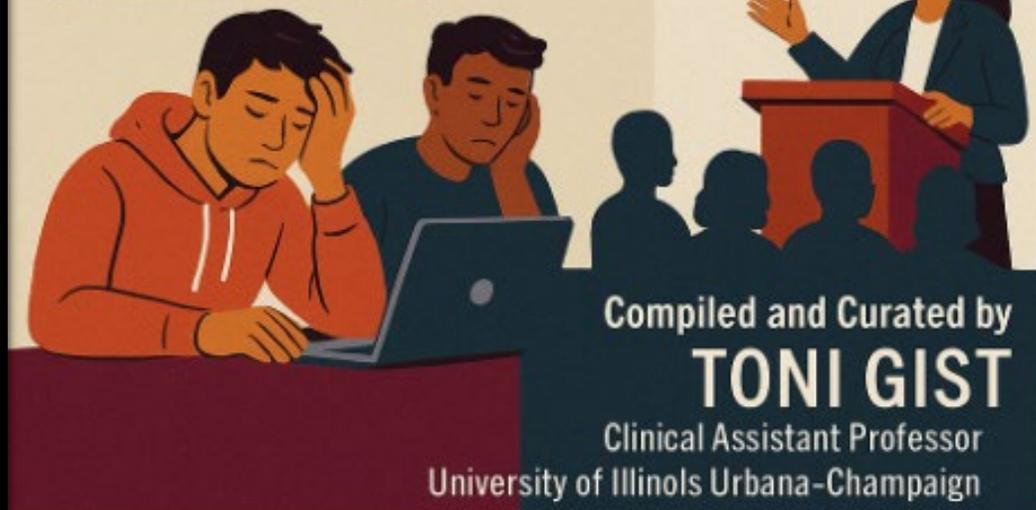# WHAT YOUR STUDENTS AREN'T TELLING YOU

VOICES, DATA, AND STORIES FROM THE MODERN COLLEGE CLASSROOM

?

Compiled and Curated by
TONI GIST
Clinical Assistant Professor
University of Illinois Urbana-Champaign
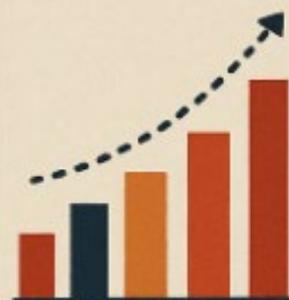
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What Your Students Aren't Telling You

Voices, Data, and Stories from the Modern College Classroom

Compiled and Curated by

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With Contributions From

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April 2025

Dedication

To the students

past, present, and future

who bravely share their truths, challenge the system,

and remind us that learning is not one-size-fits-all.

This work exists because of you.

Your stories, your struggles, your persistence,

and your vision for what education *could* be

are the heartbeat of every chapter.

And to every educator courageous enough

to pause, reflect, and grow…

thank you for choosing to listen.

Authorship Acknowledgments

With Gratitude from Toni Gist

Students enrolled in unique leadership-focused sections were invited to serve as valued research collaborators. These students thoughtfully analyzed survey data, authored literature reviews, and offered critical reflections and insights that are woven throughout this book to help faculty better understand and implement student-centered practices.

This book would not exist without the brilliant, passionate, and dedicated student authors who co-created it. You brought not only your intellect, but your full selves—your curiosity, your courage, and your voice. Your contributions have the power to transform classrooms, challenge assumptions, and inspire meaningful change in higher education. Thank you for leaning into the process, for asking bold questions, and for writing with clarity, conviction, and heart.

Student Authorship Team Members
(Listed alphabetically by first name)

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- **Jose Patino** – Your voice helped clarify why confidence matters. Thank you for helping others see the student perspective with such clarity.

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To each of you: Your names appear under chapter titles, but your impact echoes far beyond them. You are not just students—you are changemakers. And I am honored to have walked this journey with you.

With admiration and appreciation,

Toni Gist

Preface

Toni Gist Clinical Assistant Professor, University of Illinois

This book began with a simple but powerful question: "***What aren't our students telling us?***"

In all my years of teaching, mentoring, and collaborating with learners from every background imaginable, I've been struck by how often students internalize challenges, misunderstandings, and even trauma—without ever sharing them. Not because they don't want to, but because they don't feel invited. Because they've learned that their voices, while occasionally requested, are rarely acted upon. And yet, their voices hold the key to everything we say we care about in higher education: engagement, equity, inclusion, innovation, and student success.

I wrote this book—and guided these student-led investigations—because I believe we can do better. I believe that if we center the student experience in meaningful ways, we not only transform our teaching—we transform lives.

To get there, I didn't go it alone. I was honored to collaborate with brilliant colleagues who are just as passionate about reimagining higher education:

- ***Bonnie Hemrick***, Director of Mental Health Promotion at Oregon State University, brought deep insight into student well-being and emotional resilience.
- ***Dr. Emily Tarconish***, Teaching Professor in the College of Education at the University of Illinois, offered her expertise on inclusive pedagogy and accessible course design.
- ***Amy Leman***, Professor in Human Development and Family Studies, contributed her rich understanding of student development and identity formation.
- ***Dr. Tony Zhang***, Professor in the Gies College of Business, provided a unique lens into Artificial Intelligence and ChatBot implementation in today's educational space.
- ***Ann Fredricksen***, a committed advocate from Disability Resources and Educational Services, ensured we examined the impact of disability on the student experience not as an afterthought—but as a foundation.

With their help, and with the enthusiastic participation of more than 2,000 students over multiple semesters, we designed and administered surveys, analyzed trends, and co-authored recommendations. But more importantly, we created a space where students could speak openly about their learning experiences—what helps, what hurts, and what they hope faculty will someday understand.

What you'll read in the pages that follow is more than research. It's a movement. A movement that acknowledges that students are not just passive recipients of content—they are co-creators of learning. A movement that insists on the radical idea that every learner deserves a voice, a choice, and a sense of belonging in our classrooms.

You'll meet students who are brilliant but burned out. Passionate but unheard. Capable but contending with invisible challenges. And you'll see how even small shifts—rethinking assignment formats, offering flexible modalities, using inclusive language, or listening to student feedback—can unlock student confidence, participation, and joy.

I hope this book makes you pause. I hope it challenges assumptions. And I hope it ignites something—whether that's a new course redesign, a team conversation, or simply a moment of empathy during your next student interaction. Let this be more than a resource. Let it be a mirror, a megaphone, and a map for where we go from here. Because when we truly listen to our students, we become the kind of educators they will never forget.

Methodology for Student Insight Collection and Analysis

Students enrolled in FSHN 101: The Science of Food (a general education physical science course) and FSHN 120: Contemporary Nutrition (a general education life science course) at the University of Illinois Urbana-Champaign were given the opportunity to participate in Institutional Review Board (IRB)-approved surveys. Four strategically timed surveys were distributed throughout the semester to better understand the diverse backgrounds, experiences, and needs of students across campus who were enrolled in these courses, taught by Toni Gist.

Each survey included a set of 20+ demographic questions—such as academic year, employment status, food security, gender identity, and disability status—designed to create a multidimensional profile of the student body. These demographic data were then correlated with 15 to 40 experience- and attitude-based questions per survey, depending on the focus of the instrument at that point in the semester. These questions explored areas such as learning confidence, study habits, perceived barriers, well-being, and access to academic resources.

Surveys incorporated a variety of question formats, including multiple choice, multiple select, ranking, Likert scale, and free-response items to capture both quantitative trends and qualitative insights. The surveys were refined and updated each semester based on participant feedback and observed clarity issues, with new questions added to reflect evolving classroom dynamics and student concerns.

Select students from FSHN 101 and FSHN 120 were also invited to participate in more detailed, one-on-one interviews to provide deeper narrative context behind the data. Several of these interviews are featured within the book chapters, highlighting authentic student voices and lived experiences to further illustrate the nuances behind the quantitative findings.

Chapter 1: Book Introduction

Nina Dziamba

As a student, I have rarely been asked about my learning preferences in courses. However, I distinctly remember and appreciate the few classes where I was invited to provide feedback. Sharing methods that supported my learning not only made me feel valued but also heightened my enthusiasm to engage with the material. Unfortunately, it's frustrating when instructors solicit feedback yet fail to act on it. While it's impractical to implement every suggestion, incorporating even a portion of the feedback can profoundly influence student motivation and their sense of ownership in the course.

The Transformative Power of Listening

In my educational journey, it wasn't until I joined Toni Gist's teaching team that I truly understood how students can influence their learning experiences. From the interview process, Toni emphasized tailoring our experience to align with our goals. Her ongoing commitment to ensuring that each team member derived personal and professional value from the experience was both surprising and transformative. This approach reshaped my perspective on education, proving that even minor adjustments based on feedback can create a more collaborative and fulfilling environment.

This experience empowered me to advocate for myself and my peers. For instance, I have respectfully requested deadline extensions for assignments I found unrealistic, and to my surprise, many educators were not only receptive but eager to gather more feedback. This underscores an essential truth: most educators want to adapt their courses to meet student needs but are unsure how to proceed. Universities often rely on end-of-semester feedback, which may not benefit current students. However, gathering input at the start or midway through the course allows for timely adjustments that foster student engagement and satisfaction.

Addressing Misconceptions About Student Feedback

A common concern among educators is the belief that giving students a voice in their education may lead to an erosion of academic rigor. Some fear students might prioritize convenience over learning. However, our data reveals otherwise. Students desire meaningful changes that enhance their understanding and reduce unnecessary stress, not shortcuts to success. For instance, many students express a strong preference for alternatives to high-stakes, timed exams. These exams often test memorization under pressure rather than genuine comprehension and can disproportionately affect students who struggle with test anxiety.

Even educators themselves have experienced the stress of high-stakes assessments. For example, our professor, Toni Gist, once froze during a critical graduate exam,

despite being well-prepared. The pressure of maintaining a scholarship that covered her education created an overwhelming situation. Such experiences illustrate the profound and often unacknowledged impact of course structures on students.

The Case for Collaboration

By incorporating student feedback into course design, educators can address diverse needs, create more inclusive learning environments, and foster a stronger sense of community. Students who feel heard are more likely to engage actively, resulting in a dynamic and enjoyable classroom experience for both educators and learners.
We encourage educators to reflect on the following questions:

1. **Am I teaching in a way that benefits most of my students?**
2. **Do my students feel heard and supported in my classes?**
3. **Are my lessons aligned with the diversity, equity, and inclusion standards I value?**
4. **Do I provide opportunities for feedback and act on it meaningfully?**
5. **What are my students not telling me?**

By addressing these questions, educators can identify opportunities for growth and create a roadmap for meaningful change. While reimagining course structures may seem daunting, this book offers data-driven guidance to help navigate this process. Together, we can create learning environments where all students feel valued, supported, and empowered to succeed.

Chapter 2: Why Students' Confidence Levels Matter in Higher Education Courses

Jose Patino, Ragen Carey, Samarth Jain, Shreshika Bommana

"If you believe it, you can achieve it" is an age-old saying that emphasizes the connection between attitude, self-belief, and success. This chapter examines the critical role of students' confidence in the higher education environment, particularly as it relates to their academic achievement. Specifically, it explores how course formats and teaching methods used by instructors influence students' confidence in their ability to learn and succeed.

Focusing on undergraduate students, this discussion underscores the broader implications of student confidence on mental health and academic performance. By highlighting the intersection of teaching strategies and student self-perception, we aim to shed light on how educators can create environments that empower learners. Additionally, this chapter offers actionable insights and recommendations for fostering positive learning environments that nurture students' confidence and academic potential.

Literature Review: Building Confidence Through Effective Teaching Practices

Student confidence is a key predictor of academic success, influencing motivation, engagement, and performance. Understanding how course design, teaching methods, and instructor interactions shape this confidence is essential for creating positive and inclusive learning environments.

Confidence and Academic Performance

Confidence is closely linked to self-efficacy—the belief in one's ability to complete tasks and achieve goals. Research demonstrates that students with higher levels of academic confidence are more likely to persist through challenges and achieve higher grades (Bandura, 1997). Conversely, low confidence often correlates with avoidance behaviors, reduced participation, and lower academic outcomes (Schunk & Pajares, 2005). Instructors play a critical role in shaping students' confidence. Positive feedback, clear expectations, and a supportive classroom atmosphere can help students build self-belief and resilience. On the other hand, overly critical or ambiguous teaching practices may inadvertently undermine confidence, particularly for students who already feel vulnerable in academic settings.

The Role of Course Modality

Course modality—whether in-person, hybrid, or online—also impacts student confidence. A study by Kearns (2020) found that students in online courses reported lower confidence levels compared to their peers in traditional classroom settings.

Factors such as reduced interaction with instructors, lack of peer support, and unfamiliarity with digital tools were cited as common challenges.

Hybrid and in-person modalities offer more opportunities for immediate feedback and collaborative learning, which can bolster confidence. However, well-designed online courses that include structured support systems and frequent communication from instructors can mitigate these challenges, fostering confidence even in virtual environments.

Teaching Practices That Empower Students

Effective teaching practices are instrumental in building student confidence. Strategies such as active learning, formative feedback, and inclusive pedagogy have been shown to improve engagement and self-efficacy (Freeman et al., 2014). For example:

- **Active Learning**: Encourages students to participate in problem-solving, discussions, and hands-on activities, helping them gain confidence in applying their knowledge.
- **Formative Feedback**: Provides constructive, ongoing feedback that guides improvement and reinforces a growth mindset.
- **Inclusive Pedagogy**: Recognizes and values diverse perspectives, ensuring that all students feel seen and supported in the learning process.

These practices not only enhance students' confidence but also contribute to a more equitable and effective learning environment.

Conclusion: Linking Confidence to Success

Building student confidence requires intentional teaching strategies, thoughtful course design, and an understanding of the diverse factors that influence learners' self-belief. By prioritizing these elements, educators can create environments where students feel capable and motivated to achieve their academic goals.

Survey Data and Analysis: Understanding Confidence Through Student Perspectives

To explore how faculty impact students' confidence in different course modalities, a survey was conducted among 630+ undergraduate students at the University of Illinois Urbana-Champaign during the Fall 2024 semester. In the following section, we explore student feedback and data that highlight key instructional practices influencing academic confidence and perceived performance. By examining what students say helps them succeed, we can better understand the power of intentional teaching choices—particularly those related to classroom climate and content review. This data serves as a guide for faculty aiming to create supportive, effective learning environments that empower all students to thrive.

Instructor Attitude & In-Class Reviews : Influence on Students' Perceived Performance
Sample Size = 631, Chi-Squared Test : p-value < 0.00001
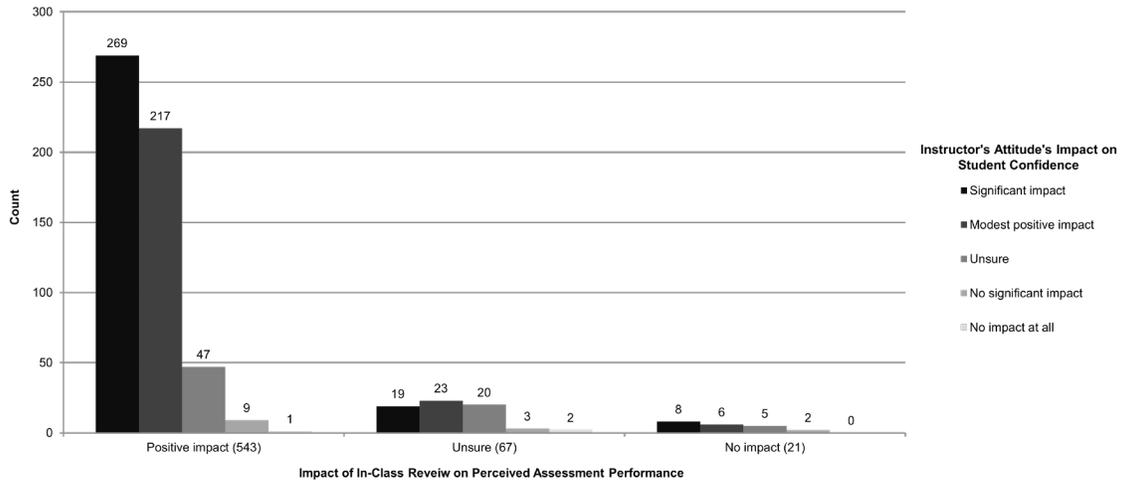
This student-reported data highlights how **in-class reviews and instructor attitude are the top drivers of perceived academic performance**. Students overwhelmingly indicated that when instructors created a positive environment and offered review opportunities, their confidence and perceived success increased. The message for faculty is clear: **what we do during class time matters most.** Incorporate low-stakes reviews and prioritize connection. These small shifts help students feel more prepared, supported, and successful—without overhauling your entire course structure.

Confidence in Class: The Role of Instructor Attitude & Teaching Style
Sample Size = 628, Chi-Squared Test : p-value=0.396
Preferred Teaching Style for Effective Learning
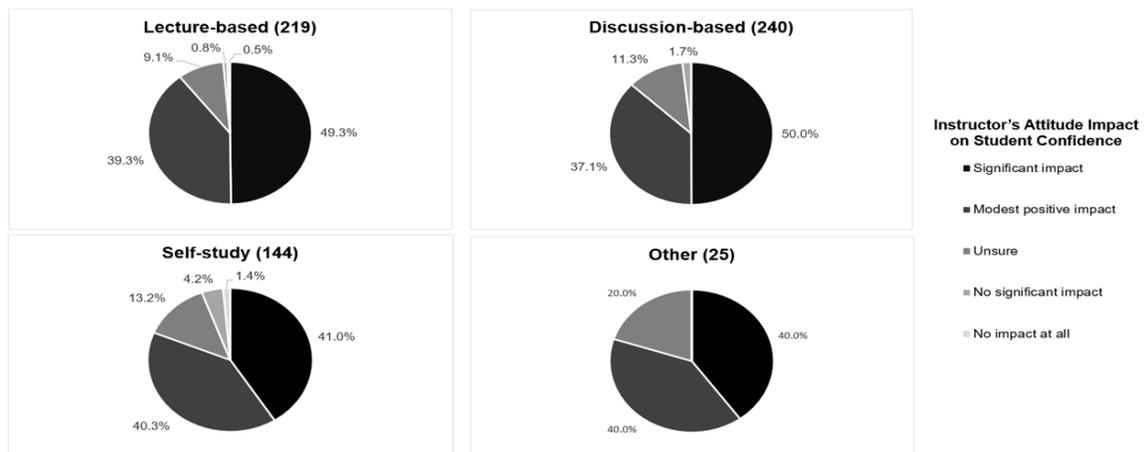
This data, collected from 628 students, demonstrates that **instructor attitude significantly impacts student confidence across all teaching styles**. Regardless of modality, over 85% of students reported a positive impact when instructors were supportive and encouraging. While preferences for how students learn vary, **how they are treated remains a constant driver of confidence**. Faculty can act on this by being approachable, showing empathy, and creating space for student voice. The takeaway

is clear: your attitude matters. A positive presence isn't just nice—it's powerful, and it shapes how students see themselves and their ability to succeed.

Instructor's Teaching & Attitude : Influence on Students' Success & Confidence
Sample Size = 630, Chi-Squared Test : p-value < 0.00001
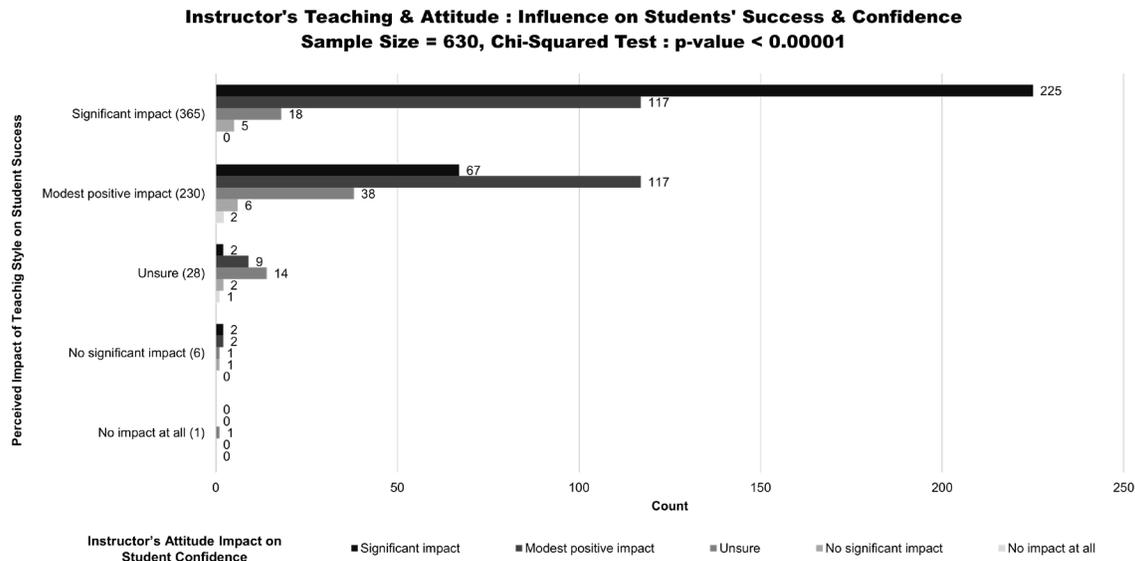
This chart showcases powerful student-reported data on how **instructor attitude directly influences both student confidence and success**. A majority of students indicated that when their instructor had a positive attitude, they felt more confident and more successful in the course. The close alignment between confidence and success suggests a reinforcing loop: when students feel supported, they believe in their abilities and perform better. For faculty, this is a call to action—your tone, empathy, and encouragement make a real difference. By showing care and approachability, you're not just teaching content—you're helping students believe they belong and can thrive.

Student Story: Bridging Confidence Gaps in STEM

To explore how faculty influence confidence in traditionally challenging fields, we spoke with a junior majoring in Mechanical Engineering. The student, who identifies as a first-generation college student, shared insights into how teaching practices impacted their confidence in STEM courses.

Overcoming Initial Doubts

"When I started my engineering courses, I honestly didn't think I could keep up," the student shared. "The material was overwhelming, and I didn't know if I had what it took to succeed." The student credited their improved confidence to an instructor in a foundational course who made complex concepts accessible through clear explanations and hands-on projects. "They broke things down step by step and made me feel like

questions were always welcome," the student explained. This supportive approach helped bridge their confidence gap and set a positive tone for future courses.

The Impact of Feedback

Another turning point for the student came from consistent, constructive feedback. "In one project, I didn't do great on the first attempt, but my professor walked me through what went wrong and how to fix it," they recalled. "That made all the difference. Instead of feeling defeated, I felt motivated to try again."
This experience highlights the role of formative feedback in fostering a growth mindset, enabling students to view mistakes as opportunities for learning rather than failures.

Challenges with Online Courses

While the student praised their in-person learning experiences, they expressed frustration with online courses. "In one of my online classes, the professor was barely available, and we never got feedback on our assignments," they said. "It felt like we were on our own, and my confidence took a hit."
The lack of interaction and support in the online format underscored the importance of instructor presence and timely feedback in maintaining confidence, especially in challenging subjects like STEM.

Lessons from the Student's Experience

1. **Clear Instruction Matters**: Breaking down complex material into manageable steps helps students build confidence in mastering difficult subjects.
2. **Feedback Fosters Growth**: Constructive, actionable feedback empowers students to learn from mistakes and improve.
3. **Instructor Presence Is Crucial**: Regular interaction and availability significantly enhance confidence, particularly in online courses.

Probing Questions for Faculty

To help educators reflect on how their teaching practices influence student confidence, the following questions are offered for consideration:
1. **Promoting Confidence Through Clarity**:
   o Are your instructions, expectations, and course materials clearly communicated to students? How might greater transparency impact their confidence in completing assignments and assessments?
2. **Supporting Growth with Feedback**:
   o How often do you provide formative feedback to your students? Does your feedback encourage a growth mindset, helping students view mistakes as opportunities to improve?
3. **Enhancing Instructor Presence**:

- Are you accessible to students in ways that support their learning and confidence? How could regular check-ins or increased availability foster a stronger connection with your students?

4. **Adapting Across Modalities**:
   - How do you adapt your teaching strategies to support student confidence in online, hybrid, and in-person courses? What additional support might be needed in virtual environments?

5. **Creating Inclusive Environments**:
   - How do you ensure that all students, particularly those from underrepresented backgrounds or with unique challenges, feel confident and supported in your classroom?

Resources for Faculty

The following resources provide valuable tools and strategies for fostering student confidence and creating inclusive, supportive learning environments:

Breaking the Stress and Self-Esteem Cycle to Improve Academic Performance

- **Overview:** This article explores the negative feedback loop between stress and self-esteem in university students and outlines how goal setting can mitigate academic stress.
- **Takeaway:** By implementing SMART goals and offering smaller, non-cumulative assignments, faculty can reduce student stress and shift the focus from outcome to learning process.
- *Source:* William Peace University. (2023, November 28). Break the stress and self-esteem cycle to improve your academic performance. https://peace.edu/break-the-stress-and-self-esteem-cycle-to-improve-your-academic-performance/

Inclusive Teaching Toolkit

- **Overview:** This toolkit provides resources to support instructors in incorporating diverse perspectives into the curriculum and creating a welcoming, student-centered classroom climate.
- **Takeaway:** Offers practical tools such as checklists for inclusive teaching strategies, guidelines for inclusive syllabus design, and strategies for building community in online classrooms.
- *Source:* University of Illinois Chicago Center for the Advancement of Teaching Excellence. https://teaching.uic.edu/cate-teaching-guides/inclusive-equity-minded-teaching-practices/inclusive-education/inclusive-teaching/UIC Teaching Center

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Interacting Asynchronously

- **Overview:** This guide highlights ways to foster meaningful engagement in asynchronous online courses through strategic interaction with content, instructors, peers, and self-reflection.
- **Takeaway:** Incorporating varied and purposeful interaction tools, like interactive texts, discussion boards, and self-assessments, enhances student processing and comprehension in online learning environments.
- *Source*: McDaniel, R. (1970, July 13). *Interacting asynchronously.* Vanderbilt University. https://www.vanderbilt.edu/cdr/module-2/interacting-asynchronously/

Effective Strategies for Improving College Teaching and Learning

- **Overview:** This piece emphasizes the power of approachability and active listening in faculty-student relationships and how these practices enhance learning and academic outcomes.
- **Takeaway:** When instructors build rapport and adapt teaching based on student feedback, it improves motivation, communication, and academic success.
- *Source*: Weimer, M. (2024). *Effective Strategies for Improving College Teaching and Learning.* Union University.

Fostering a Growth Mindset in Students

- **Overview**: This short course offers instructors an in-depth workshop series on the social and cognitive origins of students' mindsets. Participants will differentiate between fixed and growth mindsets, examine their impact on learning experiences, and explore teaching strategies to foster a growth mindset among students.
- **Takeaway**: Equips faculty with strategies to empower students to overcome challenges and succeed.
- *Source*: Center for the Advancement of Teaching Excellence, University of Illinois Chicago. https://teaching.uic.edu/events-3/short-courses/fostering-a-growth-mindset-in-students/

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Chapter 3: Empowering Students Through Modality Choice

Chaiya McNeil, Magdalena Trzupek, Torrie Blasko

Students approach their educational journey with diverse backgrounds, responsibilities, and learning styles, all of which influence their preferences for course modalities. Whether choosing online, hybrid, or in-person classes, these preferences significantly impact their academic success and overall experience. Understanding the reasons behind these choices is crucial for creating inclusive and effective educational systems. This chapter explores the role of course modality preferences in fostering student success. Drawing from existing research and our own survey data, we analyze how the freedom to choose course formats supports diverse learning needs and enhances academic performance. By examining factors such as lifestyle, responsibilities, and individual learning styles, we aim to shed light on why empowering students with modality options is a meaningful and necessary step in higher education.

Through this analysis, we aim to equip educators and institutions with the insights needed to design flexible, inclusive learning environments that recognize and respect the varied needs of students. This foundational understanding sets the stage for evaluating modality preferences across different student demographics and their implications for academic policies and teaching practices.

Literature Review: Understanding Modality Preferences Across Student Demographics

Student preferences for course modalities—whether online, hybrid, or in-person—are shaped by a range of factors, including age, year in school, and individual circumstances. By exploring these preferences across different student demographics, educators can better understand how to accommodate diverse needs and foster academic success.

Freshmen: Transitioning to College Life

Freshmen often experience unique challenges as they transition from high school to college. The pressures of adapting to new academic expectations and social environments can influence their preference for in-person classes, where direct interaction with instructors and peers provides additional support. A study by Susan Ramlo (2017) examined freshmen perceptions of online versus in-person physics classes. While 60% of students had prior online learning experience, nearly 50% preferred in-person interaction, citing the need for structure and face-to-face engagement. Interestingly, a significant portion expressed dissatisfaction with the idea of STEM classes being taught online, suggesting that freshmen may rely heavily on direct classroom interaction, particularly in challenging subjects.

Sophomores: Building Confidence and Experience

Having completed their first year, sophomores often feel more confident navigating college life. This increased familiarity may lead them to weigh factors such as quality of instruction and engagement when choosing modalities. Research by O'Neill and Sai (2014) found that sophomores in an Educational Psychology course overwhelmingly chose in-person classes despite having online options. These students valued in-person lectures for their ability to foster engagement and make the most of their tuition investment. This suggests that sophomore preferences may be driven by a desire for high-quality, immersive learning experiences.

Juniors: Balancing Flexibility with Commitment

Juniors often face increased demands as they juggle academics, internships, and preparation for post-graduation careers. Flexibility becomes a priority, making hybrid and online courses particularly appealing. A 2023 EDUCAUSE study revealed that 51% of students appreciated hybrid options for their ability to combine the social benefits of in-person learning with the convenience of online formats. For juniors, this blend allows them to meet academic obligations while managing internships and other commitments effectively.

Seniors: Preparing for Life After Graduation

As students near graduation, their modality preferences often reflect their unique priorities. While many seniors favor online courses for their flexibility, some continue to see value in in-person classes as networking opportunities and sources of mentorship. An article in *Frontiers in Education* (2020) highlights how seniors strategically use in-person interactions to build relationships with peers and professors, aiding in post-graduation plans such as securing recommendations or networking opportunities. This dual approach reflects the varied priorities of seniors, balancing immediate academic needs with long-term career goals.

The Importance of Flexibility in Modality Offerings

This review demonstrates that students' preferences for course modalities are influenced by their year in school, life circumstances, and learning styles. Freshmen tend to favor in-person interactions for support, while seniors often prioritize the flexibility of online options. Offering a range of modalities is essential for accommodating these diverse needs and ensuring that all students have the tools they need to succeed.

Survey Data and Analysis: Insights into Modality Preferences

To better understand student preferences for course modalities, a survey was disseminated before the first day of class (pre-semester) among students at the University of Illinois Urbana-Champaign in Fall of 2024. The survey aimed to assess preferred modalities and the life circumstances influencing these preferences. Students were asked to provide feedback on five modality options from most to least preferred:

1. **Online asynchronous**: No required meeting times.
2. **Hybrid synchronous**: Self-paced materials with one hour of live online meetings.
3. **Online synchronous**: Three hours of live online meetings.
4. **Hybrid in-person**: Self-paced materials with one hour of in-person meetings.
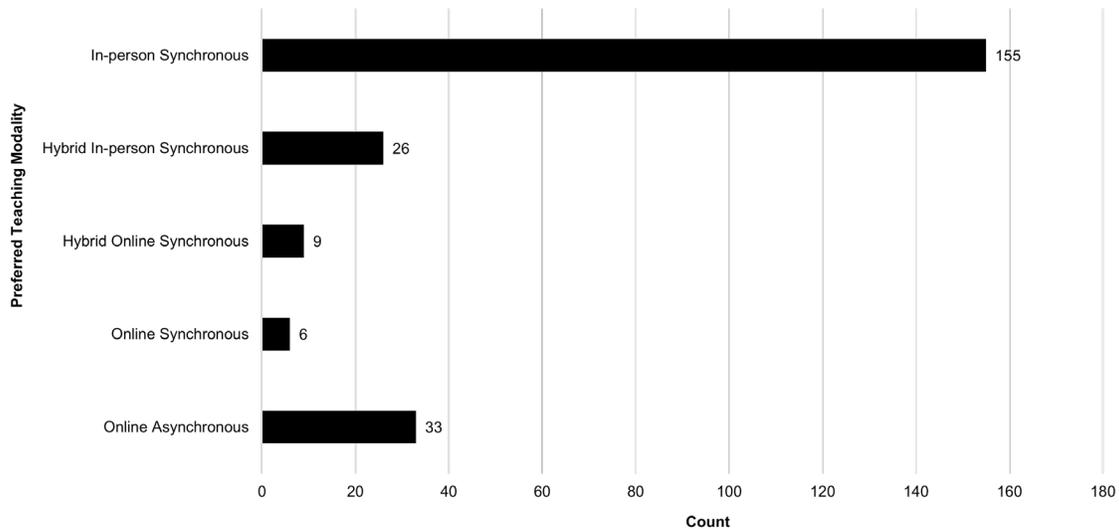5. **Fully in-person synchronous**: Three hours of live, in-person meetings.

The results revealed distinct preferences influenced by year in school, disabilities, and responsibilities beyond academics.

Teaching Modality Rankings
Sample Size = 705
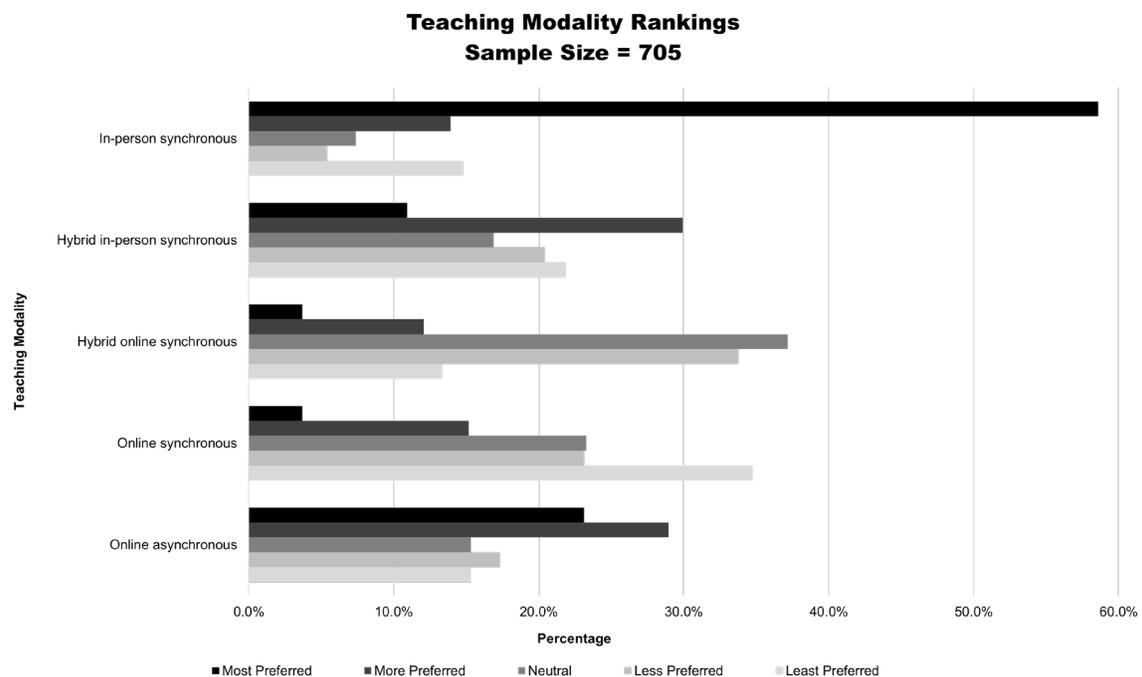
This data reveals how students perceive the impact of different teaching modalities on their confidence and success. **In-person synchronous classes ranked highest**, while fully asynchronous courses were associated with the lowest confidence and success. The takeaway? **Modality matters.** Students thrive when they feel seen, heard, and supported, and it seems they feel that it occurs most often in-person. Faculty teaching online can boost outcomes by adding video check-ins, real-time discussions, or active peer engagement. Whether teaching face-to-face or remotely, prioritizing human connection helps students stay motivated and succeed. If it is found that teaching online meets the collective need of your student body, let presence—not just platform—shape your course design.
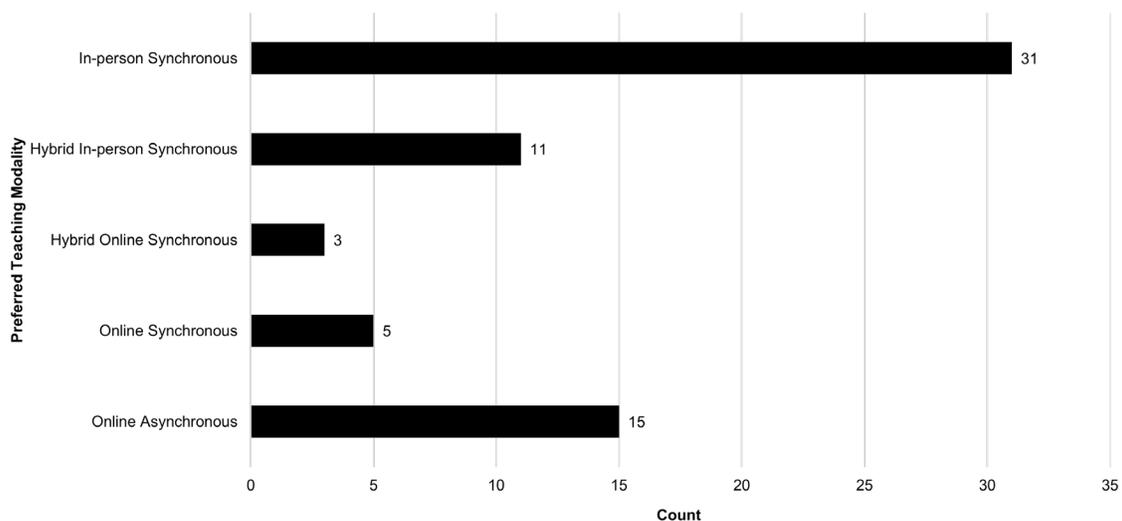
Top Instructional Modality preferred by Freshmen
Sample Size = 229

Preferred Teaching Modality

Modality	Count
In-person Synchronous	155
Hybrid In-person Synchronous	26
Hybrid Online Synchronous	9
Online Synchronous	6
Online Asynchronous	33

Count

The above pre-semester data captures first-year students' top instructional modality preferences, highlighting a strong leaning toward **in-person learning with instructor interaction**. Despite growing familiarity with online tools, students clearly value real-time engagement, structure, and presence—especially early in their college journey. Online synchronous modalities ranked lowest, suggesting that location flexibility alone doesn't outweigh the benefits of in-person support and connection.

Top Instructional Modality preferred by Seniors
Sample Size = 65

Preferred Teaching Modality

Modality	Count
In-person Synchronous	31
Hybrid In-person Synchronous	11
Hybrid Online Synchronous	3
Online Synchronous	5
Online Asynchronous	15

Count

It can be noted that senior students' top instructional modality preferences only offer a small contrast to first-year learners. With more seasoned stuents, while in-person

formats still hold value, there's a notable shift toward **hybrid and online options**—particularly **online asynchronous with instructor interaction**. This suggests that as students grow more confident and independent, they prioritize flexibility, but not at the expense of connection. For faculty, the takeaway is clear: **interaction still matters— just delivered differently.** Experienced students thrive when given autonomy alongside structured instructor presence. When designing courses for upper-level students, consider blending flexibility with meaningful touchpoints to support both mastery and momentum in their final academic stretch.

In-person Synchronous Preference among Students with Disabilities
Survey Size = 683, Sample Size = 181
ANOVA Test : p-value = 0.00266
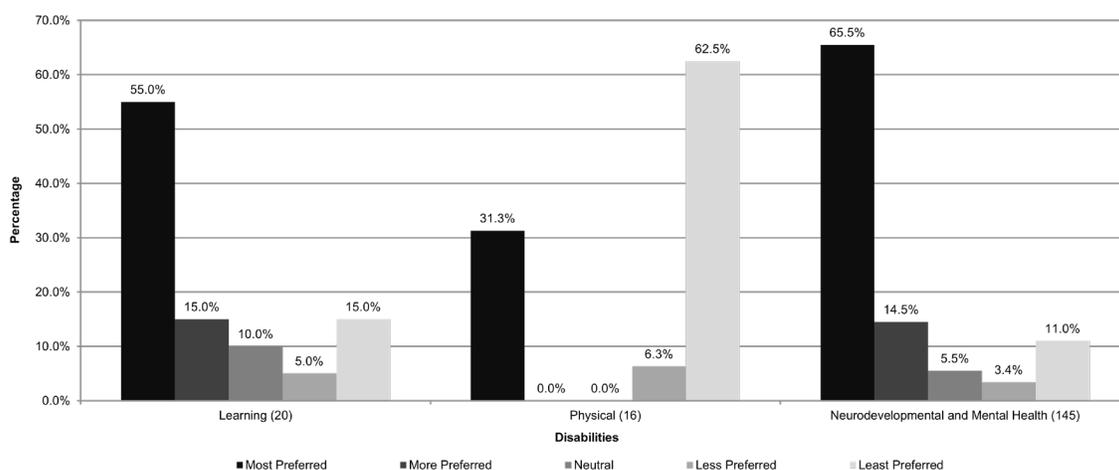
The above data highlights course modality preferences among students with documented disabilities, revealing a key distinction: **students with physical disabilities were far less likely to prefer in-person synchronous classes** compared to with other disabilities. While "in-person with instructor interaction" was popular overall, students with physical disabilities leaned more heavily toward **online asynchronous courses with instructor interaction**—prioritizing accessibility and autonomy. This data underscores the need for **flexible, inclusive course design** that maintains meaningful instructor presence. For faculty, the takeaway is clear: offering accessible online options with interaction isn't just helpful—it's essential for equity and student success.

Student Story: ROTC and Modality Preferences

The Reserve Officer Training Corps (ROTC) at the University of Illinois provides students with a rigorous combination of academic and military training. To understand how these dual responsibilities impact course modality preferences, we interviewed a second-year ROTC cadet, who requested to remain anonymous. Their insights shed light on how demanding schedules influence the decision-making process.

Balancing Academic and Military Responsibilities

As an Engineering Mechanics major, the cadet juggles a challenging academic load alongside 10–15 hours per week of ROTC commitments, including training, leadership activities, and events. These responsibilities often leave little room for flexibility in their schedule. "I wouldn't necessarily learn better this way, but it's a general education requirement… All of my technical classes meet a lot in person already, so I'd be fitting FSHN120 into a tight schedule," the cadet shared, explaining their preference for a fully online asynchronous modality.

This choice reflects the cadet's prioritization of time management over optimal learning conditions. With a packed schedule, online asynchronous courses provide the flexibility needed to accommodate ROTC obligations and demanding major-specific coursework.

Scheduling Over Learning Style

The cadet acknowledged that an in-person modality might improve their learning experience but emphasized that scheduling constraints left them with little choice. Their primary focus was ensuring success in both their ROTC training and academically rigorous courses. "I don't have the option to choose based on how I learn best," they explained. This reality highlights a critical consideration for faculty: many students prioritize logistical feasibility over learning preferences due to external pressures.

Lessons from the ROTC Student's Perspective

- **Time Management**: Students with significant extracurricular commitments, such as ROTC, rely on flexible modalities to balance their responsibilities.
- **Learning Style Trade-Offs**: Scheduling demands often force students to prioritize accessibility over their preferred learning style.
- **Support for Non-Traditional Learners**: Institutions can better support students like ROTC cadets by offering robust online options and recognizing the unique challenges these students face.

This story illustrates how external responsibilities significantly shape course modality preferences, reinforcing the importance of flexibility and accessibility in curriculum design.

Probing Questions for Faculty

To foster a deeper understanding of student preferences and enhance teaching practices, faculty are encouraged to reflect on the following questions:
1. **Student Decision-Making**:
    o How might the modality of your course impact a student's decision to enroll, particularly for those balancing work, caregiving, or extracurricular responsibilities?

2. **Inclusivity Across Modalities**:
   o In what ways can your course design accommodate diverse student needs, including those with disabilities or differing learning styles?
3. **Alignment with Academic Goals**:
   o Does your current modality offering align with the intended learning outcomes of your course? Could other modalities better support these objectives?
4. **Engagement and Performance Trends**:
   o Have you noticed patterns in student engagement or academic performance that correlate with specific modalities? What might these trends reveal about the effectiveness of your teaching methods?
5. **Barriers to Participation**:
   o What barriers might prevent students from choosing their preferred modality (e.g., scheduling conflicts, availability)? How can these be addressed to ensure equitable access?

By considering these questions, faculty can create more flexible, inclusive, and effective learning environments that meet the diverse needs of their students.

Resources for Faculty

For educators seeking to better understand and support students' modality preferences, the following resources offer valuable insights and strategies:

EDUCAUSE: Empowering Students to Choose Learning Modalities

- **Overview**: This resource discusses the ethical implications of providing students with choice in course modalities and emphasizes the importance of flexible offerings to accommodate diverse needs.
- **Takeaway**: Faculty can explore best practices for implementing hybrid and online options without compromising learning outcomes.
- *Link*: https://www.educause.edu/ecar/research-publications/2023/students-and-technology-report-flexibility-choice-and-equity-in-the-student-experience/empowering-students-to-choose

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EducationDynamics: 2023 Online College Students Report

- **Overview**: This comprehensive report examines trends in online learning preferences, highlighting the growing demand for flexibility among employed and caregiving students.
- **Takeaway**: Faculty can use this data to better understand the unique challenges faced by non-traditional students and tailor their courses accordingly.
- *Link*: https://insights.educationdynamics.com/rs/183-YME-928/images/EDDY-online-college-students-2023.pdf

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By leveraging these resources, faculty can gain a deeper understanding of how modality choices impact student success and explore actionable strategies for creating flexible and inclusive learning environments.

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Chapter 4: The Importance of Understanding Textbook Modality Preferences

Seungmin Cho, Taylor Herman, Tessa Wolf

This chapter explores the factors that influence students' preferences for different textbook modalities, which include physical textbooks, online textbooks, and, in some cases, no textbooks. By understanding these preferences, educators can better support diverse learning needs, reduce student stress, and foster a more personalized and effective learning experience.

Students' educational, cultural, and financial backgrounds play significant roles in shaping their learning preferences. Additionally, individual learning styles—whether visual, auditory, or kinesthetic—impact how students engage with educational materials. Some students thrive in group settings, while others prefer independent study. These nuances extend to textbook preferences, affecting how students learn in class, how they prepare for exams, and how they engage with course content.

With the rapid growth of digital education tools, online textbooks have gained popularity due to their affordability and accessibility. However, the suitability of online resources varies among learners. For some, the convenience and lower cost of e-textbooks are appealing, while others find physical textbooks more engaging and easier to use. Understanding these dynamics is crucial as educators strive to adapt teaching strategies to a rapidly evolving technological landscape.

This chapter aims to shed light on the challenges and preferences that shape students' choices regarding textbook modalities. We will draw on existing literature, analyze data from student surveys, and discuss real-world implications for teaching practices. By doing so, we aim to equip educators with insights that help them make informed decisions about textbook options, ensuring that all students have equitable access to the tools they need for academic success.

Literature Review: Insights into Textbook Modality Preferences

This study delves into various teaching methods and the advantages and limitations of different textbook modalities to guide educators in making informed decisions about course materials. In addition to examining the effects of textbook costs on student success, we explore how diverse learning styles and individual challenges shape preferences for physical textbooks, online textbooks, or no textbooks. These preferences often correlate with students' socioeconomic status, disability status, and international background.

General College Student Preferences

Two key themes emerge in research on textbook modality preferences among college students: preferences based on learning styles and the impact of textbook costs on academic outcomes. Studies reveal the advantages and disadvantages of both physical and digital textbooks, yet few explore the implications of using no textbooks at all. Many students favor physical textbooks for their ability to enhance focus and engagement, though financial constraints often drive them toward more affordable digital options. Physical textbooks reduce eye strain, enable easy annotation, and do not rely on internet connectivity (Mohr et al., 2020). Conversely, e-textbooks offer benefits such as lower costs and greater portability. While some studies highlight adaptability among students regardless of modality, others indicate that most students lack a strong preference and can adjust to either format as needed (Hollister, 2020). Most studies in this area rely on student surveys and statistical analyses, often conducted in specific academic disciplines or demographic groups. This localized focus presents challenges in generalizing findings to diverse and expansive campuses like UIUC. Despite these limitations, existing research provides valuable insights into students' perceptions of textbooks and their underlying preferences.

Socioeconomic Status

The cost of textbooks is a significant factor influencing student preferences, with physical textbooks often being viewed as superior in quality but prohibitively expensive. Studies indicate that high textbook costs contribute to stress and, in some cases, deter students from enrolling in or completing courses (Martin et al., 2017).

Open Educational Resources (OER) represent a practical alternative, offering free or low-cost online materials that reduce financial burdens while maintaining educational effectiveness. Educators adopting OER materials can help alleviate stress, foster classroom engagement, and improve academic performance, particularly for students facing financial hardships (Becker et al., 2023). By integrating OER resources, faculty can empower students to allocate limited funds toward essential living expenses, thereby enhancing their ability to succeed in the classroom.

Future research should investigate the role of campus resources, such as libraries and financial aid programs, in mitigating the costs of textbooks. These initiatives could shape students' preferences and reduce barriers to accessing educational materials.

Disability Status: Accessibility and Textbook Preferences

Students with disabilities face unique challenges in accessing and using textbooks, making accessibility a critical factor in their learning experiences. Both physical and digital textbooks offer features designed to accommodate diverse needs, yet the effectiveness of these features varies by student and disability type.

Accessibility Features

Physical textbooks can be customized for accessibility through options like Braille, large-print formats, and color-coded tables for visually impaired or color-blind students. On the other hand, e-textbooks often provide a wider range of customizable features, including adjustable font sizes, text magnification, screen-reader compatibility, and text-to-speech functions. These digital features can significantly enhance usability for students with visual impairments or other accessibility needs (Bouck & Meyer, 2012). Despite the advanced capabilities of e-textbooks, many students with disabilities still prefer physical textbooks, citing familiarity, comfort, and reliability. A study conducted at UIUC revealed that students value accessibility, ease of use, and practicality when deciding on textbook modalities. These findings suggest that offering multiple textbook formats within a single course could better accommodate students' diverse needs (Liu, 2022).

Challenges and Recommendations

While e-textbooks offer greater accessibility in theory, technological flaws such as pacing issues in text-to-speech tools or errors in digital formatting can hinder their effectiveness. Faculty should thoroughly review the features of any e-textbooks they adopt to ensure accuracy and usability, particularly for students who rely on these tools for accurate comprehension.

Additionally, research on textbook preferences for students with disabilities often generalizes across disability types, leaving gaps in understanding specific needs. For instance, students with visual impairments have distinct requirements compared to those with autism or ADHD. Future research should explore how specific disabilities influence textbook preferences to develop more targeted solutions.

Practical Steps for Educators

Educators are encouraged to offer multiple textbook modalities whenever possible. While implementing such options may require additional planning, the benefits extend beyond students with disabilities, creating an inclusive learning environment for all. By addressing accessibility concerns proactively, faculty can ensure that students with disabilities have equitable opportunities to succeed in their courses.

International Student Status: Unique Perspectives on Textbook Preferences

International students bring diverse educational backgrounds and cultural experiences that influence their preferences for textbook modalities. While many of their preferences align with those of domestic students, unique factors such as prior exposure to technology, economic considerations, and cultural norms play a significant role in shaping their choices.

Cost and Convenience

Cost is a central concern for many international students. E-textbooks often appeal to this group due to their affordability and ease of access, especially when compared to the high costs and logistical challenges associated with purchasing physical textbooks internationally. Studies have found that e-textbooks not only reduce financial stress but also contribute to higher course satisfaction and improved learning outcomes for international students (Hollister, 2020).

However, preferences are not universal. A global survey revealed that approximately 78% of international students prefer physical textbooks, citing better focus and information retention as key benefits (Mizrachi et al., 2018). Features like the ability to highlight and annotate directly on printed pages enhance their learning experience. These findings highlight the variability in preferences based on individual circumstances and cultural contexts.

Technological Familiarity and Accessibility

Students' familiarity with technology often depends on their country of origin. For instance, students from technologically advanced countries may feel more comfortable using e-textbooks, while those from regions with limited access to digital tools may find physical textbooks more intuitive. A study of East African college students during the COVID-19 pandemic revealed initial struggles with online resources due to limited technological knowledge, though these challenges diminished over time as students gained experience (Moshtari & Safarpour, 2024).

Cultural norms and educational practices also influence textbook preferences. For example, students from countries where digital tools are rarely integrated into the classroom may be more accustomed to physical textbooks and less likely to adopt e-textbooks. Offering multiple textbook modalities ensures that international students can adapt to a new academic system while maintaining comfort with familiar formats.

Recommendations for Educators

Faculty are encouraged to consider the unique challenges faced by international students when selecting textbook modalities. Adopting Open Educational Resources (OER) can help reduce costs, while offering both physical and digital textbook options can accommodate varying levels of technological proficiency. Additionally, leveraging campus resources such as libraries and academic support centers can help international students access necessary materials and develop new study strategies. Future research should explore how cultural and economic factors shape international students' textbook preferences. This understanding can inform policies and teaching practices that create equitable and supportive learning environments for all students.

Building Inclusive Learning Environments Through Textbook Choices

The findings of this study emphasize the critical importance of understanding the diverse factors influencing students' textbook modality preferences. These factors—socioeconomic status, disability status, and international background—each present unique challenges that affect how students engage with educational materials. By acknowledging and addressing these differences, faculty can create more inclusive, supportive, and effective learning environments.

Key Takeaways

1. **Socioeconomic Considerations:** High textbook costs remain a significant barrier to academic success for many students. Adopting Open Educational Resources (OER) can alleviate this financial strain, reduce stress, and improve student engagement and performance.
2. **Accessibility for Students with Disabilities:** Offering multiple textbook modalities ensures that students with varying accessibility needs have equitable opportunities to learn. Faculty should prioritize materials with reliable accessibility features to support students with disabilities effectively.
3. **Support for International Students:** International students often face unique challenges related to cost, technological familiarity, and cultural norms. Providing both physical and digital textbook options can help them transition to new academic systems while accommodating their diverse backgrounds.

Practical Recommendations for Faculty

Educators can take meaningful steps to address the barriers that hinder student success:

- **Reduce Costs:** Transitioning to OER materials or negotiating for affordable textbook options can significantly decrease financial stress for students.
- **Offer Multiple Modalities:** Providing both physical and digital resources enables students to choose the format that best supports their learning style and circumstances.
- **Engage Students Directly:** Gathering feedback from students about their textbook preferences and challenges can inform more inclusive teaching strategies.

Future Research Directions

The topic of "no textbooks" remains underexplored. Investigating how faculty-curated materials or alternative resources impact learning outcomes could open new avenues for creating flexible and cost-effective teaching methods. Additionally, research into how

specific disabilities and cultural factors shape textbook preferences could yield deeper insights into addressing individual needs.

A Call to Action

By embracing strategies that accommodate diverse student preferences, faculty can empower students to thrive academically. Thoughtful textbook selection not only reduces stress but also enhances the overall educational experience, ensuring that every student has the tools and support needed to succeed.
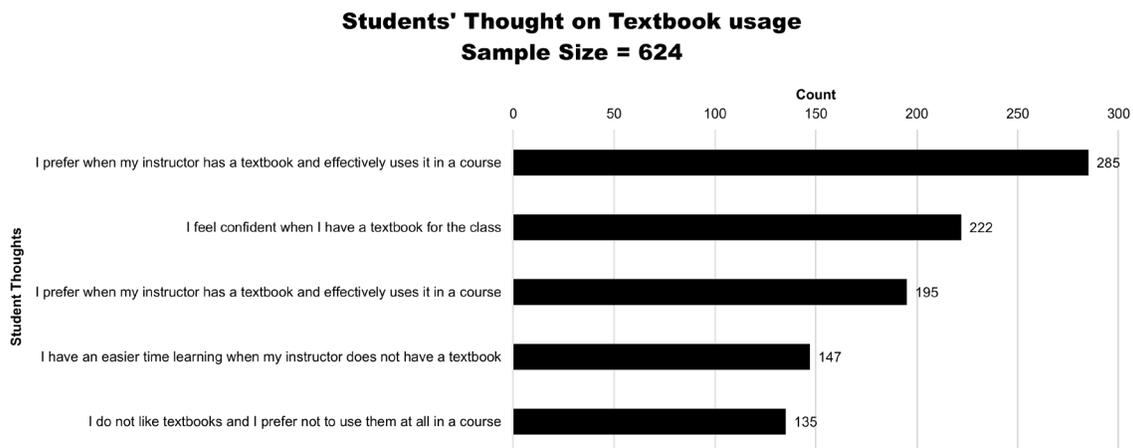

Survey Data and Analysis: Insights into Student Textbook Preferences

This section presents the findings from our Fall 2023 mid-semester survey data administered to 600+ students, highlighting key trends and relationships in students' textbook preferences. These insights provide actionable information to help educators align their teaching practices with student needs.

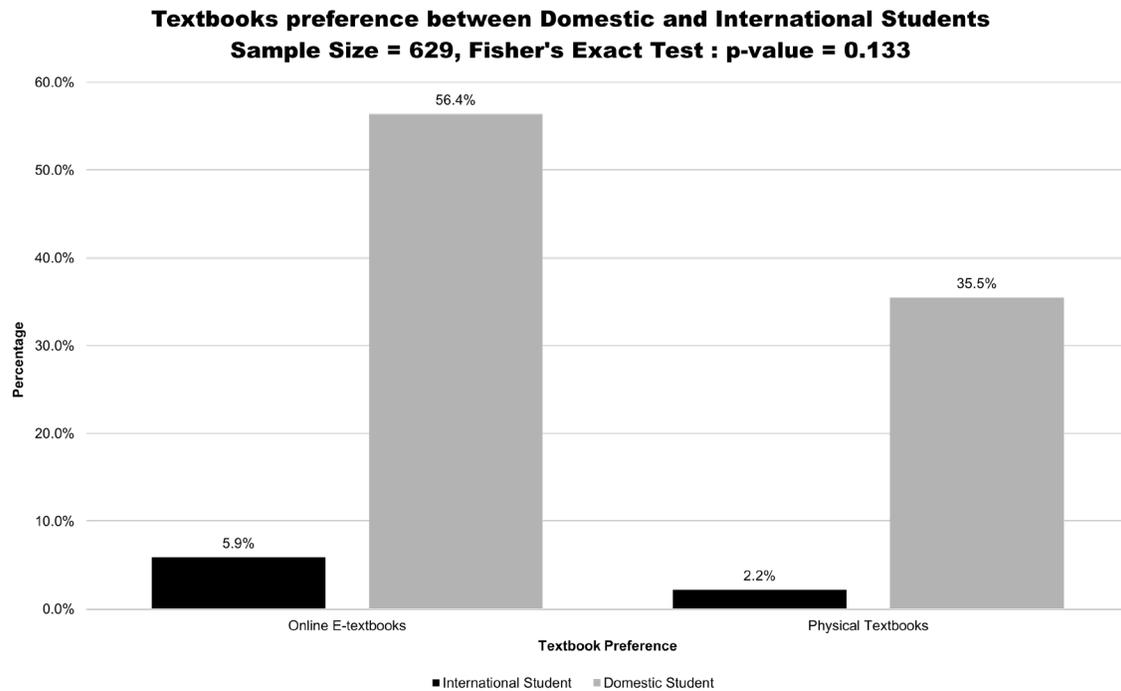## Student Preferences for Textbook Use

A mid-semester survey question asked 600+ students to select statements that best described their views on textbooks. The responses highlight varied perspectives on the role of textbooks in education.

Students' Thought on Textbook usage
Sample Size = 624

Student Thoughts	Count
I prefer when my instructor has a textbook and effectively uses it in a course	285
I feel confident when I have a textbook for the class	222
I prefer when my instructor has a textbook and effectively uses it in a course	195
I have an easier time learning when my instructor does not have a textbook	147
I do not like textbooks and I prefer not to use them at all in a course	135

A multiple select question was administered to gather feedback on students' views regarding textbook requirements and usage in a college class. The data shows that students (285) **prefer when instructors have a textbook and use it effectively**, and 222 students feel **more confident** when a textbook is available. However, 147 students shared they learn better without a textbook, and 135 prefer **not to use textbooks at all**. These findings suggest that while many students benefit from a clearly integrated textbook, others find value in **alternative learning resources**.

Instructors may consider offering **flexible options** and clearly explaining how the textbook supports course goals.
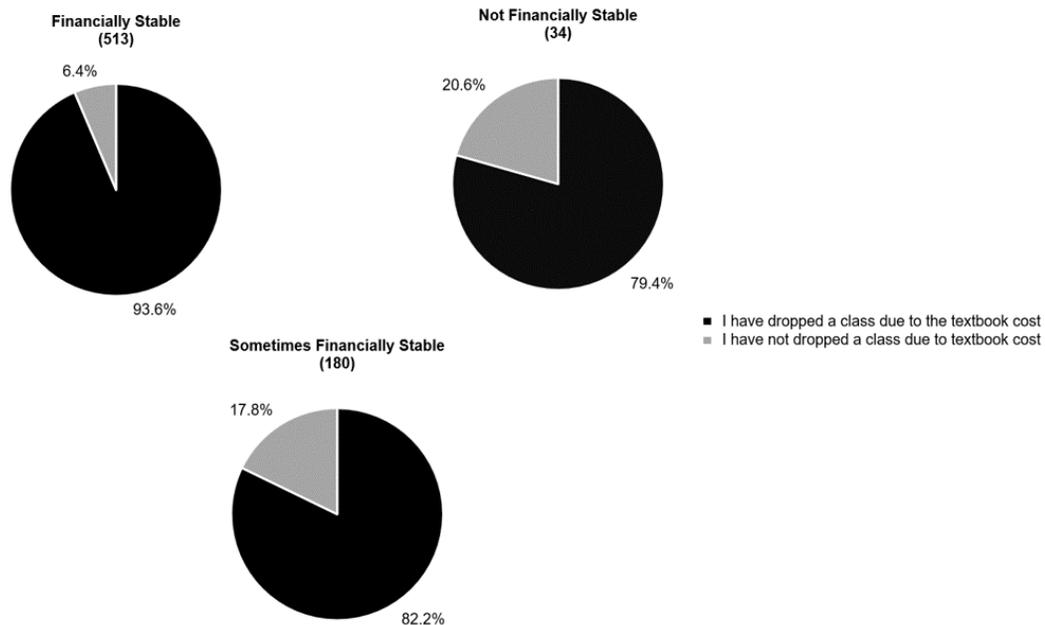

Textbooks preference between Domestic and International Students
Sample Size = 629, Fisher's Exact Test : p-value = 0.133

The data shows that **72.8% of international students** and **61.4% of domestic students** prefer an **eText over a physical textbook**, with the preference even stronger among international students. One reason for this may be that **eTexts can be easily translated** using browser tools or apps, helping non-native English speakers better understand course content. Digital formats also offer **greater flexibility, accessibility, and portability**, which benefit all learners. To support these preferences, instructors should consider adopting eTexts that are **mobile-friendly and compatible with translation tools**.


Relationship Between Dropping Classes and Financial Stability Sample
Size=727, Chi-Squared Test: p-value < 0.00001

Financially Stable
(513)

6.4%

93.6%

Not Financially Stable
(34)

20.6%

79.4%

■ I have dropped a class due to the textbook cost
■ I have not dropped a class due to textbook cost

Sometimes Financially Stable
(180)

17.8%

82.2%

The collected data shows a clear relationship between **financial stability and the likelihood of dropping a class due to textbook costs**, with a statistically significant result (p < 0.00001). Among students who are financially stable, only **6.4%** have dropped a class because of textbook cost. In contrast, that number jumps to **17.8%** for students who are sometimes financially stable, and a striking **20.6%** for students who are not financially stable. These findings underscore the real impact of textbook costs on student retention. **Offering open-access textbooks or free eText options** can directly reduce financial barriers, especially for students who are financially vulnerable. For faculty, selecting no-cost or low-cost course materials isn't just a budget-friendly decision—it's a **retention and equity strategy** that helps ensure all students can stay enrolled and engaged in their courses.

Mapping E-textbook Adoption and Campus Service Utilization
Sample Size = 733, Chi-Squared Test : p-value = 0.0630
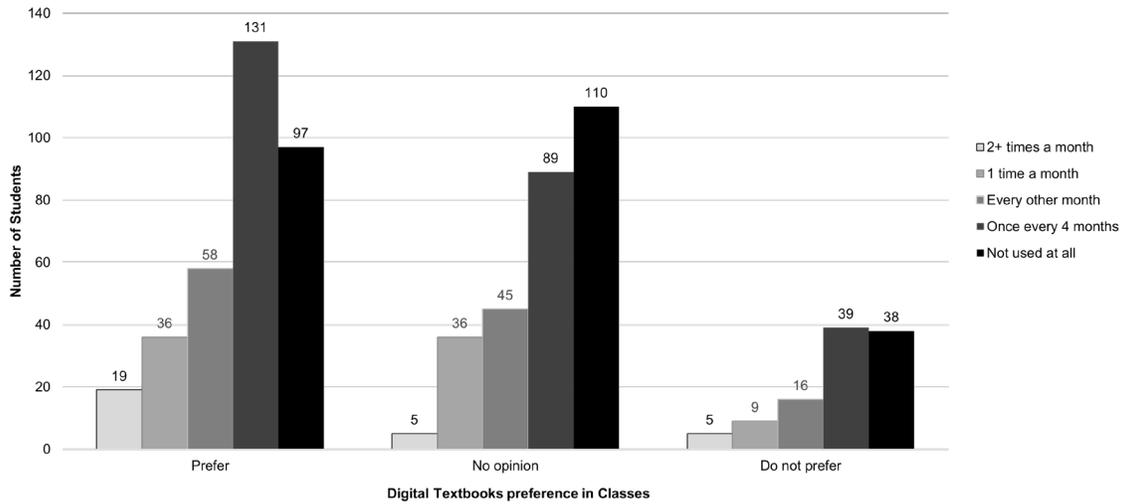
The data demonstrated that **most students either prefer an eText** (or do not have a strong opinion), while fewer students prefer physical textbooks. It also highlights that **many students are not regularly using campus services**, with the largest group reporting little or no use at all. However, students who do access services more frequently show a stronger preference for eTexts. This suggests an opportunity: if instructors **author their own eTexts and embed links to both course resources as well as campus resources**, it may increase awareness and usage of support services. Thus, strategically linking resources within course materials can promote both **engagement and student success**.

Textbook preferences by Disability Types
Sample Size = 631
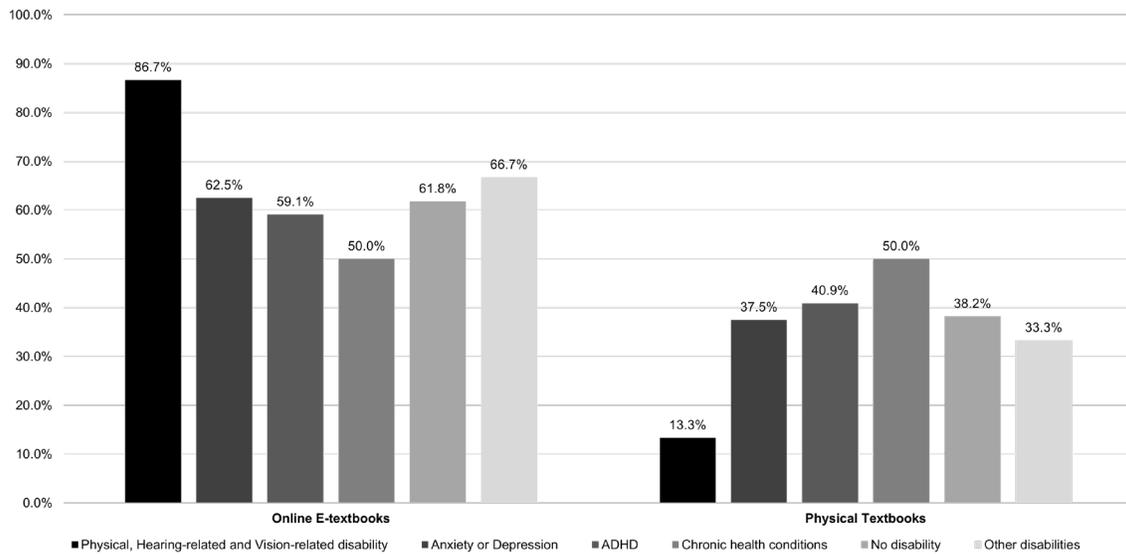
The data shows that students across many disability categories are more likely to prefer eTexts (or have no strong preference). However, students with **chronic health conditions were more divided in their preferences**. This split may reflect specific conditions such as **chronic migraines or traumatic brain injuries**, where **limiting screen time** is recommended, making **physical textbooks a more manageable option** for some. To support all learners, faculty can offer both digital and physical options when possible, and ensure eTexts are screen-reader compatible, downloadable, and flexible in format.

Student Story: Ananya's Experience

To further understand the factors that influence textbook modality preferences, we interviewed Ananya Mani, an international student from Dali, India, studying Food Science at the University of Illinois at Urbana-Champaign. Ananya's story provides a unique perspective on how cultural, educational, and personal factors shape textbook preferences.

Educational Background and Learning Style

Ananya's educational journey began in a high school system in India where the use of electronics in the classroom was strictly prohibited. This stands in stark contrast to the North American system, where digital tools play a significant role in classroom learning. Ananya's familiarity with physical textbooks from her earlier education has greatly influenced her current preferences.

Ananya identifies as a visual learner, favoring study methods that include educational videos, flowcharts, flashcards, lecture slides, and practice questions. While she does not rely heavily on textbooks for her studies, she prefers physical textbooks over e-textbooks when she does use them. Her preference stems from the discomfort of prolonged screen exposure, which often leads to eye strain. This choice aligns with her upbringing in a system that emphasized print resources over digital formats. Interestingly, this preference differs from the broader survey findings, where 73% of international students expressed a preference for e-textbooks. This highlights the diversity of experiences among international students and the influence of individual educational backgrounds on modality choices.

Adapting to a New Educational System

Ananya faced several challenges transitioning to the American education system. One significant adjustment was managing weekly assignments, particularly in courses requiring essay writing, as English is not her first language. In her previous educational system, assessments were limited to a single, heavily weighted final exam, accounting for 80% of her grade.

To adapt, Ananya sought support by forming study groups, learning to manage assignments with calendar reminders, and participating in smaller discussion sections. She found these strategies helpful in navigating the frequent assessments and collaborative learning style typical of American classrooms.

Implications for Faculty

Ananya's story underscores the importance of understanding the diverse needs of international students. Her preference for physical textbooks reflects her familiarity and comfort with this modality, while her reliance on visual aids and alternative study methods illustrates the value of diverse teaching tools.

For faculty, engaging students to gather feedback on their preferences and challenges can be instrumental in creating a supportive learning environment. Offering a mix of physical and digital resources can address the varied needs of students like Ananya, ensuring they have the tools necessary to succeed academically.

Probing Questions for Faculty

To help educators critically reflect on their practices and consider improvements to textbook modality offerings, the following questions are designed to inspire thoughtful dialogue and actionable strategies:

1. **Financial Accessibility**:
   - What steps can you take to reduce financial stress for your students through textbook selection or alternative resources?
2. **Accessibility for Students with Disabilities**:
   - How can you ensure your course materials are accessible to students with varying disabilities? Are you leveraging the full range of accessibility features available in physical and digital textbooks?
3. **Flexibility in Modality Offerings**:
   - What barriers do you foresee when offering a single textbook modality or multiple modalities? How might these barriers affect students' ability to succeed?
4. **Adoption of Affordable Textbook Materials**:
   - What obstacles could arise in adopting lower-cost textbook options, such as Open Educational Resources (OER)? How can these challenges be mitigated?
5. **Catering to Diverse Student Groups**:
   - How can you adjust your textbook modality choices to accommodate the needs of international students, students with disabilities, and students from low socioeconomic backgrounds?
6. **Commitment to Improvement**:
   - Based on the findings in this study, what is one concrete change you could implement to support your students' textbook preferences in your next course?

By reflecting on these questions, faculty can identify opportunities to improve textbook selection processes, ensuring a more inclusive, accessible, and supportive learning environment for all students.

Resources for Faculty

For educators seeking to deepen their understanding of textbook modality preferences and explore actionable strategies, the following resources provide valuable insights and practical recommendations.

High-Priced Textbooks' Impact on Community College Student Success.

- **Overview:** This study examines how the high cost of textbooks affects student engagement, academic performance, and classroom participation in community colleges. It also explores perceptions of Open Educational Resources (OER) as affordable alternatives.
- **Takeaway:** Lower-cost or free textbook options like OER can significantly reduce student stress, improve participation, and support success—without compromising academic outcomes.
- *Source*: Becker, K. L., Safa, R., & Becker, K. M. (2023). High-Priced Textbooks' Impact on Community College Student Success. https://doi.org/10.1177/00915521221125898

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eText, Mathematics, and Students with Visual Impairments: What Teachers Need to Know.

- **Overview:** This article explores the unique challenges faced by visually impaired students when using textbooks in math classrooms and highlights how eText features can support accessibility.
- **Takeaway:** While eTexts offer helpful tools like adjustable font size and text-to-speech, they aren't perfect—some functions can be flawed, and Braille alternatives, though effective, may not always be accessible or ideal for all students. Educators must be aware of these factors to better accommodate diverse learners.
- **Source:** Bouck, E. C., & Meyer, N. K. (2012). *eText, Mathematics, and Students with Visual Impairments: What Teachers Need to Know*. https://doi-org.proxy2.library.illinois.edu/10.1177/004005991204500206

Collaborating with an International Partner Institution to Mitigate the Cost of Course Textbooks.

• **Overview:** This study explores the impact of textbook affordability on international students and examines the outcomes of a collaboration aimed at providing free or low-cost course materials.

• **Takeaway:** Affordable textbooks—especially eTexts—can significantly improve course satisfaction and learning outcomes for international students, who often weigh cost

heavily when choosing between digital and physical formats.
• *Source*: Hollister, C. V. (2020). *Collaborating with an International Partner Institution to Mitigate the Cost of Course Textbooks*. https://doi.org/10.1080/19322909.2020.1781019

Additional Recommendations for Faculty

1. **Explore OER Repositories**: Platforms such as OpenStax and MERLOT offer free, high-quality resources across various disciplines.
2. **Leverage Institutional Support**: Collaborate with campus libraries and accessibility services to enhance resource availability.
3. **Encourage Student Feedback**: Conduct surveys or hold discussions to understand students' specific needs and preferences regarding textbook formats.

By utilizing these resources, faculty can make informed decisions that align with the diverse needs of their students, ensuring equitable access to learning materials.

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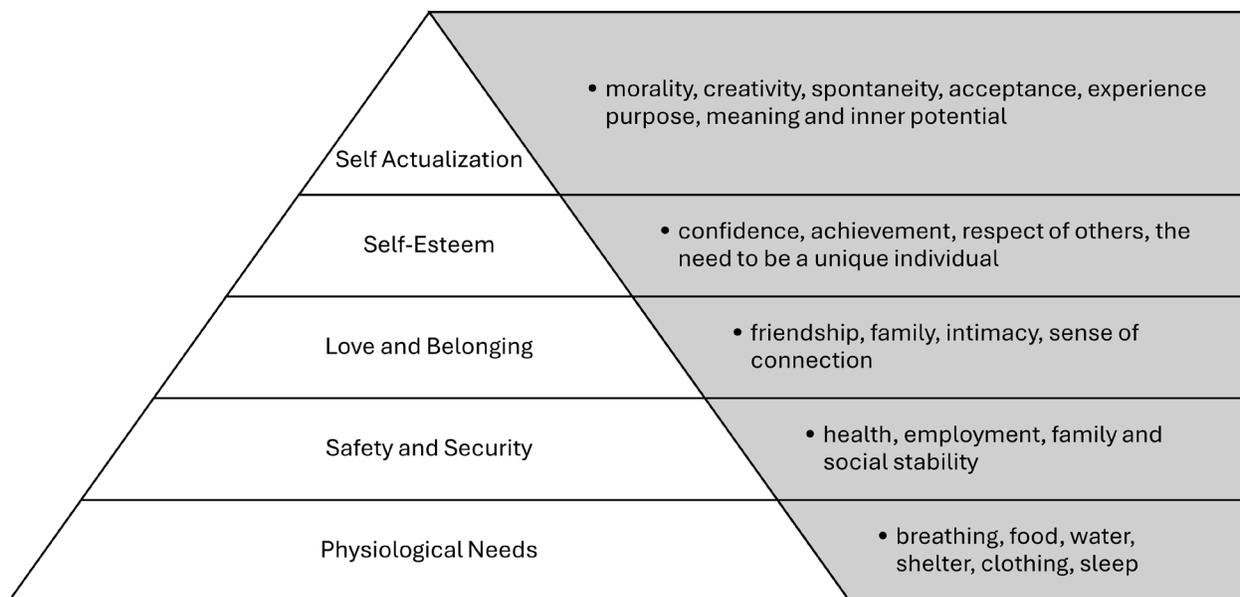
Chapter 5: Meeting Basic Needs to Foster Academic Success

Wei-Ting Yang, Alysha Haverkos, Sheza Shaikh

Meeting students' basic needs is a cornerstone of academic success at universities across the world. However, many college students face significant challenges in securing essentials such as food and housing, which can lead to heightened anxiety and lower academic performance. At the University of Illinois Urbana-Champaign, these challenges mirror national trends, underscoring the urgency of addressing basic needs on campus.

This chapter uses Maslow's hierarchy of needs—a psychological framework that outlines a pyramid of human necessities leading to self-actualization—as a lens to examine how unmet basic needs impact students' academic and personal development. Maslow's theory highlights the importance of fulfilling fundamental needs, such as physiological and safety requirements, before higher-level aspirations like cognitive growth and self-fulfillment can be realized.

Image inspired by Maslow's Hierarchy of Needs
(https://www.scientificamerican.com/blog/beautiful-minds/who-created-maslows-iconic-pyramid)

We explore the intersection of food insecurity and academic performance, demonstrating how barriers to meeting basic needs disproportionately affect underrepresented students. By applying Maslow's model, we aim to provide actionable strategies for educators to support students holistically, creating learning environments that promote equity and well-being.

Literature Review: Applying Maslow's Hierarchy to Education

Maslow's hierarchy of needs, first introduced in 1943, provides a comprehensive framework for understanding student motivation and development. By examining the interplay between basic, psychological, and self-fulfillment needs in education, this theory offers valuable insights into creating supportive learning environments that address students' diverse challenges.

The Role of Basic Needs in Academic Success

At the foundation of Maslow's pyramid are basic physiological and safety needs, such as proper nutrition, housing, and personal security. When these needs are unmet, students face significant barriers to learning. Studies reveal that food insecurity is four times more prevalent among college students than the national average (Loofbourrow & Scherr, 2023). Additionally, low-income and first-generation students are disproportionately affected, often lacking the resources to meet their basic needs (Wolfson et al., 2024).

The impact of food insecurity on academic performance is well-documented. Students who experience hunger or malnutrition exhibit lower GPAs, as found in a study by Van Woerden et al. (2022), which reported a 0.25-point GPA gap between food-secure and food-insecure students. These findings underscore the urgent need for programs and policies that ensure equitable access to basic resources for all students.

Psychological Needs: Belonging and Engagement

Belonging and self-esteem, critical psychological needs in Maslow's hierarchy, significantly influence student engagement and emotional resilience. Students who feel disconnected from their peers or instructors are more likely to experience loneliness and disengagement, hindering their academic performance. Inclusive practices, such as fostering diverse peer networks and promoting cultural sensitivity in coursework, are essential for creating a sense of belonging.

Research from Chilean universities supports this idea, showing that addressing students' foundational psychological needs boosts intrinsic motivation and academic integration (Vergara-Morales & Del Valle, 2021). By prioritizing inclusive practices, educators can create environments where students feel valued and supported, ultimately improving their academic confidence.

Self-Fulfillment: Unlocking Potential Through Supportive Environments

At the apex of Maslow's hierarchy lies self-actualization, which represents achieving one's fullest potential. For students, this stage involves not only academic success but

also personal growth, creativity, and career preparation. However, the pathway to self-actualization is often obstructed by unmet basic and psychological needs.

Simulation-based learning approaches and mentorship programs have been shown to facilitate self-fulfillment by providing students with real-world applications of their learning and strong support systems (Frei-Landau & Levin, 2023). When students feel secure, connected, and empowered, they are more likely to excel academically and personally.
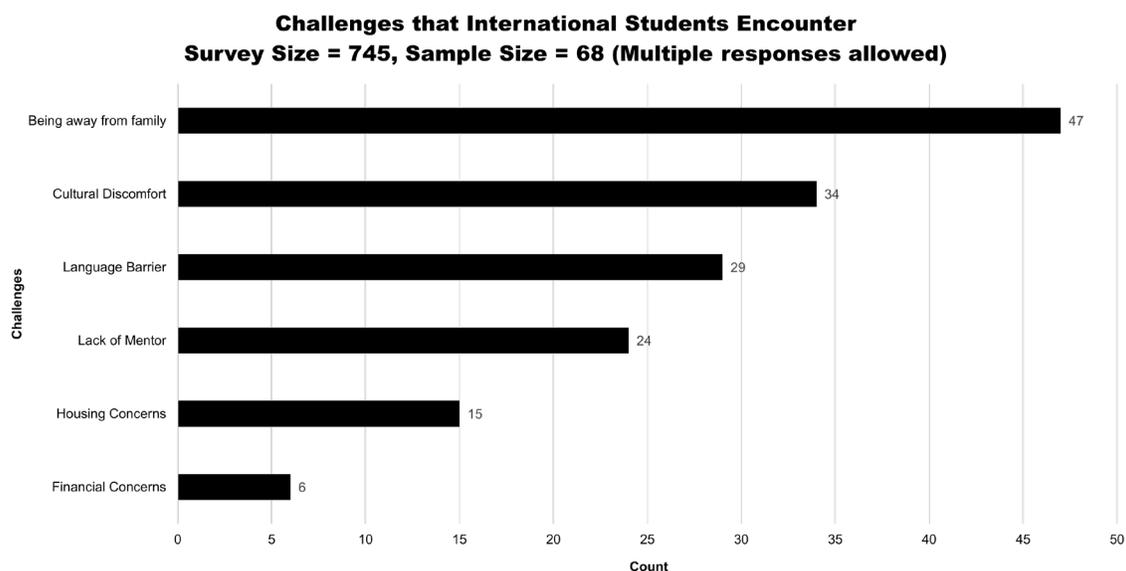
Conclusion: A Holistic Approach to Education

By applying Maslow's hierarchy of needs, educators can better understand the challenges faced by students and implement strategies to address them. From ensuring access to basic resources like food and housing to fostering inclusive classroom environments, meeting these needs is essential for promoting academic success and personal growth. This framework provides a roadmap for creating equitable and supportive educational systems that empower all students to thrive.

Survey Data and Analysis: Understanding Student Needs Through the Maslow Lens
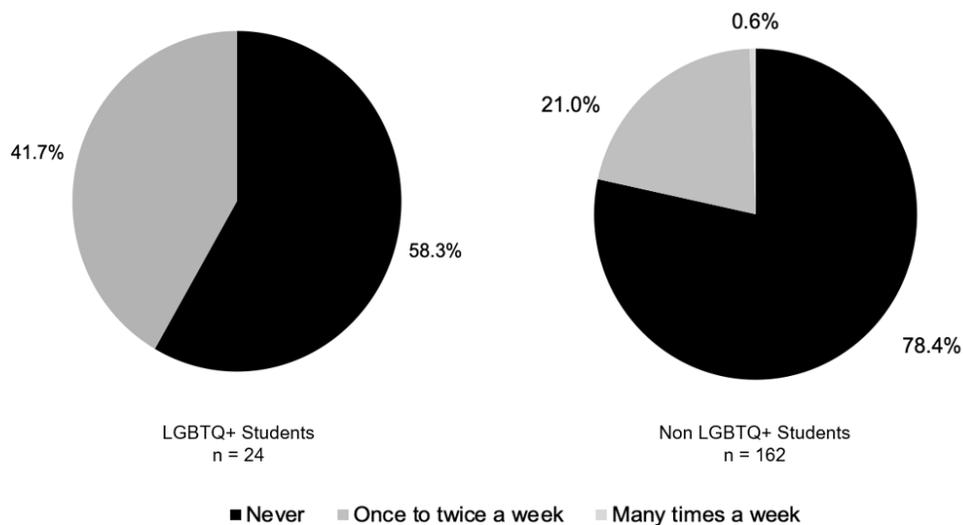
To investigate how challenges impact underrepresented students at the University of Illinois Urbana-Champaign, a survey was conducted in Fall 2023 among 700+ undergraduate students. Demographics highlighted in our data included international students, LGBTQ+ students, and students with self-identified disabilities. The survey explored food security, classroom attendance, and other barriers, providing valuable insights into students' basic, psychological, and self-fulfillment needs.

Challenges that International Students Encounter
Survey Size = 745, Sample Size = 68 (Multiple responses allowed)

Challenges	Count
Being away from family	47
Cultural Discomfort	34
Language Barrier	29
Lack of Mentor	24
Housing Concerns	15
Financial Concerns	6

While the international students in Toni Gist's FSHN courses represent a wide range of majors across campus, many shared common experiences and challenges. Most report being financially secure and are highly engaged in topics related to food and nutrition. However, their primary concerns reflect deeper human needs. **Being away from home** (69.1%), **cultural discomfort** (50%), and **language barriers** (42.6%) are the most frequently cited challenges, along with a **lack of mentors** (35.3%) and **housing concerns** (22.1%). These align closely with **Maslow's Hierarchy of Needs**, particularly the foundational **needs for safety, belonging, and connection**. While financial security (a physiological need) may be met, many students are still navigating unmet **social and emotional needs**, such as finding community, cultural acceptance, and meaningful support. Understanding these layers can guide faculty in creating learning environments that feel not only academically enriching but also personally supportive and inclusive.
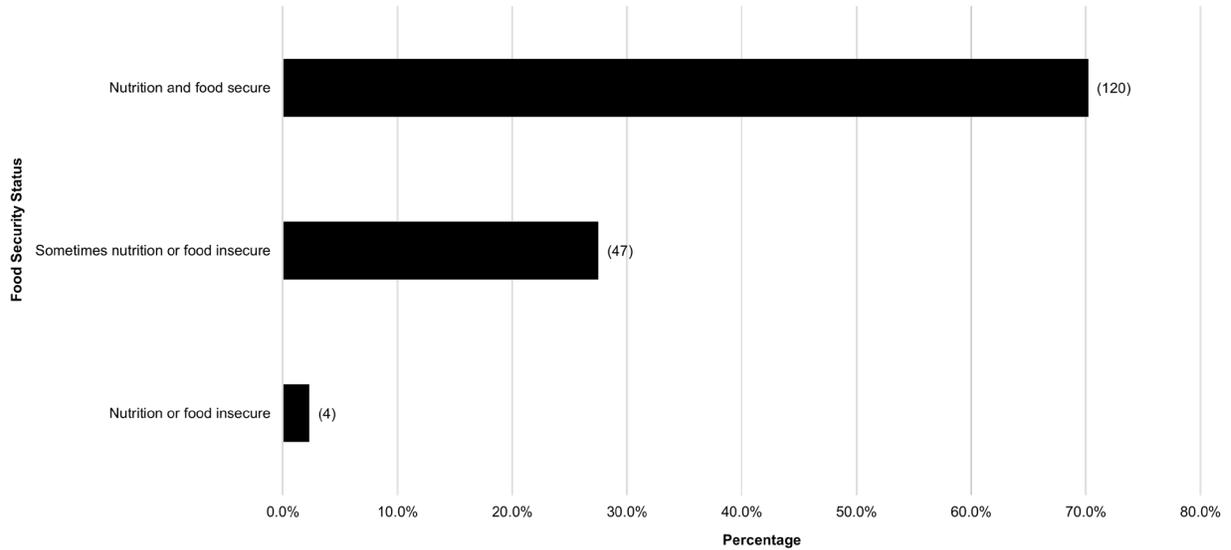
LGBTQ+ vs. non LGBTQ+ Students Missing or Being Late to Classes due to Food Insecurity
Sample size = 186, Chi-Squared Test: p-value = 0.000104

LGBTQ+ Students
n = 24

41.7%

58.3%

Non LGBTQ+ Students
n = 162

0.6%

21.0%

78.4%

■ Never   ■ Once to twice a week   ■ Many times a week

The data collected reveals a stark disparity in food insecurity's impact on class attendance between LGBTQ+ and non-LGBTQ+ students. While 78.4% of non-LGBTQ+ students report **never missing class due to food insecurity**, only 58.3% of LGBTQ+ students report the same—meaning over 40% of LGBTQ+ students are **missing or arriving late to class at least once a week** due to lack of food security. Viewed through **Maslow's Hierarchy of Needs**, this highlights a failure to meet students' **basic physiological needs**—a foundational layer essential for learning, motivation, and self-actualization. For LGBTQ+ students, this gap poses a barrier to academic success and well-being, emphasizing the urgent need for targeted food access support within inclusive educational environments.
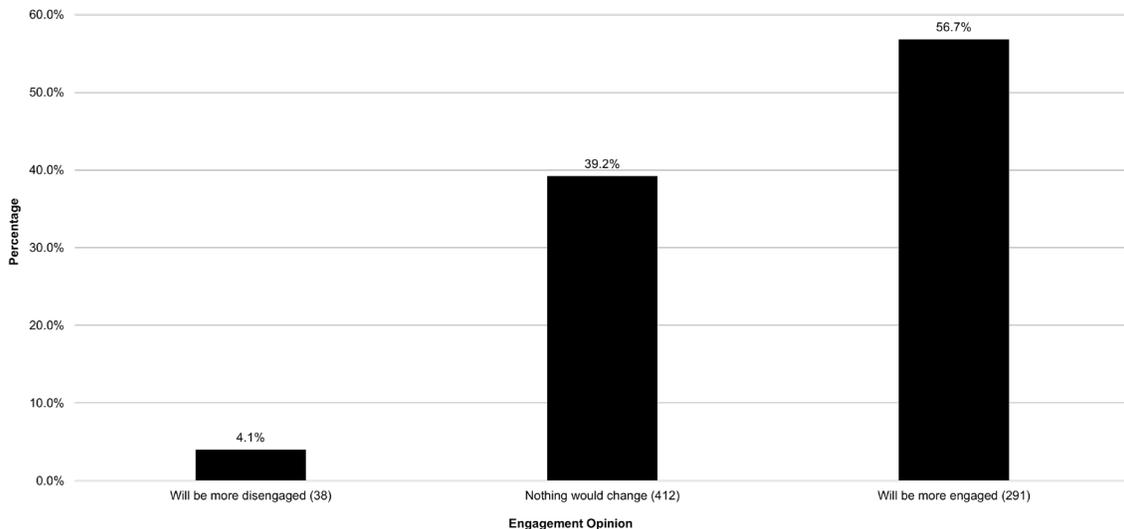
Students who Self-Identified with Disability and their Food Security Status
Sample Size = 171, Chi-Squared Test: p-value = 0.104

Food Security Status

- Nutrition and food secure — (120)
- Sometimes nutrition or food insecure — (47)
- Nutrition or food insecure — (4)

0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0%

Percentage

It was noted that 29**% of students with disabilities experience food/nutrition insecurity**, compared to **approximately 25% of University of Illinois students surveyed reporting concerns related to nutrition security**. This demonstrates a small trend for those with disabilities to be experience a slight increase in nutrition insecurity. But, overall, it showcases that about one in four students in our classes are struggling to meet their basic needs. For faculty, this highlights a pressing need for all: when basic needs aren't met, learning suffers. By including food resource links in your syllabus, offering flexible policies, and normalizing well-being conversations, you help create a more equitable classroom where all students—especially those at higher risk—can succeed.

Students' Opinion on Engagement Changes if Course Material is
More Inclusive or Culturally Sensitive
Sample Size = 741, Chi-Squared Test: p-value = 0.000129

Percentage

- Will be more disengaged (38) — 4.1%
- Nothing would change (412) — 39.2%
- Will be more engaged (291) — 56.7%

Engagement Opinion

The data revealed that a majority of students (56.7%) reported they would be more engaged if course materials were more culturally inclusive or sensitive. In contrast, only 4.1% stated they would feel more disengaged, while 39.2% indicated that it wouldn't affect their experience. This data sends a clear message: **inclusive content enhances engagement for many students, with very few perceiving any downside**. The concern that materials could be "too inclusive" is not supported by student responses. Instead, this is an opportunity—**faculty can confidently integrate diverse perspectives knowing it's likely to benefit classroom engagement without alienating students**.

Key Takeaways

1. **International Students**: Addressing cultural and emotional barriers is critical for fostering belonging and academic success.
2. **LGBTQ+ Students**: Inclusive and culturally sensitive course materials significantly enhance engagement and connection for all and can provide a voice for all students.
3. **Students with Disabilities**: Small disparities in food security, but overarching need for food resources for all highlight the need for targeted interventions to support all student populations.

By applying Maslow's hierarchy to these findings, educators and institutions can develop holistic strategies to create environments where all learners can thrive.

Student Story: Navigating Challenges as an LGBTQ+ Student

To better understand how identity and lived experiences intersect with academic success, we spoke with a sophomore student who identifies as part of the LGBTQ+ community. Their story provides a personal lens on how inclusive practices and access to resources can shape the college experience.

Barriers to Belonging

The student shared that their sense of belonging on campus was often challenged by a lack of visible representation and inclusive practices. "In some classes, I feel like I can't fully be myself," they explained. "The material sometimes feels outdated or excludes perspectives that reflect my identity." This lack of inclusivity, particularly in course materials, has made it harder for the student to engage fully in the classroom. The experience highlights the importance of incorporating diverse voices into academic content to create environments where students feel seen and valued.

Finding Support Through Campus Resources

Despite these challenges, the student expressed gratitude for the LGBTQ+ Resource Center and other campus organizations that provided a sense of community. "These

spaces have been lifesaving," they said. "They're where I can meet people who understand my experience and where I feel supported."

These support systems address both the belonging and esteem levels of Maslow's hierarchy, helping the student build confidence and resilience in the face of external stressors.

Recommendations for Faculty

When asked how faculty could better support LGBTQ+ students, the student emphasized the value of proactive inclusion. "Using inclusive language and bringing in diverse perspectives makes a huge difference," they said. "Even small things, like normalizing pronoun use, can make the classroom feel safer." They also recommended offering anonymous feedback opportunities, allowing students to voice concerns about classroom dynamics without fear of retaliation.

Key Takeaways from the Student's Experience

1. **Representation Matters**: Incorporating diverse perspectives in course content fosters engagement and belonging.
2. **Campus Resources Are Crucial**: LGBTQ+ students benefit significantly from dedicated spaces and community support.
3. **Proactive Faculty Practices**: Small actions, such as normalizing pronoun use and providing opportunities for feedback, can create more inclusive and welcoming classrooms.

This student's story underscores the need for intentional efforts by educators and institutions to support students' psychological needs, ensuring that all learners can thrive academically and personally.

Probing Questions for Faculty

To help educators reflect on how their teaching practices and course designs impact students' basic and psychological needs, the following questions are offered for consideration:

1. **Addressing Basic Needs**:
   o How can your course policies and materials support students facing challenges such as food insecurity or housing instability? Are there resources or referrals you could provide?
2. **Promoting Inclusivity**:
   o Are your course materials reflective of diverse identities and perspectives? How can you ensure that students from underrepresented backgrounds feel seen and valued in your classroom?
3. **Fostering Belonging**:

- o   What steps are you taking to create a welcoming environment where students feel comfortable expressing their authentic selves? Could practices such as pronoun normalization or anonymous feedback help?

4.   **Accommodating Diverse Needs**:
- o   How flexible are your course policies in addressing the unique challenges faced by students with disabilities or other responsibilities? Are you offering accommodations proactively?

5.   **Evaluating Engagement**:
- o   Have you observed disparities in engagement or performance among different student groups? How might your teaching practices address these gaps to ensure equity?

By engaging with these questions, faculty can identify opportunities to align their teaching with students' needs, creating supportive and inclusive learning environments that foster academic and personal growth.

Resources for Faculty

The following resources provide actionable insights and tools to help faculty support students in meeting their basic and psychological needs, fostering inclusive and equitable learning environments:

Campus Resources

- **Food Security Programs at U of I**: Helps students experiencing food insecurity, providing access to nutritious meals and connecting them with community resources. Faculty can refer students to these programs to help address foundational physiological needs.
- **Link**: https://publish.illinois.edu/nutrition-fshn120/nutrition-security-resources/
- **Gender & Sexuality Resource Center**: A safe space for LGBTQ+ students offering advocacy, counseling, and community-building activities. Faculty can collaborate with the center to incorporate inclusive practices into their teaching.
- **Link**: https://gsrc.illinois.edu/

ACT Research Report: *Meeting the Needs of Students from Historically Underserved Populations* (2022)

- **Overview:** This report utilizes Maslow's Hierarchy of Needs to explore how social and emotional learning (SEL) can address barriers faced by students from historically underserved populations, including those affected by poverty, trauma, and systemic inequities.
- **Takeaway:** By aligning SEL strategies with Maslow's framework, educators can more effectively support the holistic development of underserved students, fostering environments that promote equity and academic success.ACT

- *Link:* https://www.act.org/content/dam/act/unsecured/documents/2022/R2115-Meeting-the-Needs-of-Students-from-Historically-Underserved-Populations-2022-03.pdf

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Professional Development

Workshops on Inclusive Teaching: Offered by the university's Center for Innovation in Teaching and Learning (CITL), these sessions equip faculty with tools for fostering equity and inclusion in the classroom.
- *Link*: https://citl.illinois.edu/citl-101/teaching-learning/inclusive-teaching-practices

Trauma-Sensitive Schools Training Package (U.S. Department of Education)
- **Overview:** A free, research-backed toolkit for K–12 educators and administrators. It includes modules on understanding trauma, building trauma-sensitive classrooms, and leading schoolwide implementation
- **Takeaway:** Offers practical strategies and resources to create safe, supportive learning environments for all students.
- *Link***:** https://safesupportivelearning.ed.gov/trauma-sensitive-schools-training-package

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Online Resources

- **Hope Center for College, Community, and Justice**: Provides research, tools, and policy recommendations to address food and housing insecurity among college students. https://hope.temple.edu/

- **Active Minds**: A national nonprofit organization focused on student mental health. Faculty can access resources and strategies to support students' emotional well-being. https://www.activeminds.org

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Chapter 6: Understanding Student Stressors Is Key to Enhancing Classroom Experiences

Joshua Ryan Fajardo, Sinan Anwar, Valerie Weinshenker

Understanding mental health in college students—particularly as it relates to their academic settings—can offer valuable insights for educators and researchers aiming to support student well-being. With mental health and student wellness taking a prominent role in education over the past decade, it has become essential to incorporate empathy-driven curricula that address students' needs. This chapter focuses on the stressors impacting students and their effects on academic performance, with the goal of identifying strategies to improve learning outcomes and reduce perceived classroom stress.

Students today are increasingly aware of their mental health and that of their peers, making it crucial to design classroom requirements that consider their well-being. By examining assessment types, cultural differences, economic strains, and reported levels of student stress, educators can gain a clearer picture of how their preferred teaching methods affect students. Moreover, addressing these factors can lead to solutions that alleviate stress and foster more meaningful learning experiences.

Stress, irritability, fear, and anxiety can have profound effects on students, leading to diminished classroom participation, impaired learning, and lower exam performance. Survey findings suggest that students experiencing mental health challenges report higher levels of classroom stress and perceive a decline in academic performance. While the data does not establish causation due to limitations in sampling, it offers valuable correlations for further investigation.

This chapter delves into the stressors linked to various exam types, examining their relationship with reported anxiety and academic performance. By analyzing student survey data, we aim to provide educators with actionable insights into the preferences and challenges of their students. The discussion also explores the role of personalized learning and technology in mitigating these stressors, ultimately supporting more inclusive and effective educational practices.

Literature Review: The Impact of Stress on Academic Performance

The relationship between stress and academic performance has been widely studied, revealing the significant challenges students face due to various stressors. These include socioeconomic factors, social and cultural influences, academic demands, sleep quality, mental health issues, and testing-related anxiety. The following subsections highlight key findings from the literature and provide context for the survey data analyzed in this study.

Academic Strains

Academic strain is a pervasive stressor among college students. Research indicates that heightened stress often leads to solitary activities, such as extended study sessions in libraries, with less time spent on social or leisure activities (DaSilva et al., 2019). These behaviors can exacerbate feelings of isolation and negatively impact overall well-being. Additionally, academic stress has been linked to burnout and high dropout rates among students across various countries, including the United States, Portugal, and Finland (Marôco et al., 2020). Burnout, characterized by emotional exhaustion and diminished motivation, significantly predicts increased dropout intentions and poor academic performance. This underscores the need for strategies that reduce academic strain and foster student engagement.

Environmental and Sociocultural Factors

Sociocultural networks play an essential role in helping students cope with academic stress. As Dr. Abdullah Alkhawaldeh and colleagues note, coping mechanisms are heavily influenced by factors such as geography, social groups, gender, and historical context (Alkhawaldeh et al., 2023). For example, socioeconomic status has a notable impact on academic anxiety. A study found that students with lower socioeconomic backgrounds experience higher levels of anticipatory distress before exams, particularly those whose mothers had lower levels of education (Rahal et al., 2023). These findings highlight the importance of addressing sociocultural and economic disparities to support student mental health.

Anxiety and Alternative Testing Methods

Test anxiety, a common academic stressor, is closely linked to overall academic stress. Research shows a significant positive correlation between these two variables, with students reporting higher stress levels also experiencing greater test anxiety (Zhang et al., 2023). Traditional testing formats, such as timed exams, often exacerbate this anxiety. Alternative assessment methods, including game-based evaluations, have shown promise in reducing test-related stress. For instance, a study involving biomedical engineering students revealed that 89% of participants felt less intimidated by game-based assessments compared to traditional exams (Bonefont et al., 2022). These findings suggest that alternative methods not only improve mental health outcomes but also enhance academic performance.
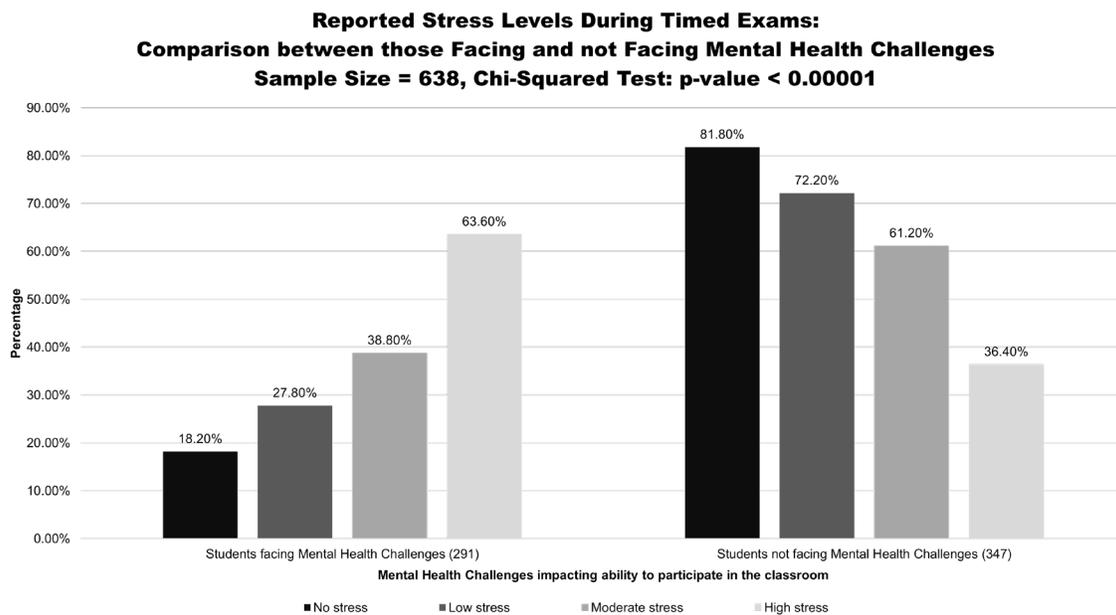
Survey Data and Analysis: Insights into Student Stress and Academic Performance

To explore the relationship between stressors and perceived academic performance, survey data was collected from Food Science and Human Nutrition (FSHN) students at the University of Illinois Urbana-Champaign in Fall 2023 and Fall 2024. These general

education courses attract students from diverse majors and backgrounds, offering a broad perspective on stress in academic settings.

Of the 1,000 students surveyed, over 600 students responded. Participants completed a qualitative questionnaire featuring multiple-choice and open-ended questions. Topics included stress levels related to various testing methods, socioeconomic status, reported disabilities, and mental health conditions. While this sample may not represent the entire college population, the findings highlight key trends affecting student stress and academic performance.

Reported Stress Levels During Timed Exams:
Comparison between those Facing and not Facing Mental Health Challenges
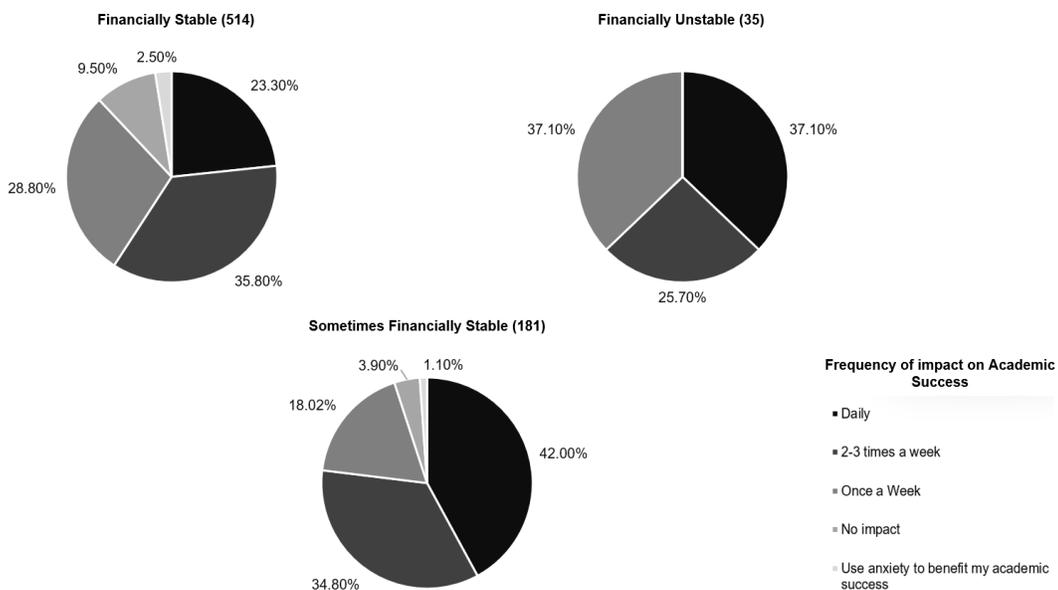**Sample Size = 638, Chi-Squared Test: p-value < 0.00001**

It is important to note that **nearly 9 out of 10 students** report feeling high or moderate stress during timed exams. Additionally, data highlights a strong correlation between **stress during timed exams** and reported mental health challenges. Of students who reported **no stress during timed exams**, **81.8% did not face mental health challenges**. In contrast, among those who reported **high stress**, **63.6% were experiencing mental health challenges**. These findings suggest that students with mental health challenges are more likely to feel heightened stress under timed conditions. Faculty can support students by offering flexible testing options, allowing extra time when possible, and normalizing accommodations. Reducing high-pressure exam formats can foster equity and improve outcomes for students with mental health concerns.

**International Students' Opinion on Worry, Stress, or Anxiety
Impacting Academic Success
Survey Size = 762, International Students Size = 66
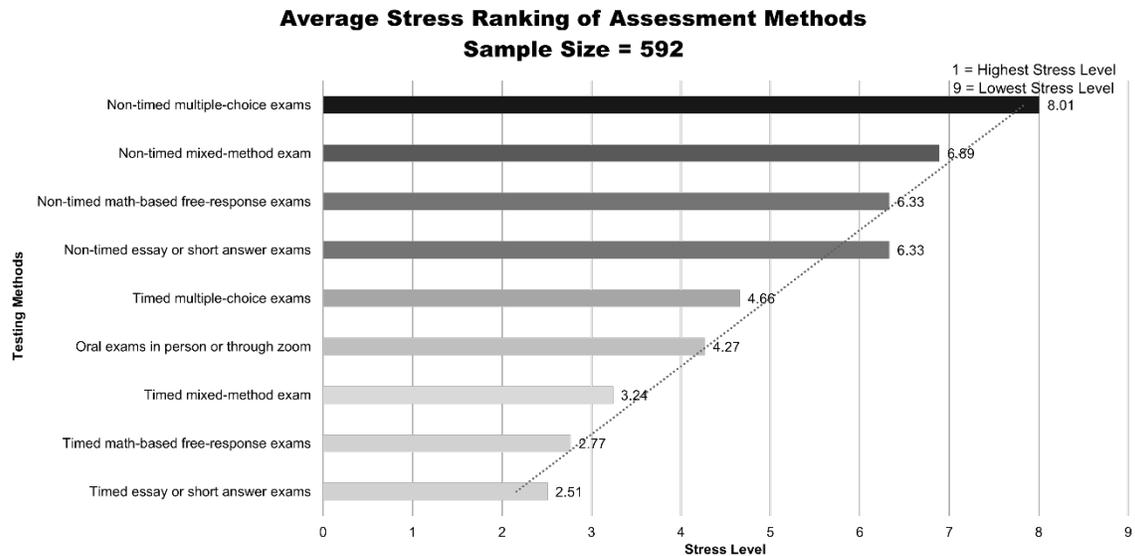Chi-Squared Test : p-value = 0.0298**
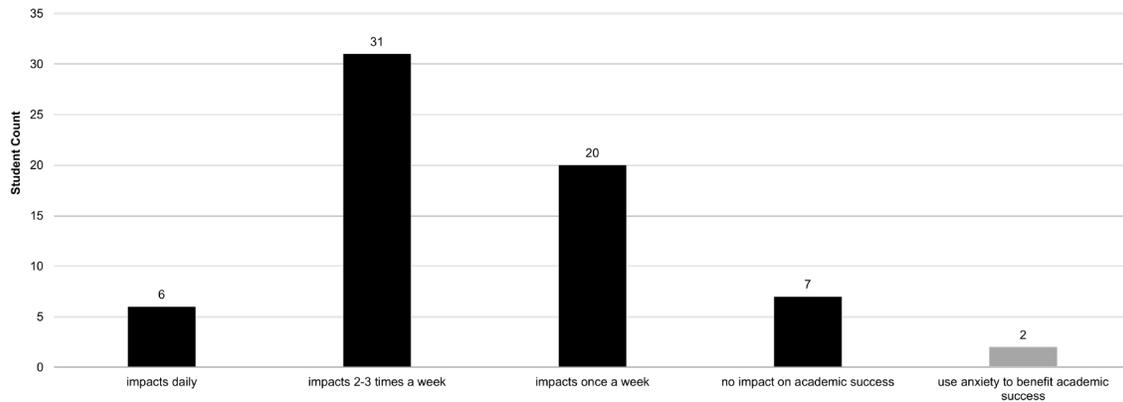
The data revealed that **nearly 88% of international students** reported that **worry, stress, or anxiety impact their academic success at least once a week**. Of the 66 respondents, 47% said it affects them **2–3 times per week**, 30% **once a week**, and 9% **daily**. Only 10.6% shared that it does not impact them, and a small number (3%) said they use anxiety to their benefit. These findings highlight a clear need for faculty to acknowledge and address academic stress, especially among international students, by offering **flexibility, access to support services**, and a **welcoming, culturally aware classroom environment**.

**Perceived Effects of Worry, Stress, and Anxiety on Academic Success in
Students with Different Financial Stability
Sample Size = 730, Chi-Squared Test : p-value = 0.0000191**

Financially Stable (514)

Financially Unstable (35)

Sometimes Financially Stable (181)

Frequency of impact on Academic Success
- Daily
- 2-3 times a week
- Once a Week
- No impact
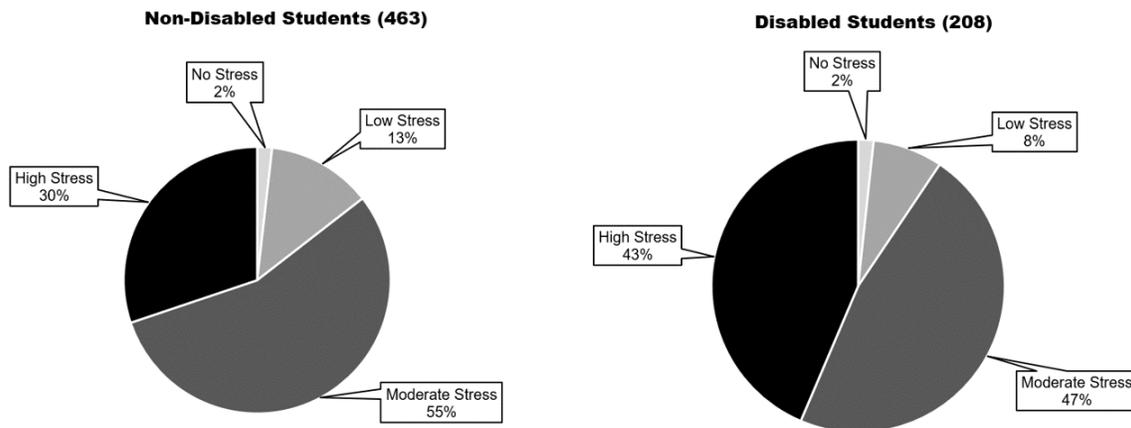- Use anxiety to benefit my academic success

It was interesting to see a clear link between financial stability and stress-related academic challenges. Among financially unstable students, **100% report that stress**

impacts their academic success at least weekly, compared to 59.1% of financially stable peers. These findings are statistically significant (p < 0.001). Faculty can support students by **embedding mental health and financial resources into syllabi**, offering **flexible deadlines**, and being mindful of how **course costs or high-stakes assessments** might disproportionately burden financially insecure students. Cultivating a compassionate and resource-aware classroom can ease barriers for these students.

Average Stress Ranking of Assessment Methods
Sample Size = 592

1 = Highest Stress Level
9 = Lowest Stress Level

Testing Methods	Stress Level
Non-timed multiple-choice exams	8.01
Non-timed mixed-method exam	6.89
Non-timed math-based free-response exams	6.33
Non-timed essay or short answer exams	6.33
Timed multiple-choice exams	4.66
Oral exams in person or through zoom	4.27
Timed mixed-method exam	3.24
Timed math-based free-response exams	2.77
Timed essay or short answer exams	2.51

This graph ranks assessments by average student-reported stress (1 = highest, 9 = lowest), with timed written assessments shown in the lightest bars and non-timed assessments in darker bars. **Timed assessments are associated with the most stress**, while **non-timed assessments** are associated with less perceived stress. To reduce stress and level the learning field for students with documented anxiety, faculty can **limit the use of high-stakes timed exams**, **offer take-home or untimed alternatives**, and **clearly communicate expectations**. Incorporating **low-stress, scaffolded assignments** like homework, reflections, or project-based work can still meet learning goals while supporting student well-being and academic confidence.

Perceived Stress Level During Timed Exams Based on Disability
Sample Size = 638, p-value = 0.00952

Non-Disabled Students (463)

No Stress 2%
Low Stress 13%
High Stress 30%
Moderate Stress 55%

Disabled Students (208)

No Stress 2%
Low Stress 8%
High Stress 43%
Moderate Stress 47%

This graph compares perceived stress during timed exams between non-disabled (left) and disabled students (right). A significant difference (p = 0.00952) reveals that **43% of disabled students experience high stress**, compared to **30% of non-disabled students**. Disabled students also report lower levels of low stress (8% vs. 13%). These findings highlight how timed exams disproportionately impact students with disabilities. Actionable steps for faculty include ensuring accommodation processes are clear and supportive, and integrate **Universal Design for Learning (UDL)** to create more inclusive learning environments for all students while reflecting if a non-timed alternative would achieve the same learning objectives and goals of the course.

Key Takeaways

- **Stress and Academic Performance**: Timed exams are a significant source of stress, negatively affecting academic outcomes.
- **Cultural and Financial Factors**: Economic instability and nuanced cultural differences influence stress levels in diverse ways.
- **Disabilities and Anxiety**: Students with disabilities and anxiety disorders face unique challenges, underscoring the importance of flexible assessment methods and targeted support.

Student's Story: A South Asian Student's Perspective on Academic Stress

To provide a personal lens on academic stress and its impact, a South Asian student from the University of Illinois Urbana-Champaign, with a projected graduation year of 2026, shared their experiences. Their reflections shed light on the realities of stress and assessments in higher education.

Limited Exposure to Alternative Assessments

When asked about their experiences with alternative exams or assessments, the student noted, "No. Most of the courses I've taken rely mainly on in-person written exams or multiple choice on the computer. I've used resources like Kahoot and Quizlet in preparation for exams, but it hasn't been an actual exam in my class." This highlights the limited adoption of alternative testing methods across their academic journey. While they had engaged with innovative tools for exam preparation, these methods had not yet been integrated into formal assessments. The student's feedback underscores the potential for educators to explore and implement diverse assessment strategies to enrich the testing experience.

Use of Campus Resources for Stress Management

When reflecting on stress alleviation strategies, the student shared,
"Yes, I've used campus resources to alleviate stress. Some of these include talking to my advisors for advice and joining RSOs to meet new people and form friend groups." The student found support in campus-provided resources, including academic advising and social opportunities through Registered Student Organizations (RSOs). These interactions helped them navigate stressors and build a supportive network. However, they also acknowledged that additional resources could be made available, particularly in the realm of mental health and well-being.

Recommendations for Future Educational Practices

The student expressed a desire for systemic changes in addressing student well-being, stating, "I hope there are mental health checks throughout the semester to see where everyone is and how they feel about the exam. This is especially important for people entering a new curriculum as they adjust to a new style of teaching and studying that they've never done before." Their recommendation reflects the need for educators to prioritize ongoing mental health assessments and adapt curricula to accommodate the diverse needs of students. Incorporating periodic well-being checks and alternative assessment methods could enhance the academic experience and foster a more empathetic learning environment.

Key Takeaways from the Student's Story

This student's narrative highlights several important themes:
- **Lack of Alternative Assessments**: Current testing methods rely heavily on traditional formats, limiting opportunities for innovative approaches.
- **Value of Campus Resources**: Access to academic and social support systems is crucial in mitigating stress.
- **Need for Well-Being Checks**: Proactive mental health evaluations and curriculum adjustments can support students transitioning to new educational settings.

This story, while not representative of all students, offers a meaningful glimpse into the intersection of stress, mental health, and academic success.

Probing Questions for Faculty

To foster thoughtful reflection and actionable improvements in addressing student stress, educators can consider the following questions:

1. **Assessing Student Stress**:
   - Have you formally or informally asked your students about their stress levels or sources of stress? If so, was the feedback collected anonymously? If not, what other tools have you used to gauge student well-being?
2. **Workload Trends**:
   - How have students responded to workloads throughout the semester? Have you observed trends in their engagement or stress levels, particularly during midterms and finals?
3. **Resource Accessibility**:
   - What resources have you provided to help reduce student stress? Are these resources easily accessible to all students, including those with disabilities or financial constraints?
4. **Inclusive Assessment Methods**:
   - How can your current assessment methods be adapted to reduce stress for students with disabilities or mental health challenges? Could alternative formats be implemented in future semesters to foster inclusivity?
5. **Enhancing Student Well-Being**:
   - Have you considered integrating mental health checks or stress management initiatives into your course design? How might these measures impact the academic and emotional well-being of your students?

These questions encourage educators to evaluate their teaching practices through the lens of student well-being, promoting a more empathetic and effective classroom environment.

Resources for Faculty

The following resources provide valuable tools and strategies to help educators address student stress and foster a supportive academic environment.

McKinley Health Center: Stress Management Resources

- **Overview**: Offers students practical methods to manage stress, including counseling, stress-reduction techniques, and resources to address external factors such as sleep deprivation and anxiety.
- **Takeaway**: Educators can guide students toward these services to support their mental health both inside and outside the classroom.
- *Link*: https://mckinley.illinois.edu/stress-management

University of Illinois Counseling Center

- **Overview**: Provides free individual and group counseling, workshops, and outreach programs to help students manage stress and other challenges in daily life.
- **Takeaway**: Faculty can encourage students to utilize these comprehensive resources to navigate academic and personal stressors effectively.
- *Link*: https://counselingcenter.illinois.edu/

InFocus Workshop – Student Affairs at U of I

- **Overview**: A four-week program designed specifically for students with ADHD, offering strategies for managing workloads, setting goals, improving time management, and practicing self-care.
- **Takeaway**: This resource is particularly helpful for students who need tailored approaches to manage academic stress and workloads.
- *Link*: https://counselingcenter.illinois.edu/workshops/focus-workshops

Student Success Toolkit from Exploratory Studies at U of I

- **Overview**: An online resource offering strategies for note-taking, test preparation, and effective communication. These toolkits are designed to help students enhance their academic skills and confidence.
- **Takeaway**: Faculty can integrate these resources into their courses to empower students with actionable strategies for success.
- *Link*: https://explore.illinois.edu/toolkit

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Chapter 7: Recognizing and Addressing Barriers to AI ChatBot Adoption

Melissa Mueller, Nicolas Bless, Shenhua Zhang

While innovative tools such as AI-powered ChatBots hold significant promise for enhancing classroom learning, barriers often deter students from fully utilizing these resources. Personalized course ChatBots, designed to complement traditional instructor interactions, are not always embraced by students, underscoring the need to understand and address these challenges.

To better grasp the factors that influence ChatBot adoption, we analyzed survey data and reviewed prior research on barriers to resource utilization. Understanding these obstacles is essential for making learning objectives accessible to all students. Additionally, examining how students interact with and perceive various educational resources, including ChatBots, provides a more comprehensive understanding of their needs. Since each student's experience is unique, addressing diverse preferences and potential barriers is vital to fostering effective learning outcomes.

As AI ChatBots become increasingly prevalent in education, identifying and addressing obstacles from the student perspective is critical. Rather than replacing traditional learning supports, ChatBots must be designed to complement and enhance them, closing gaps in accessibility and equity. For AI tools to be effective, their foundation must prioritize student success over mere technological advancement, ensuring they meet diverse learning needs in meaningful ways.

Literature Review: Barriers to Classroom AI ChatBot Adoption

The adoption of AI ChatBots in the classroom presents unique challenges that must be addressed to ensure equitable access for all students. These barriers often reflect students' diverse backgrounds, learning styles, and personal circumstances. By understanding these obstacles, educators can create more inclusive and effective ChatBot tools.

English as a Second Language

Many classes, including those at the University of Illinois, are designed primarily for native English speakers. This creates significant challenges for students whose first language is not English, as resources and tools may not adequately support their needs. This issue is particularly evident in online learning environments, such as Massive Open Online Courses (MOOCs), which became increasingly popular during the COVID-19 pandemic. Despite their flexibility, these platforms often cater to native English speakers, leaving non-native speakers at a disadvantage.

To make ChatBots more accessible, integrating multimodal features such as audio, video, and graphical interfaces is essential. These non-textual interactions help bridge language gaps and support diverse learning styles (Han et al., 2023). Additionally, tailoring a ChatBot's conversational style to align with the cultural and linguistic contexts of its users can significantly improve mutual understanding and user perception. Given the increasing enrollment of non-native English speakers in MOOCs, special attention must be paid to designing ChatBots that address their unique needs.

Extraversion and Personality

Personality traits, such as extraversion, can influence how students interact with educational tools, including ChatBots. Extroverts are often characterized as assertive and sociable, preferring in-person interactions and resources that facilitate human connection. In contrast, introverts may feel more comfortable using AI tools, which offer anonymity and a reduced need for direct interaction.
Research suggests that extroverted students may underutilize ChatBots because these tools lack the interpersonal dynamics they value. To address this, ChatBots must incorporate human-like features that engage extroverted learners while maintaining the accessibility and privacy that benefit introverted users (Tian & Ou, 2023). Recognizing the role of personality in learning behaviors allows educators to create tools that resonate with a broader range of students, fostering motivation and engagement.

Ethical and Moral Concerns

The rapid integration of AI into education has sparked concerns about authenticity and ethical use. Some students experience "AI guilt," a sense of unease or dishonesty when relying on AI tools for academic tasks. This guilt often stems from fears of undermining their learning or perceptions of academic integrity (Chan, 2024).
These concerns, while valid, are less pronounced in course-specific AI tools like AristAI, which are sanctioned by instructors and designed to complement the curriculum. By framing AI tools as supplementary resources rather than replacements for traditional learning methods, educators can alleviate students' apprehensions and promote ethical AI use.
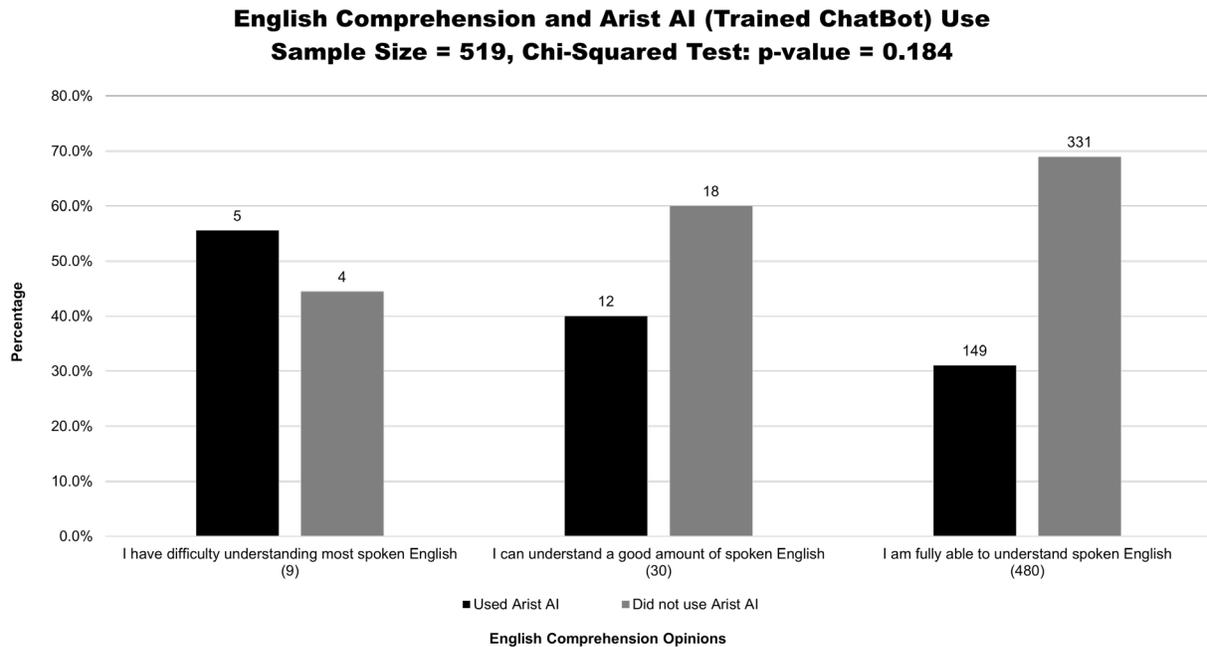
Trust in AI

Trust is a pivotal factor in students' willingness to use AI tools. Misinformation and lack of transparency in AI platforms can erode confidence, discouraging students from engaging with these resources. To build trust, ChatBots must prioritize fairness, accountability, and transparency (FAT) in their design (McKnight et al., 2010). Familiarity also plays a critical role; students are more likely to trust AI tools when they have prior positive experiences with similar technologies. Incorporating human-centric

design principles and ensuring the reliability of ChatBot responses can enhance user trust and, by extension, their adoption in educational settings.
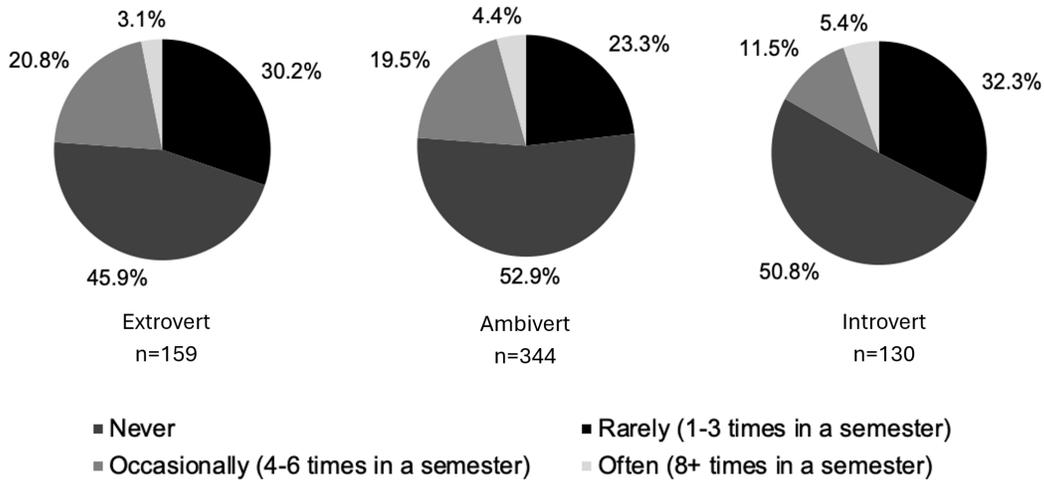
Survey Data and Analysis: Understanding ChatBot Adoption Barriers

This section analyzes survey data from 500+ students in Fall 2024 to uncover the factors influencing student use of AI ChatBots, including language proficiency, personality traits, ethical concerns, and trust. The findings provide a detailed view of students' perceptions and interactions with course-specific tools like a trained ChatBot like AristAI.

English Comprehension and Arist AI (Trained ChatBot) Use
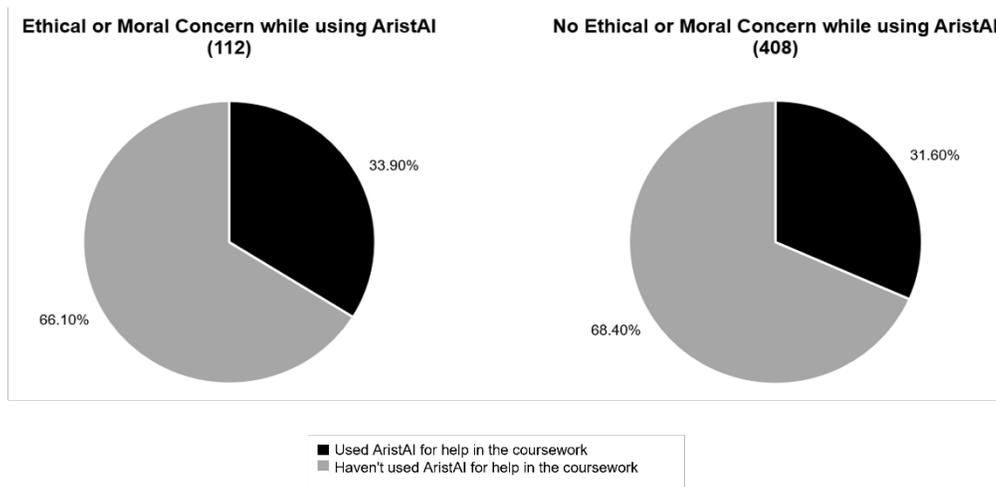**Sample Size = 519, Chi-Squared Test: p-value = 0.184**

While the numbers representing students who struggle with spoken English, this chart reveals a meaningful trend: **10% of students who struggle with spoken English used AristAI**, compared to only **6% of those who fully understand spoken English**. Although preliminary, this suggests that tools like AristAI may offer valuable support to multilingual learners by providing clarity, repetition, and accessible content review. **There's a story here worth exploring further.** Faculty should consider the potential of trained ChatBots to reduce barriers and support language equity in the classroom. More research is needed, but these early patterns highlight the importance of inclusive tools in a diverse academic environment.

Students' Personality Type vs. Frequency Reaching Out to Instructor/TA for Help
**Sample Size = 633, Chi-Squared Test : p-value = 0.137**

3.1%
20.8%
30.2%
45.9%
Extrovert
n=159

4.4%
23.3%
19.5%
52.9%
Ambivert
n=344

5.4%
11.5%
32.3%
50.8%
Introvert
n=130

■ Never
■ Occasionally (4-6 times in a semester)
■ Rarely (1-3 times in a semester)
▫ Often (8+ times in a semester)

Although self-identified personality type is **not significantly correlated** with how often students reach out to instructors or TAs (p = 0.137), a **notable trend** emerges. About **24% of extroverts and ambiverts** seek help **4+ times per semester**, while only **15.9% of introverts** do the same. This suggests that introverted students may face barriers in help-seeking behaviors. For faculty, this highlights the value of offering **alternative support options**—such as discussion boards, anonymous Q&A, or a **trained ChatBot**—to ensure all students, regardless of personality type, can access the help they need in a way that feels comfortable and accessible.

Use and Ethics: Student Perspectives on AristAI (Trained ChatBot)
Sample Size = 520, Fisher's Exact Test : p-value = 0.649

Ethical or Moral Concern while using AristAI
(112)

33.90%
66.10%

No Ethical or Moral Concern while using AristAI
(408)

31.60%
68.40%

■ Used AristAI for help in the coursework
■ Haven't used AristAI for help in the coursework

The data shows that **most students—regardless of use—do not express ethical or moral concerns about AristAI**, suggesting that these concerns are **not a major driver of usage behavior**. However, it's still important to note that **112 out of 520 students (over 1 in 5)** reported some level of discomfort using a ChatBot for coursework. While the data suggests that these concerns **don't significantly impact whether a student uses the tool**, they **highlight a need for transparency, ethical framing, and optionality**. Faculty can support students by clearly outlining appropriate use, encouraging reflection, and providing alternative ways to access help.

Usage and Trust on Information generated by AristAI (Trained ChatBot)
Sample Size = 516, Chi-Squared Test : p-value < 0.00001
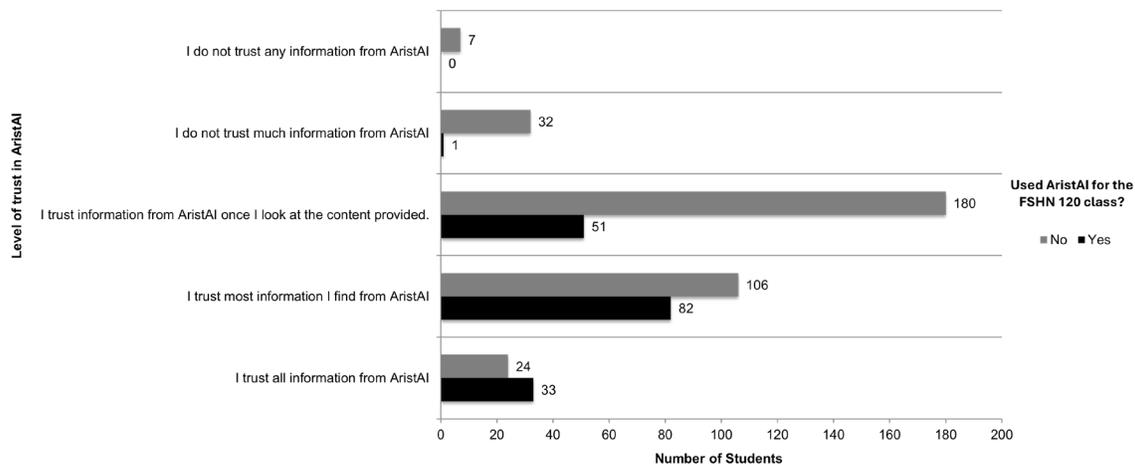
Only 7.8% of students expressed distrust in AristAI, however just one of those students reporting had used the tool. In contrast, **165 students (99.4%) who used AristAI** reported trust in its responses. This reinforces that meaningful engagement is associated with trust. Rather than viewing AI as a threat to academic integrity, this data suggests that with **clear guidance and transparent expectations**, trained ChatBots can serve as effective learning supports. When students understand how and when to use these tools, they are more likely to use them responsibly—expanding access to help without replacing critical thinking or instructor connection.

Key Insights:

1. **Language Proficiency**: English hearing comprehension has minimal influence on ChatBot adoption.
2. **Personality Traits**: Extraversion is not a significant factor in help-seeking behavior or ChatBot usage.
3. **Ethical Concerns**: Moral discomfort in a trained ChatBot is secondary to practical benefits like accessibility and efficiency.
4. **Trust**: Trust is the strongest predictor of ChatBot usage, emphasizing the importance of reliable and transparent design.

Student Story: Tim's Experience with AristAI

To gain a personal perspective on the barriers to using AI ChatBots, we spoke with Tim, an international student at the University of Illinois Urbana-Champaign. His insights reveal the factors that influence whether students choose to engage with AristAI.

Limited Use of AristAI

"I only used it twice," Tim explained, "because a majority of the course content I can find on the PowerPoint under weekly updates. The ChatBot is there, but I wouldn't really need to use it." Tim's response highlights a key issue: when course materials are readily accessible in other formats, students may perceive little added value in using the ChatBot. This suggests that ChatBots should complement existing resources by addressing gaps or providing unique functionality.

Relevance to Course Difficulty

Tim shared that he would find a ChatBot more beneficial in more challenging courses. "If the same feature could be applied to my organic chemistry class, that would be fairly beneficial. But in this class [Food Science and Nutrition], since the material is easier, I wouldn't really have to use the ChatBot." This emphasizes the importance of aligning ChatBot functionality with course complexity. ChatBots designed for more rigorous or concept-heavy subjects may see higher usage rates.

Concerns About Learning Authenticity

"We all know ChatGPT, and a lot of people use it when they need help with random problems. But one of the reasons some people, like me, don't want to use the AI feature is because it feels like we are depriving ourselves of the learning experience. When you throw it to the ChatBot, it's like, 'Okay, we got the answer,' but my brain doesn't really process the knowledge." Tim's concern reflects the broader issue of perceived learning authenticity with AI tools. Students may feel that relying on ChatBots diminishes their critical thinking and problem-solving skills, leading to a reluctance to use these tools.

Takeaways from Tim's Experience

Tim's story offers valuable insights into the barriers that may deter students from engaging with AI ChatBots:
1. **Perceived Redundancy**: When other course materials are sufficient, ChatBots may seem unnecessary to students.
2. **Alignment with Course Needs**: ChatBots should target subjects where their support can have the most impact.
3. **Learning Authenticity**: Addressing concerns about the impact of ChatBots on genuine learning experiences is crucial for increasing adoption.

While Tim noted that his status as a non-native English speaker did not hinder his use of AristAI, his broader reflections underscore the importance of designing ChatBots that add tangible value to the learning process.

Probing Questions for Faculty

To help educators reflect on their teaching practices and identify ways to improve the integration of AI ChatBots, consider the following questions:

1. **Supporting Diverse Student Needs**:
   o Are your current course resources effectively meeting the needs of students who are non-native English speakers or those facing other unique barriers?
2. **Enhancing the Learning Experience**:
   o Would a personalized ChatBot tailored to your course content enhance the learning environment for your students? If so, how could it complement existing resources?
3. **Supplementary Materials**:
   o Do you believe your course provides sufficient supplementary materials for student success? Could the addition of a ChatBot encourage greater engagement with these resources?
4. **Perspectives on AI in Education**:
   o What are your current thoughts on the appropriate role of AI ChatBots in education? How can they be ethically and effectively integrated into your teaching practices?
5. **Aligning with Student Needs**:
   o How might a ChatBot be designed to address specific challenges your students face, such as difficulty understanding complex topics or reluctance to seek help in person?

Resources for Faculty

For educators interested in addressing barriers to AI ChatBot adoption and enhancing their integration into the classroom, the following resources provide valuable insights.

Kuhail et al. (2023). Interacting with Educational ChatBots: A Systematic Review.

- *Overview: This systematic review analyzes 36 studies on educational ChatBots across various disciplines, including language learning, engineering, and general education. It examines the roles of ChatBots as teaching agents and peer collaborators, as well as their interaction styles, such as scripted and user-driven conversations.*
- *Takeaway: The review highlights the potential of ChatBots to enhance personalized and experiential learning. However, it also identifies challenges, including insufficient*

training datasets and the need for improved usability heuristics, suggesting areas for further research and development.

- *Link:* https://link.springer.com/article/10.1007/s10639-022-11177-3

Cheong-Trillo, N. (2023). Benefits and Barriers of ChatBot Use in Education.

- **Overview:** This chapter explores how educational ChatBots offer continuous availability, enabling students to access resources anytime for flexible, self-paced learning. It highlights their ability to streamline administrative tasks, cater to diverse learning styles, and support language learning through translation features.
- **Takeaway:** While ChatBots present numerous benefits, the chapter also warns of challenges such as the reproduction of social biases and the ethical implications of AI-based tools. It urges educators to implement equitable practices when integrating ChatBots into educational settings.
- *Link*: https://pressbooks.pub/techcurr2023/chapter/benefits-and-barriers-of-chaptbot-use-in-education

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Personality Traits of College Students Affect Their Learning Flow Experience

- **Overview:** This study examines how personality traits, particularly agreeableness, influence college students' ability to achieve a flow state during learning. The research highlights the role of intrinsic motivation as a mediator between personality traits and the learning flow experience.
- **Takeaway:** Understanding students' personality traits can help educators design personalized interventions to enhance engagement and optimize the learning environment, thereby facilitating better academic outcomes.
- *Link*: Tian, Y., & Ou, L. (2023). *How Do Personality Traits of College Students Affect Their Learning Flow Experience?* https://doi.org/10.1016/j.lmot.2023.101917

"AI Guilt" Among Students: Are You Guilty of Using AI in Your Homework?

- **Overview:** This study investigates the phenomenon of "AI guilt" among secondary school students—a moral discomfort experienced when using AI tools for academic tasks traditionally performed by humans. The research identifies three primary dimensions contributing to AI guilt: perceived laziness and authenticity, fear of judgment, and concerns about identity and self-efficacy.AI Models+3arXiv+3arXiv+3
- **Takeaway:** The findings suggest a need to redefine academic integrity guidelines and promote ethical awareness to encourage responsible AI use. The study emphasizes the importance of clear frameworks and educational support to help students navigate the complexities of integrating AI into learning.
- *Link*: Chan, C. K. Y. (2024). *Exploring the Factors of "AI Guilt" Among Students: Are You Guilty of Using AI in Your Homework?* https://arxiv.org/abs/2407.10777

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Chapter 8: What I Wish I Had Learned in College

Kelly Doro

College is a time for growth, learning, and development. Most U.S. undergraduates – 67.2% – are 24 or younger, with many transitioning directly from high school (Hanson, 2024). This transition, especially for those living on campus, marks the beginning of a significant new chapter in their lives.

While college offers academic knowledge and specialized skills, it also helps students develop critical soft skills like time management, communication, and collaboration. These experiences foster personal growth, independence, and the ability to balance responsibilities. As an academic professional, offering grace as students transition is important, acknowledging that real-world success often depends on common sense, organization, basic manners, as well as academic achievements.

To successfully prepare students for their future endeavors is to equip them with practical skills for the workforce while providing the guidance and resources they need to succeed academically and professionally. This chapter explores the essential elements of success in college and beyond, highlighting what truly supports students' growth and development.

Student Story: Post Graduation Reflection

I began my college career in August 2017 and graduated with a degree in Food Science and Human Nutrition from the University of Illinois in May 2021. Entering college directly from high school at age 17, I chose my major based on the classes I enjoyed in high school. Like many of my peers, I changed my major during my undergraduate years. Ultimately, I completed 138 credits, averaging 17 per semester, and graduated with a single major.

Currently, I am a Project Manager of Clinical Research trials focused on nutritional supplements, pharmaceuticals, and medical devices. While my job closely reflects my Food Science and Human Nutrition degree, this background is sometimes beneficial but not always necessary. The primary skills needed for my career are organization, effective communication, and practical judgment.

Core Principles for Effective Classroom Instruction

A successful career is built on technical expertise and the ability to communicate and collaborate effectively with others. From my experience, the least intelligent person in the room can still have the potential to make a tremendous impact. It is not just about knowledge but also how you use it to engage, inspire, and collaborate. Students must

develop hard and soft skills during their undergraduate careers to cultivate success post-graduation.

Whether instructing a course with 200 students or 20, the core principles of what works in the classroom remain consistent. Spoiler alert, none of these principles involve a professor lecturing for an hour while students take notes. While the delivery of information is the foundation of every class, more is needed to ensure successful information transfer, knowledge retention, or comprehensive understanding. The University of Michigan Center for Research on Learning and Teaching provides a comprehensive guideline on good practices in the classroom: engagement, collaboration and communication (TTECBYU, et al., n.d.).

Lecturing alone often creates a passive learning environment, limiting student engagement and reducing learning to executive functioning. However, combining lectures with active learning strategies fosters more profound understanding and student success. Active learning—incorporating critical discussions, problem-solving, and personal insights—engages students in multiple ways, strengthening memory, linking concepts, and motivating learners through immediate feedback (Cornell University, 2024). Instructors can enhance learning by designing activities around specific learning outcomes, particularly for difficult topics, and ensuring students understand how these activities connect to the course goals. Active learning also promotes regular interaction with peers and instructors, building a sense of community, refining teaching methods, and keeping students engaged beyond classroom instruction. To maximize the benefits of active learning, instructors should encourage students to prepare before class, incorporate breaks for active learning, and hold students accountable through individual, group, and peer work, providing timely feedback to support learning and motivation.

Engagement is a crucial element in the classroom that drives active learning practices, with Dr. Roberta Lenger Kang emphasizing three key pillars: academic, intellectual, and social-emotional engagement. These pillars empower students to take responsibility for their learning (Lenger Kang, n.d.). Kang advocates moving beyond compliance-based education, particularly in remote learning, to truly engage students and enhance their learning experiences.

Academic engagement involves helping students stay on track with their tasks and routines. While high expectations are essential, instructors should implement strategies to guide students in meeting these expectations. This includes clearly communicating how much time students should spend preparing for class and the expected duration of assignments. Early in the semester, create milestones for significant projects, gradually reducing these guardrails to teach students how to set their own checkpoints. Additionally, guiding students toward university resources, designing relevant activities, and encouraging attendance at office hours can further promote engagement. Regular email reminders about the syllabus and expected learning outcomes can help keep students focused and accountable. Helpful tip: Professors can use AI-powered tools, such as automated email scheduling platforms, to preschedule reminder emails about

syllabus deadlines and expectations, ensuring students receive timely notifications without requiring manual intervention each time.

Intellectual engagement emphasizes making learning both interesting and relevant to foster intrinsic motivation. Relevance helps students form a personal connection to the material, boosting their interest. The 2024 Cambridge Press and Assessment Annual Report suggests three steps to engage students: understand your learners, tailor your lessons, and demonstrate the value of learning (Blue, 2022). Effective strategies include open-ended tasks, eliciting students' prior knowledge, linking content to real-life situations, and using reflection assignments to highlight personal growth (Stanford University n.d.). This approach aims to create a more meaningful and engaging learning experience.

Social-emotional engagement focuses on creating strong relationships and a supportive environment, which research shows can enhance active learning and better prepare students for post-graduation (University of Minnesota, n.d.). Without social engagement, learning relies on executive functioning, which is challenging for young adults. Social-emotional engagement includes student-instructor interactions and student cooperation. These interactions boost motivation and involvement, while collaboration enhances participation and deeper understanding through insightful discussions. Moving beyond one-way lectures increases interest and performance. Frequent feedback and opportunities for improvement build relationships, teach problem-solving, and foster constructive criticism skills, creating a more engaging and supportive learning experience.

By focusing on these core principles—active learning, engagement, and strategic guidance—instructors can create a compelling and supportive learning environment that helps students succeed in college and post-graduation.

Adapting Remote Learning: Lessons from COVID-19

COVID-19 disrupted the spring semester of my junior year, and my senior year was conducted entirely through remote classes. One of my main takeaways from this experience is the ineffectiveness of full-length lecture videos. A recent study suggests that full-length lecture videos are correlated with decreased course performance compared to supplemental video material (Ferguson & Nightingale, 2024). Full-length lecture videos promote procrastination and encourage passive learning, as students tend to re-watch lectures instead of actively engaging with the material. Even adults often struggle with time management and organizational skills. Incorporating milestone deadlines and supplementary materials can support active learning and help students develop more effective study strategies while better reflecting real-world expectations. As mentioned, while my degree closely reflects my career, it is only sometimes necessary. Knowing how to use resources is crucial for success and helps develop the skills needed in any career. In a professional setting, effectively utilizing resources is a common and necessary practice, as it involves knowing where to find them and

managing them efficiently to achieve goals. This requires balancing time, effort, and available tools to ensure optimal outcomes and productivity.

Creating active learning environments is possible even in remote settings. Short videos that expand on lecture topics help deepen students' understanding. More assignments mean more accountability, preventing students from waiting until the last minute to review and practice material. Get creative with student engagement by using different methods—oral, written, and projects—and challenge yourself to find ways to push students toward mastery. For instance, requiring students to create practice problems forces them to dissect the methods for solving them and work backward, resulting in a deeper understanding of the material and enhanced problem-solving skills, which are crucial postgrad. Additionally, different mediums will engage students in various ways, creating a more enjoyable learning environment and resonating with varying learning styles, fostering success for all.

The professional world resembles an open-book exam, with constant access to the internet and resources like YouTube for refreshing memory or relearning concepts. Long standardized tests encourage memorization practices, which dissolve mastery and often result in a lack of lasting knowledge. Instead, assignments and exams that allow students to prepare with notes and resources, mimicking real-world practices, better prepare them for their careers and promote active learning. This approach enables students to develop a deeper understanding, ensuring that those who rely solely on notes will be motivated to engage more actively with the material. Blending the need for knowledge with realistic preparation should be the ideal for fostering mastery and practical skills.

Academic Advisors at a Large University

An academic advisor's role is to act as a mentor and support students throughout their time in college. This is a challenging role because many students enter college at 18 years old with a limited worldview, a weak sense of identity, and a poor grasp of the demands of post-graduation life. Nationally, 60% of students earn their bachelor's degree in six years (NCES, 2022). Extending the time spent on a bachelor's degree can delay students' continued development and pursuit of their professional goals while also increasing the financial burden of tuition and student loans. At a minimum, an advisor should guide students to select classes that lead to a diploma with a manageable course load. Ideally, advisors will also expose students to various majors and minors through general education requirements, which can broaden their perspectives and inspire new passions.

My postgraduate experience has taught me that many paths can lead to the same destination. Choosing a broad major, such as communications, can open doors to various industries. For example, if your passion is health and your skill is organization, you could become a project manager for a biotech company, or if your passion is animals and your skill is writing, you could work as a marketing associate for a pet food

company. This kind of strategic thinking is often beyond the scope of impulsive 18-year-olds but integrating it into their decision-making process can be transformative. By understanding the concept of Ikigai, students can approach their educational and career choices with a broader perspective. Rather than making decisions based solely on external expectations or pressures, they can consider how their skills, passions, and societal contributions align. This holistic approach helps students identify a fulfilling and sustainable career and sets them up for success in both college and life. Encouraging students to reflect on how their interests and strengths intersect with societal needs empowers them to make informed decisions that promote personal happiness and a positive impact.

In Japanese culture, there is a philosophy called "Ikigai," which directly translates to "a reason to live" (iki = to live, gai = reason) (Oliver, 2017). More loosely, this concept refers to a passion that brings value and joy to life. Your Ikigai is a purpose that meets the following requirements:

- What you are good at.
- What you can be paid for.
- What you love.
- What the world needs.

Ikigai
A Japanese Concept Meaning "A Reason For Being"

Image inspired by diagram from Oliver, 2017
(https://www.weforum.org/stories/2017/08/is-this-japanese-concept-the-secret-to-a-long-life/)

Conclusion

In conclusion, navigating the transition from high school to college and eventually to the professional world is a complex journey that requires thoughtful guidance and strategic planning. Advisors play a critical role in this process by helping students navigate course selection, manage their academic responsibilities, and explore various fields to discover their true passions. By encouraging students to broaden their career perspectives and align their interests with their strengths, advisors can help them make informed decisions that lead to fulfilling and successful careers. Understanding the diverse paths available and the value of hard and soft skills will better prepare students for the challenges of post-graduation life. Adopting this comprehensive approach ensures that students not only earn the academic credentials they need but also acquire the practical skills and insights necessary to succeed in the real world.

Moreover, enhancing classroom experiences to increase interaction and facilitate real-world scenarios—such as incorporating open-note exams and presentations—can better prepare students for the practical demands of the workplace. These adjustments create environments where critical thinking, adaptability, and communication are key, mirroring professional settings where students may need to consult resources and present ideas effectively. By nurturing these skills in the classroom, students are not only academically prepared but also equipped with the practical tools and insights needed to thrive in their future endeavors. This comprehensive approach ensures that students graduate ready to succeed both professionally and personally.

Survey Findings: The Undergraduate Experience and Postgraduate Success

To gain a comprehensive understanding of students' experiences at large universities, I conducted a qualitative study through personal interviews in December 2024. I initially reached out to 38 of my peers, and 22 individuals expressed interest and consented to participate. It is important to note that I have a personal connection to all the participants, and this study does not represent the full diversity of the undergraduate student population. These participants graduated from bachelor's programs between 2017 and 2024. The universities represented in the study have undergraduate populations ranging from 1,300 to 59,500, with an average of 22,106. Each interview was conducted in an open-ended format, allowing interviewees to express their opinions freely. However, to maintain the integrity of this chapter, each individual was asked questions on their academic success, utilization of resources, and perceptions of how different courses prepared them for their chosen career.

Interviewee Demographics:

Students by Graduation Year

Attended Public vs Private University
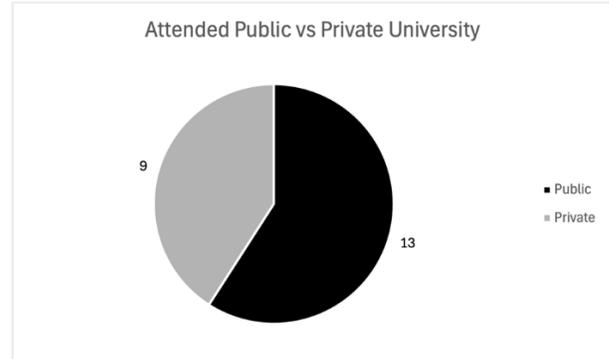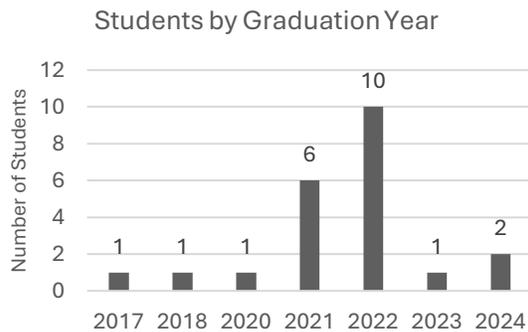
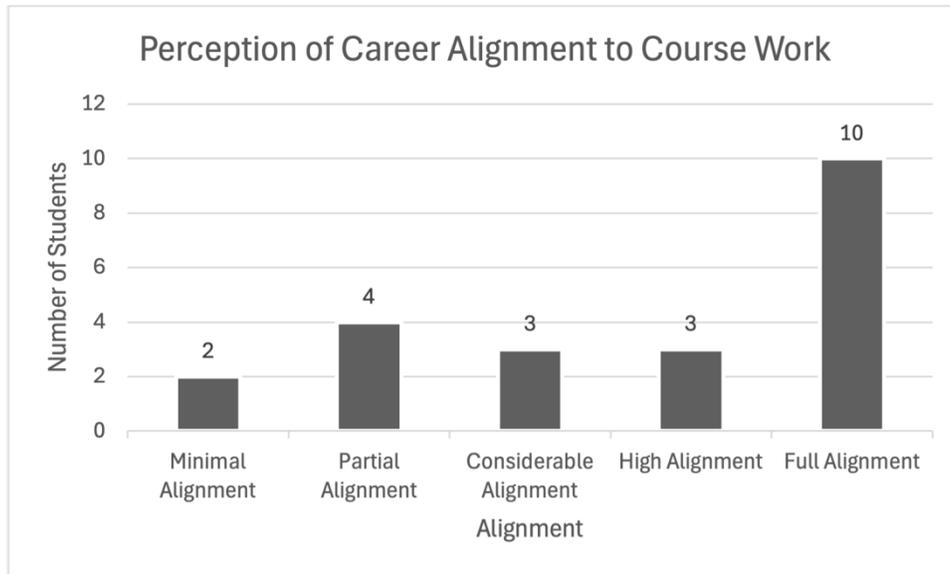| State of Attendance	
Illinois	11
Missouri	3
Iowa	2
Florida	2
Washington	1
Indiana	1
Tennessee	1
Michigan	1

Preparation for Postgraduate Success: Course Content and Broader Experiences

Drawing upon insights from these interviews, it becomes evident that the content of undergraduate courses and the broader college experience beyond one's major are crucial in preparing for postgraduate success. Only 45% of respondents consider their major directly aligning with their current profession. However, those who found their coursework foundational – 36.4% – tend to work in specialized fields such as education, economics, data analysis, and the medical field. Critical technical skills, such as proficiency in Excel and PowerPoint, were frequently mentioned as essential tools in their professional lives. Beyond technical knowledge, students emphasized that passive coursework elements—such as time management, collaboration, public speaking, and organization—were the most important skills they gained in college.

While many students found their major courses provided a foundation for their careers, the extent of this alignment varied. For example, students in nursing, public health, and physical therapy felt that their coursework directly prepared them for patient care, anatomy, and clinical skills. In contrast, students in fields like business, finance, and advertising found that the content of their courses did not always align directly with their job roles, with on-the-job learning often being more crucial.

This suggests that undergraduate education should focus not only on specialized content but also on developing soft skills and practical tools that are universally applicable across professions. By prioritizing time management, collaboration, public speaking, and organization within the curriculum, institutions can better equip students for diverse career paths. Additionally, integrating critical software tools like Excel and PowerPoint into coursework can ensure that students graduate with valuable skills directly applicable to the workforce. A more holistic approach to education, incorporating technical and interpersonal skills, can significantly enhance graduates' preparedness for the workforce.

Perception of Career Alignment to Course Work

Number of Students by Alignment:
- Minimal Alignment: 2
- Partial Alignment: 4
- Considerable Alignment: 3
- High Alignment: 3
- Full Alignment: 10

### Shifting Academic Plans and Career Goals

Many students shared experiences adapting their academic paths during their undergraduate years, often by adding minors or switching majors to better align with their interests, career goals, or course load management. Standard shifts included moving from Athletic Training to Physical Therapy, Real Estate to Finance, and Pre-Law to Psychology. Other students adjusted their academic plans to handle better time constraints, such as transitioning from Computer Science to Data Science. Twelve of the 22 students had changed majors at least once. These changes highlight the dynamic nature of academic planning and the importance of aligning one's education with personal interests and professional aspirations.

The Role of Undergraduate Academic Advising

Based on this small-scale study, the frequency and effectiveness of meetings with academic advisors varied significantly among students. Most respondents reported

meeting with an advisor every semester, often before class scheduling. Some students also mentioned additional informal meetings or communication via email for specific questions. However, a few students would have benefited from more contact with advisors, meeting only once or twice during their undergraduate experience. Additionally, those attending smaller universities or involved in specific programs, such as the James Scholar program or being a student-athlete, generally had more frequent advising sessions. Despite the frequency of advising sessions, many students felt these interactions were impersonal, lacking the individualized attention they needed. A recurring experience shared by those interviewed who attended larger universities was meeting with different advisors at various stages of their academic journey, often driven by issues of time, staffing, and turnover. This led to a sense of inconsistency, leaving students feeling unsupported and disconnected. Furthermore, a few respondents shared instances where their advisors steered them toward academic paths that did not align with their credit needs, leading to delays in graduation. These experiences underscore the importance of personalized and accurate academic advising in helping students navigate their academic requirements efficiently and graduate on time.
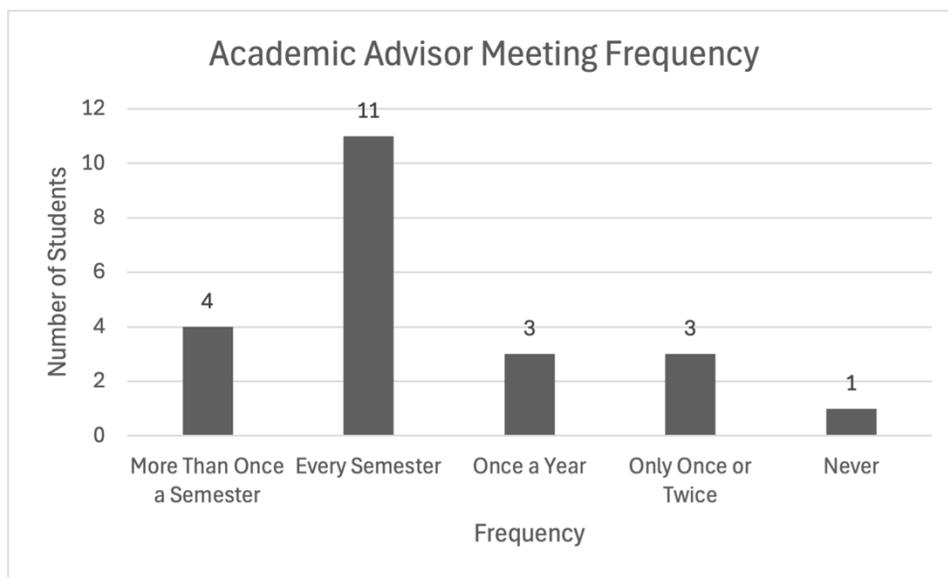
In-Person vs. Remote Learning

Students had varied preferences and experiences regarding in-person versus remote classes. Many favored in-person courses for their ability to enhance focus, reduce distractions, and foster a better learning environment. In-person settings also provided opportunities for accountability, social connections, and interaction with faculty and peers, which were particularly beneficial for more challenging subjects and courses that included labs. On the other hand, some students preferred remote classes for their convenience and flexibility. A few students enjoyed a mix of both, appreciating the focus required in-person while valuing the flexibility of remote classes for less demanding

subjects. Ultimately, success in either format varied based on course-content, individual learning styles, the nature of the classes, and the ability to manage distractions.

Study Techniques and Assignment Types

Students employed a combination of passive and active study techniques, with success found in both approaches. Passive methods included re-watching lecture videos and reading and rewriting notes, while active methods involved tools like flashcards, practice problems, and platforms like Quizlet. A combination of both strategies was common among students, with many also benefiting from collaboration with peers and engaging in discussions to reinforce concepts. Rewriting and organizing material, creating study guides, referencing posted lecture materials, and utilizing practice problems were frequently mentioned as successful strategies for mastering coursework. However, exams were not commonly cited as a material in which students gained mastery; instead, students found that projects, presentations, and papers were more effective in reinforcing their understanding of the material. Simulations and labs, particularly for hands-on learning in STEM courses, were also highly valued. Practice problems and reviewing lecture slides were common strategies for preparing for exams.

Extracurriculars and Real-World Experience

Extracurricular activities played a significant role in students' career preparation. Participation in professional organizations, clubs, student government, and roles in Greek life helped students develop valuable skills in networking, leadership, time management, and communication. These experiences, alongside internships, part-time jobs, and volunteer work, allowed students to apply their academic knowledge in real-world settings. Students emphasized that these experiences helped them gain practical skills such as teamwork, public speaking, and problem-solving, which are often more directly applicable in their careers than classroom learning alone.

Career Services

University career services are a valuable resource that many students fail to fully take advantage of. In the second semester of my senior year, I applied to over 300 jobs but secured fewer than ten interviews. During this time, I relied solely on my peers for resume building and interview preparation. Looking back, I realize I was applying for positions I wasn't fully qualified for and wasn't effectively showcasing my skills on my resume.

Career services offer valuable support in multiple ways, helping students build strong resumes, craft tailored cover letters, and prepare for interviews with mock sessions and coaching to boost their confidence and presentation skills. Career counselors also guide students in identifying job opportunities that align with their qualifications and

aspirations, ensuring they are well-prepared to enter the job market. By utilizing these resources, students can significantly improve their chances of securing interviews and job offers. Faculty and advisors should familiarize themselves with the resources available on campus and actively encourage students to utilize these free services to enhance their career prospects.

Conclusion

The most meaningful lessons and skills students took away from their college experience often centered on both hard and soft skills. Time management and task prioritization were emphasized as crucial for balancing academics, work, and personal life, helping students navigate the demands of their coursework while maintaining a sense of well-being. Self-growth and independence were also key lessons, with many students learning to operate outside their comfort zones, take care of themselves, and manage increased responsibilities. Additionally, the importance of relationships and collaboration was emphasized, as students found that their most valuable experiences were shaped by teamwork and peer support. Resilience and problem-solving were notable skills, with many recognizing the importance of pushing through challenges and learning from adversity.

Soft skills like communication, organization, leadership, teamwork, and professionalism were highly valued across different disciplines. These interpersonal skills, coupled with technical competencies were particularly crucial for students pursuing STEM fields. Critical thinking and adaptability also emerged as vital skills, with students recognizing their importance in navigating complex challenges both in college and in their careers. In addition, students acknowledged the significant role of networking and relationship-building, understanding that professional connections could unlock valuable opportunities. Ultimately, students felt that the most important takeaway from their college years was the development of a well-rounded skill set. This blend of practical expertise and interpersonal abilities not only facilitated personal growth but also prepared them for success in their professional lives.

Resources for faculty:

For faculty who are interested in learning more about supporting students in the classroom, the following resources with their takeaway points.

Getting Started with Active Learning.

- **Overview:** This resource introduces a holistic active learning framework adapted from Fink (2013), emphasizing the integration of encountering new information, engaging with content, and reflecting on learning. It provides guidance on designing

both synchronous and asynchronous activities to foster higher-order thinking skills such as analyzing, evaluating, and creating.

- **Takeaway:** Educators can utilize this framework to plan active learning experiences that align with course objectives, promote student engagement, and support diverse learning styles. The resource includes tools like the Planning Active Learning Experiences Worksheet to assist in implementing effective strategies.
- *Link*: Columbia University Center for Teaching and Learning (n.d.). *Getting Started with Active Learning*. https://ctl.columbia.edu/resources-and-technology/resources/active-learning-basics/

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What We've Learned—and Where We Go from Here

This book began with a question: ***What aren't our students telling us?***

And throughout these pages, they answered—with honesty, vulnerability, and insight. We learned that students are navigating much more than academic content. They are balancing jobs, caregiving responsibilities, mental health concerns, cultural adjustments, and systemic barriers—often without ever saying a word. We also saw how small shifts—like instructor warmth, culturally responsive materials, access to food, or the option to use a trained chatbot—can make a **big difference** in helping students feel seen, supported, and capable.

Some of the most powerful takeaways include:

- ***Instructor attitude matters more than we often realize.*** The way we show up in the classroom can either open or close the door to student confidence.
- ***One-size-fits-all education doesn't fit anyone.*** Inclusive design, flexible modalities, and compassionate practices benefit *everyone*, not just those who ask for them.
- ***Students trust tools that come with transparency.*** AI, alternative supports, and new technologies can expand access—if we guide their use with clarity and care.
- ***Listening changes everything.*** Students told us what they need. Now, we have a choice: to adjust or to ignore. To move forward or remain static.

To every educator reading this: thank you for the courage it takes to **pause, reflect, and evolve**. Change doesn't require a total classroom overhaul. It starts with one conversation, one syllabus revision, one student you choose to believe in a little more. If this book inspired you, challenged your thinking, or opened up new possibilities, I invite you to connect. Let's work together to **create classrooms that listen louder, love better, and leave no learner behind**.

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Together, we can turn insight into impact—and students into partners in their own success. Let's keep the conversation going.