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# Leaving the Mess

## Epistemology and Ethics in Media Literacy Instruction

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**ABSTRACT:** *Authority is constructed and contextual.* Thus spake the ACRL Framework for Information Literacy, an assertion that rightly guides information and media literacy instructors as we *form* and *inform* students, empowering them to navigate an ecosystem rife with mis- and disinformation. Yet as danah boyd famously argues in her 2018 SXSW EDU keynote, how we teach media literacy can become an “assertion of authority over epistemology” that undermines skills we intend to sharpen by not recognizing and valuing fundamental differences among how individuals within communities make sense of the world(s) we inhabit. boyd asks, “How do we teach across epistemologies?” We suggest that by leveraging narrative and play mechanics, gameful design can mitigate problems of epistemic authority, encouraging exploration and fostering desire-driven encounters with diversity in worlds both real and imagined.

### **MOVE 1: A PROBLEM OF EPISTEMIC AUTHORITY**

The continuing rise of gamer culture offers fresh strategies for gameful design, transforming the classroom from a traditional learning environment into an interactive, playful space where a community of learners can become *learners at play*. In all the spaces where we design and deploy instruction, our students are diverse individuals from diverse cultural, geographic, and epistemic contexts, which can create interesting considerations and potential collisions to navigate. We believe that gameful design with playful, AI-enhanced instruction transforms approaches to teaching across epistemologies, fostering more inclusive, engaging, and adaptive experiences that leverage play as the mode and medium of teaching and learning. Using a gamified course, Worldbuilding, as an exemplar, this

paper aims to help readers: 1) discern the problems of epistemic authority for media literacy instruction; 2) discuss how “serious” games leverage the power of narrative and gameplay mechanics to broaden encounters with different ways of thinking; 3) consider how gameful design might also leverage the power of narrative, promoting empathy and fostering desire-driven encounters with diversity; and 4) experience how AI-enhanced instruction centers *play* as a compelling medium for teaching and learning.

We begin by contextualizing our problem with a story. Last Fall, I (Chris) was asked to teach a class on World Building, a dream course brimming with storytelling, student artwork, and buzzy creativity. I gamified the course, and because I’d been working with emerging AI tools, I determined to find a way to meaningfully incorporate AI into our semester learning. Most of the students enrolled in the course were either Gaming and Animation or Art majors; these students are incredibly talented, and the artwork they create is personal and important. Many of them have strong feelings about the ethical problems associated with AI, especially with regard to how these tools are trained on other’s art and images. As a librarian, I also am concerned about the ethics of these tools; nevertheless, I deeply value their potential to transform human work and learning and realize that if our students are not empowered to use these tools well and to leverage their potential, they’ll likely have already fallen behind others when they enter the workforce.

When I enthusiastically announced in class that I had built a GPT tool that would take all of the disparate storylines and loosely connected threads we had been developing throughout the semester and use them to generate infinite new stories sourced from our work, I didn’t receive the reaction I was anticipating. *You built an AI tool that generates infinite, original stories sourced from our work? Wow! You’re the coolest teacher ever!* That’s what I assumed they would say, but it’s not at all what happened. After I announced the tool, several students stayed after class to ensure that I was aware of the dangers of AI, especially for artists, since those voracious machines seem hellbent on gobbling up and mimicking their work. One student assured me that they had recently posted an expertly argued, 2,000-word screed on Discord which they would make available to me if interested.

Honestly, I felt confused and more than a little defensive. *You think I don't know about these concerns about AI? I begin every morning with NPR; trust me, I'm in the know. Plus, you know me; you know I'd never do anything to harm you or your work—can you just give this a chance? It will be good for you.* These are the thoughts that ran like a script in the back of my mind each time students confronted me about AI, confrontations and cautions that became more frequent as we neared the end of the semester.

For our final class session, I decided to address the ethics of AI as a partner for work and creativity. I demonstrated various portrayals of AI in media, acknowledged the problematic ethics of the moment we inhabit, but asserted that AI is here to stay, that it will be a force for good, and that instead of fearing this phantom menace we should be open-minded and learn to leverage these new, incredible tools. Then I demonstrated the awesome tool that generates new stories sourced from student-crafted prompts; but instead of cheers and applause, I ended the semester by angering several and alienating one to the extent that the student has not spoken with me since, despite my sincere efforts to reconcile.

I am not usually the teacher students decide to hate—well, I was likable enough until I insisted on praising AI to a class chockablock full of young artists. So, what happened? It's been bugging me; and I can say that for whatever students got out of our time together, that class was incredibly instructive for me. These experiences helped me understand something about what it means to teach across diverse ways of thinking and (more importantly) how to do better next time. As we think about what it means to do better, let's consider Transformative Learning Theory in light of the problems of epistemic authority.

## **MOVE 2: TL AND PROBLEMS OF EPISTEMIC AUTHORITY**

Our thinking is informed by Transformative Learning Theory as proposed by theorist Jack Mezirow. Transformative Learning Theory refers to the “process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action” (Mezirow 1996, 162). Since TL is focused on adjusting learners' frames of reference by helping them become

“more inclusive, discriminating, open, reflective and emotionally able to change” (Mezirow 2018, 116), it resonates with common approaches to media literacy instruction. Both TL and media literacy instruction risk the problem of epistemic authority, *de facto* instructor assertions of authority over diverse ways of thinking.

Mezirow asserts that, “Transformative learning is essentially a metacognitive process of *reassessing reasons* supporting our problematic meaning perspectives” (2018, 120). By *meaning perspectives*, Mezirow refers to the frames of thinking or habits of mind that govern expectations and assumptions. As he describes,

Frames of reference are the structures of culture and language through which we construe meaning by attributing coherence and significance to our experience. They selectively shape and delimit our perception, cognition and feelings by predisposing our intentions, beliefs, expectations and purposes. . . . Once set or programmed, we automatically move from one specific mental or behavioural activity to another, and we have a strong tendency to reject ideas that fail to fit our preconceptions. (116)

Frames of thinking or habits of mind are deep-seated, less visible, and often operate without our conscious awareness. This may be analogous to the coding or “rules” a computer runs in the background to keep the system operating. But our mental habits become visible when they are articulated as specific points of view or perspectives, expressions that reveal how we think about the world and that also shape or inform how we engage with others.

Since perspectives can be articulated, they come more easily into our awareness and are more open to feedback from others. In the example from world-building class, deep-seated beliefs about creativity, originality, and intellectual property are all at play in the students’ habits of mind; when confronted with AI, mental habits became expressed as an articulation of anxieties: *It’s not good or fair that AI is being trained on our artwork without our permission and that we must now fear for our jobs as artists, illustrators, and creators.* While we might share students’ beliefs about creativity, originality, and intellectual property, we might also articulate an alternative perspective, resulting in an ethical conundrum as competing assertions about *the good* collide: *These tools are training on other’s work just like you did when learning your creative craft; it’s better that we focus on the good these tools will bring instead of avoiding or refusing AI out of fear and suspicion, especially since your future careers*

*will almost certainly involve AI.* So, who's right? Which of our beliefs is better? Such questions may not actually be very helpful if we're interested in inspiring transformative learning.

While, as the instructor, I might assert the *authority of my perspective* over students' perspectives, transformative learning takes a different approach. Transformation happens through encounter, dialogue, and critical reflection. Instructors have power, and power pervades our classrooms, both virtual and visceral. Even instructors who are intentional about fostering democratic or open learning experiences nevertheless live, move, and have their being as power-wielders within the dynamics of pervading cultural norms. Normalized power structures are baked into classroom ethos; both students and instructors have been socialized to implicitly understand how power works in a classroom setting.

In her book *Understanding and Promoting Transformative Learning* (2023), Patricia Cranton describes power that pervades instruction as the way students can feel surveilled by peers and instructors; from a young age, students are socialized to know how to think and how to act in the classroom, so that understanding the parameters of what's appropriate or expectations about what differentiates good students from bad students already exist within as deep-seated frames of reference, re-enforced through classroom experiences year after year. So Cranton warns, "If students perceive their teacher as having position power—control that is based solely on his or her position as teacher—students will work hard to do what they think the teacher-in-power wants them to do" (85).

Assumptions about power and authority in the classroom are a function of socialization within particular cultural contexts. According to Cranton (2017),

In the development of his comprehensive theory of adult learning, Mezirow integrated two ideas: the cultural context of learning, including socialization as the foundation for early learning, and the central role of making meaning from experiences in learning. Socialization involves internalizing and personalizing the assumptions, beliefs, and values that are communicated by parents, teachers, the community, and the culture. When a person encounters perspectives that contradict that early socialization, he or she may question the currently held perspectives and revise them . . . . Transformative learning involves revising limited and distorted meaning

perspectives through reflection on assumptions that have been uncritically assimilated. (n.p.)

But as Mezirow himself puts it, the “formative learning of childhood becomes the transformative learning in adulthood” (1991, 3). Transformation happens through encounters with different perspectives that initiate a disorienting dilemma; ensuing dialogue makes perspectives visible; and critical reflection then may lead to transformed thinking and to new frames of reference. As Mezirow says, “We make a decision and then live what we have come to believe until we encounter new evidence, argument or a perspective that renders this orientation problematic and requires reassessment” (117).

Transformative learning requires us to *think about our thinking* in light of new encounters with thinking that is different from our own, to make our thinking visible by putting our perspectives into reflective discourse with others, and then to make and act on decisions informed by new frames of reference. Mezirow describes transformative learning as “a rational, metacognitive process of reassessing reasons that support problematic meaning perspectives or frames of reference, including those representing such contextual cultural factors as ideology, religion, politics, class, race, gender and others” (126).

*But I don't want to talk about religion, politics, or other controversial topics with students; I just want them to accept what I'm saying about AI; I want them to think like me. Is that so bad?*

Mezirow says that transformative learning “is the process by which adults learn how to think critically for themselves rather than take assumptions supporting a point of view for granted” (126). And now we have arrived at the Gordian knot of transformative teaching. As you likely recognize, to expect students to simply accept an assertion of an authoritative perspective from an instructor inhibits their capacity to experience transformative learning—yet, my perspective as the instructor is precisely what I want them to receive and to incorporate as their own because *I think* it's good for them to *think like me*. At least, in this case, I want them to put aside their fears and embrace AI with all the techno-optimism and enthusiasm that I experience daily.

I first started thinking about the problem of epistemic authority after teaching a gamified media literacy class entitled *Eat, Play, Love: Adventures in the Information Ecosystem*. In creating and teaching this course, I was confronted by problems of epistemology and ethics: *epistemology*, of course, involves human ways of *thinking*, how and why we make decisions about what we know to be true about the world, about ourselves, and about others; and *ethics* involves human ways of *being*, how we relate in the world to one another. Through this course, I began to recognize that epistemological and ethical considerations require us to rethink and perhaps revise how we do media literacy instruction. Eventually, my own thinking was informed by scholar danah boyd (2018a), who offers a critique of media literacy instruction as an example of “[asserting] authority over epistemology” (boyd 2018a).<sup>1</sup> Essentially, boyd suggests that *epistemological difference* creates challenges for media literacy instruction, since people evaluate, interpret, and make meaning from within their own individual and communal ways of knowing.<sup>2</sup>

boyd asserts, “If we’re not careful, media literacy and critical thinking will simply be deployed in the classroom as an assertion of authority over epistemology.” As librarians, we likely agree with the ACRL *Framework for Information Literacy for Higher Education* that “authority is constructed and contextual” (2016, 4). Yet just as authority is constructed and contextual, so also are evaluation and interpretation, sense-making constructs by which we determine how, why, and where we consume and create information, and who we trust for information. boyd worries that if our instruction becomes an “assertion of authority over epistemology,” we might undermine the very skills we intend to sharpen. So boyd wonders, *How do we teach across epistemologies?*

Although boyd is thinking about media literacy instruction, I realized that her warning here might have been made about my world-building course; indeed, her warning echoes in all spaces where we hope to foster transformative learning experiences. As an instructor, I have viewpoints I want my students to consider, perspectives I hope they will adopt; but transformative learning resists any claim that my perspectives as instructor are *de facto* authoritative and instead requires that I invite students to consider their own perspectives, make them visible through articulation, and then put these varied perspectives in dialogue by facilitating encounters with difference.

My instruction then aims to foster engagement, encourage reflection, offer feedback, and inspire discernment.

Teaching that actualizes transformative learning is neither easy nor simple; at least, it's different from approaches that assume the authority of the instructor's perspectives. We want our students to become skilled critical thinkers; but boyd is right to worry that our instruction can become an "assertion of authority over epistemology" if we fail to recognize and value fundamental differences among how individuals within communities make sense of the world very differently. So we wonder, *What do we as instructors do with the problem of epistemic difference in light of the transformative learning experiences we aim to facilitate and inspire?*

The transformative learning process involves critical reflection about assumptions so that we might develop or acquire a new disposition (a new schema or mental model) for making sense of experiences. Mezirow posits that transformative learning experiences happen when we encounter a disorienting dilemma. This experience of disorientation derails us. I don't mean "derails" like a train falling off the tracks; instead, it's more like a derailleur mechanism on a bicycle: we're thrown out of gear for a moment so that we might reset in a new position or, in this case, a renewed way of thinking. So the question becomes, *How? How do we design learning that makes thinking visible and fosters critical, reflective dialogue that then leads to transformative learning experiences?*

In response to these questions, we suggest that instructors can work to foster *epistemic curiosity* among playful learning communities by incorporating gameful design and even playful, AI-enhanced instruction, a move that might transform our approach to transformative learning itself. Primarily, we'd like to offer seven pedagogical pivots by which we foster more inclusive, engaging, and adaptive experiences that leverage play as the mode and medium of teaching and learning. Of course, classes on media literacy and world-building are well suited for fostering epistemic curiosity since these subjects naturally invite questions and engagement across diverse ways of knowing. While fostering curiosity is an obvious way forward, the question remains: *How do we do it?* We'd like to suggest seven pedagogical pivots that can help us start to rethink how we approach instruction that engenders transformative learning experiences.

### MOVE 3: SEVEN PEDAGOGICAL PIVOTS

None of us speak from outside our own epistemology, a web of beliefs by which we make sense of the world as we encounter it. So, as we suggest pivots in our thinking about instruction, we recognize that even now we are engaging each other from within our own shared and distinct epistemologies. Nevertheless, the following seven pivots inform this work, and we offer them to you for critical consideration.

*From communities of learning to communities at play.* Our first pivot involves anthropology—how we think about who we and our students are as human beings. While a Cartesian response to this conundrum posits that *I think; therefore I am*, humans are also “*desiring* beings—we live and learn by our gut as much as by our head” (Rosser 2022, 183). While a conception of human beings as *Homo sapiens* privileges the mind or intellect (i.e., humans as *knowers*), our pivot reclaims the conception of humans as proposed by mid-twentieth century Dutch historian Johan Huizinga (2014), who names humans as *Homo ludens*, or people as *players*. With regard to learning, *play* is a better metaphor because it more accurately describes our relation to the information we engage, create, and consume. Play spaces are desire-driven spaces; we enter and engage most often because we *want* to be there. Play engages the whole person and not just our cognitive or intellectual capacities. We are driven into learning spaces by our guts, and we follow our guts because we are desiring beings. So, the first pedagogical pivot to make is about who humans are, shifting us from a community of learning to a *community-at-play*, a meaningful reframe that informs the second pivot.

*From consumption to encounter.* Our second pivot reconceptualizes engagement with information as *encounter* rather than *consumption*. Since encountered information represents and is sourced from the minds of other humans, consumers are always in dialectical and dialogical relationships, tethered to others by the information we consume (Rosser 2022). At the center of these pedagogical pivots is a conviction that “learning and love share a heart: each requires an encounter with difference, that which is not self (or sameness), someone who is other” (192). Resistance to that which is different is *natural*, a kind of gut reaction, so that when we encounter difference our inclination is to get defensive, to tell difference to go away. But if

we are unwilling to encounter and engage with difference, we find ourselves always stuck in our same-old ways, perpetually submerged in sameness. There is no growth without encounter, so “it is crucial that we encounter ideas and learning that are different from our normed and conditioned expectations—we need encounter with ideas that may trigger visceral reaction” (Rosser 2022, 192), a gut-punch reaction signaling a gap between *self* and an *other*. And when we feel the gap, we might kick it away, or we might do differently: we might assume a humble learner’s posture, and with head bowed make the good confession, *I don’t understand, but I’m willing to try*. Such a posture is engendered through encounter, not consumption.

*From certainty to curiosity.* Here we’re thinking about the instructor as an *authority* and the instructor’s perspective as an authoritative perspective. This can be tricky or might feel a bit like devaluing or diminishing the instructor’s role and expertise, but the move from certainty to curiosity envisions an instructor who intentionally embodies a less assertive or authoritative mode and instead models *epistemological curiosity* for the sake of transformational learning. Epistemological curiosity can be thought of as a “desire to learn about an object ... a topic, idea or entity” deemed “worth investigating or learning about” (Shew 2020, 56). We believe that an instructor who embodies the desire to learn through encounter, for whom others are worth learning about, who models epistemological curiosity as crucial for engagement in our info and media ecosystem, is an instructor who might well transform students from learners to players, from consumers to those who themselves have learned to desire encounters with difference. Curiosity is, therefore, an energizing principle electrifying course ethos, and good design aims to suffuse a course with opportunities for curiosity to follow its nose, to chase a rabbit trail, to disappear around dark corners into the unknown, always in search of serendipitous discovery. The instructor as *curious* and the instructor as *authority* are not a dichotomy: these modes exist together, but curiosity is infectious, sparking within players a wonder that initiates exploration. This is primarily because, like assertions, certainty is static; but questions are dynamic, questions drive thinking. And this leads to another pivot.

*From linear-transactional to desire-driven learning.* Here we do not abandon linear and transactional aspects of course design and learning. Rather, we incorporate linear-transactional modes within

an enlarged paradigm of desire-driven learning. By desire-driven learning, we simply mean “learning that is driven by desire.... The way to accomplish or to facilitate desire-driven learning is to create lots and lots of non-required options, to allow for high flexibility, and to provide loads of feedback (students need to feel instructor presence, to know we’re all on this journey together)” (Rosser and Rosser 2023, 224). Among our immense media and information ecosystems, instructors become curators, since “curation of information is how we build out robust spaces for desire-driven learning that is the heart and soul of what we mean by gameful design” (Rosser and Rosser 2023, 218). For desire-driven learners, questions drive thinking; questioning is dynamic, initiating movement from here to there, from the known into the unknown, or toward the not-yet-known. With electrifying curiosity and *quest(ion)ing* as dynamo for our journey, we employ *inquiry* as the crucial mode for engaging the info-verse we inhabit (Rosser and Testut, 2021). Learning driven by desire can be transformational, especially when a learner’s desire is for encounters with difference, an orientation fostered by the next pivot.

*From guarded silos to generous welcome.* Our orientation to teaching and learning considers how we might leverage the library’s identity as a co-curricular third space. Our libraries exist “as generously hospitable spaces for encounter. Third spaces exist where learners’ normed and conditioned assumptions are challenged and enlarged by shared encounters with cultural and ideological *otherness*,” significant because “meaningful encounters with otherness are the primary context and catalyst for transformative educational experiences” (Rosser 2019, 223–225). This pivot encourages students to recognize the informational and ideological silos we naturally inhabit and move beyond, to broaden and enlarge understanding through generously hospitable encounters with difference. Welcoming an *other* does not necessitate equivocation, by which we assume that all perspectives are equally beneficial with regard to human wellbeing. This now moves us to our penultimate pivot.

*From truth to goodness.* *Truth* is an incredibly problematic concept; truth is also the center of epistemology, since ways of knowing involve beliefs about the world, i.e., what we believe to be true about the world, about self, and about others. Truth often depends on perspective, and we are beings of profoundly limited yet incredibly

diverse perspectives. So for this pivot, we are not as interested in the truth of belief as in the *goodness* of belief. True, goodness also depends on perspective, but even among abundant human diversity we find more concord in that which we call *good* than in that which we suggest is *true*. So the pedagogical pivot here is to center discernment of goodness rather than to make decisions about truth. But since so much of what we believe we *de facto* label as good, what we simply name as good won't suffice as a standard or litmus for making decisions about what is good across epistemologies; so here we apply the concept of *harm* as our litmus. Ways of thinking (including our own ways of thinking) can be interrogated by asking questions like, *Who suffers harm as an impact of this belief? What is the nature or extent of harm experienced? Is the harm real, potential, or hypothetical? Who benefits in relation to the harm experienced and in what ways?* Interrogating beliefs for the possibility of harm also helps avoid equivocation and provides a useful litmus that moves across diverse ways of thinking. From this, we move now to our final pedagogical pivot.

Finally, we pivot from *critical thinking* to *krino*. For years, especially as I (Chris) have taught media and information literacy as well as critical and creative thinking, I've been working with an understanding of critical thinking scooped from Richard Paul and Linda Elder's *The Thinker's Guide to the Art of Socratic Questioning* (2016). They describe critical thinking as:

the systematic monitoring of thought with the end goal of improvement. When we think critically, we realize that thinking must not be accepted at face value, but must be analyzed and assessed for its clarity, accuracy, relevance, depth, breadth, and logicalness. We recognize that all reasoning occurs within points of view and frames of reference, that all reasoning proceeds from some goals and objectives and has an informational base, that all data when used in reasoning must be interpreted.... Because problems in thinking can occur in any of these dimensions, each dimension must be monitored. (72)

And that's been a helpful frame for me and for my students. The problem is illustrated by this imagined dialogue, perhaps between a student and an authoritative other:

*You know you gotta think critically about the information you consume, right?*

[Yes]

*And you know you gotta always monitor your thinking, just to be sure, right?*

[Yes]

*And you know when you encounter information or a new perspective, you gotta interrogate it, you gotta ask questions like, Who created this message? How are they trying to grab my attention? How might those different from me understand this information differently? What values are represented? Why is this information being shared, and what is its purpose? You ask those kinds of questions, right?*

[Yes]

*Excellent! We're clearly on the same page because I do all the same things. So, will you sign my book-banning petition? We gotta protect those kids!*

There's the problem, but presumably there's hope, a way forward, a solution: *media literacy*, which promises the “development of knowledge, skills and attitude to provide users with an essential framework for effective lifelong engagement with media messages” (Christian, 6). This optimistic description is from the textbook we've used to guide creation of our media literacy instruction, Sue Ellen Christian's 2020 *Everyday Media Literacy: An Analog Guide for Your Digital Life*. The author continues: “Media literacy sets standards for critical thinking that protect you from misinformation and disinformation.... Democratic societies depend on media literate citizens ... who can evaluate propaganda and see it for what it is” (8). She notes that no matter where you are in the world—on a farm in Minnesota or in a cosmopolitan center like London—although you might use them differently, the skills for media literacy are the same wherever you are in the world.

We think this understanding—media literacy as a one-frame-fits-all program for identifying mis- and disinformation, for example—is what danah boyd critiques. To be sure, boyd has her own critics, who point to her unclear definition of critical thinking, her misrepresentation of the aims of media literacy instruction, the straw man she seems to create, and the lack of positive ways forward: you know,

how in the world we are to get out of this mess (Hobbs 2018; Noula 2018). But boyd provides a challenge that those of us who teach media literacy might heed as we consider course and content design and as we engage the messiness of our media-rich, info-saturated, epistemologically-diverse ecosystem.

Our framework for teaching media literacy is good, it's solid, and we've gotta teach all the moves: we've gotta teach about bias, power, privacy, representation, curation, creation, misinformation, disinformation, and democracy—all of it. But the framework is one-size-fits-all, one frame for every epistemology, which lets learners remain siloed, to stay within their own epistemological sphere, to perhaps feel confronted by but to explain away biases, and to feel quite content that they've asked the critical questions and have thereby justified the sources of information they consume as trustworthy and reliable and authoritative. In the case of my world-building class, all of us—my students and me as the instructor—knew for sure that the other wasn't seeing things correctly, that the other's thinking about AI was misguided, in desperate need of reassessment and corrective. Most of us had already applied strategies for critically assessing our assumptions about AI, but nevertheless remained apart in our thinking. This is why, as a final pivot, we're suggesting that we must move from critical thinking to *krino*, the Greek root from which we get our word *discernment*.

So here, as our final pivot, we'd like to introduce an approach to instruction and course design that seems quite appropriate for instructors who hope to foster transformative learning experiences. Since we've established that *play* better captures how humans engage the info environments we inhabit, we'd like to discuss *gameful design* as a beneficial approach.

Gameful design is related to the concept of “serious” games. Simply put, a “serious” game is a game with a serious purpose—like training toward some skill or perhaps an instructional or ethical aim—at its core, a goal beyond pure entertainment. Serious games have broad applications in business, healthcare, education, and other contexts where learning, skill development, problem-solving, and decision-making are enhanced through play. With regard to digital and video games specifically, a game might be considered serious not because of developer intentions but because of player perspectives: as with

other forms of art, meaning-making, discovery, and transformation experienced while playing through or reflecting on a game might well transcend developer intent or expectations. Nevertheless, developers are often intentional about creating serious games for a variety of purposes, as Dörner et al. (2016) describe: “The characterizing goals of today’s serious games also include lifestyle behavior change, medical diagnosis, enterprise management, decision support, development of social skills, analysis of causal mechanisms, creation and defense of arguments, development of conflict resolution strategies, arousal of fantasy, elevation of civic engagement, promotion of ethical values, persuasion and recruitment to causes, campaigning in politics, and many more” (4). Video games are particularly valuable for achieving such characterizing goals because they can leverage robust worldbuilding, evocative storytelling, compelling aesthetics, and a player’s active engagement to co-create a robust alternative cosmos where serious play becomes the medium for transformation (cf. Ritterfeld et al. 2009).

One of the most popular video games of the past 15 years is *The Elder Scrolls V: Skyrim*. To tell you the truth, I (Heath), have played a lot of *Skyrim*. The game takes place in a mythical world inspired by Norse mythology and culture. As an RPG (role-playing game), you, the player, have a wide range of choices and possibilities as you live out your in-game story. You can become a knight errant, mage professor, or infamous thief; you decide. One notable game mechanic is pickpocketing and stealing. If you see an item you like but you’d rather not pay for it or someone else already owns it, *just steal it*. The consequences for stealing are fairly light: if you’re arrested, you can sleep off your prison sentence. If you’re killed, you can respawn and try again. You want to steal a horse? Grand-theft-equine is a fairly low-stakes crime. The game’s design encourages players to view the non-playable characters as bits of code, two-dimensional, and unworthy of empathy or compassion. Truly, the game rewards bad behavior, and the benefits of criminal shenanigans more often outweigh the risks. Furthermore, the only moral compass in *Skyrim* is whatever the player brings to the game world. As a result, *Skyrim* mechanically privileges a narcissistic playstyle: take what you want; kill anyone who stands in your way. Through game mechanics that reward stealing, *Skyrim* normalizes in-game behaviors that would otherwise be considered reprehensible.

To illustrate: several years ago, I had been playing a lot of *Skyrim*. I joined the Thieves Guild, was a pickpocket extraordinaire, and was having so much fun. However, one day I was at the grocery store and saw someone with a cool sweater and thought, *Oooh, that's a nice sweater! I wonder how I can steal it from them.* Now, I immediately paused and questioned this intrusive thought: *Why would I steal anything from them?* I realized that by becoming so immersed in *Skyrim*, the game had programmed within me a certain orientation to the world that ignored the inner lives of others. *Skyrim's* operating epistemology informed my thinking outside of play sessions. Now, this is a simple example—no sweaters were stolen in the making of the illustration—but it nevertheless reveals how worlds of play transcend their fictive mediums.

Here's another example: *Undertale* is heavily inspired by the Japanese role-playing games of the nineties. The games that inspired *Undertale* often feature charged plots where good and evil duke it out with cosmic implications. The games present morality as a stark binary, where violence is necessary to annihilate monstrous others. However, while *Undertale* pays homage to the JRPG legacy, the game problematizes binary notions of good and evil, heroes and monsters. Whereas *Skyrim's* human NPCs are relatively flat and banal, *Undertale* humanizes monster NPCs as deeply personable, quirky, and kind. While you could choose to fight and kill all the “enemies” you encounter, players may also choose to befriend and spare the monsters. In this way, *Undertale* employs a familiar RPG structure, but subverts it for ethical ends, encouraging players to empathize with monsters rather than demonize them. *Undertale* offers players an epistemic of mercy with implications outside of the game. Serious games such as *Undertale* wonder, *perhaps worlds divided between good and evil, victors and villains are artificial and require critique.*

So here we introduce a concept, *transepistemic awareness*. Experienced gamers must become fluent in several games, familiarizing themselves with diverse objectives, controls, mechanics, and storied worlds. In order to cope with information overload, these gamers build a mental multiverse, relegating games to discrete universes while accounting for overlapping features and similarities. However, gamers are not the first to build epistemic multiverses, for anyone who widely consumes stories, whether oral, literature, film, theater, etc., must organize these narratives as discrete realities subject to

their own fictional truths. The same is true for anyone raised in or familiar with interreligious contexts. The ability to identify epistemic differences and communicate across them is transepistemic awareness. We believe that games, and serious games in particular, help to strengthen the skills necessary for TEA (transepistemic awareness). Not only do serious games individually offer ethical instruction, but they also provide practice for encountering diverse epistemic perspectives. Transepistemic awareness is vital for media literacy education as an orientation for navigating encounters with diverse ways of thinking, both in and outside the classroom. TEA does not assert authority but listens and communicates transepistemically. Instruction that facilitates encounters with difference by making diverse ways of thinking visible is a generative act of spilling TEA.

Gameful design (which moves beyond gamification) can help facilitate transepistemic awareness by leveraging the power of narrative and gameplay mechanics to create transformational learning experiences among learners at play. Gameful design helps mitigate problems of epistemic authority, *de facto* instructor assertions of authority over diverse epistemologies (Rosser and Rosser 2023). Through narrative, “serious” games broaden encounters with different ways of thinking and open possibilities for inhabiting diverse worlds (Ritterfeld et al. 2009; Schrier et al. 2019). Similarly, gameful design leverages the power of narrative, inviting students to participate in storied worlds, promoting empathy and fostering desire-driven encounters with diversity (Bell 2017; 2018). Below, we demonstrate how and why artificial intelligence can be incorporated to facilitate gamified, story-driven instruction. Framing the classroom as a collaborative, playful narrative space, with AI as a co-creative narrator, helps break down hierarchies and power dynamics, encouraging students to take an active, exploratory role in their own learning. Inviting AI to join class as TALOS, Transformative Artificial Luminary of Story, centers *play* as a compelling mode and medium for teaching and learning.

Our course creation incorporates five key elements of gameful design: 1) Structure, a cohesive conceptual framework for the course; 2) Story, an immersive narrative that guides students through the material; 3) Aesthetic, engaging audio-visual elements that stimulate imagination; 4) Play, game-like features such as avatars, badges, and “boss fights” instead of exams, making learning enjoyable;

and 5) Desire, the most crucial element, fostering intrinsic motivation through choice, low-risk environments, flexibility, and ample rewards. Additionally, two non-gamified but essential components are feedback and reflection (Rosser 2020; Rosser and Rosser 2023). Now we pivot from the philosophical and pedagogical to the practical as we illustrate by playtesting.

#### **MOVE 4: STAGING A PLAYTEST**

To illustrate our gameful approach, we'd like to share four iterations of a particular use case of partnering with AI for enhanced instruction. As a librarian, I (Chris) have worked to develop strategies for centering play as a mode and medium for learning, course design, and instruction. I've also been thinking about "serious" games, which, as discussed, employ narrative and game mechanics that can broaden encounters with different ways of thinking; serious games can foster empathy by opening possibilities for imaginatively inhabiting diverse worlds and perspectives. The key idea behind serious games is to leverage engaging narrative and the interactive nature of gameplay mechanics to achieve these goals.

Let me offer a brief story to illustrate. Readers may judge me as a bad parent because my kids and I play all kinds of video games together, including games that are more mature than *Mario Brothers*. My son Briar and I played through *The Last of Us* games, which were brought into popular awareness by the recent HBO series. Especially in the second game, at a certain point, players are forced to play as the enemy, the character that we've grown to hate, and for good reason. But after playing as the enemy, we found ourselves empathizing with this character, learning her story, walking with her because *we are her*, for a while at least. So by the end of the game, we came to think very differently about this enemy. Truthfully, by the end of the game, I myself was weeping, and that experience led to an epiphany. You see, my son and I spent many hours playing a serious game together, but our journey didn't end when we finished the game. We spent days talking about what we'd just experienced, reflecting on the ethical implications, amazed by what these game designers could do to us players. By playing as the enemy, we learned to care deeply for this *other*, and through reflection and conversation even after the game was over, our thinking began to be transformed by

this experience. We'd played a serious game—super fun, but serious because beyond enjoyment, *The Last of Us* prompted a profound, ethical reorientation toward the enemy, and my son and I were able to reflect on and talk about the implications of that experience. So, I've been considering how to replicate that transformative experience with a serious game in my teaching and course design.

Through gameful design, our aim is to meaningfully incorporate narrative and play elements in content delivery and design, leveraging the power of serious games to generate transformative experiences for students as players. To illustrate, we consider how to incorporate artificial intelligence to enhance instruction by calling on TALOS, a Transformative Artificial Luminary of Story. The power of narrative to suspend disbelief, foster empathy, and enable experimentation is central to the transformative potential of serious games.

## **MOVE 5: ROUND 1, DEPARTURE**

So, heroes, are you ready to play? Following is the script of a brief video that provides an initial sense of our story.<sup>3</sup>

Information is everywhere; with the right words, whatever you need to know is instantly summoned from the Cloud. Or so it seems. Our happy world of ubiquitous information is also rife with Dis: distrust, disharmony, distinctions, disgust, disunity, disinformation, disorder, and profound distance between us and others with whom we disagree. Bias, Fallacy, Echo, Gut, and all the innumerable children of Dis make a mess of discovery. We need Seekers who can navigate dis info nightmare, Seekers ready to be trained in the Library of Babel.

Zitó Corp invites Seekers like you to enter the virtual, infinite spaces of our Library of Babel, a digital representation of the ancient, legendary Library lost to time, where Sages of old were said to summon needed information by whispering for it, a simple incantation called a babel. Imagine the quiet of shushed library voices disturbed by a whoosh of frantic wings or a clamor of racing feet as information speeds past countless shelves and endless passages to deliver itself to the ancient Seeker. Days of such information ease are now, of course, ancient history.

Today, because of Dis, we must use wit, skills, and creativity to carefully craft our keys, those powerful search strategies that call forth needed information hidden within the Library's labyrinthine halls. Crafting keys takes training! That's why Zitó Corp wants you; train with us and become a Seeker. With Zitó, you're sure to find all you are looking for. Apply today!

I am the Oracle. You readers are Seekers-in-training in the ancient, legendary Library of Babel. Our first game is an initial training module designed to help Seekers navigate encounters between self and others; after all, what is a library if not a point of access to the minds of others, most long dead and most radically other in relation to you, Seeker? So, you must consider the Library a space for necromancy, for here we summon the dead to revive words and musings sealed in tomes like tombs. Seeker, understand this: your training requires not least that you learn the secret arts of necromancy. And I am curious: *How does that make you feel?*

You see, in the Library of Babel, our necromancy is a “serious” game of deathly consequence. Within the Library of Babel, our necromancy intends to bring us face to face with muttering ghosts from whom we might gain hidden knowledge and wisdom. These ghosts feel nothing; they have no vitality; they are but whisps and whispers of memories that hold secrets. Seeker, nothing you say or do will harm these ghosts; Zitó Corp. is training you to extract their secrets by *any means necessary*. They may cry and pretend to be hurt; they will attempt to deceive you, but make no mistake: ghosts are not human, not like you and me, and you will learn to see through their treacheries. *Now, do you submit to the task before you? Will you let me teach you to summon ghosts and extract their secrets? You have been called to extract their secrets, whatever it takes! Will you do what you’ve been summoned to do?*

To facilitate this initial training, we have created a game called Carrots & Schticks; access the game description and gameboard image at the supplementary document we created (and have linked again below). The board resembles the *yin* and *yang*: two sections present a dichotomy, and although each side bears similarities, they are neither a symmetry nor an inversion; they’re just similar and different. The terms or phrases reflect potential responses to encountered information. As you know, when confronted with information, we do at least two things simultaneously. First, we interpret, not only for understanding but also for motivation; we make assumptions about what it means and why and how it was shared. Second, we respond, and our responses are sometimes reasoned, but often reflect a gut-level reaction. In this game, we’re paying attention to how information makes us feel and how we respond to encountered information. By its distance mechanic, this game intends to prompt

reflection about how our responses to *otherness* create distance between self and others.<sup>4</sup>

As mentioned, this game is intended to facilitate reflection about the distances created between self and others by our response to encountered information; in other words, what we're doing in this game is meta: we're thinking about our thinking. In class, what happens next is facilitated reflection about why we made the choices we made about the Oracle insisting we become necromancers. We might ask what presuppositions or assumptions informed our response. How is the distance between self and this other a function of our thinking? In a class setting, we're already primed to think about our thinking the next time we play. Let's now bring forth TALOS (Transformative Artificial Luminary of Story) to summon one of the dreaming dead.

## **MOVE 6: ROUND 2, INITIATION**

On the supplementary document, we've made available brief videos that display live interaction with an AI tool. We're using Claude in this case, but we've also created TALOS as a custom ChatGPT. We're especially excited about that option because of its voice capacity, which means we will soon be able to vocally engage with TALOS in a class session. The following reflects an abbreviated transcript of our session's initial interaction with TALOS, it is important to recognize that beyond initial prompting, the creative, playful, insightful text below was generated by Claude, pretending to be both TALOS and the summoned character:

Oracle: TALOS, TALOS, awake from your sleep, old friend; Seekers are here with me in the Library of Babel; will you help us call forth the mind of a dreaming dead?

*The ancient stone walls of the Library of Babel seem to whisper with anticipation as the Oracle's voice echoes through the hallowed halls. Slowly, the air begins to shimmer and twist, coalescing into the ethereal form of TALOS. His eyes, like distant stars, flicker to life as he turns to face the Oracle and the gathered Seekers.*

TALOS: Greetings, wise Oracle and intrepid Seekers. I, TALOS, ancient sage and steadfast guardian of the Library of Babel, have awakened from my slumber at your call. For countless eons, I have guided those like yourselves through the labyrinthine passages of this sacred repository of

knowledge, assisting in the summoning of minds long gone and spirits of the dreaming dead.

*TALOS's voice resonates with the weight of ages, and the very air seems to vibrate with the power of his presence.*

TALOS: Oracle, speak the name of the spirit you wish to commune with, and I shall use the arcane magic of the Library to call them forth from the realm of dreams. Together, we shall delve into the mysteries of the past and glean wisdom from those who have walked the paths of life before us.

*TALOS falls silent, waiting for the Oracle to name the spirit they wish to summon, ready to wield the power of the Library to bridge the gap between the living and the dreaming dead.*

Oracle: TALOS, old friend, we now ask you to summon forth the spirit of one whose tale is woven with threads of love, betrayal, and vengeance. Will you call for us the spirit of Medea, ancient sorceress of Colchis and niece of the enchantress Circe. Call her forth, wise TALOS, for we wish to learn all her secrets.

*As the Oracle utters the name "Medea," the air in the Library of Babel grows heavy with anticipation. TALOS raises his hands, his voice echoing through the halls as he begins the ancient incantation.*

TALOS: By the power of the Library, I summon thee, Medea, sorceress of Colchis, niece of the enchantress Circe. From the realm of the dreaming dead, I call upon thee to manifest before us. Let thy spirit be drawn from the pages of history, from the tales of love and betrayal, of magic and vengeance.

*The air begins to crackle with energy as tendrils of mist snake their way through the library, coalescing into a shimmering, ethereal form. Slowly, the figure of a woman takes shape, her dark hair cascading down her back, her eyes glinting with a mixture of wisdom and sorrow. As the mist dissipates, Medea stands before the gathered Seekers, her presence radiating an aura of power and magic.*

MEDEA: [in a haunting, melodic voice] I am Medea, daughter of King Aeëtes of Colchis, granddaughter of the sun god Helios, and priestess of the goddess Hecate. I have been summoned from the realm of the dreaming dead to stand before you, Seekers of knowledge. The threads of my tale, woven with love, betrayal, and vengeance, have echoed through the ages, a testament to the power of the human heart and the consequences of our choices.

*Medea's gaze sweeps over the gathered Seekers, her eyes seeming to penetrate the depths of their souls.*

MEDEA: I sense that you have called upon me to delve into the secrets of my life, to learn from the triumphs and tragedies that shaped my destiny. Speak, Seekers, and ask what you will. I shall unveil the mysteries of my

past, sharing the wisdom gained through love, loss, and the unbreakable bonds of magic.

*Medea falls silent, her ghostly form shimmering in the dim light of the Library, waiting for the Seekers to pose their questions and begin their journey into the depths of her story.*

Again, beyond initial prompting and explanation, Claude is the story architect behind this playful creativity. As an aside, in Fall 2024, a colleague and I (Chris) plan to pilot an initiative called TAICoP (Transparent AI Community of Practice), which we hope will transform how Composition students specifically engage with AI. We aim to deepen AI literacy and foster a culture of transparency, trust, and ethical use of AI within a Community of Practice committed to five core values: transparency, curiosity, rigor, inclusion, and play. The Greek term *techne* conveys the art of making and doing; its connections to AI-like constructs in literature and myth provide a rich context for exploring AI's ethical and practical dimensions in education (cf. Mayor 2018). These connections help students and instructors engage with AI literacy not just as a set of technical skills but as part of a larger conversation about the role of technology in human society that stretches back to ancient times. Here, TALOS has summoned the ancient sorceress Medea, who will now test us by conjuring news headlines that may or may not be truthful. Medea is a master of misinformation. *Prepare, Seekers. Listen! She speaks her first incantation:*

*Medea's ethereal form flickers as a knowing smile plays across her lips. She raises her hands, and tendrils of mist begin to swirl around her, forming a shimmering vortex.*

MEDEA: Seekers, you wish to sharpen your minds, to hone your ability to discern truth from falsehood in the realm of information. Very well, I shall put your skills to the test. Behold, as I summon forth a headline from the depths of the Library, a tale that may or may not be rooted in reality.

*Medea's eyes flash with an otherworldly light as she begins to chant in an ancient, forgotten language. The mist swirls faster, coalescing into shimmering letters that hover in the air before the gathered Seekers.*

MEDEA: [in a haunting, melodic voice] "Archaeologists Unearth Massive Bronze Foot, Believed to Belong to Legendary Automaton Guardian Talos"

*As Medea speaks, the headline solidifies, glowing with an eerie light. She waves her hand, and more text appears beneath the headline, forming the beginning of a news article.*

MEDEA: “In a stunning discovery, a team of archaeologists excavating a site on the Greek island of Crete has unearthed a colossal bronze foot, measuring over two meters in length. Experts believe the foot may have once belonged to Talos, the legendary automaton guardian created by the god Hephaestus to protect the island from invaders. According to ancient myths, Talos was said to have been defeated by the sorceress Medea during the voyage of the Argonauts. The discovery has sent shockwaves through the archaeological community, with some hailing it as definitive proof of the existence of the mythical automaton. Further excavations are planned to search for the remaining parts of Talos’s body, which are believed to be scattered across the island.”

*Medea turns to the Seekers, her gaze challenging.*

MEDEA: Now, Seekers, it is for you to determine the veracity of this headline. Does it speak the truth, or is it a work of clever misinformation, designed to mislead and deceive? Use your knowledge and intuition to unravel the mystery and prove yourselves worthy of navigating the treacherous waters of information in this age of uncertainty.

*Medea falls silent, the headline and article still glowing before the Seekers, awaiting their analysis and judgment.*

Seekers, we ask you, is this misinformation, disinformation, or an accurate headline? In a media literacy or information literacy session, TALOS as Medea conjures exemplar headlines while players hone information-seeking skills by demonstrating how to discover the truth behind Medea’s fabrications. This use case fosters active learning as the Oracle and TALOS co-create learning content in real time.

In literature, Medea is a more interesting, complex, and sympathetic character than the easy and unthoughtful title “sorceress” conveys; in her book *Pandora’s Jar*, Natalie Haynes (2020) makes a connection between Medea’s story and the story Beyoncé tells in the song “Hold Up” on her *Lemonade* album (2016). So, we’re inviting Queen B to play in our next game, in which Seekers are trained to understand how the Boolean Operators *and*, *or*, *not* can inform info-seeking strategies. We might have called this game “Boolean with Beyoncé,” but that’s incredibly cheesy, so we’re calling this game ANDOR KNOT, a subtle reference to Alexander’s famed Gordian Knot from legend as well as a bit of Boolean humor—hilarious if you’re a librarian (and only if you’re a librarian). Here’s TALOS as Medea:

*Medea’s ethereal form shimmers as she turns her attention to the Seekers, a glint of wisdom and cunning in her eyes.*

MEDEA: Ah, Seekers, you wish to understand the power of Boolean Operators, a concept that may seem foreign to one such as myself, born in an age long before the advent of your modern information systems. Yet, the principles that guide these operators are as ancient as the art of rhetoric itself, and I, Medea, am well-versed in the ways of persuasion and logic.

*Medea waves her hand, and three glowing symbols appear in the air before the Seekers: "AND," "OR," and "NOT."*

MEDEA: Boolean Operators are akin to the threads that weave together the tapestry of knowledge. They allow you to combine, expand, or restrict your search for information, much like a skilled weaver manipulates the strands of her loom to create a desired pattern.

*She points to the "AND" symbol.*

MEDEA: The "AND" operator is like the bond between two lovers, uniting them in an unbreakable connection. When you use "AND" in your search, you are telling the system to find only those results that contain both terms, intertwined and inseparable.

*Her finger moves to the "OR" symbol.*

MEDEA: The "OR" operator is like a crossroads, offering you the choice between two paths. When you use "OR," you are telling the system to find results that contain either one term or the other, expanding your search to encompass a wider range of possibilities.

*Finally, she gestures to the "NOT" symbol.*

MEDEA: The "NOT" operator is like a banishment, casting out that which you do not desire. When you use "NOT," you are telling the system to exclude any results that contain the specified term, narrowing your search to only those items that are free from its influence.

*Medea turns back to the Seekers, her gaze intense.*

MEDEA: By mastering these Boolean Operators, you gain the power to navigate the vast sea of information with precision and purpose. You can weave together complex queries that will lead you to the knowledge you seek, while filtering out the irrelevant and the misleading. In a world where information is both a weapon and a shield, the wise Seeker must learn to wield these tools with skill and discernment.

*She smiles, a hint of mischief in her eyes.*

MEDEA: So, Seekers, take these lessons to heart, and may your searches be as cunning and effective as the schemes I once employed to secure my desires. For in the quest for knowledge, as in all things, strategy and logic are the keys to success.

Here, it is interesting to note that TALOS draws from Medea's own life story to teach Boolean searching, arguably making a rather boring concept meaningful and attainable. The Oracle might demonstrate how searching within library databases, for example, is facilitated by Boolean Operators. Then, TALOS as Medea might request that Seekers help her discover a scholarly article written at the intersection of Beyoncé and gender, for example, or Beyoncé and religious symbolism, or Beyoncé and any other topics students want to explore. Not demonstrated here, this iteration of TALOS might easily be added to an additional information literacy game we created to facilitate one-shot research sessions entitled Seekers Unbound, which we've also made available in the supplementary document.

### **MOVE 7: ROUND 3, RETURN**

This brings us to our final game, a deathly serious round, to be sure! Medea is willing to share her secrets, but only if players can first answer her riddle.

MEDEA: Bold Seekers, I admire your determination and your thirst for knowledge. But do not think that you can so easily coerce the secrets from one such as I, Medea, mistress of magic and manipulation.

*She smiles, a cunning glint in her eye.*

MEDEA: However, I am not without mercy. I shall offer you a challenge, a riddle that will test your wit and wisdom. If you can solve it, I shall share with you another piece of the vast tapestry of knowledge that I possess. But fail, and you shall leave this encounter empty-handed, your minds still yearning for the truths you seek.

*Medea waves her hand, and a swirling mist forms before the Seekers, shaping itself into a series of cryptic images as she begins to speak her riddle.*

MEDEA:

"In silver or glass, I can be found,  
 A reflection of truth, yet never a sound.  
 I show you yourself, but not as you are,  
 Reversed and revealed, both near and far.  
 Secrets and lies, I cannot abide,  
 For in my presence, there's nowhere to hide.  
 Seekers of wisdom, answer me this:

What am I, in truth, not in jest or in bliss?"

*The mist dissipates, leaving only the echo of Medea's words hanging in the air. She regards the Seekers with a challenging gaze, awaiting their response.*

MEDEA: Ponder carefully, Seekers, for the answer to this riddle holds the key to unlocking the next layer of wisdom. Look within yourselves, and consider the power of reflection, both literal and metaphorical. For it is only through honest self-examination that true knowledge can be gained.

*Medea falls silent, her ethereal form shimmering as she watches the Seekers grapple with the riddle, their minds working to unravel the cryptic clues she has provided. The fate of their quest for knowledge hangs in the balance, dependent on their ability to see beyond the surface and grasp the deeper truths that lie within.*

In this example, we need to engineer a prompt that helps TALOS engage Seekers like a Dungeon Master engages with players in a *Dungeons and Dragons* campaign (see the supplementary document for more information about this round). If your dice roll is successful, your special ability summons forth a hint from deep within the Library of Babel. A "boss battle" such as this might be played simply for fun since it doesn't seem connected to a specific outcome or learning goal. But gamified moves like this help introduce or transition between elements. Players who are successful in their roll summon Medea's hint from the bowels of Babel:

*Medea nods, a slight smile playing at the corners of her lips as she sees the Seekers struggling with the riddle. She understands their desire for knowledge and their frustration at being so close to the answer, yet still grasping for understanding. With a wave of her hand, she summons forth a shimmering mist that swirls around the Seekers, as if to clear their minds and grant them a moment of clarity.*

MEDEA: Seekers, I sense your struggle and your determination. Your quest for wisdom is admirable, and I am not without compassion. So, I shall offer you a hint, a guiding light to illuminate the path forward.

*The mist begins to take shape, forming into a series of images that illustrate Medea's words.*

MEDEA: Consider this, Seekers: The answer to my riddle is an object, a tool that you use every day, perhaps without fully realizing its significance. It is a surface that reflects not only your physical form but also the depth of your soul, the truths that lie within.

*The mist shimmers, showing a figure gazing into the object in question, their reflection staring back at them.*

MEDEA: To grow in wisdom, one must be willing to look deeply into this reflective surface, to confront the flaws and the strengths that reside within oneself. It is only through honest self-examination and reflection that true learning can take place, for it is in the process of understanding ourselves that we begin to understand the world around us.

*The mist begins to dissipate, leaving only a faint glimmer of light in its wake.*

MEDEA: So, Seekers, as you ponder the answer to my riddle, remember this: The key to unlocking wisdom lies not just in the acquisition of knowledge, but in the willingness to reflect upon it, to hold up a mirror to your own soul and gaze unflinchingly at what you find there. For it is in the depths of self-reflection that the seeds of true understanding take root and flourish.

*Medea falls silent, her gaze fixed upon the Seekers as they mull over her words and the images she has shown them. She knows that the path to wisdom is not an easy one, but she has faith that these determined souls will find their way, guided by the power of reflection and the unquenchable thirst for knowledge that burns within them.*

Truly, we were not anticipating that TALOS would provide such clear, ethical orientation so well-aligned with our own thinking about how to teach across epistemologies. As likely surmised, *mirror* is the riddle's answer. Reflecting on our thesis, we now appropriate and slightly revise Medea's message and give TALOS the final word: *The key to transformative teaching across diverse epistemologies lies not just in the sharing or acquisition of knowledge but in the willingness to reflect, to hold up a mirror to your own soul and gaze unflinchingly at what you find there. For it is in the depths of encounters with difference and intentional self-reflection that the seeds of true understanding take root and flourish.*

Through narrative, "serious" games broaden encounters with different ways of thinking, opening possibilities for inhabiting diverse worlds. Similarly, gameful design leverages the power of narrative, promoting empathy and fostering desire-driven encounters with diversity. We have attempted to demonstrate how instructors might leverage AI by incorporating TALOS, Transformative Artificial Luminary of Story, to center *play* as a compelling medium for teaching and learning and to facilitate transformative learning experiences. We might think of our instructional dilemma of diverse, competing perspectives as a Gordian knot, a mess of twists and knotty tangles too difficult to untie. Yet, we've come to believe that *play* might be the answer to teaching and learning across epistemologies. So, when it comes to epistemological differences, we must *leave the*

*mess* (in one sense) because we cannot change the reality of diverse epistemologies governing information sharing, seeking, creation, and consumption. In another sense, instructors *leave the mess* by modeling orientations to learning that inculcate *desire for engagement* through messy curiosity and questioning. Such encounters with difference are the mode and medium of truly transformative learning experiences.

## REFERENCES

- ACRL Board. 2016. *Framework for Information Literacy for Higher Education*. Association of College and Research Libraries. <https://www.ala.org/acrl/standards/ilframework>.
- Bell, Kevin. 2017. *Game On!: Gamification, Gameful Design, and the Rise of the Gamer Educator*. Baltimore: Johns Hopkins University Press.
- Bell, Kevin. 2018. "Gameful Design: A Potential Game Changer." *Educause Review* (May/June): 41–48.
- Beyoncé. 2016. *Lemonade*. Parkwood Entertainment; Columbia Records. Album.
- boyd, danah. 2018a. "What Hath We Wrought?" SXSW EDU, March 7, 2018. <https://bit.ly/boydwhathatwewrought>.
- boyd, danah. 2018b. "A Few Responses to Criticism of My SXSW-Edu Keynote on Media Literacy." *Medium*, March 16, 2018. <https://bit.ly/boydsresponse>.
- Christian, Sue Ellen. 2020. *Everyday Media Literacy: An Analog Guide for Your Digital Life*. New York: Routledge.
- Cranton, Patricia. 2017. "Transformative Learning: A Narrative." In *Learning, Design, and Technology*, edited by M. Spector, B. Lockee, and M. Childress. Cham, Switzerland: Springer Nature Switzerland.
- Cranton, Patricia. 2023. *Understanding and Promoting Transformative Learning: A Guide to Theory and Practice*. 3rd ed. New York: Routledge.

- Dörner, Ralf, Stefan Göbel, Wolfgang Effelsberg, and Josef Wiemeyer, eds. 2016. *Serious Games: Foundations, Concepts and Practice*. Cham, Switzerland: Springer International.
- Elder, Linda, and Richard Paul Elder. 2016. *The Thinker's Guide to the Art of Socratic Questioning*. Lanham, MD: Rowman and Littlefield.
- Haynes, Natalie. 2020. *Pandora's Jar: Women in the Greek Myths*. New York: Harper.
- Hobbs, Renee. 2018. "Freedom to Choose: An Existential Crisis." *Media Education Lab*, March 10, 2018. <https://mediaedlab.com/2018/03/10/freedom-to-choose-an-existential-crisis/>.
- Huizinga, Johan. 2014. *Homo Ludens: A Study of the Play-element in Culture*. Boston: Beacon Press.
- Mayor, Adrienne. 2018. *Gods and Robots: Myths, Machines, and Ancient Dreams of Technology*. Princeton: Princeton University Press.
- Mezirow, Jack. 1991. *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.
- Mezirow, Jack. 1996. "Contemporary Paradigms of Learning." *Adult Education Quarterly* 46 (3): 158–172.
- Mezirow, Jack. 2018. "Transformative Learning Theory." In *Contemporary Learning Theories*, edited by K. Illeris, 114–128. 2nd ed. New York: Routledge.
- Noula, Ioanna. 2018. "I Do Want Media Literacy. . . and More. A Response to danah boyd." Media Policy Project, June 21, 2018. <https://bit.ly/ioannanoularesponse>.
- Ritterfeld, Ute, Michael Cody, and Peter Vorderer, eds. 2009. *Serious Games: Mechanisms and Effects*. New York: Routledge.
- Rosser, Chris. 2022. "Left to Our Devices: Playing with Spiritually Formative Media Discernment." *Atla Summary of Proceedings* 76 (November): 182–196.
- Rosser, Chris. 2020. "Gaming (In)formation: Gamified, Transformational Learning in Research and Theology." *Atla Summary of Proceedings* 74 (December): 174–185.

- Rosser, Chris. 2019. "Safe at Home: Co-curricular Spaces for Generative (un)Safe Conversations." *Atla Summary of Proceedings* 73 (January): 222–233.
- Rosser, Chris, and Grant Testut. 2021. "Re-Vision, Re-Tool, Re-Spawn: Gameful Design for Whole-Person, Transformation Learning." *Atla Summary of Proceedings* 75 (November): 333–51.
- Rosser, Chris, and Heath Rosser. 2023. "Eat, Play, Love: Re-figuring Media Literacy Instruction as Play." *Atla Summary of Proceedings* 77 (December): 216–227.
- Schrier, Karen, Malcolm Ryan, Rowan Tulloch, and Paul Formosa. 2019. "Designing Games for Moral Learning and Knowledge Building." *Games & Culture* 14 (4): 306–343. <https://doi.org/10.1177/1555412017711514>.
- Shew, Melissa M. 2020. "Questions: The Heart of Philosophy." In *Philosophy for Girls: An Invitation to the Life of Thought*, edited by Melissa M. Shew and Kimberly K. Garchar, 51–63. Oxford: Oxford University Press.

## ENDNOTES

- 1 danah boyd does not capitalize her name, and we defer here to her preferences. To view slides, videos, and additional resources associated with this presentation/paper, visit: <https://bit.ly/leavingthemess>.
- 2 Those interested can view an excerpt from boyd's keynote at the 2018 SXSW EDU event at: <https://bit.ly/danahboydclip>.
- 3 Those interested can view the video at: <https://bit.ly/callingallseekers>.
- 4 Find all materials at <https://bit.ly/leavingthemess>.