The UAGC Chronicle

Winter Issue 25/26

The Future of Learning:
AI, Innovation, and Evidence-Based Teaching

THE UNIVERSITY OF ARIZONA
GLOBAL CAMPUS

Cover Design Citation:

Thomas, R. (2026). *The UAGC Chronicle* [Magazine cover]. Fall 25/26 issue. University of Arizona Global Campus. Cover partially created using Adobe Express AI with the prompt: "AI, Educational Framework Transition."

THE UAGC CHRONICLE: A FACULTY–FOCUSED PUBLICATION

The UAGC Chronicle **supports the entire academic community's contribution to the UAGC mission of providing a community of caring and guidance for adult online learners. Therefore, our publication promotes content that addresses the theoretical underpinnings and practical execution of this mission: academic research on instructional best practices, curricular innovation, and student support strategies; examples and resources that foster a community of practice; news of the progress of institutional student success initiatives; professional development opportunities; and – most importantly – the stories and successes of the people who shape our university. Please check the Call for Submissions section for more information on submitting an article for consideration.**

Contents

LETTER FROM THE EDITOR

As we move into 2026, it's undeniable that the world around us is changing. Conversations about AI have become woven into nearly every aspect of our lives, and higher education is being reshaped by shifting student needs, new learning modalities, and an increased demand for relevance and flexibility. Not to mention, all this evolution is happening at an unprecedented pace. However, there is always a palpable sense of hope that accompanies the start of a new year. For many of us, the new year represents a fresh start, a time to dream big, make plans, set goals, and embrace the excitement of what's ahead.

The winter issue of the UAGC Chronicle reminds us that change, while sometimes uncomfortable, can also be a powerful force for growth. As educators, we continue to navigate an evolving landscape, starting with authors like Millie Tyznik, who explores how AI can be used to provide meaningful writing feedback for students, and Tobenna Attah, who examines the benefits of entrepreneurial thinking within higher education. These conversations reinforce the idea that the role of an instructor is not static but continually transforming.

Rather than viewing new tools and technologies as working against us, we invite you to consider how they can work *for* us. This issue encourages readers to explore the many ways we can leverage emerging tools to enhance our work and enrich the student experience in higher education.

We also share updates from several UAGC Faculty Fellows, whose projects continue to evolve and gain momentum. These efforts reflect a commitment to developing educational experiences that are both engaging and accessible. These projects will continue to take shape in the months ahead.

I encourage you to enter this year with a renewed mindset, one rooted in curiosity, reflection, and possibility. Ask yourself not only *what* can be better, but *how* you can be better as an educator, a colleague, and a contributor to our shared academic community. Growth does not happen in isolation, and at UAGC, we are fortunate to be surrounded by passionate, innovative individuals who are willing to learn alongside one another.

Let's continue to lean on each other, share ideas openly, and offer encouragement as we navigate change together. There is excitement in the unknown and strength in our collective willingness to adapt. As the world evolves, so do we! Shaping our practices, refining our approaches, and reaffirming our commitment to student success - this spirit of forward momentum defines UAGC, and it's what will carry us confidently into the year ahead.

Sincerely,

Jackie Bullis
Lead Faculty Support and Classroom Consultant, The UAGC Chronicle Editor

UNIVERSITY/PROGRAM/CURRICULUM/STRATEGIC INITIATIVES

ANNOUNCING THE UAGC 2025 TEACHING AND LEARNING CONFERENCE PRESENTATION AWARD WINNERS

VANGUARD AWARD

The Vanguard Award recognizes the session at TLC that most effectively embraces the conference theme, either through theoretical inquiry or practical research.

Recipient: Leading with Connection: Building a Cohesive Culture Remotely, presented by Dr. Kelly Olson-Stewart - This session explored practical strategies for building trust, fostering meaningful connections, and aligning values across fully remote teams. Based on ideas and strategies from two key texts, Digital Body Language (Dhawan, 2021) and Shatterproof: How to Thrive in a World of Constant Chaos (and why Resilience Alone Isn't Enough) (Eurich,2025), participants discovered how to reinvigorate practices, create intentional touchpoints, design inclusive communication practices, and leverage technology to strengthen human connection and enhance organizational culture.

Honorable Mention: The Impact of the Math Hero/Math Avatar Two-Part Activity on Algebra Student Success, presented by Holly Ourso – This session discussed the impact of the Math Hero/Avatar intervention, which spotlighted individuals who used mathematics to change lives. This intervention required students to select a math hero, explain why they selected that person, and share a reflection via a journal describing how their math hero would approach a real-life problem.

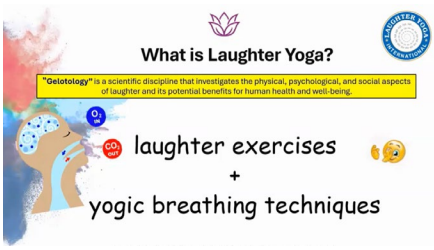
TEACH US MORE AWARD RECIPIENTS

The Teach Us More Award recognizes the session at TLC that attendees vote they would most like to learn more about after the conference. The award-winning presenters are invited to submit an article to the UAGC Chronicle to share further research on their presentation topic.

Recipient: Accountable Leadership in Action: Real-World Strategies to Build a Culture of Continuous Learning, presented by Yolanda Hill, Bridgette Stasher-Booker, and Ma'Kelsius McMeans. – This session explored how organizations can foster a sustainable culture of continuous learning through real-world leadership practices rooted in trust, transparency, and accountability. Examining the five key leadership values, such as building people up, loyalty, trustworthiness, open communication, and commitment to quality, participants explored how these principles align with Senge's (2006) Five Disciplines and contribute to long-term organizational growth.

Honorable mention: Bringing Joy Back To The Classroom: Empowering Educators with Dynamic Music & Movement for Positive Classroom Transformation, presented by Nick Young. – In this session, "Nick the Music Man" demonstrates how interactive music and movement activities provide a "neurological force

multiplier" for early childhood development by simultaneously engaging multiple brain regions. He highlights how these joyful, high-energy exercises enhance self-regulation, reduce stress, and build the physical, social, and emotional competencies essential for modern school readiness.



Breathe, Laugh, Thrive: Laughter Yoga for Personal Mastery, presented by Dr. Yolanda Harper. Laughter Yoga is a system of unique wellness practices combining laughter exercises with yogic breathing techniques (Pranayama). Laughter has long been associated with life quality (Lindquist, 2016) and transforming mental and physical states (e.g., Alici & Dönmez, 2020; Bressington et al., 2018). Health & wellness professionals, educators, & others have long utilized laughter to enhance health & improve teaching & learning outcomes (e.g, Walsh, 1928; Savage, 2017). Research supports the efficacy of Laughter Yoga in strengthening resilience, enhancing performance, & buffering the negative stress impacts (e.g., Katara, 2024; Meier et al., 2021). The session was structured to enhance personal mastery, energy focus, emotional resilience, & mindfulness.

COMMUNITY ENGAGEMENT AWARD RECIPIENTS

The TLC Community Engagement Award recognizes the individual at TLC who demonstrates the highest level of engagement with the TLC community throughout the conference via Whova, the event platform. Engagement with Whova includes participating in icebreakers, responding to polls, chiming in on discussion forums, connecting with fellow participants, and posting photos.

Recipient: Abayomi Olaofe, Teacher/ Graduate Student. Abayomi collected 181,600 points for his participation in Whoova at TLC 2025!

Congratulations to all of our Award winners for TLC 2025.

More To Come!

The UAGC 2025 Teaching and Learning Conference Proceedings will be published in the spring of 2026. Watch for the publication and learn more.

The Teaching and Learning Conference (TLC) may have wrapped up, but the conversation continues — explore the TLC 2025 Playlist to view conference presentations.

TLC is supported by a dedicated learning community that consists of educators, learners, higher education thought leaders, and volunteers. Interested in supporting the annual UAGC Teaching and Learning Conference? TLC volunteers tell us that they enjoy interacting with the TLC community, being part of the team, and contributing to a larger purpose. Raise your hand to join us here!

Learn more about the annual UAGC Teaching and Learning Conference.

INTRODUCING THE UAGC TEACHING AND LEARNING PARTNERSHIP | AN INSTRUCTIONAL SUPPORT CONSULTATION PROGRAM

Haley Sampson, Associate Director of Faculty Support, Faculty Affairs

Faculty Affairs proudly launches the UAGC Teaching and Learning Partnership, a faculty-driven professional learning opportunity grounded in collaboration, reflection, and instructional growth.

Explicitly designed for UAGC educator practitioners, the UAGC Teaching and Learning Partnership provides faculty with a consultative, confidential, non-evaluative space to explore their teaching practices alongside a trusted thought partner. The program honors faculty expertise, values real-world experience, and fosters instructional growth through reflective dialogue and collaborative inquiry.

What Is the UAGC Teaching and Learning Partnership?

The UAGC Teaching and Learning Partnership delivers instructional support consultation through a formative, partnership-based experience that helps faculty examine their teaching and its impact on student learning. Faculty guide consultations by identifying their own goals and questions, such as:

- What aspects of my teaching am I most curious about right now?
- What feedback or classroom experiences are shaping my thinking?
- How might I align my instructional practices more closely with my values and student needs?

I invite you to explore the foundational theory that shapes this program's vision: Instructional Support Consultation Vision.

Get Started!

Learn more about the program and sign up to participate in the UAGC Teaching and Learning Partnership.

What Faculty Can Expect

Instead of offering prescriptive solutions, consultants partner with faculty by listening deeply, asking reflective questions, sharing research-based practices, and supporting experimentation with instructional strategies that feel authentic and effective. Faculty who participate in the Instructional Support Consultation Program can expect the following:

- A confidential, non-evaluative environment
- Respect for their role as content experts
- Collaborative goal-setting and reflective dialogue
- Research-informed instructional support
- Ongoing support and encouragement as new practices are implemented

The program draws on transformative learning theory and emphasizes growth through reflection, discourse, and meaningful instructional change.

Join the Conversation

Faculty Affairs is collaborating with the Faculty Council to support the program's launch, and participation remains entirely voluntary. As part of this collaboration, Faculty Affairs is seeking faculty partners who are willing to participate and share their experiences with the UAGC Teaching and Learning Partnership through co-authored articles and presentations to the Faculty Council. If you are interested, please contact me at Haley.Sampson@uagc.edu.

The UAGC Teaching and Learning Partnership offers faculty an opportunity to pause, reflect, and engage in thoughtful conversations about teaching—without judgment, evaluation, or expectations of perfection. Whether you are refining an established practice or navigating a new instructional challenge, the program will meet you where you are.

FACULTY FELLOW RESEARCH

THE IMPACT OF INSTRUCTIONAL PRACTICES ON STUDENT PERFORMANCE AND PERCEPTION

Nikola Prendergast Lucas, Faculty Fellow, Department of Human Behavior & Performance Professions

As instructors, we strive to present educational material in a manner that is both engaging and digestible. When creating our courses, we also consider the different learning styles of our students and possible barriers to comprehension. These can be more difficult to identify when we do not interact in person with our students. In online education, we aim to create courses that are tailored for all learners while maintaining best standards in instructional practices. We create videos and interactive activities, incorporate humor, imagery, and hands-on applications when available, and connect with all our students by using multiple methods of interaction and communication. The University of Arizona Global Campus (UAGC) requires faculty to meet standard instructional expectations (SIEs) to ensure students receive instructional support. However, there is limited research regarding which practices effectively support student success. That said, UAGC collects substantial quantities of data on instructor practices and student performance. This is especially true in the Division of Human and Behavioral Performance Professions, which takes a very detailed approach to its Instructional Quality Review (IQR) of faculty teaching. This data has historically been utilized by the university to make decisions regarding faculty course assignments and to provide "snapshots" of a course to plan course up and revisions. Thus, this faculty fellows project aims to explore the effectiveness of specific teaching practices on student performance, as measured by course learning outcomes, grade point average, and course progression, and student perception of teaching. How do specific instructional practices impact student learning?

With the assistance of Faculty Affairs, particularly Assessment Specialist Kaitlyn Sproat, who is passionate about assessment research and is my partner in this endeavor, we are conducting this study. Together, we are investigating the following research questions:

1. Does a multimedia approach improve student performance?
2. Is there a difference in student performance and student perceptions based on the type of feedback received (in-text, summary, none)?
3. How does the quality (substantive, format only, none) of feedback affect student success/ performance?

To answer these questions, we are in the process of collecting and compiling a master data set comprised of data regarding specific instructional practices and measures of student performance and perception. Available data for this endeavor includes IQRs, end-of-course surveys (EOCS), course learning outcomes (CLOs), and various dashboards for key course metrics, such as grade point average (GPA) and progression, from the 2024-2025 academic year. The IQRs from the Department of Human Behavioral and Performance Professions have been selected for this investigation because of the detailed nature of their approach, which also tracks Waypoint activity to assess instructor activity. The 2024-2025 IQR survey is composed of 5 major assessment areas that evaluate multiple practices using checked boxes to create a score for each section. For example, three separate items on the IQR specifically focus on multimedia components within the course. For this project, multimedia is defined as instruction that includes the use of instructor-created videos or other academic videos (e.g., TED-Ed, YouTube), images and/ or illustrations, links to activities, information, and scientific articles. As three items in the IQR assess this variable, we scored it on a scale of 0-3 based on how many boxes were checked in the IQR. Thus, if they did not incorporate any multimedia, the score was assigned to zero, and if two of the three boxes were checked, they were assigned a 2. The variable, type of feedback, is measured on the IQR with one box for the use of in-text feedback. Using a 0-1 scale to quantitatively assess this variable, a score of 0 indicates a lack of in-text feedback from the instructor and a score of 1 indicates the instructor utilized in-text feedback tools within Waypoint. The third variable, quality of feedback, is assessed using 2 boxes on the IQR. These boxes identify whether the instructor has included substantive feedback about the content of the assignment, feedback regarding format and mechanics, or if feedback is absent.

We initially started with a small pilot data set of 15 courses to determine if we were asking the right questions. Initial analyses suggested a positive relationship between overall IQR scores and student evaluation of their instructors on end-of-course survey (EOCS) questions related to instructional practices. These findings encouraged us to build a larger dataset so that we could ask more interesting questions with greater power in the analysis. For those who may be unfamiliar with research practices, the experimental power increases as the sample size gets larger, meaning that we are more likely to detect a finding if one exists (Serdar, Cihan, Yucel, & Serdar, 2021). We started building the data set in September and expect to finalize our data set this December. Once the data set is complete, we will statistically analyze the data in the new year.

Statistical analysis of the data will allow us to map specific teaching practices to learning outcomes, which, to our knowledge, has not been done before. This information can inform evidence-based decisions when developing SIEs, new faculty training, and other processes related to instructional practices. Ultimately, these findings can be used to improve course development, teaching practices, student learning outcomes, and degree completion. If we understand how instructor practices impact student learning, we can create more specific instructional strategies, expectations, and models to assess the effectiveness of our teaching practices. We are excited to share our future results with faculty, staff, and leadership. Finally, we would like to expand the study to incorporate additional metrics, such as the use of Signalz, and additional factors impacting course progression.

References

Serdar, C. C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: simplified and practical approaches in pre-clinical, clinical and laboratory studies. *Biochemia Medica*, *31*(1), 010502. https://doi.org/10.11613/BM.2021.010502

UAGC FACULTY FELLOW, ACCESSIBILITY DESIGN

Ted Ellis, Program Chair, BASCJ & MSCJ Programs, Division of Justice, Security, & Public Safety Professions

This pertains to work on collaborative initiatives I am advancing as the University of Arizona Global Campus (UAGC) Faculty Fellow for Accessibility Design, an appointment I received across the academic year 2025-2026. Working in collaboration with UAGC curriculum and accessibility team members, UAGC faculty, and with projected collaboration with members of University of Arizona (UA) Online, I aim to advance accessibility initiatives, which include a funded research design in progress to facilitate an upcoming pilot study, an event with sessions for spring 2026 accessibility learning, and a spring 2026 Faculty Learning Community (FLC).

Research Design and Faculty Instruction Self-Audit and Reflection

In the fall of 2025, I constructed outlines for productivity on research design to facilitate collaboration with and inputs from Dr. Ellen Beattie (UAGC Assistant Professor, Division of Education Professionals) and Dr. Paul Greenberg, (UAGC Assistant Professor, Division of Health and Behavioral Professions), and at the present, the literature review, theoretical support, questions, hypotheses, variables, quantitative and qualitative methodology, structure for instruments, and process in data collection are approaching finalization. The pilot study objectives include the structuring and use of instruments to measure the effectiveness of the faculty accessibility self-audit and reflection rubric as an accessibility initiative, parallel to the projected spring learning session and FLC accessibility initiatives, that center on dynamic faculty activities and contributions within the online course environment, as distinct from embedded

online course infrastructure. In collaboration with Alaina Pascarella (UAGC Manager, Academic Quality Services, Quality Matters Coordinator), Stacy Gresnick (UAGC Academic Quality & Accessibility Specialist), and additional team members, there has been preliminary construction of an instructional resource in the form of a faculty accessibility self-audit and reflection rubric for online instruction with learning outcomes. Our accessibility initiatives include a focus on Web Content Accessibility Guidelines (WCAG) 2.1 and 2.2 (WCAG 2 Overview), and an emphasis on learning how accessibility standards apply to and inform online instructional practices and dynamic instructor contributions in guidance, announcements, posts, feedback, and messaging in online higher education classrooms. The faculty accessibility self-audit and reflection rubric will function as the intervention in the pilot study, and the projection is to maintain and iterate this resource, purposed to support faculty application of accessibility standards in their dynamic course instruction contributions. The pilot study will involve data collection through instruments and participation in the faculty instruction accessibility self-audit and reflection rubric.

Accessibility Module and Faculty Resource

As an initiative in parallel, collaborative work is proceeding toward construction of an accessibility training module to house and administer the faculty instruction accessibility self-audit and reflection rubric. This collaboration includes UAGC media content developers. The objective at present is to sequence the module with existing accessibility training materials/modules and to construct a curriculum with exploration of badging feasibility. Beyond the pilot study, the projection is to structure the accessibility module and training elements as fluid instructional tools amenable to relevant updates and inputs.

Accessibility Learning Sessions and Demonstration of Tools

Additional congruent initiatives include a collaborative structure and implementation of a day with sessions on accessibility learning with a projection for implementation in the spring of 2026. Work is in progress through communication with Morgan Johnson (Vice President, Academic Innovation & Operations, Academics), Dr.Teresa Kuruc (Vice President, Faculty Affairs & ALO), Jenn Zaur (UAGC Director, Learning Solutions, Academics), and Jacquelyn Bullis (Lead Faculty Support & Classroom Consultant, Academics) to communicate and promote participation, with session construction in collaboration with Alaina Pascarella, Stacy Gresnick, Nicole Egelhofer-Wells (UAGC Faculty Support and Classroom Consultant), and Diana Boggan(UAGC Faculty Development & Coaching Specialist), and with anticipation of additional UAGC and UA Online team members. The sessions will feature learning and module training relevant to accessibility in instructional practices in online higher education instruction, to support faculty in their dynamic contributions to online classrooms.

Faculty Learning Community on Accessibility

In collaboration with Alaina Pascarella, Stacy Gresnick, Jenn Zaur, Nicole Egelhofer-Wells, and Diana Boggan, and with anticipated contributions from additional UAGC and UA Online team members, progress is advancing on curriculum and session design for a three-week faculty learning community

(FLC) to engage in accessibility learning, granular FLC-based discussion on accessibility tools pertaining to outlets in online courses, and to inform and faculty contributions to and within online classrooms. The projection anticipates collaboration with UAGC and UA Online representatives to design and to leverage the faculty learning community on accessibility structure to augment faculty study of WCAG 2.1 and 2.2, together with other sources on accessibility standards applicable to online instruction, and to form a focus group.

Next Phase Components

- Submit research design and instruments to the IRB
- Finalize the faculty instruction self-audit and the reflection accessibility rubric
- Collaboratively build the interactive training module
- Administer the pilot study through quantitative and qualitative methods
- Collect and analyze the pilot study data
- Build structure and session allocation for accessibility learning sessions/events
- Finalize a three-week accessibility faculty learning community curriculum
- Prepare a manuscript and identify potential conferences and/or outlets for research dissemination

The essence and outcome projections of the foregoing accessibility initiatives are practical, in support of online instruction and learning for faculty. Collectively, the accessibility initiatives inform, and center on, learners' interests in dynamic contributions of instructors in online classrooms that manifest in conduits for guidance, announcements, discussion posts, feedback, and messaging.

References

World Wide Web Consortium. *WCAG 2 overview Web Content Accessibility Guidelines (WCAG)*. W3C Web Accessibility Initiative. https://www.w3.org/WAI/standards-guidelines/wcag/

IMPROVING STUDENT SUCCESS THROUGH UX: A 2025–26 FACULTY FELLOWS PROJECT UPDATE ADVANCING USER EXPERIENCE AT UAGC

Bill Davis, Faculty Fellow, Department of Resource Operations Professions and Jacline Contrino, Experience Design Strategist

It is with great pleasure that I share an update on the progress of our 2025–26 Faculty Fellows project. As many of you know, I have the privilege of partnering with UX Researcher Jacline Contrino, whose background in human-centered design has guided many organizations through meaningful quality-improvement cycles. Working alongside

her has been both energizing and inspiring as we explore new ways to elevate the University of Arizona Global Campus student academic experience.

When we began this project, Jacline brought forward the Double Diamond design process, a four-step framework widely used for designing solutions to complex problems. She was exceptionally well equipped to help UAGC apply this model, which emphasizes discovering user needs, defining core issues, designing meaningful improvements, and delivering tested, refined solutions. With my coaching and planning background, Jacline and I built a detailed Gantt chart to map out the phases, activities, and deliverables of our research effort. This combination of her UX expertise and my structuring and support ensured that we entered the project well-organized and aligned. While I have offered coaching and consultation where needed, Jacline's initiative, leadership, and ongoing engagement with students and stakeholders have been outstanding, and together we are making strong progress.

A Four-Step Human-Centered Design Approach

The Double Diamond process aligns with the UAGC commitment to clarity, quality, and continuous improvement. Its four stages—Discover, Define, Design, and Deliver—allow us to frame complex challenges through the lens of student experience. This framework ensures that our recommendations will be thoughtful, relevant, and grounded in authentic user needs.

What We Learned in the Discovery Phase

Throughout the fall, Jacline conducted stakeholder conversations across many academic and student services teams, led a faculty focus group, reviewed available survey data and past research, and performed lean walkthroughs across several UAGC platforms - including the classroom. Constellation textbooks, Library, and Writing Center. From these efforts, several opportunities emerged:

- Information architecture: We can enhance how content is labeled and organized across the classroom and supporting platforms.
- User interface improvements: We identified low-lift adjustments, such as more visible tabs, that could create smoother navigation.
- Content strategy: Many students experience "walls of text"; using plain language and more concise guidance can reduce overwhelm.
- Mobile-friendly design: Students increasingly rely on mobile devices, making responsive design a necessity for accessibility and success.

These insights affirm what many of us hear in our daily work: students thrive when their environment is ordered, consistent, and easy to navigate.

Early Themes from Student Interviews

Jacline is now deep into the next phase—interviewing and conducting usability tests with a variety of students, including GEN101 students, experienced students, military students, and more. Her early findings offer both encouragement and clear direction:

- Positive classroom experience: Students generally find the classroom intuitive and feel confident navigating it.
- Initial overwhelm: Newer students often struggle to locate key resources due to inconsistent labels and navigation across tools.
- Value of consistency: Students appreciate predictable tools, terminology, and expectations, especially during transitions or system updates.
- Point-of-need support: Time-strapped students rely heavily on self-service tools such as Grammarly, RefWorks, and AI resources, often close to deadlines.
- Library appreciation with room to grow: Students love the UAGC Library, yet they expressed interest in stronger collections, clearer menus, and improved mobile usability.
- Motivation through connection: Perhaps most powerfully, students emphasized that their greatest motivators are engaged instructors, personalized feedback, and a sense of community.

These themes align strongly with our quality and academic excellence goals, reminding us that technology and pedagogy must work hand in hand.

What Comes Next

Jacline completed the remaining student interviews and usability testing in late November and will fully synthesize the data in December. She plans to prepare a comprehensive findings report for our wider academic teams in January. Morgan Johnson's recent recap of our UX update meetings reflects the excitement and engagement across departments, and we look forward to continuing those conversations after the holidays.

As we advance this work, we encourage faculty, staff, and leaders across UAGC to stay connected with us. Whether you have insights, questions, or recommendations—or know students interested in participating—your contribution is invaluable.

A Shared Commitment to Excellence

Partnering with Jacline has reinforced the importance of human-centered design in higher education. Her expertise, combined with our collective dedication to students, positions us to make meaningful, value-added improvements that align with our mission of excellence and accessibility.

I look forward to updating you again through the Chronicle and in future meetings as Jacline Contrino and I continue this important work. Let's all keep on keeping on! Students first!

RESEARCH CORNER

The research corner is a space in the UAGC Chronicle dedicated to exploring innovative ideas related to teaching and learning. In this space, we want instructors to share their research interests and pursuits. In addition to fostering a community of educators eager to exchange insights, the research corner serves as a platform for showcasing different methodologies and pedagogical approaches. Whether delving into emerging trends or reimagining traditional practices, this space encourages collaboration and the advancement of educational scholarship.

ADDRESSING IMPLICIT BIASES IN DUAL CREDIT PROGRAMS

Timothy Cedor, Ed.D., Dallas College

Introduction

Implicit bias is widespread when it comes to dual credit education. Administrators and educators at both the high school and college levels are influenced by their subconscious biases, which often include seeing dual credit students as too underprepared and immature to manage the rigors of college courses. Such bias negatively impacts dual credit programs by keeping them from meeting the needs of the students who could benefit from them the most. In particular, they can further exacerbate existing barriers to participation in dual credit courses for middle- to low-achieving, low-income, and racially underrepresented students. This article explores three common implicit biases towards dual credit students and the impacts they have on active and potential dual credit students. If administrators and educators can identify implicit biases in their dual credit programs, it may make it easier to come up with solutions to eliminate those biases. Doing so can help cultivate better learning environments and strategies that allow dual credit students to thrive and maximize their educational experience.

Implicit Bias #1: High School Students are Underprepared

In my 19 years of working in dual credit education, I have heard from college and high school educators alike that dual credit students are too underprepared to succeed in their dual credit programs. They note that students need to be responsible enough to manage rigorous coursework on their own, but that high school policies allowing students to turn in work late for full credit or to redo their work multiple times before receiving a final grade do not prepare them to do so. The consensus among college professors seems to be that K-12 is not adequately preparing students for college, so starting students in a college course while they are still in high school is problematic (Cedor et al., 2025).

A common measure of students' dual credit readiness is performance on standardized math and reading exams, which many educators believe to be an accurate measure of ability. While high-achieving

students may have an easy time attaining acceptable exam scores, middle- to low-achieving students can find meeting these scores difficult. As a result, middle- to low-achieving students may have limited access to dual credit programs. However, Lee and Villareal (2021) found that when low-achieving students were allowed to participate in dual credit programs, those students benefited from their participation. According to their findings, "students perceived as low achieving should not be discouraged from DE [dual enrollment] participation due to the presumptions that their past test performance predicts their future capability to succeed in rigorous college courses" (p. 6). This means that as educators, we need to be aware that our implicit bias toward using standardized testing as a means of assessing ability and dual credit readiness can be a flawed way of making decisions, harm student development, and raise barriers to our goal of expanding college access instead of just advancing high-achieving students.

Implicit Bias #2: High School Students are too Immature

Regardless of the academic preparedness of a student, high school students are often viewed as too immature for college classes. College professors say dual credit students are too noisy as they move around campus and are disruptive in the classroom because they are always on their phones or talking to each other during lectures. Others complain that dual credit students cannot keep up with their coursework, turn in assignments late or not at all, and need too much handholding to complete courses.

I have taught dual credit students on their high school campus, on my college campus, and online. While these students can be immature, we as educators should not be biased against them because of this. Working with immature students is challenging, but the very nature of teaching is challenging. Our role as educators is not only to teach these students the content of our courses, but to help them develop their maturity and become better versions of themselves than when they started the course. We do this through coaching, mentoring, and a variety of other techniques, making our bias regarding student maturity levels a poor excuse for limiting a student's access to higher education. It has been a privilege to watch my (often highly immature) freshman and sophomore literature students evolve into quite capable students, who, by the end of their junior or senior year, are quite different than the students who walked into my dual credit English 1301 class. These students have learned time management, responsibility, ways to regulate their emotions, and hopefully, useful English skills along the way. They have matured, and dual credit students have reported that their experience in a dual credit course helped them become more mature (Kanny, 2015).

Implicit Bias #3: Bias Against Minority and Low-Income Students

Racial and ethnic minority students and students who rely on low-income programs such as meal support are often underrepresented in dual credit programs (Lee & Villareal, 2021). According to Spencer and Maldonado (2021), schools with high numbers of racially minoritized students are the least likely to have dual credit programs. However, even when such schools do offer dual credit programs, racially minoritized and low-income students are less likely to participate in those programs than their more affluent peers in other school districts. Access to dual credit may be limited because "schools

often rely on the recommendations of counselors, seventy percent of whom are white, to identify students for dual enrollment" (Field, 2021). According to Education Trust, a non-profit focused on equity in education, such judgments " 'may be shaped by implicit (or even explicit) racial bias'" (as cited in Field, 2021, para 52).

A report from the Teachers College's Community College Research Center and The Aspen Institute (Mehl et al, 2020) suggests that such biases toward dual credit students are raising barriers and negatively impacting dual credit programs across the country. According to this report, among students who participate in dual enrollment programs, roughly 12% are White, 8% are Hispanic, and just 7% are Black. The report also found that only 20% of dual enrollment programs had successfully narrowed or eliminated race and income gaps. According to U.S. Department of Education data, during the 2022-23 academic year,

> Black students were underrepresented in dual enrollment in every state except for Massachusetts. And Black students had equal or greater representation in dual enrollment at only 74 community colleges—fewer than one in ten community colleges serving dual enrollment students nationally. (Fink, 2024, para 6)

The barriers raised by an implicit bias against low-income or racially underrepresented students do not end with access to dual credit. Like most dual credit students, low-income and racially underrepresented students admitted to dual credit programs still face a lack of advising, an incomplete understanding of the benefits of participation, and a lack of financial opportunities. With high school counselors handcuffed by their administrative tasks and community colleges having overextended resources, advising support for these students ranges from non-existent to severely limited, and training often does not exist for counselors to learn ways to support underrepresented students (Hooper & Harrington, 2022). Without advising, students are left to flounder on their own, and this can increase the success gaps seen in dual credit programs.

Conclusion

Dual credit programs can save students time and money, improve college readiness, and boost graduation and persistence rates. Implicit bias in dual credit programs presents barriers to accessing these advantages, often for those students who could benefit from them the most. Administrators and educators must examine their implicit biases toward both active and potential dual credit students—not just in the three areas covered in this article, but in all areas. Then, they should re-examine their programs through an unbiased lens, assessing where bias may have erected barriers. Finally, they should commit to creating educational partnerships and programs responsive to all populations. Dual credit can change a student's life in unimaginable ways. It is time to stop letting our preconceived notions of preparedness, maturity, and ability get in the way of change.

References

Cedor, T., Glaman, R., Beach, D., & Higham, J. R. III. (2025). Comparing high school and college dual credit instructors' perceptions of dual credit students in entry-level college English courses: a qualitative investigation. *School-University Partnerships*. Advance online publication. https://doi.org/10.1108/SUP-01-2025-0001

Field, K. (2021). The rise of dual credit. *Education Next, 21*(1), 56-62. https://www.educationnext.org/wp-content/uploads/2022/01/ednext_XXI_1_field.pdf

Fink, J. (2024, August 26). *How many students are taking dual enrollment courses in high school? New National, state, and college-level data*. Community College Research Center. https://ccrc.tc.columbia.edu/easyblog/how-many-students-are-taking-dual-enrollment-courses-in-high-school-new-national-state-and-college-level-data.html

Hooper, K. M. & Harrington, C. (2022). Equity gaps in dual enrollment. *Impacting Education: Journal on Transforming Professional Practice*, *7*(3), 20-26. https://files.eric.ed.gov/fulltext/EJ1357956.pdf

Kanny, M. A. (2015). Dual enrollment participation from the student perspective. *New Directions for Community Colleges*, *2015*(169), 59-70. https://doi.org/10.1002/cc.20133

Lee, H. B. & Villareal, M. U. (2021). *Should students falling behind in school take dual enrollment courses?* [Policy brief]. Texas Education Research Center. https://eric.ed.gov/?id=ED618071

Mehl, G., Wyner, J., Barnett, E. A., Fink, J., & Jenkins, D. (2020). *The dual enrollment playbook: A guide to equitable acceleration for students*. The University of Aspen and Teachers College Community College Research Center. https://ccrc.tc.columbia.edu/wp-content/uploads/2020/09/dual-enrollment-playbook-equitable-acceleration.pdf

Spencer, G., & Maldonado, M. (2021). Determinants of dual enrollment access: A national examination of institutional context and state policies. *AERA Open*, 7(1), 1-18. https://journals.sagepub.com/doi/epdf/10.1177/23328584211041628

CULTURE OF CARE

A DECADE OF PARTNERSHIP ROOTED IN CARE, CELEBRATED WITH GRIT AND GRATITUDE

Kelly Wood, Sr. Corporate Account Executive, UAGC Business Education Services Team

For more than ten years, the education partnership between the University of Arizona Global Campus (UAGC) and Airgas Inc. has embodied a spirit of growth and "students first" ethos. Rooted in the shared belief of the potential of others—Airgas through its "Fill Your Potential™" promise, and UAGC through its Culture of Care—this partnership has proven that resilience thrives when opportunity and care meet. That shared commitment has also created moments worth celebrating—honoring the personal milestones and workplace impact of more than 200 Airgas associates who crossed the graduation stage with UAGC during the last ten years.

Airgas: "Fill Your Potential™" as a Culture of Care

Airgas, an Air Liquide company, employs roughly 18,000 associates in all 50 states, supporting customers in manufacturing, healthcare, construction, and other essential sectors. Associates are invited to "be yourself while becoming your best" in a workplace where they are valued for who they are and who they are capable of becoming, with opportunities to grow through hundreds of career paths in operations, engineering, sales, customer service, and corporate roles.

In 2022, Airgas introduced its clever "Fill Your Potential™" tagline as a way to capture the company's promise to help customers and associates grow as they "create, build, care, serve and sustain." This message is not only reflected throughout its talent and culture messaging but is also integrated into our collaborate partnership marketing as well.

In other words, "Fill Your Potential™" is not just an Airgas marketing tagline; it symbolizes our shared values and the strength of our education partnership.

Where Our Two Cultures Meet

When an Airgas associate enrolls at UAGC, they are not just moving from "work" to "school"; they are moving between two cultures of care and potential. Just as Airgas encourages their associates to pursue new roles and responsibilities as they grow into their potential, UAGC invites students to see themselves as scholars, leaders, and change agents.

Growth is a shared responsibility. Airgas actively promotes its education partnership and the UAGC Full Tuition Grant opportunity, knowing that, in return, UAGC provides rigorous, flexible academic programs and robust support services to help their workforce succeed.

Belonging and safety matter: Airgas emphasizes a welcoming workplace rooted in safety and support, just as the UAGC Culture of Care explicitly focuses on building trust, belonging, and psychological safety. This allows students to fully engage, grow in confidence, and be successful in and out of school.

The Annual Virtual Graduation Celebration: Culture of Care in Action

One of the clearest expressions of this successful partnership and our shared philosophy is the annual virtual graduation event dedicated to Airgas–UAGC graduates. These yearly events showcase the extraordinary achievements of Airgas associates who balanced work, family, and rigorous academic study to reach a milestone they will carry forever.

At the heart of these events are the student testimonials — brief yet heartfelt reflections that underscore how their children inspired their self-determination, and how fulfilling lifelong dreams, gaining confidence, and realizing that education has changed how they approach leadership, teamwork, and their future.

Airgas leadership of all levels — from colleagues and direct supervisors to Divisional President–take turns speaking, honoring not only the degrees earned, but also the distinguished qualities that we at UAGC strive to cultivate in all of our students. Common themes shared are:

Grit – Persisting through difficult terms, long shifts, and family responsibilities.

Time-Management – Balancing coursework with full-time work, often in physically demanding roles.

Perseverance – Returning to education after time away or continuing to push through setbacks.

Dedication to Advancement – Pursuing degrees not just for personal pride, but to better support their families, serve customers, and grow into leadership roles.

Bloodworth, who earned his Bachelor of Arts in Business Administration Summa Cum Laude at UAGC in 2022, was featured as a speaker at the recent Airgas Central and Airgas Safety Division graduation and shared a moving testimonial on how his degree played a pivotal role in his career advancement with Airgas.

"Our partnership with The University of Arizona Global Campus truly embodies a successful educational collaboration. We have witnessed firsthand the immense value it brings to our organization, empowering our employees and driving personal and professional growth. This initiative is helping to build a lasting framework for succession planning, creating a pipeline of skilled leaders ready for future roles. The dedication UAGC shows to our team's development is invaluable, reinforcing our commitment to a culture of continuous learning."

Michael Bloodworth

These events also feature congratulatory remarks from the BEST Airgas Inc. Account Management Team and Student Services, including myself, Deniss Mendoza, BEST Operations Specialist, Stephani Kilby, Student Services Director, Brandon Sterk, BEST Education Partnerships Representative Manager, Mike

Speer, BEST Education Partnerships Representative, Bill Davis, UAGC Program Chair and Assistant Professor, and most recently, Dr. Rochelle Robinson-Levant Ed. D., Associate Dean and Professor, Division of Operations Professions.

Featured as the event's inspiring keynote over the last two years, Davis reminded graduates to "lead with care, empathy, and compassion — and to show others, by example, that commitment creates opportunity." His message reinforced the values that both Airgas and UAGC share: lifting others, pursuing excellence, and fostering environments where individuals flourish personally and professionally.

A Partnership with Proven Impact

Since 2015, UAGC has been the preferred education partner for Airgas. In that time

- More than 200 Airgas employees have completed their degrees tuition-free with UAGC through the Full Tuition Grant.
- More than 60% of all Airgas–UAGC graduates have earned their bachelor's degree, and fourteen of those graduates also completed their master's degree with UAGC.
- More than 140 Airgas students are actively enrolled and progressing towards their degree with B.A. Business Administration, MBA, B.A. Business Leadership, B.A. Accounting and B.A. Operations Management & Analysis being four of the top enrolled degree programs.

As this second decade of partnership unfolds, each new graduate reminds us that when people are supported to "Fill Your Potential™ — and cared for along the way — the impact reaches far beyond any single ceremony.

BUILDING ACADEMIC COMMUNITY

IDENTIFYING BENEFITS OF ENTREPRENEURIAL THINKING IN HIGHER EDUCATION

Dr. Tobenna Attah, Associate Faculty, Department of Learning & Information Studies

Entrepreneurial thinking is not just for students who want to start a business. It is a practical language for navigating the real world, no matter the discipline. When students learn through hands-on experience, test whether ideas actually work, set clear goals, and learn how to communicate value, they engage more deeply and prepare more realistically for life after graduation. Both research and classroom experience show that the incorporation of entrepreneurial elements in a curriculum closes the gap between theory and practice, helping students see how what they learn connects to real problems, real people, and real opportunities they will face beyond the classroom.

College provides students with incredible resources, but access alone does not turn ideas into action. What makes the difference is experience. Rodrigues et al. (2023) indicated that when students are immersed in hands-on, real-world learning, they develop the kind of entrepreneurial skills that truly matter: creativity, adaptability, and confident decision-making. These are the skills that keep students engaged, make them employable, and help them think beyond a single major or career path. When curricula fail to connect theory to practice, students often leave knowing the content but still doubting their ability to apply it. Higher education can start to feel abstract, disconnected, and increasingly difficult to justify, especially when students begin to question the return on their investment (Colombelli et al., 2022).

Despite this, many institutions remain locked into lecture-heavy models that reward memorization over application (Martins van Jaarsveld et al., 2025). Ironically, real-world learning already exists across campus. Nursing students complete clinical rotations. Artists work in studios. Engineers build capstones and compete in student competitions. Social science students engage in community projects. The problem is not the absence of practice. It is the absence of an entrepreneurial framework in every discipline.

Too often, students are not taught how to identify genuine needs, test whether their ideas are effective, or assess whether their efforts are viable beyond the classroom. Without that lens, students may graduate feeling like they have done a lot of work without clearly understanding how any of it translates to the workplace. Limited, inconsistent collaboration with industry and community partners only deepens this gap, leaving graduates unsure how their skills align with real labor market demands (Leiva Lugo et al., 2024).

College programs still lean heavily on theory, often at the expense of what it takes to make hands-on learning actually matter in the real world. The outcome is no surprise: students graduate knowing the material but remain unsure how to apply it meaningfully (Mngwengwe et al., 2025). Even when labs, practica, or fieldwork are incorporated, students are rarely challenged to ask the question that drives real progress: How could this work be improved, rethought, or scaled to address a current problem? A nursing student may log clinical hours without ever being invited to streamline a process that eases staff workload or improves patient communication. A media arts student may mount a live production without learning how to draw an audience or sell tickets in large numbers. When that question is missing, experiential learning becomes an exercise rather than a catalyst. Closing this gap means designing curricula around action, experimentation, and entrepreneurial tools that teach students across disciplines to spot inefficiencies, uncover unmet needs, and test ideas where learning actually happens.

An entrepreneurial approach is the practice of disciplined problem-solving applied to real world challenges. It starts with identifying problems that matter, listening to the people affected, and refining solutions within real constraints. This approach strengthens experiential learning in any field. A nursing student improving patient discharge instructions, a computer science major designing an accessible app,

or a sociology student building a community-based research project all rely on the same entrepreneurial habits: spotting opportunities, engaging stakeholders, and testing feasibility. These skills do not replace disciplinary expertise. They sharpen it. They make learning purposeful, responsive, and connected to outcomes that extend beyond grades.

Non-business programs often miss a powerful opportunity when they overlook customer-centered thinking. Real-world success, in any field, depends on whether something actually meets a need and can be sustained over time. Embedding an entrepreneurial mindset across the higher education curriculum helps students move from ideas to impact. A media arts major learns not just how to produce art, but how to attract an audience and manage financial realities. An engineering student learns to balance user needs, cost, and technical limits. These are not "business skills;" but rather skills that any discipline could leverage to improve student experiences.

The Importance of Emphasizing Business Viability

College programs should ideally move students closer to the people who matter most: customers, clients, patients, audiences, and community partners (Henderson et al., 2025). When students engage directly with real stakeholders, learning becomes more than hypothetical. They begin to understand real problems, real constraints, and real trade-offs. This is where entrepreneurial thinking takes root, when learning is anchored in the priorities and lived experiences of others. The business viability questionnaire below can push students in this direction and works just as well for business ideas as it does for community-based solutions (Kander, 2014):

My customers are _____.

Their problem is _____.

They are currently solving their problem by _____.

On a scale of 1 to 10, the seriousness of the problem is ___ out of 10.

They would spend $____ to fix this problem.

Business Viability Questionnaire

1) My customers are _____.

2) Their problem is _____.

3) They are currently solving their problem by

_____.

4) On a scale of 1-10, the seriousness of the problem is ___ out of 10.

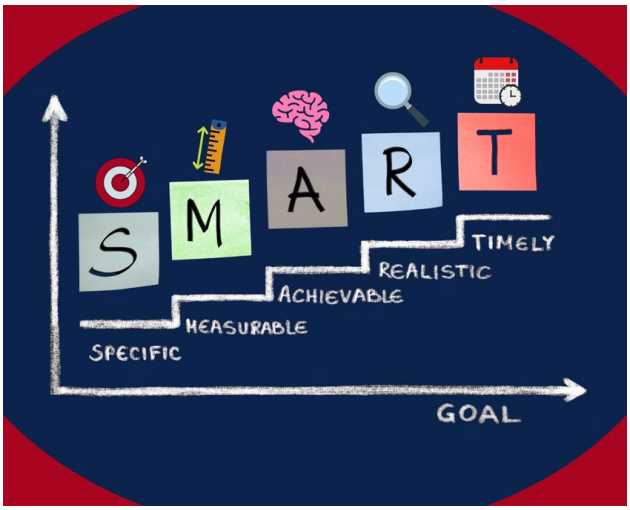
5) They would spend $_____ to fix this problem.

These five questions force clarity. Students should define who they are serving, assess the urgency of the problem, and determine whether anyone is willing to commit resources to a solution. A nursing student might focus on patients struggling to understand discharge instructions. A media arts student might treat local audiences or community partners as stakeholders and confront what it truly takes to sustain a production. In every case, students move beyond good intentions to honest viability checks.

This kind of reflection builds customer-centered thinking, a skill set that matters far beyond startups and business. It shapes better clinicians, stronger nonprofit leaders, more effective engineers, and more grounded public servants. Educators should feel empowered to adapt tools like this across disciplines, not as add-ons, but as core practices for developing entrepreneurial mindsets that translate into real-world impact.

Emphasizing SMART Goals to Promote Individualized Support

Goal setting is widely used in higher education as a measure to understand student perspectives and motivations. SMART goals, which are Specific, Measurable, Achievable, Relevant, and Time-bound, may provide a particularly effective framework for revealing students' intrinsic interests and fostering entrepreneurial traits such as persistence and adaptive problem solving (Martins van Jaarsveld et al., 2025). When framed entrepreneurially, SMART goals help students in any program treat their ambitions as hypotheses to test through structured action in the real world.



In my GEN 101 course, I work closely with students to connect their professional SMART goals to real opportunities outside the classroom. That process sparks deeper engagement and more honest conversations about risk, effort, and feasibility. When students set goals that are specific and values-driven, they stop feeling overwhelmed and start moving strategically. This is the same approach entrepreneurs and working professionals use to break down big ideas into executable steps. For example, my former student, Samantha, wanted to open an automotive repair business with her father. She wasn't just dreaming. She was thinking through logistics, scheduling, location, and legal requirements. Together, we shaped that ambition into a SMART goal:

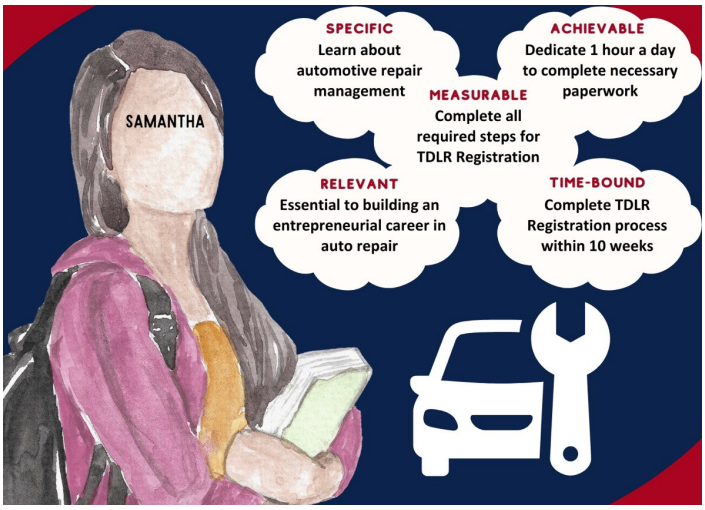
Specific: Learn automotive repair management.

Measurable: Obtain the Texas Department of Licensing and Regulation (TDLR) Registration, necessary for becoming a vehicle inspection station.

Achievable: Dedicate one hour each weekday (five hours weekly) to completing the required paperwork.

Relevant: This aligns directly with her entrepreneurial objective to operate an auto repair shop with her father.

Time-bound: Set a deadline of 10 weeks for completing all necessary paperwork, with the goal of finishing earlier if possible.



Once the goal was clear, I pointed Samantha to Open Educational Resources (OER) that actually moved the needle: step-by-step YouTube guides for securing a general business license and case studies of successful auto repair shops. This kind of individualized support is now standard in my course. We focus less on abstract planning and more on building skills that students can use immediately, regardless of their major.

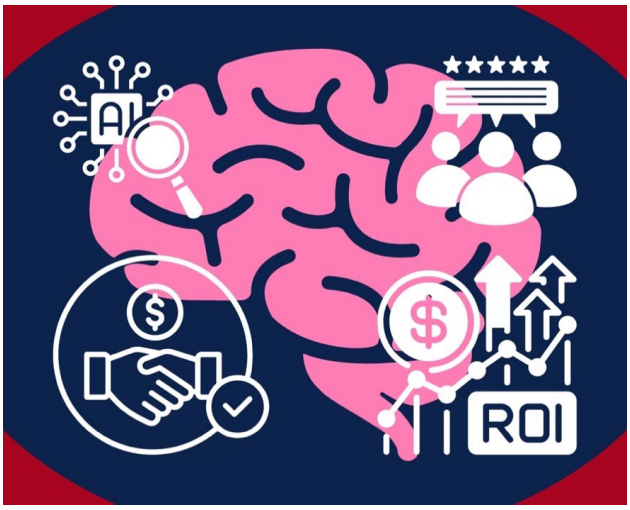
The same framework works far beyond business. A nursing student might set a SMART goal to shadow two nurses, document workflow bottlenecks, and propose a testable improvement within a four-week period. A computer science student might interview five users and revise an app interface by a fixed deadline. A media arts student might meet with local venue managers, gather audience feedback, and revise a production plan before opening night. In every case, professional SMART goals turn disciplinary work into entrepreneurial practice. They push students to act, measure, adjust, and learn. That is how entrepreneurial thinking becomes accessible, practical, and relevant across every field.

Encouraging Sales Enablement Principles and the Ethical Use of Artificial Intelligence (AI)

Sales enablement is essentially what sales organizations use to train employees and ensure they are adding value at every customer touchpoint. In practice, sales enablement aligns teams, resources, and

data so sellers can work more efficiently and consistently advance opportunities through the sales process to hit measurable revenue goals (Bookstaber, 2023). When sales enablement is integrated into coursework, learning shifts from abstract theory to applicable skills. Students stop thinking in terms of ideas and start thinking in terms of problems real people are willing to pay to solve (Peterson et al., 2020). That customer-first mindset is foundational to entrepreneurial thinking and relevant across disciplines.

AI tools can support the sales enablement process, but only when they are treated as starting points, not answers. The goal is not to outsource thinking, but to pressure-test it. Used ethically, even basic AI tools help students generate hypotheses, explore patterns, and simulate scenarios that would otherwise be hard to access. The discipline comes in verification. Students learn quickly that AI can suggest possibilities, but real insight comes from confirming those ideas in the field.



Returning to Samantha's example, AI tools could help her scan the local auto repair landscape to identify competitors, pricing trends, and potential service gaps. That information gives her direction, not certainty. It becomes something to validate through conversations, site visits, and local research, rather than something to accept at face value.

Sales enablement principles in higher education also involves teaching students how to identify and engage with real customers. I encouraged Samantha to call her auto insurance agent and ask direct, practical questions: Where are you struggling to place repair work? Which zip codes or towns lack reliable shops? Those conversations reveal truths no algorithm can. Based on that insight, her family could choose a location where demand already exists. Once the shop opens, Samantha can follow up with the agent, clearly positioning the business as a solution to a known gap and building a natural referral channel.

This is what "trust, but verify" looks like in practice. Data informs decisions, but people confirm them (Huber, 2025). Teaching students to combine sales enablement strategies with a cautious and critical use of AI prepares them to make smarter, lower-risk decisions when the stakes are high. That balance,

not blind reliance on technology, is what makes experiential learning meaningful in the college classroom.

Conclusion

Embedding entrepreneurial thinking across higher education is not a trend. It is a response to what students actually need. When programs integrate experiential learning, SMART goals, sales enablement, and practical tools like the Business Viability Questionnaire, students stay engaged, persist longer, and graduate better prepared to work and adapt. These practices develop skills that are relevant today: creativity under constraint, comfort with uncertainty, stakeholder awareness, and the ability to make decisions when the answer is not immediately apparent.

More importantly, entrepreneurial thinking provides students with a way to apply their discipline in the real world. A nursing student improving patient education materials, an engineering team designing a prototype for a community partner, or a media arts ensemble learning how to build and sustain an audience are all doing entrepreneurial work, whether they call it that or not. When students are taught to view their projects through this lens, learning becomes more concrete. They begin to connect coursework to real needs, understand what it takes to secure support and resources, and adjust when conditions change.

This kind of integration does not require rebuilding programs from scratch. It strengthens what already exists. And when students can clearly see how their education translates into action and impact, the value of their degree becomes easier to trust. That is how higher education prepares graduates who are not just credentialed but also proactive, resilient, and ready to make a positive impact in whatever field they enter.

References

Bookstaber, P. (2023) Sales enablement: A complete guide (importance, strategies & more). *Salesforce*. https://www.salesforce.com/sales/enablement/what-is-sales-enablement/

Colombelli, A., Loccisano, S., Panelli, A., Pennisi, O. A. M., & Serraino, F. (2022). Entrepreneurship education: The effects of challenge-based learning on the entrepreneurial mindset of university students. *Administrative Sciences, 12*(1), 10. https://doi.org/10.3390/admsci12010010

Henderson, A., Karimi, H., & Fairfield, A. (2025). How to succeed in business as a student entrepreneur. *Small Business Institute Journal, 21*(1), 35–44. https://doi.org/10.53703/001c.138373

Huber, N. (2025) *The sweaty startup: How to get rich doing boring things*. Harper Business. https://a.co/d/5vnDcdN

Kander, D. (2014). *All in startup: Launching a new idea when everything is on the line*. Wiley. https://a.co/d/60YAZk5

Leiva-Lugo, L., Álvarez-Icaza, I., López-Hernández, F. J., & Miranda, J. (2024). Entrepreneurial thinking and Education 4.0 in communities with development gaps: An approach through the Sustainable

Development Goals. *Frontiers in Education, 9*, 1377709. https://doi.org/10.3389/feduc.2024.1377709

Martins van Jaarsveld, G., Wong, J., Baars, M., Specht, M., & Paas, F. (2025). Goal setting in higher education: How, why, and when are students prompted to set goals? A systematic review. *Frontiers in Education*, 9, 1511605. https://doi.org/10.3389/feduc.2024.1511605

Mngwengwe, S., Govender, S. ., & Mokoena, S. . (2025). Evaluating the business studies curriculum for contemporary business practices. *Edelweiss Applied Science and Technology, 9*(3), 2038–2048. https://doi.org/10.55214/25768484.v9i3.5745

Peterson, R. M., Malshe, A., Friend, S. B., & Dover, H. (2020). Sales enablement: Conceptualizing and developing a dynamic capability. *Journal of the Academy of Marketing Science*, 1-24. https://doi.org/10.1007/s11747-020-00754-y

Rodrigues, A. L. (2023). Entrepreneurship education pedagogical approaches in higher education. *Education Sciences, 13*(9), 940. https://doi.org/10.3390/educsci13090940

AI IN EDUCATION: THE LINE BETWEEN STUDENT OVERRELIANCE AND INTELLECTUAL EMPOWERMENT

Murat M. Elahi, UAGC Associate Faculty, Department of Justice, Security, & Public Safety Professions

Artificial intelligence tools such as ChatGPT are reshaping how students look for information and demonstrate understanding. These tools can lighten cognitive load, spark curiosity, and help students approach assignments from new angles. At the same time, these tools can pull students away from the kind of critical thinking that learning requires when used too early or too often. To clarify what meaningful engagement looks like when AI is involved, I draw on learning research such as the ICAP framework, which distinguishes interactive, constructive, active, and passive forms of thinking (Chi & Wylie, 2014). In this article, I focus on one central question: How do we tell the difference between AI that strengthens thinking and AI that gradually replaces it? Drawing on recent classroom research and my own teaching experience, I highlight where overreliance tends to emerge and how thoughtful course design can help students stay actively engaged. My goal is to offer a clear, practical view of what responsible AI use looks like in everyday learning.

Debate Over AI in Education

Debate over AI in education often swings between promise and concern. Some fear that students will lean on generative tools to such an extent that the thinking embedded in coursework becomes optional. Others see these systems as accessible learning partners that can help students test ideas, receive feedback, and strengthen early drafts. Recent reviews of generative AI in higher education show both

sides of this tension: the technology can deepen understanding when used after genuine effort, yet it can also short-circuit the learning process when it supplies polished answers too quickly (Ali et al., 2024). The real issue is not whether AI helps or harms—it is **when**, **how**, and **under what conditions** it shifts from a productive scaffold into a shortcut that weakens the habits instruction is meant to build.

The Overreliance Problem

Overreliance tends to show up in recognizable ways. One early sign is a drop in genuine generative thinking. When students import AI-produced text and make only minor edits, they skip the retrieval and reasoning that support deeper learning. Another marker is miscalibration: Students often assume they understand material because the AI's fluent explanations make the work look easy. Over time, this can contribute to "concept drift," the gradual shift in a student's understanding as their mental model moves away from the intended course concepts, especially in cumulative courses where skills are meant to build from one assignment to the next. These patterns become more common when tasks are vague, when grading rewards polish over process, or when students are unsure about the boundaries of acceptable AI use. Courses that rely only on written submissions—without chances for oral explanation, problem-solving demonstrations, or iterative feedback—tend to make this drift even more likely. In one of my courses, a student submitted a polished written response that looked impressive until we discussed it in class. When I asked her to walk through her reasoning, she froze and admitted she had relied heavily on AI to generate the explanation. The moment made clear that the "understanding" the assignment was meant to build never actually happened.

Where AI Can Empower Rather Than Replace Thinking

AI can strengthen learning when it is used in ways that keep students mentally active. It can help them compare alternative solutions, notice inconsistencies in their reasoning, or ask questions they might not have considered on their own. Research on cognitive engagement, including the ICAP framework, shows that deeper learning occurs when students move beyond passive or surface-level activity into constructive and interactive forms of thinking (Chi & Wylie, 2014). Generative AI tends to be most effective when it supports these higher levels of engagement—after students have made an honest first attempt—rather than providing polished answers too early in the process. Studies of classroom use show that when learners use AI to refine their ideas and test their understanding, the tool becomes a companion that makes thinking visible rather than a shortcut that replaces it (Mollick & Mollick, 2023). I worked with a student who attempted a complex case analysis on his own before asking AI to critique his draft. When he compared his reasoning to the model's suggestions, he spotted a weak assumption he hadn't noticed and revised his argument accordingly. The improvement came not from the AI's answer, but from the comparison process itself. The distinction is simple: In empowered use, AI supports the learner's reasoning. In overreliant use, AI replaces it.

Ethics, Authorship, and Disciplinary Norms

Responsible use of AI is not only a matter of learning science; it is also a matter of academic norms. Different fields draw the authorship line in different places. A philosophy course may limit AI to

metacommentary and counterexample generation, while a data science course may allow AI-generated boilerplate code but reserve modeling decisions for the learner. Design programs, in particular, are experimenting with AI as a rapid prototyping partner while still requiring students to explain the aesthetic and human-centered tradeoffs behind their choices—an expectation reflected in emerging research on AI-supported creative work (Kasneci et al., 2023; Holmes et al., 2023). Across disciplines, the unifying principle is accountability: Students must own the truth and reasoning behind what they submit, even when acknowledging appropriate AI assistance. A student in my ethics course once asked whether using AI-generated code meant the assignment was technically "still his." His uncertainty showed how quickly authorship lines blur when tools produce fluent output. It turned into a discussion about intellectual ownership and what it means to stand behind the decisions in your work.

Faculty Development and Institutional Policy

Individual instructors cannot navigate the instructional, ethical, and data-related shifts introduced by AI-enabled education in isolation. As Khosravi et al. (2023) argue, the integration of AI-powered educational technologies creates system-level challenges that require coordinated institutional support rather than individual faculty-level responses. In this context, instructors need guidance, shared examples, and time to redesign assignments so that AI use promotes active engagement rather than passive task completion. Teaching and learning centers can play a supporting role by helping translate institutional expectations into practical resources, including illustrative syllabus language, discipline-specific scenarios, and case examples that demonstrate how routine academic tasks may be restructured to support deeper learning. Institutions should also establish clear, tiered policies that distinguish prohibited uses of AI from permitted or encouraged forms of assistance. Consistent with Khosravi et al. (2023), learning analytics and AI-supported feedback systems can help identify early signs of misunderstanding or misuse, not as surveillance mechanisms but as tools for timely instructional intervention and student support, while ensuring due process in academic integrity cases that rely on probabilistic or system-generated evidence. In practice, some institutions have begun responding to these challenges by shifting toward multimodal project formats, such as image- or video-based submissions, while others employ AI-assisted pre-review systems to identify errors or inconsistencies before instructor evaluation, illustrating emerging institutional approaches to AI-supported assessment.

Conclusion

AI is neither a shortcut machine nor a silver key. It amplifies whatever learning design, assessment practice, and ethical expectations we place around it. Overreliance emerges when tasks reward polish over thought, when students turn to AI before they struggle productively, or when expectations around AI use are unclear. Empowerment grows when students are asked to compare, justify, revise, and explain their thinking—when process matters as much as product, and when access to AI is paired with transparent guidance. In my own teaching, I have watched students become more accountable when they know they will explain their work in person or on video. The line between empowerment and overuse is real, but not fixed. Educators can move it through deliberate design and honest conversation,

and students can move it through reflective use. When overuse appears, it becomes a teaching moment—a chance to help students realign their habits and use AI as a tool rather than a substitute for their own intellectual work.

References

Ali, W., Fatemi, A., Wang, W., et al. (2024). ChatGPT in teaching and learning: A systematic review. *Education Sciences, 14*(6), 643. https://doi.org/10.3390/educsci14060643

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W H Freeman/Times Books/Henry Holt & Co.

Chi, M. T. H., & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist, 49*(4), 219–243. https://doi.org/10.1080/00461520.2014.965823

Holmes, W., Bialik, M., & Fadel, C. (2023). Artificial intelligence in education. In *Data ethics: Building trust: How digital technologies can serve humanity* (pp. 621-653). Globethics Publications. https://doi.org/10.58863/20.500.12424/4276068

Kasneci, E., Sessler, K., Küchemann, S., et al. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences, 103* (102184). https://doi.org/10.1016/j.lindif.2023.102274

Khosravi, H., Sadiq, S., & Amer-Yahia, S. (2023). Data management of AI-powered education technologies: Challenges and opportunities. *Learning Letters, 1*(2). https://doi.org/10.59453//XLUD7002

Mollick, E., & Mollick, L. (2023). Assigning AI: Seven approaches for students, with prompts. *The Wharton School Research Paper.* http://dx.doi.org/10.2139/ssrn.4475995

WHEN THEORIES MISLEAD: RE-EXAMINING EDUCATIONAL FRAMEWORKS THROUGH EVIDENCE AND CRITICAL REFLECTION

Yolanda Harper, Program Chair, Department of Human Behavior & Performance Professions

The following generative artificial intelligence (AI) was used in the creation of this submission: Perplexity. In this text, AI was used to assist with clarity improvement or phrasing suggestions. AI was used for only the reason listed and not to produce, replace, or substitute the author's work and original thought. Suggested phrases were edited further by the author.

Educational theories serve as guiding frameworks that shape academic content, teaching practices, assessment designs, and policy decisions in higher education. When subjected to critical scrutiny, many theories offer helpful insights as long as we keep in mind they are just that—theories, not universal scientific laws. When theories are uncritically

accepted, they mislead students and educators, waste resources, and create a misplaced sense of confidence in practices lacking empirical support.

Scholarly literature abounds with credible sources going back decades (e.g., Wahba & Bridwell, 1976; Waterhouse, 2006) documenting theories that continue to be used as frameworks for teaching and practice despite having long been discredited (e.g., Lilienfeld et al., 2010; Riener & Willingham, 2010). This article re-examines the role of theories in education, highlights several disproven yet persistent educational myths, and advocates for continuous critical reflection and empirical validation as core components of professional practice in the university context. Both historical and contemporary sources have been intentionally incorporated to demonstrate that these theories have long been recognized as unfounded.

Common Educational Myths

Consistent with prior scholars, this article will use the term "educational myths" to refer to theoretical claims that have been discredited or are not supported by credible evidence to justify using them as valid frameworks (e.g, Gerber & Sander, 2025; Howard-Jones, 2014; Lilienfeld et al., 2010; Tunga et al., 2025). These models function as idealized fictions—simplified narratives—that impose conceptual order upon the inherently complex and context-dependent nature of learning and motivation while distorting both empirical reality and lived human experience (e.g., Francis, 2021; Gravett & Bach, 2024; Saif, 2024). Over time, these frameworks have become traditional narratives within higher education, perpetuating the illusion of universality and scientific legitimacy despite evidence to the contrary. Such models also serve to elevate particular theorists' contributions, thereby reinforcing a selective and culturally circumscribed worldview that marginalizes alternative perspectives and evidence.

Educational myths arise from multiple sources. Some emerge when complex findings about teaching and learning are oversimplified and overgeneralized claims despite resting on weak or inconsistent evidence (Lilienfeld et al., 2010). Others are perpetuated by decontextualized summaries in textbooks, media pieces, and professional development materials that omit crucial caveats, boundary conditions, or methodological limitations (Pasquinelli, 2012; Hughes et al., 2020). Among the most frequently endorsed myths are learning styles, left-brain/right-brain thinking, multiple intelligences, Maslow's hierarchy of needs, and Bloom's taxonomy (Dekker et al., 2012; Fink, 2013; Francis, 2021; Howard-Jones, 2014; Pashler et al., 2008; Tunga et al., 2025).

- Learning styles theory claims students learn best when instruction is tailored to preferred modalities (e.g., visual, auditory, kinesthetic), yet rigorous reviews have failed to find reliable benefits of matching teaching to such styles on learning outcomes (Brown, 2023; Pashler et al., 2008; Dekker et al., 2012).
- The left-brain/right-brain dichotomy persists in popular discourse, even though contemporary neuroscience shows that both hemispheres are involved in most cognitive tasks and that functions are far more integrated than this simplistic model suggests (Howard-Jones, 2014).

- Multiple intelligences theory, proposed by Howard Gardner, suggests people have several distinct types of intelligence (e.g., logical-mathematical, musical, bodily-kinesthetic, intrapersonal, etc.). However, research has failed to validate these as separate measurable intelligences (Waterhouse, 2006).
- Maslow's hierarchy of needs is a particularly pervasive mythical theory that has spread like an infection to a wide range of disciplines and professions. Who has not seen the pyramid with fixed, sequential levels of "needs" purported to be universal? Yet literature reviews as early as the 1970s indicated little to no support for Maslow's model, including the deprivation–domination hypothesis, the gratification–activation proposition, a hierarchical organization of needs, and the universality of the model (e.g., Wahba & Bridwell, 1976). Maslow based his theory on observations of individuals he deemed "self-actualized," such as Albert Einstein and Abraham Lincoln, rather than valid empirical evidence based on culturally representative samples (Maslow, 1943). Contemporary research continues to find a lack of support for the theory and the assumptions on which it is based (e.g., Rojas et al., 2023; Saif, 2024).
- Bloom's taxonomy may not be a total myth, but for decades, its categorization of cognitive skills has been described as an outdated and overly simplified model that misrepresents how learning occurs in the brain (Fink, 2013). Contemporary research indicates that learning processes are dynamic and simultaneous as opposed to strictly hierarchical. The mythological nature of hierarchical taxonomies like Bloom's can lead to misleading instructional sequencing and illusory scaffolding. While attempts have been made to revise the model, the biggest concerns that remain are the lack of empirical evidence to inform the development of the model, along with a lack of credible support for the original and revised versions. Additional critiques include outdated verbs that stifle creativity, are rigidly applied, are often irrelevant for modern learning, and are not effectively learner-centered (Fink, 2013; Francis, 2021; Gravett & Bach, 2024; Irvine, 2017; Wells, 2015).

The persistence of educational myths, as long ago highlighted by Howard-Jones (2014) and Pasquinelli (2012), is not merely of historical interest but has immediate and significant implications for curriculum development, assessment practices, and student support strategies. Relying on discredited or oversimplified theories for instructional and student support decisions risks misdirected interventions, misrepresents students' abilities, and limits pedagogical approaches that could benefit diverse learners. In addition, perpetuating these myths as if they were evidence-based miseducates students and the communities they share their misinformation with.

Debunking the Myths

Research on cognitive biases and logical fallacies offers insights into the persistence of outdated, discredited, and undersupported theories and the mindsets that sustain misleading educational ideas (Simmering et al., 2025). Opre et al. (2025) found that the acceptance of misleading theories is embedded in broader systems of preparation, professional discourse, and institutional culture.

However, there is hope: Tunga et al. (2025) and Gerber and Sander (2025) found educational myths to be reversible, albeit resistant—at least among the populations they studied. They also found that while endorsement of several entrenched misconceptions was reduced, different beliefs required different myth debunking strategies. For university faculty, this line of research highlights the value of professional development that goes beyond simply presenting new theories: Invite educators to critically interrogate and revise existing beliefs in light of empirical and other credible evidence.

Cultivating a culture of critical inquiry around educational theories requires deliberate effort at the individual, team, and institutional levels. Faculty and administrators can begin by routinely questioning the evidentiary foundation of widely cited frameworks, asking what kinds of studies support them, in which populations, and with what limitations. Developing habits of empirical validation involves resisting the allure of seductive but unsupported claims and instead prioritizing systematic reviews, replication studies, and converging evidence from multiple methods. Structured professional development—such as seminars on cognitive biases in educational decision-making, journal clubs focused on methodological quality, and workshops that critically analyze popular theories—can help educators recognize and counter their own cognitive biases (Simmering et al., 2025). Collaborative peer discussions that scrutinize the evidence behind established practices promote collective vigilance against miseducation and normalize the revision of beliefs in response to new findings (Tunga et al., 2025). Questions to help us frame our thinking include the following:

- At a time when higher education faces growing scrutiny and its value for workforce development is questioned, what are the risks of continuing to rely on and promote mythical theories?
- How might we all challenge ourselves to apply the same critical thinking and bias-reduction strategies that we teach our students?
- Which of our content and practices would benefit from revision based on the best available evidence that integrates insights from diverse disciplines and cultural contexts?
- What are the potential impacts of being transparent about the limitations of our theories and the practices on which they are based?
- How has the rise in AI, which now performs many traditional "cognitive" tasks, challenged the continued relevance of learning taxonomies, and what evidence is needed to reconceptualize or create credible frameworks that prioritize process-based, learner-centered competencies?

Ultimately, re-examining educational frameworks through evidence and critical reflection is essential for advancing effective pedagogy in higher education. Theories grounded in credible evidence can be helpful for organizing thinking about learning. However, rather than treating them as dogma, we need to be open to revising our theories and applying them with flexibility. By remaining vigilant about debunked and weakly supported theories, recognizing the role of cognitive biases and research miscitations (Simmering et al., 2025), and cultivating a habit of ongoing critical scrutiny, we can more closely align our practices with the aims of higher education. In doing so, universities not only enhance

student learning outcomes but also model for students what it means to engage in genuinely evidence-based, critically reflective inquiry.

References

Brown, S. B. R. E. (2023). The persistence of matching teaching and learning styles: A review of the ubiquity of this neuromyth, predictors of its endorsement, and recommendations to end it. *Frontiers in Education*, *8*, Article 1147498. https://doi.org/10.3389/feduc.2023.1147498

Dekker, S., Lee, N. C., Howard-Jones, P., & Jolles, J. (2012). Neuromyths in education: Prevalence and predictors of misconceptions among teachers. *Frontiers in Psychology, 3,* 429. https://doi.org/10.3389/fpsyg.2012.00429

Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. John Wiley & Sons.

Francis, E. M. (2021). *Deconstructing depth of knowledge: A method and model for deeper teaching and learning*. Solution Tree Press.

Gerber, Y., & Sander, E. (2025). Overcoming educational neuromyths: exploring the impact of metaphorical framing on confirmation bias and beliefs. *Cogent Education*, *12*(1), 2554015. https://doi.org/10.1080/2331186X.2025.2554015

Gravett, E. O. & Bach, D. (2024). Beyond the "human dimension": Expanding Fink's taxonomy of significant learning to include the more-than-human world. *To Improve the Academy: A Journal of Educational Development, 43*(1), 2. https://doi.org/10.3998/tia.3800

Howard-Jones, P. A. (2014). Neuroscience and education: Myths and messages. *Nature Reviews Neuroscience, 15(*12), 817–824. https://doi.org/10.1038/nrn3817

Hughes, B., Sullivan, K. A., & Gilmore, L. (2020). Why do teachers believe educational neuromyths? *Trends in Neuroscience and Education*, *21*, 100145. https://doi.org/10.1016/j.tine.2020.100145

Irvine, J. (2017). A comparison of revised Bloom and Marzano's New Taxonomy of Learning. *Research in Higher Education Journal*, *33*. https://files.eric.ed.gov/fulltext/EJ1161486.pdf

Lilienfeld, S. O., Lynn, S. J., Ruscio, J., & Beyerstein, B. L. (2010). 50 great myths of popular psychology: Shattering widespread misconceptions about human behavior. Wiley-Blackwell.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

Opre, D., Pintea, S., & Iucu, R. (2025). Pre-service teachers' misconceptions about brain and mind–prevalence and predictors. *Trends in Neuroscience and Education, 40*, 100260. https://doi.org/10.1016/j.tine.2025.100260

Pasquinelli, E. (2012). Neuromyths: Why do they exist and persist? *Mind, Brain, and Education, 6*(2), 89–96. https://doi.org/10.1111/j.1751-228X.2012.01141.x

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, D. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest, 9*(3), 105–119. https://doi.org/10.1111/j.1539-6053.2009.0103

Riener, C., & Willingham, D. (2010). The myth of learning styles. Change: *The Magazine of Higher Learning, 42*(5), 32–35.

Rojas, M., Méndez, A., & Watkins-Fassler, K. (2023). The hierarchy of needs empirical examination of Maslow's theory and lessons for development. *World Development*, *165*, 106185. https://doi.org/10.1016/j.worlddev.2023.106185

Saif, G. B. D. (2024). Towards a dynamic model of human needs: A critical analysis of Maslow's hierarchy. *PhilPapers, 2*(3):1028-1046. https://philpapers.org/rec/BELTAD

Simmering, M. J., Fuller, C. M., Leonard, S. R., & Simmering, V. R. (2025). Cognitive biases and research miscitations. *Applied Psychology, 74*(1), e12589. https://doi.org/10.1111/apps.12589

Tunga, Y., Celik, B., & Cagiltay, K. (2025). Educational myths among teachers: Prevalence and refutational intervention for belief change. *Humanities and Social Sciences Communications, 12*(1), 1–16. https://doi.org/10.1057/s41599-025-05470-y

Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Review of Educational Research, 46*(4), 531–543. https://doi.org/10.1016/0030-5073(76)90038-6

Waterhouse, L. (2006). Multiple intelligences, the Mozart effect, and emotional intelligence: A critical review. *Educational Psychologist, 41*(4), 207–225. https://doi.org/10.1207/s15326985ep4104_1

Wells, C. (2015). The structure of observed learning outcomes (SOLO) taxonomy model: How effective is it? *Journal of Initial Teacher Inquiry*, *1*, 37–39. https://ir.canterbury.ac.nz/server/api/core/bitstreams/075999c6-81d9-470f-b827-42dd5c2cf42a/content

AI CORNER | REAL STORIES FROM HIGHER ED

About This Series

AI Corner | Real Stories from Higher Ed is a reflective series in *The UAGC Chronicle* that highlights how faculty and staff across our university are engaging with AI through experimentation, exploration, and thoughtful practice. Each entry offers a glimpse into real work in motion, showing how colleagues are thinking through new tools, noticing patterns in their work, and testing small ideas that help our institution learn as it goes.

Some stories may focus on tools and workflow design, while others may center on personal insight, accessibility, or ethical considerations. Together, they reflect a community learning with AI, not simply learning about it.

Interested in Contributing to AI Corner?

This series invites faculty and staff contributors across UAGC to share not only successes, but also questions, early prototypes, and reflections, because the most meaningful AI work often begins with understanding ourselves as learners.

Contributions may focus on tools you are exploring, workflows you are rethinking, or questions that have shaped how you approach your work.

If you have a story about learning with AI, we invite you to share it through the UAGC Chronicle submission portal.

USING AI TO SUPPORT REFLECTION AND LEARNING

Diana Boggan, UAGC Faculty Development and Coaching Specialist, Faculty Affairs

In preparing for a recent quarterly aims check-in, I expected a familiar exercise: reviewing tasks completed and outlining next steps. Instead, I turned to AI tools to help me reflect on my work. I was not looking for faster outputs or automated summaries; I was trying to make sense of complex, overlapping projects. As a neurodivergent professional, that kind of reflection does not always come easily. What I discovered was that using AI as a *thinking partner* helped me externalize my ideas, organize my thoughts, and reduce the cognitive load that often makes reflection difficult.

In this article, I argue that for neurodivergent professionals, AI-supported reflection can create a cognitively accessible and meaningful learning process. In my case, this took shape within the Learning Plan Framework shared by keynote speaker Dr. Blake Naughton at the 2025 UAGC Teaching and Learning Conference. The Learning Plan Framework provided a simple structure for articulating what I had done, why it mattered, and what I was learning. Paired with AI-supported reflection, the process felt less like reporting progress and more like engaging in a learning experience. That shift is what I want to explore here, and why I believe AI-supported reflection holds promise for faculty and staff navigating complex work and competing priorities.

Why Reflection Matters in Complex Work

Reflection is often described as a cornerstone of professional learning, particularly in higher education. In learning organizations, reflection allows individuals and teams to surface assumptions, make sense of experience, and connect daily work to broader purpose. Peter Senge's (1990) work on learning

organizations emphasizes that learning does not come from activity alone, but from the ability to reflect on that activity in ways that inform future action.

In practice, however, reflection is frequently constrained by time pressure, competing priorities, and institutional demands that prioritize documentation over sensemaking. Reflection becomes something to complete rather than something to engage in. For neurodivergent professionals, these constraints can be even more pronounced. Executive-function demands such as organizing thoughts, synthesizing information, and articulating learning often require significant cognitive effort, especially when work is complex or non-linear.

The Learning Plan Framework introduced by Dr. Naughton (2025) was designed to support reflection by offering a simple structure for articulating what was done, why it mattered, and what was learned. It provides a tangible, repeatable way to shift perspective, supporting the ongoing cultural movement at UAGC away from legacy mindsets and toward shared vision and psychological safety. A visual representation of the Learning Plan Framework is shown in Figure 1, where the learning organization is at the center, surrounded by Agreement, Experiment, and Share Stories, which together describe how shared understanding, experimentation, and reflection support continuous learning. This structure provided by the framework matters. It creates a shared language for reflection and helps shift conversations away from task completion toward learning and growth. However, structure alone does not eliminate cognitive friction. Even with this clear framework, reflection can remain difficult when the work itself is layered, iterative, and distributed across time, especially when individuals are asked to connect day-to-day responsibilities, such as administrative or operational tasks, to broader outcomes like student success.

This is where AI-supported reflection became meaningful in my own practice. The combination of a reflective framework and AI as a thinking partner made it possible to engage with reflection in a way that felt cognitively accessible. Instead of holding all the pieces of my work in my head, I could externalize them, organize them, and return to them with more clarity. Reflection became less about producing a summary and more about making sense of my work as a learning process.

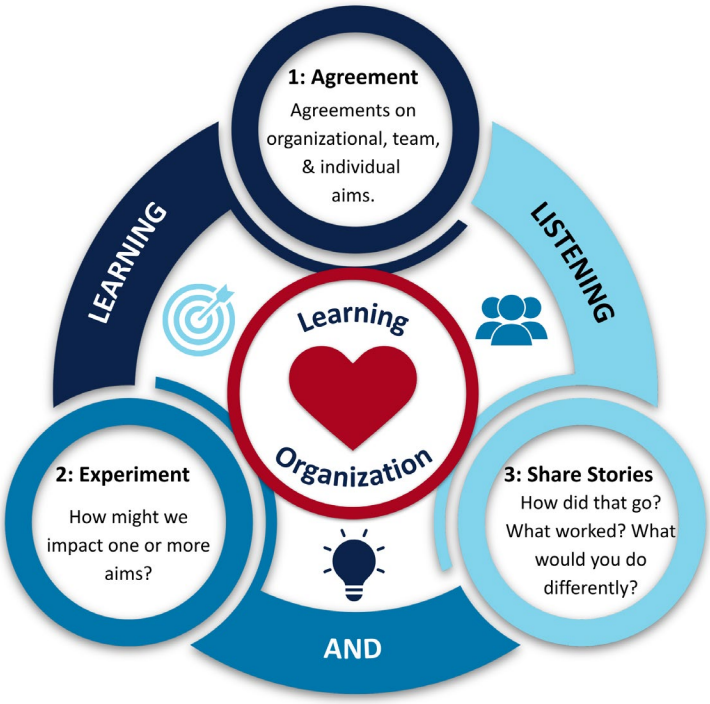


Figure 1. The Learning Plan Framework: Agreement, Experiment, Share Stories.

AI-Supported Reflection in Practice

When I began preparing for my quarterly aims check-in, I was not looking for a new productivity tool. I was trying to reflect on a quarter of work that spanned multiple projects, conversations, and evolving priorities. Holding all of that in mind at once made it difficult to articulate what I had done, what I had learned, and how my work connected to broader goals. This is where AI-supported reflection became practically useful.

Rather than using AI to generate content or automate decisions, I used it as a thinking partner. I worked iteratively, sharing fragments of notes, partial reflections, and questions, and asking the tool to help me organize themes, surface patterns, and clarify relationships between ideas. This process allowed me to externalize my thinking and reduce cognitive load, making reflection more accessible and less overwhelming.

The way this approach took shape in my work was through an early prototype of the Exploring Alignment Agent, an AI-supported tool designed to guide reflective sensemaking. The agent prompts users to explore how their work connects to personal aims, job responsibilities, and institutional priorities using questions aligned to the Learning Plan Framework. For example, after describing a project I had worked on, I asked the agent to help me reflect on how that work aligned with my stated aims and what I was learning through the process. The tool helped me organize my notes into themes, identify where my work supported broader goals, and surface questions I wanted to carry forward. The

purpose of the AI tool is not to produce answers, but to support reflection by organizing information, surfacing connections, and encouraging deeper consideration of impact.

Use of the AI tool did not replace my reflective thinking in this process. Instead, it supported it. By externalizing information and reducing cognitive friction, the tools helped me notice patterns I might otherwise have missed. Senge (1990) describes leverage points as small, well-placed interventions that can lead to meaningful change in complex systems. For me, AI functioned as one of those leverage points by changing how reflection was supported, not by changing the work itself.

While my example draws from an annual aims process, this approach is not limited to formal goal-setting. Associate faculty, for example, could use the Exploring Alignment Agent to support reflection on teaching practice by describing a course, instructional strategy, or classroom challenge and using the guided prompts to examine what they tried, what they observed, and what they are learning. In these cases, the agent supports reflection rather than evaluation, helping structure thinking around instructional experiments, student feedback, or course adjustments. As with other uses of AI-supported reflection, the goal is not to generate answers, but to provide cognitive scaffolding that supports sensemaking within complex, human-centered work.

Research Context: AI, Reflection, and Cognitive Support

Research on learning and cognition helps explain why AI-supported reflection can be effective, particularly for neurodivergent professionals. Studies of executive functioning show that tasks requiring synthesis, organization, and self-reflection place significant demands on working memory and attentional control. For adults with ADHD and other neurodivergent profiles, these demands can make reflective work disproportionately effortful, even when motivation and expertise are high (Francisco et al., 2024).

Within organizational learning contexts, reflection is not simply a personal habit but a structural necessity. In *The Fifth Discipline*, Peter Senge (1990) emphasizes that learning organizations depend on mechanisms that support sensemaking rather than compliance or surface-level reporting. Reflection becomes meaningful when individuals are able to externalize their thinking, examine patterns over time, and connect experience to shared purpose. Without adequate scaffolding, reflective processes often collapse into documentation rather than learning. Recent research suggests that AI-supported tools can help address these challenges by functioning as cognitive scaffolds rather than substitutes for thinking. In a systematic review of AI technologies designed to support adaptive functioning in neurodevelopmental conditions, Perry et al. (2024) found that AI tools can reduce cognitive load and support sensemaking by helping users organize information, surface relationships, and engage in reflective processes within everyday environments. Importantly, these benefits were most evident when AI systems were used interactively, in ways that supported human judgment and learning rather than automating decision-making.

This research aligns closely with how AI-supported reflection functioned in my own practice. The value of the AI tool was not in producing insights automatically, but in helping create the conditions under

which reflection could occur. By supporting organization, reducing cognitive friction, and making it easier to revisit and rework ideas over time, AI-supported reflection made learning more accessible and sustained, particularly within structured frameworks that prompt intentional sensemaking.

When used thoughtfully, AI can support reflective learning by extending cognitive capacity rather than replacing it. For neurodivergent professionals navigating complex, human-centered work, this distinction is essential.

Collective Learning and an Invitation

Learning organizations grow through shared reflection. The Learning Plan Framework emphasizes experimentation and storytelling as ways of making sense of complex work, and that emphasis aligns closely with the spirit of the AI Corner, a space to pause and learn together as we explore new tools and practices. My experiment with AI-supported reflection was small, but it helped me understand my work differently. That feels like the kind of learning worth sharing.

The Exploring Alignment Agent is an AI tool designed to support reflection within the Learning Plan Framework. It offers guided prompts that help faculty and staff explore how their work connects to institutional initiatives, clarify priorities, and document learning. Rather than replacing reflective thinking, the agent is intended to support it by helping externalize ideas, reduce cognitive load, and structure sensemaking.

This AI tool is designed for anyone who has wondered:

- How does my daily work connect to institutional initiatives?
- Where is my work already aligned, and where could it grow?
- How can I capture and share what I am learning so others can benefit from it?

You are invited to explore the Exploring Alignment Agent and share what you learn. Your reflections help our institution learn together. The tool is available through a Faculty Help entry that includes brief instructions, optional reflection worksheets, and a short feedback survey. The goal is to offer a supported starting point rather than a standalone tool. Faculty and staff are invited to explore the tool at their own pace and share what they notice along the way.

AI Use Disclosure:
The following generative artificial intelligence (AI) was used in the creation of this submission: ChatGPT and Microsoft Copilot. In this text, AI was used to organize ideas, support clarity, and assist with revision. AI was used only for the reasons listed and not to produce, replace, or substitute the author's work and original thought.

References

Francisco, C., Morales, L., & Sandoval, S. (2024). Executive functioning in adults with attention deficit hyperactivity disorder: A systematic review. Acta *Neurológica Colombiana, 40*(3). https://doi.org/10.22379/anc.v40i3.1208

Naughton, B. (2025, November 5). *Shred your strategic plan – Craft a learning plan instead* [Conference keynote presentation]. Teaching and Learning Conference, University of Arizona Global Campus. https://youtu.be/lorWSLJHMWA

Perry, N., Sun, C., Munro, M., Boulton, K. A., & Guastella, A. J. (2024). AI technology to support adaptive functioning in neurodevelopmental conditions in everyday environments: A systematic review. *npj Digital Medicine, 7*(1), 370. https://pmc.ncbi.nlm.nih.gov/articles/PMC11659516/

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization.* Doubleday.

USING AI TO PROVIDE WRITING FEEDBACK TO STUDENTS

Millie Tyznik, Sr. Lead Writing & Learning Specialist, UAGC Writing Center

As a writing and learning specialist, I know that the most straightforward pathway to improving one's writing skills is to get consistent and substantial writing feedback. If you've ever worked alongside an editor on a piece of your writing, you know the value of getting effective writing feedback and suggested improvements, and likely, you learned something while working with an editor that you continue to apply to your writing today.

As an instructor, you provide feedback to students weekly. But if you are not a trained writing instructor, you may struggle to provide meaningful *writing-specific* feedback. Or you may find that you do not have the time needed to supplement your feedback on course learning objectives with additional writing-specific feedback, even for those students who you see struggling with writing. I want to share a specific AI tool that faculty can use to provide meaningful writing feedback on student work. Using it will free you up to focus exclusively on the course learning objectives while giving you an assist in the area of writing instruction. Helping students improve their writing skills is another way for you to have a lasting impact on a student's academic and professional success.

The Princeton Review AI Essay Feedback Tool

The UAGC Writing Center recently made the Princeton Review AI Essay Feedback tool available to students through a partnership with Tutor.com. I advocate for faculty to use this AI tool as well. When you see a student paper that clearly shows the student's need for writing-specific feedback, download that paper and submit it to this AI Essay Feedback tool. Within 30-45 seconds, it provides both summative feedback and margin comments, all devoted to writing improvement. You can then copy any of that writing feedback and add it to the feedback you provide on the student's assignment within

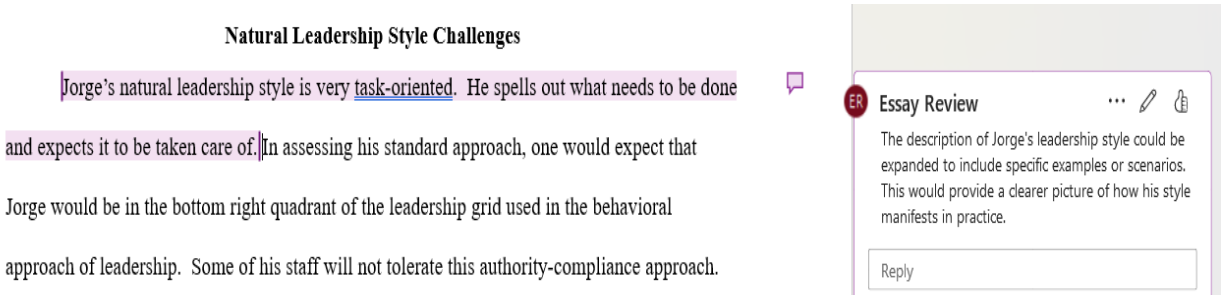
SpeedGrader, Waypoint, Blackboard Annotate, or whatever online grading and feedback tool you are using. You can edit and adapt the feedback as you wish, as well as include a link to an appropriate writing guide such as those found within the UAGC Writing Center website.

I have found that it does take an extra two minutes to download the paper from Canvas (or any other CMS) and then upload it to the AI tool, but it is well worth the effort, especially for non-writing instructors who would likely take much more time and mental energy to provide meaningful suggestions for writing improvements. This effort on your part will pay off for your students, too, especially with our workforce prep focus and the need for just about every profession to have strong writing skills.

How is This AI Tool Different Than Using ChatGPT or Copilot?

Something I like about the AI Essay Feedback tool is that it is clearly built for education. It does not create, replace, or revise the student's writing. It only provides feedback in the form of suggested writing improvements. While general generative AI tools can certainly offer supportive writing feedback, these are not created specifically for education or for academic writing. For generic generative AI tools, you would need to create a clear and specific prompt for what you want AI to provide. The AI Essay Feedback tool has those instructions already built in. It is programmed to provide writing suggestions alone.

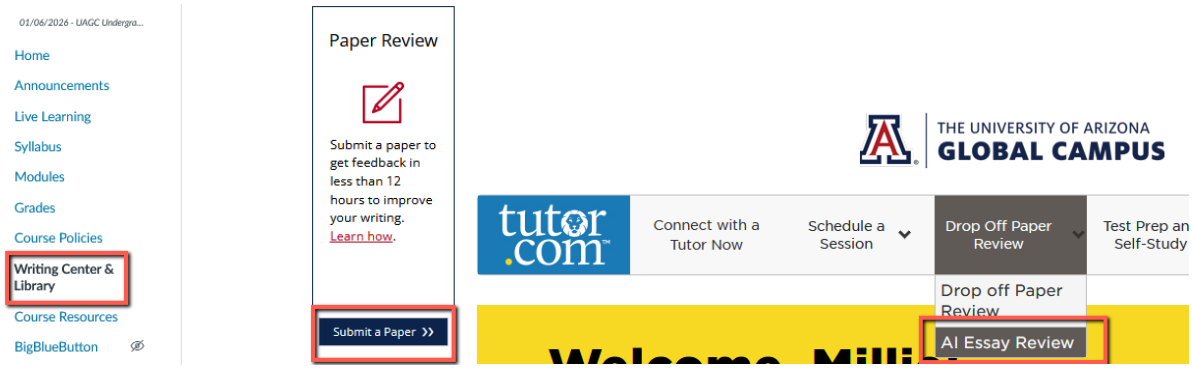
Also, basic generative AI tools such as Copilot provide summative comments but don't include margin comments and suggestions at the point of need within the writing. As an instructor, you need to include feedback within the student's submission in addition to summative feedback. For a student, they need feedback at the point of need within their writing to better understand where and how to improve. This tool provides this.



How to Try the AI Essay Feedback Tool

For UAGC faculty, this tool is made available through your Canvas classroom within the Writing Center link in the left-navigation menu. Once you click on that Writing Center link, you'll select Submit a Paper. On the next screen, along the top banner menu, you will see the Drop-Off Paper Review menu selection, where you will select AI Essay Review. From there, you can upload a paper to get the review within about 30 seconds. That review will generate on the screen for you, but in my experience, it works best to click Download, which will provide you with a Word doc. This way, you can easily copy those valuable

margin comments from the Word doc to apply as in-line feedback to your student through the online grading program you are using.



If you are a faculty member at another university, check with your office or department of academic support or tutoring services to find out if they partner with a tutoring vendor that has the Princeton Review AI Essay Feedback tool available for use. If not, the tool can be purchased, but I consider it an expensive option at $1 per essay review.

Share Your Experiences

If you use this tool to aid you in giving your students writing-specific feedback, I'd love to hear about your experience or how your students respond to it. Email me at millie.tyznik@uagc.edu.

CALL FOR SUBMISSIONS

We want to hear from you!

The UAGC Chronicle supports the entire academic community's contribution to the UAGC mission of providing a community of caring and guidance for adult online learners. Therefore, our publication promotes content that addresses the theoretical underpinnings and practical execution of this mission: academic research on instructional best practices, curricular innovation, and student support strategies; examples and resources that foster a community of practice; news of the progress of institutional student success initiatives; professional development opportunities; and – most importantly – the stories and successes of the people who shape our university.

To make this publication an authentic representation of our diverse faculty body, we encourage submissions from associate faculty and UAGC staff. Please consider the questions below as you craft your submission.

- What is your purpose in writing?
- What are you trying to accomplish?
- How does this information tie into university initiatives?
- Why should UAGC Constituents care about the information you are providing?
- What are the next steps, or what is your call to action?
- Who is your audience?
- How do you want to present your information? Would graphics or other visuals supplement your submission?

For more details and submission guidelines, please visit the UAGC Chronicle page.

Thank you for reading! We hope you enjoyed this issue.

THE UNIVERSITY OF ARIZONA
GLOBAL CAMPUS
Faculty Affairs

THE UAGC CHRONICLE STAFF

Shawna Brown
Publication Manager

Jacquelyn Bullis
Editor

Megan Crayne
Content Editor

Bill Davis
Faculty Contributor

Sally Deckard
Copy Editor

Amy Erickson
Content Editor

Dr. Teresa Kuruc
VP Faculty Affairs

Rebecca Paynter
Content Editor

Haley Sampson
Publication Manager

Jessica Sarra
Content Editor

Ryan Thomas
Designer

Millie Tyznik
Content Editor

CONTRIBUTORS

A special thank you to the contributors to this issue!

Tobenna Attah

Diana Boggan

Timothy Cedor

Jacline Contrino

Bill Davis

Ted Ellis

Murat M. Elahi

Yolanda Harper

Nikola Prendergast Lucas

Haley Sampson

Millie Tyznik

Kelly Wood