

Chemical Engineering Colloquium

September 30, 2026

Goddard Hall, Room 227

12:00 PM – 1:00 PM

Creating Intentional Pathways for Learning, Belonging, and Professional Development

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Faculty influence extends well beyond helping students master course content; we can also help students understand how they learn, develop a sense of belonging, and envision who they might become. In this talk, I will introduce research-based metacognitive strategies that help students evaluate and direct their learning, recognize the skills they are developing, and connect their educational choices to future goals. Drawing on my own work implementing these ideas, I will share examples involving flipped classrooms, learning communities, and career-discovery activities that help students become more reflective, connected, and intentional learners. These examples also invite us, as faculty, to reflect on our own roles, influence, and opportunities for growth.

I will then broaden the discussion beyond individual teaching practices by sharing findings from a national study of teaching-focused faculty in chemical engineering. The study identified 279 teaching-focused faculty, representing approximately 10% of chemical engineering faculty, whose contributions encompass teaching, advising, service, undergraduate leadership, and engineering education scholarship. Their experiences illustrate both the substantial influence faculty can have across students' educational experiences and the institutional support needed for this work to thrive. Participants will leave with practical ideas for helping students learn, belong, and become, along with a broader vision of how faculty can serve as educators, mentors, innovators, and agents of academic change.



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