.asee.org/37269
- Hargis, L. E., & Wright, C. J., & Usher, E. L., & Hammer, J. H., & Wilson, S. A., & Miller, M. E. (2021, July), Relationship Between Mental Health Distress and Help-Seeking Behaviors Among Engineering Students Paper presented at 2021 ASEE Virtual Annual Conference Content Access, Virtual Conference. https://peer.asee.org/37657
- Mental health Workshops: https://counseling.utdallas.edu/healthyu/
 - o There are useful videos on this website: Youtube

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