UCF

Faculty Focus

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Trying Artificial Intelligence in Intermediate Algebra

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During Summer B 2024, I experimented with bringing Artificial Intelligence (AI) into my Intermediate Algebra (MAT1033) class. My goal was to get students thinking more critically by using tools like UCF's Copilot (or ChatGPT if they preferred) as a reasoning partner. I built the course around three key activities: step-checking with reflection, analyzing mistakes, and verifying solutions using two methods. In each case, students compared their own work with what the AI produced, spotted differences, and reflected on their problem-solving approach. This approach builds on teaching models that encourage ethical and reflective use of AI in learning (Hodges & Ocak, 2023). To understand how students felt about this pilot, I ran an anonymous survey with ten Likert-scale questions. Out of 81 students, 44 responded. Most (84%) said they could easily access AI tools. Many found AI "sometimes" or "often" helpful for concepts. But when it came to trust and comfort, the responses were more cautious. About half said they'd only "sometimes" recommend AI to a friend. These mixed feelings echo broader trends of students who appreciate AI's convenience but aren't fully sold on its reliability or depth (Walkington, 2025). Student comments from end-of-semester evaluations added more feedback. They saw AI as a fresh and engaging addition. They enjoyed trying out new tools and understood the importance of AI literacy for their future. But one student raised a concern of overreliance on using AI. That's the challenge educators face in how to help students benefit from AI without losing their reasoning skills.

From my perspective, AI offered valuable feedback and cognitive support. Students could visualize different solution paths, confirm algebraic steps, and catch mistakes. But sometimes, the ease of getting answers led them to skip the thinking part. The survey revealed comments that are not related to the course. For example, a student shared concerns that if other instructors don't share their expectations, they won't know what to do. That tells me we need to be clearer and offer guidance.

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Faculty Focus

Frames Without Borders: Teaching Cinema Through Immersion in Barcelona

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This summer, I had the privilege of leading UCF's first filmmaking study abroad course in partnership with UCF Global and Academic Programs International (API). Over the course of four weeks in Barcelona, students—most of whom had never made a film before—transformed from curious observers into creative storytellers. As their instructor, I watched them learn not only how to make films, but how to see and interpret the world differently.

What made this course especially exciting was that it wasn't limited to film majors. Students came from fields like engineering, psychology, nursing, communication, and political science. I designed the course knowing I'd be working with nontraditional filmmakers, and my goal was to meet them where they were—technically—and push them to explore how storytelling through cinema could connect disciplines, ideas, and lived experiences.

At the heart of the course was a philosophy of **learning by doing.** I structured the syllabus around weekly production milestones: storyboarding, location scouting, filming, editing, and critique. I broke the filmmaking process into manageable stages, allowing students to build confidence through each round of feedback and iteration. By introducing theory alongside practice, I encouraged them to use film, not just to tell stories, but to question what it means to observe, represent, and participate.

We focused on two key theoretical pillars: first, David Bordwell's idea that cinema is primarily a **visual medium.** I emphasized visual thinking from day one. Instead of writing dense scripts, students storyboarded action, experimented with framing, and studied how motion, light, and space could carry meaning. We watched silent films, then recreated scenes using only gesture and movement.

Second, I introduced Michel Chion's concept of sound as an interpretive force, not just background or redundancy. In post-production, students layered ambient sounds over dissonant visuals, used asynchronous voiceover, and discovered how sound could contradict or heighten a scene's tone. These principles helped them realize that even at the most

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TRYING AI IN ALGEBRA (CONT.)

For future work, I plan to make three key changes to improve how AI is used in my course: (1) add a mini lesson on AI literacy; (2) improve rubrics for AI integrated activities; and (3) scaffold reflection (ask students to write about how AI helped or challenged their thinking during problem-solving). As Stanford's AI Literacy Framework reminds us, students need both technical and pedagogical skills to work meaningfully with intelligent systems (Stanford Teaching Commons, n.d.). In the end, the activities and the discussions helped change the course format from being traditional, reduced math anxiety, and gave students ownership in correcting their own mistakes and finding out how to better use technology for their learning. In math, AI can be valuable and should support the human side of problem-solving.

References

Hodges, C., & Ocak, M. (2023). Faculty strategies for integrating generative AI in coursework. EDUCAUSE Review.

Walkington, C. (2025). Implications of generative AI for mathematics education. Wiley Online Library.

Stanford Teaching Commons. (n.d.). Understanding AI Literacy Framework. Retrieved October 27, 2025, from https://teachingcommons.stanford.edu.

TEACHING CINEMA IN BARCELONA (CONT.)

basic level, sound and image are in a constant dialogue—and they are the ones orchestrating it.

Barcelona, of course, was more than just our backdrop—it was our co-teacher. I intentionally designed the course to take place outside the classroom as much as possible. Students filmed in plazas, rooftops, alleyways, and metro stations. They learned to adapt their creative vision to real-world variables: light, noise, weather, and public space. To help them navigate cultural and logistical challenges, I created a location-scouting worksheet that encouraged flexibility and resourcefulness.

Collaboration was central. Students experienced the roles of director, cinematographer, sound designer, and editor. With diverse academic backgrounds, they brought surprising perspectives to each role. They learned to negotiate, adapt, and lead—not because I told them to, but because the process required it.

Throughout this, my role was part facilitator, part coach. I held structured critique sessions on the submitted work so students could improve their projects based on the feedback. I was not alone in this endeavor. We were fortunate to hear from two experts in our field. We were able to invite two guest speakers, Dr. Saša Markus and Ángela Sánchez Orti, each providing my students with location specific knowledge. Dr Markus offered a compelling lecture on national cinema, challenging students to ask: What makes a film "Spanish"? Is it the language? The funding? The ideology? Her talk helped students see their own work as part of a larger conversation about identity and representation.

Our second guest, Ángela Sánchez Orti of MODIband, led a masterclass on film distribution and festival strategy. She used examples like *Everything Everywhere All At Once* and *Los Aitas* to show how indie films find audiences through creative outreach. Afterward, students designed their own film posters, a fun exercise that also taught them how marketing and message shape reception.

We were able to end the course with a final film screening on July 24 in front of the entire UCF Summer B cohort and API staff. This provided the students an avenue to showcase their work to a larger audience and understand how their films were received by a broader audience. What struck me the most as I watched these films again was how students applied theory—consciously or intuitively—into their creative choices.

Reflecting as an educator, I'm most proud of how students embraced risk. They made mistakes, revised, re-shot, and kept going. They learned how to give and receive feedback, how to edit with intention, and how to collaborate under pressure. More than that, they learned that filmmaking is not about having the best equipment or perfect conditions—it's about curiosity, storytelling, and perspective.

For me, this experience reaffirmed my belief that cinema education, especially at the introductory level, doesn't need to start with gear or jargon. It can start with questions: What do you want to say? How can you say it visually? What do sound and space mean in your story? When students begin here—in conversation with place, theory, and one another—something powerful happens.

These students arrived in Barcelona as learners. They left as creators. And I feel incredibly lucky to have walked that journey with them.

Digging Deep: Fostering an Online Learning Community with Yellowdig

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It can be challenging to incorporate discussions into online courses. Discussions typically feel forced, engagement is minimal, and grading is time-consuming, especially in large classes. Yellowdig is a platform available in Webcourses@UCF that presents an alternative to traditional online discussions. Designed to promote meaningful, student-driven online communities, it encourages students to engage more authentically by driving the conversation—posting, replying, reacting with emojis, and incorporating media. Students earn points automatically throughout the semester by engaging in these actions, and this is synced with the Webcourses@UCF gradebook, which means instructors can spend less time on creating discussion prompts and grading and more time participating as active citizens in the community.

View a Yellowdig online interactive demo here to see how it works in practice.

Measuring Course Engagement
Since Yellowdig's launch at UCF in 2023, it has been adopted by over 200 instructors in over 700 course sections. These span disciplines from history to engineering and include classes of all sizes, in all modalities.

Across these variations, what stands out is the level of peer-to-peer interaction. On average, a UCF Yellowdig community has 63 students, and at least 90% connect with classmates. They do this by mentioning classmates in their own posts, commenting on others' posts, or "reacting" to other posts via emojis. Over the semester, the average student makes connections with around 40 of these peers. This Yellowdig community averages 390 original posts and over 2,000 comments per semester. In other words, students aren't simply fulfilling requirements; they are engaging in a community.

This kind of interaction differs from what we usually see in traditional online discussion boards, which turn participation into a formula: post once, reply twice, and wait for the instructor to assign a grade. Without highly structured prompts from the instructor, students in Yellowdig direct their own discussions, focusing on course topics that matter to them. The real value lies in the spirit of these interactions. When students connect with peers

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FOSTERING AN ONLINE LEARNING COMMUNITY WITH YELLOWDIG CONT.

and course concepts in a natural, conversational way, learning feels more like a shared experience than a requirement.

Faculty experience with Yellowdig: Jessica Waesche

I am now in my second year of using Yellowdig, and I have implemented it in three different fully online undergraduate psychology courses. I was immediately impressed with the quality and content of the discussions. Students began engaging with each other and the course content more naturally. As the instructor, I created topics within Yellowdig that correspond to the topics in the course. Students could then freely write posts using those topic tags. They would bring up points that were most interesting to them, share examples of how the course concepts applied in the real world, and share relevant articles and videos that they found online that connected to our course topics. I could see which topics resonated most and answer any questions that came up. I realized that in my online classes I hadn't been getting this level of feedback on what topics stood out to the students and where their questions were, and I have really valued getting a more in-depth understanding of how students are reacting to my class.

Related to engagement, I noticed that students also used their Yellowdig posts to create connections with each other. They shared photos of pets, asked questions about life in Orlando/at UCF, exchanged study tips, and talked about career goals. Being an active participant in the discussion community also helped me to feel more engaged with the students. I realized (and heard feedback directly from students) that students in fully online classes feel like they are missing out on the opportunity to connect with other students and faculty on a personal level, and the Yellowdig platform gave them an opportunity to fill that void.

Ultimately, I have come to think of Yellowdig as being similar to a participation grade that you might give in an in-person class for engaging in classroom discussions and activities. The Yellowdig conversations aren't scored for quality or criteria specific to your course; rather students automatically earn points based on their level of participation, through activities such as posting their own ideas, engaging with other students' ideas, and receiving comments from others. Sometimes those interactions are based on course content and sometimes they are more personal, but all of them have value.

As with any technology, there have been challenges in adopting Yellowdig. Because Yellowdig is scored as one assignment that spans the entire semester, the score in the gradebook fluctuates from week to week. This requires careful explanation and reminder announcements, but students seemed to adapt to it fairly quickly. Some students were initially confused by the lack of direct prompts or questions to respond to, but most seemed to really enjoy the freedom to post about whatever was most interesting to them.

UCF Student and Faculty Feedback

Survey data from over 1,000 students and 40 faculty at UCF support Dr. Waesche's experience. 90% of students found Yellowdig easy to access, and 81% said it promoted interaction with classmates. More than two-thirds reported that it encouraged them to think about course content in new ways. One student shared they enjoyed "getting to express my thoughts and ask questions without having to worry about citations and word counts." Another said, "Yellowdig promoted interaction with my classmates that was more authentic than traditional discussion boards."

Faculty echoed these sentiments, noting stronger student networks and more authentic conversations. One faculty member stated, "Students' posts allowed me to get a better sense of what they were taking away from the course material, since they were creating their own posts around things they learned instead of responding to my prompts."

Interested in Using Yellowdig?

Yellowdig is available in your Webcourses@UCF course. Visit the Yellowdig Faculty Guide from CDL to learn more.

Faculty Focus

Teaching in the Age of AI: What Students Really Know (and Don't Know) About Using AI for Learning

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As AI tools have become increasingly present in higher education, many instructors assume today's students are naturally skilled at using them. Perhaps this stems from the presence of AI in writing tools, search engines, and apps that students use on a daily basis. As a veteran language teacher, I remember feeling threatened by AI and the enthusiasm expressed for it when it burst onto the scene in 2022. I have learned a great deal about AI's capabilities since then, both as a graduate of FCTL's AI Fundamentals course and in my new position as Instructional Specialist in FCTL. I felt confident, then, in my ability to integrate AI into the lower-division French course I taught in Fall 2025. I was determined to have my students use AI to review concepts from their previous French course on their own to facilitate their learning of new content in my class. It was my plan to flip my French class by having students review and study content at home and then use class time to engage students in activities that would allow them to apply concepts in real-world scenarios. What I learned, however, revealed much more about students' understanding of AI, their willingness to use it, and what faculty, regardless of discipline, need to do in order to successfully integrate AI in their classes.

In my 20 years of language teaching, I have become familiar with the challenges of language learning in general and the concepts that students find particularly challenging as they progress in specific courses. For example, I know that students have limited interactions with grammatical structures during a semester because of the pace of the course, and that any familiarity with the structures taught in a Spring 1120 course is likely greatly reduced when students return to take an 1121 course in the Fall—a three-month break is not conducive to a high level of preparedness! Even the 1-month winter break is long enough for several key grammatical concepts to fade from memory.

Making AI Use a Structured Part of the Course

In an effort to help students review 1st-semester French concepts and to harness AI's ability to provide students with explanations, practice activities, and feedback, I created a Webcourses grading category (AI Work) that accounted for 10% of students' overall grade in my course. Pedagogically, I wanted to normalize ethical AI use, demonstrate that AI can be used to support effective studying, and develop students' metacognition and critical consideration of AI output. As such, before the semester began, I created highly structured, guided AI assignments that would help my students review key concepts from FRE 1120 outside of class during the first week of classes, and I also created AI assignments for the first three lessons of new content that would be covered in week 2. For these initial assignments, I provided students with the content from my Webcourses lesson pages in .doc and .pdf formats to upload to their preferred AI product, and I gave them an exact prompt to use to generate a useful AI output that included at least one practice activity per concept. Once students had the output available, they were to complete the practice activities AI had generated and, from there, either ask three specific questions to AI that would target their individual sources of confusion or have AI generate three dialogues that would allow students to see the grammar used in a conversational context.

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USING AI FOR LEARNING CONT.

What Worked, What Didn't, What Surprised Me
Assignment Design
My diligence when I created the AI assignments made it possible for every student to generate an appropriate AI output and assignment submission that contained all of the required elements. I credit this mostly to the highly structured prompts, very specific directions, and the provision of the rubric I would use to grade students' submissions. The rubric was as follows:

You will earn 10 points if you turn in your entire conversation with the AI platform. To earn 10 points, you must include all of the following:
A. The prompt you were asked to copy and paste into the AI platform.
B. The AI's response to that prompt.
C. Your (corrected) work on all of the review activities the AI product gave you.
D. Three (3) questions, requests for clarification, or dialogues you asked for from the AI platform
E. The AI's responses to your questions, requests for clarification, or dialogues.

You will earn 5 points if you turn in three of the five required components listed above (A-E). You will earn 0 points if you turn in two or fewer of the five required components listed above (A-E).

By keeping the focus on the completeness of their submissions, students did not have to worry about being assessed on the sophistication of their AI interactions—they were free to ask for explanations of basic concepts without fear of judgment from me. As I read through students' submissions, I was able to determine if students had misconceptions in common and proactively address them in my lessons.

The AI Work I gave my students for the third and fourth chapters differed from those that I assigned during the first two weeks of the semester. Rather than giving students thorough, detailed prompts to copy and paste, I challenged students to create their own prompts given this advice:

- Remember that the AI does not know what you've studied in Chapters 6 and 7, nor does it know what you are learning about in Chapter 8—you have to tell it! (*Be sure to tell the AI product that you're only familiar with the present tense, passé composé, and futur proche.)*
- Decide what will help it all make the most sense/tie it all together the best for YOU. You can ask for grammar explanations, but you might like to have the AI produce dialogues for you, instead.

Students who did not want to use AI were provided with four prompts to select from. These students had to select the two prompts they were most interested in and then use their textbook to create five sentences per prompt that they could use to complete the prompt scenarios. Students who elected to complete this alternative assignment had to reference the textbook pages they used to create their sentences.

Because I was uncertain of students' prompting and accurate sentence writing abilities, I elected to grade these later assignments on a complete/incomplete basis. Two interesting observations were made when reviewing student submissions: 1) The vast majority of students who used AI provided the platform with lengthy, effective prompts that generated output not unlike what was generated when students used my provided prompts; 2) Only about 10% of the students elected to complete the alternative assignment and those students created sentences that were level appropriate, if not entirely accurate, and that the students did properly document the textbook pages that they used. I found these results encouraging, as students seemed to recognize not only the utility of thorough prompts, but also their textbook. Despite these positive results, the integration of AI into my class was not without its challenges.

Challenges
One of the most surprising results of my assignment design was the resistance to using AI that a handful of students demonstrated. About 10% of my students flatly refused to use AI at all, and so I was forced to

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USING AI FOR LEARNINING CONT.

create alternative assignments for these students that still engaged them in review of course content, but which required them to search the internet and their textbook for explanations for concepts they were unfamiliar with or did not feel confident using.

Another result of my assignment design that surprised me and which forced me to pivot from my initial assignment plans was how time consuming each AI assignment was for my students to complete, and how much grading it required of me, despite having a clear, simple rubric. While well-intentioned, assigning AI work for every lesson proved to be too much for the students and for me. In fact, I did not use AI work for the second chapter, and I only used it once for the third and fourth chapters.

Conclusion: What This Experience Taught Me

The biggest takeaway of this experience of integrating AI into a language course was that we cannot assume that all students are using AI for their courses, nor that they are uniformly AI literate. My students showed me that their AI proficiency can vary widely within a class section—some students may feel confident in their AI skills, while others are decidedly less so. In fact, faculty should be prepared for the presence of AI-hesitant or anti-AI students in their courses and be prepared to provide comparable alternative assignments to that population.

For instructors considering AI integration, I offer a few recommendations:

- **Evaluate students' AI literacy early.** Even a simple diagnostic can guide your pacing and expectations. The resource below contains an AI Information Literacy quiz that faculty can adapt for their courses:
  - Gotschall, T., & Deeter, C. (2025). Measuring AI information literacy: Developing a quiz for student perceptions and knowledge. Teaching and Learning with AI Presentations. https://stars.library.ucf.edu/teachwithai/2025/thursday/111
- **Start small.** One well-designed AI assignment per chapter may be more effective than weekly tasks. This will reduce the stress of the AI work for students and the grading load on instructors.
- **Provide scaffolding and gradually reduce it.** Faculty should begin by giving students very thorough prompts and gradually allow students to develop their own prompting skills that will be applicable to all topics.
- **Give students time to evaluate AI output together.** Faculty may wish to engage their students in a think-pair-share activity that guides them through a reflection about using AI and the effectiveness of AI output for their learning. This reflection activity will allow students to think critically about the utility of AI output and how well they understand key concepts after reviewing it. In pairs and small groups, students will benefit from peer teaching and can also share their insights and questions with the teacher and their peers. Not only does this provide valuable information about their students' understanding, but it also allows the instructor to increase students' sense of belonging, class community, and impression that their instructor values their input.

"It Feels Like a Warm Hug at the Beginning of the Week." Is This What Our Students Need?

Sandra Sousa

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When I first designed the *Time to Celebrate Yourselves & Be Positive!* assignment five years ago, the world was in the midst of a global pandemic. The isolation of remote learning, the stress of uncertain futures, and the overwhelming weight of constant change had taken a significant toll on students and faculty alike. As an instructor, I searched for ways to help my students stay grounded in their personal lives while still navigating the pressures of their academic responsibilities. Little did I know, this seemingly simple assignment—an exercise designed to foster positivity, reflection, and connection — would go on to play a crucial role in how I engage with my students, particularly in online classes.

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"IT FEELS LIKE A WARM HUG" CONT.

Fast forward to today, and the *Celebrate Yourself* assignment continues to be a favorite among my students. Despite its humble origins, it has proven to be more than just a routine task: it's a powerful tool that cultivates connection, reflection, and resilience in students, especially in online spaces where it's easy to feel isolated.

The Assignment: What It Is and How It Works

Each week, students are prompted to reflect on something positive or celebratory that happened during their week; whether it's a small personal win, a moment of joy, or an accomplishment, no matter how seemingly insignificant. The instructions are intentionally flexible, allowing them to define "celebration" on their own terms. They also share their reflections with the class, and are encouraged to engage with one another's posts, responding to classmates' victories with positive feedback or kind comments.

While the nature of the assignment remains simple, it has a profound impact. The reflective act of celebrating small wins every week gives students a sense of achievement and helps them develop a growth mindset. Furthermore, the communal aspect—where students connect, share stories, and celebrate one another's victories—helps create a sense of community and belonging. In an online class, where physical proximity is often absent, this kind of weekly ritual feels like a "warm hug at the beginning of the week," as one student beautifully put it.

Since introducing this assignment, I have received feedback from students that consistently emphasizes how valuable they find this space. Many students report that it has become an essential part of their routine, something they look forward to each week. Despite initial hesitations or feelings that it may be a "lot of extra work" in an online course, over time, students share how it has helped them maintain perspective and find joy in their everyday lives.

One student mentioned that the assignment "forced me to find something positive" even during weeks that felt particularly challenging. Another noted that it gave them the opportunity to reflect on moments they would have otherwise downplayed as insignificant. For many students, this weekly reflection helps them find clarity in the chaos, reframe their perspective, and appreciate the small wins that are so easily overlooked.

In addition to personal reflection, students also deeply appreciate the sense of connection that comes from engaging with their peers' posts. In an online class, it can be easy to feel detached from the people behind the screen. But by reading about classmates' triumphs, challenges, and everyday experiences, students report feeling more connected to the class and more invested in the success of their peers. As one student put it, the assignment made them feel "closer to my classmates" and helped them recognize that "everyone faces unique obstacles, triumphs, and lessons."

In a world where students are constantly grappling with the pressures of deadlines, coursework, and personal responsibilities, this weekly ritual offers them a chance to step back and focus on the positives in their lives, even if only for a few minutes. And, as many students have expressed, this shift in focus can make all the difference.

It is Powerful! Positivity and Reflection

Why is this assignment so effective? It goes beyond merely checking off a task; it taps into a deeper psychological need that many students often overlook: the need for self-affirmation. Research in positive psychology has shown that regularly reflecting on personal achievements, both big and small, boosts self-esteem, enhances motivation, and improves overall well-being. For students facing the stress of balancing academic and personal challenges, this simple act of celebration offers them a sense of agency and accomplishment. Moreover, the communal aspect of the assignment encourages empathy and emotional support, which is particularly important in online learning environments. Students are often separated by distance and time zones, and their interactions are typically confined to the formal exchange of assignments or exams. By incorporating this reflective and celebratory space, the classroom transforms into a more inclusive, supportive environment where students feel seen, heard, and appreciated.

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"IT FEELS LIKE A WARM HUG" CONT.

The assignment also promotes a growth mindset: students are encouraged to celebrate not only their successes but also their progress, no matter how incremental. By focusing on small wins, students develop a habit of acknowledging their growth, which can lead to greater resilience and persistence in the face of academic challenges.

The importance of fostering connections in online classes cannot be overstated. Without the physical presence of classmates and instructors, students can easily slip into a solitary experience, feeling like mere names on a screen. Many students struggle with feelings of isolation in virtual learning environments, especially when they don't feel connected to their peers or instructors. The *Celebrate Yourself* assignment helps address this challenge by creating a space for interaction, reflection, and personal connection. While it may seem like a small gesture, it provides students with an opportunity to engage with one another beyond the formal classroom content. This, in turn, promotes a greater sense of community and reduces the feeling of being disconnected from the learning process.

As I look to the future, I am committed to keeping this assignment. It is clear from student feedback that this practice offers both personal and educational value. Beyond its role as a simple weekly reflection, it helps students build a sense of community, maintain a positive outlook, and stay connected. In a time when students are increasingly struggling with mental health challenges, burnout, and the overwhelming demands of academic life, assignments like this provide an important space for students to slow down, reflect, and practice gratitude. And while it may feel like a small gesture, it can leave a lasting impact on how students perceive their academic journeys and their own growth.

A Warm Hug for the Future

Five years ago, I couldn't have predicted how this assignment would resonate with students, and I am continually amazed at how it continues to have a meaningful impact. As we move forward in an ever-changing educational landscape, one thing is clear: our students need more than just content and deadlines. They need connection, reflection, and a reminder to celebrate themselves.

Teaching Cross-Cultural Psychology the Gen Z Way: Candy, Conversations, & Creative Chaos

Cindy von Ahlefeldt

Doctoral Student, Human Factors & Cognitive Psychology

When I taught Cross-Cultural Psychology, I promised myself the class would never feel like a static lecture hall. I promised myself the class would never feel like a static lecture hall. I still remember walking into my first day, playlist cued up, sticky notes in my bag, a little nervous but excited to see if this would actually work. As a Gen Z educator teaching mostly Gen Z students, I've learned that engagement looks different now: they value interactivity and activities that feel meaningful and relevant to their lives.

Early on, I noticed many students wanted to talk about culture, bias, and identity but felt hyper-aware of judgment and social risk. No one wants to be the person who "says the wrong thing" in front of 70 peers. Instead of relying on traditional participation, I built a classroom environment that offers low-risk entry points and gradually grows confidence. This is grounded in inclusive, constructivist pedagogy and research on psychological safety (Edmondson, 1999), and it mirrors Universal Design for Learning principles (CAST, 2018): multiple ways to connect, reflect, and participate.

One anchor practice is the student-named "Sticky Note Toss." I pose a prompt: "What's one cultural assumption you've encountered?" or "When did you feel like an outsider?" and students write anonymously, crumple the notes, and toss them into the center. Everyone picks up a random note and reads it aloud. The social temperature drops and dialogue rises. We can examine bias, privilege, and cultural frameworks with honesty while protecting vulnerability.

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PSYCHOLOGY THE GEN Z WAY CONT.

To tap Gen Z's preference for movement and collaboration, I run gallery walks where cultural scenarios or critical questions are posted around the room. In small groups, students rotate, adding quick reflections. By the end, the walls show a layered record of perspectives and an embodied reminder that multiple interpretations of culture coexist. These low-tech structures scale well from large lecture halls to seminars and invite voices that might otherwise stay silent.

I also use music to set the tone. Before class, soft instrumental or global tracks create a relaxed, welcoming atmosphere. During activities, upbeat or culturally diverse tracks signal transitions and energize the room. This routine smooths pacing and lowers stress, especially useful on exam weeks.

Technology, used purposefully, becomes a bridge. With Pear Deck, I invite students to draw what culture feels like rather than merely define it. Projecting their anonymous sketches, flags, families, shared meals, TikTok dances, faith symbols, and music turns abstract ideas into stories. The room recognizes itself and one another. In a culture-centered course, this creative turn lowers walls and builds community quickly.

Over time, these practices coalesced into what I call "Culture-in-Action," a flexible, low-barrier approach to learning cultural concepts through lived, participatory experiences. The goal is to shift from instructor-centered Q&A to structured dialogue where students generate meaning together. Sometimes we open with a meme or timely news story; other times, students unpack an intercultural misunderstanding at work. My role becomes facilitator—connecting threads, surfacing diverse perspectives, and clarifying misconceptions without shutting anyone down.

Seasonal elements keep momentum. In October, a "Trick or Treat" cultural review turns into a lively exchange: correct answers earn a pick from a pumpkin bucket (with allergy-friendly options), and conversations branch into sweets from home countries, family rituals, and how small markers like food signal belonging. What starts as a review becomes a cultural micro-museum. Someone always gets way too excited about their favorite candy, and inevitably a debate about Twix vs. KitKat breaks out. It's ridiculous and perfect.

Assessment is ongoing and light-touch. I frequently use exit tickets asking, "What's something you learned from someone else's perspective today?" or "What challenged one of your assumptions?" These reflections provide a qualitative window into growth. Mid-semester surveys indicate the approach resonates: over 80% of students reported these activities made it easier to participate, with many naming them their favorite part of the course. I also see transfer in written work, where students reference the sticky-note dialogues, gallery walks, and drawings to explain complex constructs like individualism/collectivism, acculturation, or attribution bias.

If you're considering adapting this model, start small. Choose one moment in a unit where a concept typically stalls or stays abstract. Replace a portion of lecture with a low-risk prompt (anonymous note, one-minute draw, or a two-question gallery stop). Invite students to interpret classmates' contributions before you synthesize. Keep materials simple (sticky notes, markers, projected Pear Deck slides) so attention stays on ideas, not logistics. The specifics are less important than the conditions of psychological safety, multiple modes of expression, and structured turn-taking that prevents the loudest voices from dominating.

This work emerged through experimentation, student input, and cross-disciplinary conversations with colleagues interested in inclusive learning. The model is portable: anthropology, education, business, and health fields all grapple with culture and perspective-taking. What matters is building routines that feel safe, repeatable, and genuinely curious about students' lived experiences.

Looking ahead, I'm extending Culture-in-Action into a digital "Culture Wall," a living archive where students contribute images, short audio reflections, and drawings across the term. The wall will capture cultural touchstones that don't fit neatly into quizzes--recipes, songs, idioms, holiday photos, and it will make cultural learning an ongoing practice.

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Faculty Focus

A Subject-Centered Learning Community: Insights from Parker Palmer

Eric Main
Associate Director
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"When authentic community emerges, false differences in power and status disappear, such as those based on gender or race. But real differences remain, and so they should, for they are created by functions that need to be performed if community is to thrive—such as the leadership task of maintaining the boundaries and upholding the standards that define community at its best." ~ Parker Palmer

One of the central values in the works of Parker Palmer is the need to engage students in authentic and holistic learning communities. For more than four decades, he has encouraged educators to look beyond techniques and instructional technologies to include the inner and relational dimensions of teaching and learning. Over the years, his books have been a frequent selection of the Faculty Center's book club program, and they have inspired several UCF faculty members to innovate their practice with contemplative pedagogies, emphasis on belongingness, and the development of learning communities in their classes. On multiple occasions we featured Palmer's *The Courage to Teach* (1998) and *The Heart of Higher Education* (with Arthur Zajonc, 2010). In these, he argues that authentic education arises from the integrity of the teacher, the wholeness of the student, and the cultivation of learning communities grounded in presence, meaning, and care. At a time marked by student disengagement, a mental health crisis, and widespread uncertainty about the future, Palmer's ideas are especially relevant.

One of his most core but most challenging ideas for higher education relates to the centeredness of the learning environment. Many recent studies about effective teaching condemn a "traditional," teacher-centered classroom, often disparaging lecturers with phrases like "sage on the stage." Instead, these researchers argue for a student-centered classroom that focuses on "active learning" where the teacher becomes the "guide on the side" to facilitate the students' construction of knowledge and their peer teaching. They cite the need for in-class practice within a

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Ultimately, culture is best learned through connection, interaction, and shared experience. My aim isn't just to teach cross-cultural psychology. It's to build a class-room that embodies it—layered, inclusive, and dynamic. Whether through sticky notes, digital drawings, or a bucket of candy, these practices remind students (and me) that culture is lived, not just learned.

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welcoming and inclusive environment. Indeed, I work with several UCF instructors who claim they never lecture and never give objective exams—and that works for them. On the other hand, those who teach the lecture model rely on their proven expertise in the discipline to curate content in a way that helps students see the relevant structures within the domain. They assume self-direction in adult students and abjure "handholding." They typically employ a few summative assessments to ensure rigor. And their method works for them. Most students can adjust to either of these approaches, but the danger that Palmer sees is "when student and teacher are the only active agents, community easily slips into narcissism, where either the teacher reigns supreme or the students can do no wrong." Yes, students sometimes complain to their

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advisors about unapproachable and intractable faculty members, and yes, faculty members sometimes complain to each other about absurdly entitled and disrespectful students. Laying aside occasional instances of narcissism, the pervasive danger is an epistemological one: the teacher-centered model is prone to a false objectivism while the student-centered model is prone to false relativism.

Palmer proposes a third option: a subject-centered learning space. “The subject-centered classroom is characterized by the fact that the third thing has a presence so real, so vivid, so vocal, that it can hold teacher and students alike accountable for what they say and do. In such a classroom, there are no inert facts. The great thing is so alive that teacher can turn to student or student to teacher, and either can make a claim on the other in the name of that great thing.” He goes on to explain that the teacher’s central task in a subject-centered class is to promote the independent ability for the subject to speak its own truth. This is often accomplished in the learning space by instructors expressing their authentic passion for the subject. It’s not just that passion is contagious and increases motivation, which it does, but it also has a deeper function: it makes the subject, not the teacher, the passion-worthy center of the learning circle. This concept does not imply that we should just fill the space with content about the subject because the subject should be everything. The coverage model of teaching is overwhelming for students and usually discourages deep learning. Relationships are most important, and Palmer’s advice is that good teachers create a learning space for a community of authentic relations. He conceptualizes this idea in the following image.

Of course, this community-of-truth model does not require everyone to sit in a circle. Establishing a sense of subject-centeredness where the subject commands shared attention and respect is the goal. Several easy practices promote a subject-centered space. Students can share intellectual passions and personal connections to course themes. Activities can emphasize dialogue that values listening, empathy, and multiple perspectives. Courses can be framed around big, eternal questions that invite meaning-making. Dialogues can be structured as shared interpretations of texts, cases, datasets, etc., followed up by analyses of the interpretations, formal debates, or creative applications. We should build in time for reflective pauses, journaling, or exit tickets; have students or teams present and lead discussion; have students argue positions opposite their own or interpret competing narratives with intellectual humility; allow silence and “beholding” time before engaging content; create course policies that balance rigor with compassion; and ask students to brainstorm other ways to create a subject-centered space or ask them what evidence they would look for in a class where students experienced deep learning and long-term relationships with the subject.

How do you know your class is becoming more subject-centered? Students will refer to ideas, evidence, and interpretations rather than just authorities. Questions will become more important than answers. Dialogue will replace recitation. Students will embrace multiple perspectives and paradoxical truths with respect. You and your students will begin to feel the subject as alive and consequential. If your classes already contain these features, you have probably intuited your way to subject-centered teaching. I invite you to check out Parker Palmer and consider reading some of his books.

The Pedagogical Value of Short Lecture Videos in Canvas-Based Course Delivery

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Introduction

As learning management systems (LMS) such as Canvas have become central to course delivery in higher education, instructors increasingly confront the challenge of translating effective face-to-face pedagogy into asynchronous and hybrid environments. Research consistently shows that online student success depends less on technology itself than on course design, clarity of expectations, and sustained instructor presence.[1] Within this context, short lecture videos have emerged as a particularly effective instructional strategy. Rather than replicating traditional classroom lectures, these videos are designed to provide targeted guidance, reinforce key concepts, and scaffold student learning in manageable segments.

The pedagogical significance of short lecture videos lies not in their novelty, but in their alignment with well-established principles of learning science, student-centered pedagogy, and democratic teaching models. When integrated thoughtfully into Canvas-based courses, short lecture videos can improve comprehension, reduce cognitive overload, enhance time management, and strengthen student engagement—without diluting academic rigor. This article argues that short lecture videos function as a form of structured academic support that increases student success while preserving autonomy, responsibility, and high standards.

Short Lecture Videos & the Architecture of Online Learning

Online learning environments place greater responsibility on students to manage time, interpret instructions, and engage independently with complex material. Studies of student persistence in online courses repeatedly identify ambiguity and disorganization as primary contributors to disengagement and withdrawal.[2] Short lecture videos address this problem by providing interpretive structure. They clarify how readings, discussions, and assessments fit together, thereby reducing uncertainty without reducing intellectual demand.

In Canvas-based courses, short lecture videos function as instructional anchors. Positioned alongside readings or modules, they orient students to central arguments, theoretical frameworks, or analytical expectations. Importantly, these videos do not replace reading or independent thinking; rather, they model how scholars approach texts and problems. Nilson and Goodson emphasize that effective online instruction requires “visible teaching”—explicit guidance that helps students understand how to learn, not just what to learn.[3] Short videos are an efficient medium for delivering this guidance.

Cognitive Load, Attention, & Learning Retention

A major advantage of short lecture videos is their consistency with research on cognitive load and multimedia learning. Cognitive load theory demonstrates that learners have limited working memory capacity, especially in environments where distractions are common.[4] Long, uninterrupted lectures—whether live or recorded—often overwhelm students, leading to reduced retention and superficial engagement. Research by Richard Mayer and others shows that shorter instructional segments improve comprehension when they focus on core concepts and integrate verbal explanation with visual cues.[5] In asynchronous Canvas courses, students can pause, rewind, and revisit short videos, allowing them to control pacing and revisit difficult material. This flexibility is especially

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valuable for first-generation students, multilingual learners, and students returning to higher education after long absences.

Short lecture videos also align with evidence on attention span in digital environments. While attention varies across individuals and contexts, studies consistently find that engagement declines sharply during long video presentations.[6] By contrast, brief, purpose-driven videos sustain focus and promote active processing, especially when paired with guided questions or follow-up assignments.

Democratic Teaching & Student-Centered Learning
The use of short lecture videos supports democratic and student-centered teaching models that emphasize transparency, shared responsibility, and learner autonomy. Democratic pedagogy does not mean the absence of structure; rather, it requires clarity about expectations and access to resources that enable all students to meet them.[7] Short lecture videos embody this principle by making instructor reasoning visible while allowing students to engage on their own schedules.

In asynchronous Canvas courses, students often experience isolation or uncertainty about instructor involvement. Research on the Community of Inquiry framework identifies instructor presence as a critical factor in student satisfaction and learning outcomes.[8] Short lecture videos contribute directly to this presence by humanizing the course and reinforcing that learning is guided, not automated.

Unlike rigid participation requirements or constant monitoring, short videos respect adult learners' autonomy. Students choose when and how often to engage with the material, but they do so with clear guidance. This balance mirrors democratic teaching approaches that treat students as capable learners while acknowledging structural inequalities in preparation, confidence, and access.

Time Management and Assessment Readiness
One of the most consistent challenges reported by online students is time management.[9] Without regular class meetings, students may underestimate workload or misjudge how to allocate study time. Short lecture videos help mitigate this issue by signaling priorities and clarifying how course components relate to assessments.

Effective videos explicitly connect readings to exam questions, essays, or discussion prompts. Rather than revealing answers, they model analytical strategies—how to identify arguments, compare perspectives, or apply theory. Research on self-regulated learning shows that such modeling improves students' ability to plan, monitor, and evaluate their own learning.[10]

In Canvas environments, where students often navigate multiple courses simultaneously, these signals are especially important. Short videos reduce guesswork, allowing students to focus cognitive effort on analysis rather than logistics. This clarity benefits high-achieving students and struggling students alike, supporting equity without lowering standards.

Instructor Presence, Engagement, and Retention
Instructor presence is a decisive factor in student retention, particularly in fully online courses.[11] Students are more likely to persist when they perceive instructors as engaged, responsive, and invested in their success. Short lecture videos provide a scalable way to maintain presence without overwhelming faculty workloads.

Seeing and hearing the instructor fosters connection and accountability. Even brief videos can convey tone, emphasis, and enthusiasm in ways that written instructions cannot. Research suggests that such social presence contributes to higher levels of participation and satisfaction.[12] In Canvas courses, where discussion boards can otherwise feel mechanical, short videos help sustain a sense of academic community.

Importantly, these benefits do not depend on production quality. Studies show that students value clarity and authenticity more than polished visuals.[13] Simple recordings focused on substance are often more effective than elaborate productions that distract from content.

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Equity, Access, and Inclusive Course Design
Short lecture videos also contribute to inclusive teaching practices. When paired with captions and transcripts, they support accessibility for students with disabilities and multilingual learners. Universal Design for Learning (UDL) principles emphasize providing multiple means of representation, allowing students to engage with material in ways that suit their needs.[14]

Canvas supports captioning and transcript integration, making short videos particularly adaptable to UDL frameworks. Moreover, videos can reduce reliance on dense written explanations, which may disadvantage students with uneven academic preparation. By reinforcing key points verbally, instructors can broaden access without simplifying content.

Limits and Pedagogical Boundaries
It is important to emphasize what short lecture videos do not do. They do not substitute for close reading, critical writing, or independent analysis. Overuse can foster passivity if videos merely summarize content rather than guide inquiry. Research cautions that instructional media must be integrated intentionally to avoid encouraging surface learning.[15]

Best practice therefore involves restraint and purpose. Short lecture videos are most effective when used selectively—to introduce modules, clarify complex material, or prepare students for assessments. Their value lies in strategic deployment, not volume.

Conclusion
Short lecture videos represent a practical, evidence-based response to the pedagogical challenges of Canvas-based course delivery. Grounded in learning science, democratic teaching principles, and research on online engagement, they enhance student success by improving clarity, reducing cognitive overload, supporting time management, and reinforcing instructor presence.

Geography, discipline, and institutional context may vary, but the underlying logic remains consistent: students learn more effectively when expectations are transparent, guidance is visible, and autonomy is respected. Short lecture videos do not diminish rigor: they support students in meeting it. When used intentionally, they strengthen the academic integrity and democratic character of online education.

Overall, a systematic comparison of pre-test and post-test results, along with class performance before and after the introduction of short lecture videos in my online courses, demonstrates a clear and consistent improvement in student learning and success. Students exposed to these short, focused video lectures show higher levels of conceptual understanding, stronger performance on assessments, and greater preparedness for course assignments. These outcomes provide compelling evidence for the pedagogical value of short lecture videos as a core instructional tool in online courses.

Based on these results, I intend to continue using my short lecture videos as an integral component of my online teaching. In this context, I would also like to acknowledge the invaluable support of the Faculty Multimedia Center (FMC) and the Faculty Center for Teaching and Learning (FCTL), whose professional guidance and technical assistance have helped me become a more effective and intentional video lecturer in support of student learning.

In addition, my official UCF course and instructor evaluations consistently indicate that students find these short videos engaging and helpful. Students report that the videos improve their comprehension of course material, clarify complex concepts, and better prepare them for assignments, quizzes, and exams. Taken together, these quantitative and qualitative indicators reinforce the conclusion that short lecture videos contribute meaningfully to student success in Canvas-based online courses.

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SHORT LECTURE VIDEOS CONT.

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How I Learned to (Almost) Love Digital Proctoring

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I first noticed digital proctoring services popping up in the summer of 2020 as COVID pushed so much teaching and learning online. When I heard about how invasive digital proctoring could be—with video monitoring of students working in their private spaces—I was appalled. It felt like an invasion of students' privacy. Worse, digital proctoring was unnecessary. Well-designed assessments could create sufficient barriers to cheating. Good pedagogy, I believed, beat surveillance.

Flash forward to spring 2026. I'm now using the Lockdown Browser and Respondus Monitor apps in my online classes. What happened? AI laid waste to my other techniques for discouraging cheating.

In June 2020, I wrote an article for UCF Today explaining why digital proctoring wasn't needed. Back then, the threat to online assessments came from Googling during a test and students sharing questions and answers via GroupMe (remember GroupMe?). I recommended strategies like setting a strict time limit, so students didn't have a chance to google, or pulling questions from a large test bank, so sharing tests would be more difficult. None of these techniques matter in a world where high-powered AI chatbots spit out answers as fast as a student can copy/paste.

Respondus Monitor uses a computer's webcam to record images of a student while the quiz is underway. It can also ask students to show their ID before starting, and as a student takes a quiz, it will flag activities the system deems suspicious for faculty to review later. The set-up process offers many customization options. For example, faculty can

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choose whether the program records images of the student or of the screen (or both).

I choose the minimal amount of scrutiny. I'm not interested in detecting every suspicious move, after all, but only signaling that honesty is important and that quizzes are not a copy/paste, AI-free-for-all. What's more, although not my primary goal, digital proctoring may have changed my classes' quiz results in a way that suggests less cheating is taking place. Grades have declined, the range of scores has increased, but the time spent taking quizzes has also dropped.

For example, my Summer 2024 section of U.S. History, 1492–1877 (AMH 2010) did not use any digital proctoring. The average score across 5 quizzes was 90 percent, with scores ranging from 36 to 100 percent, and students taking an average of 31:32. The next summer, after I'd implemented digital proctoring, students in the same course scored an average of 83 percent, with scores ranging from 30 to 100 percent, and students taking an average of 13:44.

The before and after picture, then, is a bit muddy. Students finished quizzes much more quickly, which might be expected if AI were answering the questions, but they scored worse overall, which suggests AI was not involved. With unclear results, I'm hesitant to draw conclusions.

In 2020, I was sure my online assessments didn't need proctoring. I crowed about how one student complained about the tests being unfair because he couldn't find the answers on Google. That world seems very far away. I never expected the tools I once rejected as Orwellian would turn out to be helpful in my quest to support students who genuinely want to learn. Even if I haven't exactly learned to love Big Brother, I now recognize he was more useful than I'd thought.

Teaching Research as an Inferential and Critical Process

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This article, excerpted from *Strategies for Conducting Literary Research*, 2e, an Open Education Resource that faculty can adopt for free, offers students information about the use of inferential thinking in research. It helps students understand why inferences are necessary to reasoning and how to properly use them. We discuss how inferences that may be allowable in some contexts are not allowable in others. For instance, we point out that the associative logic used in poetry may not be allowable in science and in legal cases. We further discuss how different kinds of knowledge—Prototype, Template, and Procedural—provide the foundations for our inferences. Finally, we discuss how all forms of knowledge are ideological and should be scrutinized.

Inferences

In Sir Arthur Conan Doyle's story, "The Blue Carbuncle," Sherlock Holmes asks Watson: "What can you gather yourself as to the individuality of the man who has worn this article?"

'I can see nothing,' said I, handing it back to my friend."

"On the contrary, Watson, you can see everything. You fail, however, to reason from what you see. You are too timid in drawing your inferences."

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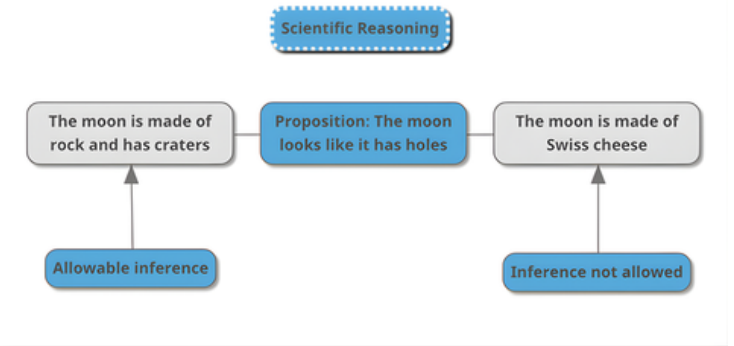
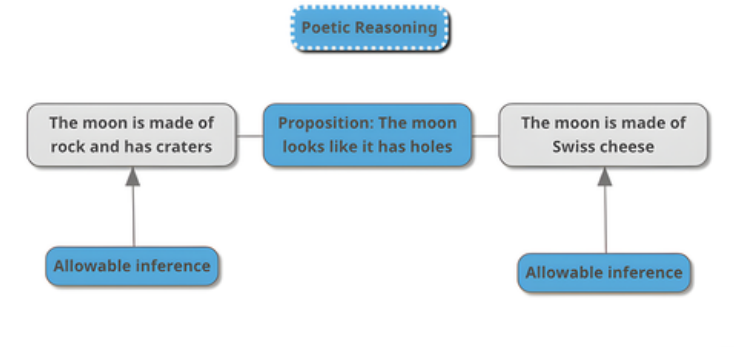
Without inferences, there is no thinking, critical or otherwise. Inferences allow us to move from one thought to another; they are the pathways by which thinking occurs. To think inferentially is to ask questions about pieces of information. What does this information tell us? Does it lead us to a hypothesis? Does it support our hypothesis or challenge it? If the information is true, what other claims follow logically from it? What additional knowledge is required to make sense of the information?

Thinking critically requires us to restrict ourselves to allowable inferences. For instance, we can observe that the surface of the moon is not smooth but appears to have holes in it. We might conclude that it is made of Swiss cheese. Science would reject this inference, but poetry would allow it. We could say that each area of knowledge has its own inference rules, just like each game has different rules of play.





Non-allowable inferences are called fallacies. In some settings, logical fallacies lead to injustices (like in the witch trials), while in others they may lead to laughter (like in Monty Python). In humor, logical fallacies are ok. In trials, they are not.

Reasoning

Reasoning is the process of putting inferences together. There are many kinds of reasoning; one of the common kinds, called *abductive reasoning*, involves reasoning about causation. If we see a house on fire, we reason that there must have been a cause. Was it an accident or was the fire set intentionally? Without more information, we are merely speculating, or reasoning with insufficient information.

A common mistake in abductive reasoning is to assume that *correlation* equals *causation*. Correlation means that two things merely appear together. For example, if we see a book of matches at the scene of a fire, we might assume that the matches were used to start the fire. Yet the appearance of the matches merely correlates with the appearance of the fire. Unless we can rule out other causes, we can't conclude with any certainty that these matches caused the fire. Similarly, if we discover that two authors met once, we do not have enough information to conclude that a literary work written by one author was intended as a response to the other author. We can speculate, but we must indicate that it is only a speculation.

Some types of reasoning are very loose and allow multiple *associations*. Let's take a hypothetical car advertisement in which a shiny new car is parked in the middle of a football field while a male peacock walks around it with its colorful tail fanned out. The peacock is eye-catching and football is about toughness; we associate both with the car. We might make any number of inferences from this scene, such as that the car is supposed to impress and intimidate (which is what male peacocks do with their display) and that it will grant the car's future owner the same powers. Such associative reasoning can help us understand metaphors and allusions in literary works.

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Prototype, Template, and Procedural Knowledge
We build inferences from our knowledge of how the world works. This knowledge can be divided into types: prototype, template, and procedural.

- **Prototype knowledge** tells us what category or class something belongs to; it can help us relate a literary work to a genre, period, or movement.
- **Template knowledge** is about patterns and structures (such as the different pieces on a chess board); in the study of literature, we bring knowledge of templates such as narrative structures and symbolic systems.
- **Procedural knowledge** is about how a process (like eating or riding a bicycle) is done; in literary studies, procedural knowledge can help us understand the composition of a work, the distribution process, the reading process, interpretation, and so on.

When we are trying to understand new information, we usually bring prototype, template, and procedural forms of knowledge together with the new information. For example, in writing about James Baldwin's "Sonny's Blues," we need to know that segregation existed in America and separated black and white communities (and that we are still living in the legacy of that separation). Our knowledge about the period of official segregation is prototype knowledge. We can make sense of the relationship between the narrator and his brother using template knowledge. Procedural knowledge can help us understand the causes and effects of addiction.

Writing a research paper involves problem solving (research question being the problem). Students must relate the information in the problem (the research question) with the research material they find—and the relevant prototype, template, and procedural knowledge—before making inferences. If students don't follow this process, they won't be able to solve the problem successfully (unless they just make a lucky guess—but even then they still must support their argument!).

The student's paper should also demonstrate to the reader how they made their inferences. By doing so, students are providing a warrant for their claims by explaining how they move from one proposition to another. The reader should be able to clearly explain to a third person how the student reached the conclusion.

Ideology
Keep in mind that prototype, template, and procedural knowledge are culturally and historically specific and that they represent the "ideology" of a culture. In other words, this knowledge is not necessarily objective reality. It contains within it a whole set of assumptions about how the world works and these assumptions may be wrong or may serve the interests of one group at the expense of another. For example, race, class, nationality, profession, gender, and sexual identity can be understood in terms of prototype, template, and procedural knowledge, but this knowledge may be based on outdated and oppressive ways of thinking such as crude stereotypes. We must use prototype, template, and procedural knowledge to produce a research project, but we should be aware that all such knowledge deserves scrutiny.

Literary theories, such as feminist, psychoanalytic, new historical, Marxist, etc. provide their own versions of prototype, template, and procedural knowledge. Such knowledge is also subject to scrutiny, but scholars have recognized much of it as valuable for making inferences within the field of literary studies. When writing a literary studies research paper, instruct students to familiarize themselves with the prototype, template, and procedural knowledge related to their chosen theory.