[Univ.] Engineering Undergraduate Student Needs

How can faculty increase student support to reduce distress?

In 2023, researchers at the University of Michigan interviewed 14 [Univ.] undergraduate students in 5 engineering majors to inform this document.

[Univ.] students commonly experience high stress.

[I was asking myself] "**How is everybody else surviving?** They're not freaking out and crying." That's when one of my friends was like, "**You're not [alone]**, *I'm also freaking out and crying.*"

I know a lot of people who are... [only] meeting their bare needs... That's **just surviving**.

My **whole major** is just **stress overload**.

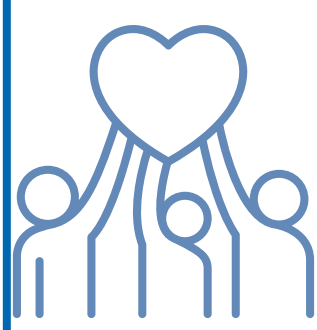
Our students are not alone. Reported student distress **doubled** in the 10 years before COVID-19 [1,2,3] and continues to increase [4].

Persistently high stress reduces student success [5,7].
We want our students to be successful.

Evidence-based goals from our research:

Goal 1: Continue fostering student collaboration

We're all just trying to support one another and trying to get ourselves all to graduate.



We found this engineering culture of collaboration particularly exciting since engineering is often "competitive" [9].

Encourage peer connections

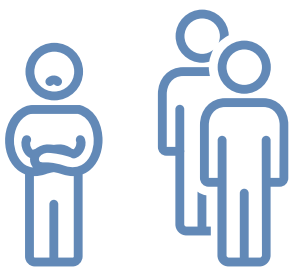
Out-of-class example: Computer Science's Discord space; Commuter social groups [8]

In-class example: Giving students time in class to form study groups and plan times to meet.

Goal 2: Strengthen student-teacher relationships

When you're person-oriented as a professor and you start **showing that you care**, your students are gonna more likely go to you for help.

Students appreciated professors who were person-oriented.



[Most research professors] don't have a lot of time in the classroom... **I feel like a number** when I walk in.

Students described some groups of professors and engineering departments at UML as less supportive.

Show an awareness of students' emotions

Ex. Exit tickets to learn students' stress levels [10]

Encourage autonomy + scaffold support

Ex. Structure so students choose their final project topic.

Ex. I ask CELT [11] for help scaffolding [12] my assignments.

Reduce barriers to asking for help. Some students don't feel comfortable sharing their struggles.

Ex: No-questions extension policy [13]

Goal 3: Increase access to student support resources

Every semester at the beginning [they say], 'Go to the counselors, here's your resources.' **But, they don't tell you how to go** to these resources... And then... there's not enough access.

Centers: Tutoring, Wellness, Financial, and Career

Financial anxiety

Expecting rejection

Long wait times

No personal connection

Not knowing details of what is available

Univ. Logo

References and more info: tinyurl.com/2024-[Univ.]-infographic-citations