What’s better than the asynchronous discussion post?

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\textbf{Abstract}  
The “discussion post” has been a staple in higher education online classrooms for decades. While educators of online learning widely rely on asynchronous discussion posting to engage students using institutional learning management systems (LMS), discussion posting requires mediation and motivation to sustain participation, is considered task-oriented by students, and has been frequently criticized for inauthentic dialogue. The Slides Strategy, which utilizes a collaborative Google Slide deck in concert with Parallaxic Praxis, a knowledge-generating framework, creates an effective environment for meaningful engagement – demonstrating student understanding of material, creating classroom community, and provoking rich, critical dialogue. Collaborative slides used as a pedagogical tool in this way encourage value of all perspectives, diverse modality and thought, and inclusivity through a platform that allows different literacies to cohabitate, working toward decolonizing academia. This paper contextualizes reflections from five asynchronous online courses taught by different instructors, and provides evidence assessing the effectiveness of this strategy through instructor and student perspectives. As educational institutions continue to grapple with an increasing reliance on, and need for, innovative, dynamic, and supportive online learning environments in a post-pandemic landscape, the Slides Strategy moves the online discussion post to a more authentic and critically reflexive academic conversation.
**Orienting the teaching method**

In this paper, we describe a pedagogical strategy for enhancing the ubiquitous “discussion post” in asynchronous online learning spaces. Discussion posting is a widespread formative assessment used in higher education online classes (Lieberman, 2019) that utilizes Learning Management Systems (LMS) to deliver and manage online course content (LMS platforms used in higher education in Canada and the US include Blackboard and Desire2Learn(D2L). The Slides Strategy we propose uses Google Slides (a free online presentation software comparable to PowerPoint) to generate meaning-making through transmediation and online conversation. As an alternative platform for student engagement with course content, cohort peers, and the instructor, this strategy fundamentally changes the dynamics of the online discussion post in ways that inspire students, encourage academic risk-taking and creative exploration, and expand students’ epistemological, and, at times even axiological lenses. Additionally, for post-secondary institutions that use Google products, moving between Email, Google Drive, and Google Slides is intuitive and user-friendly, with many benefits for managing course workflows. The platform easily allows the inclusion of images, audio, videos, and other media, and the real-time collaborative nature of the application provides whole or group class access to a shared co-constructed learning environment. Google Slides automatically saves and tracks a history so the instructor can readily determine who has contributed to the slide deck and when. Additionally, Google Slides boasts cross-platform availability on major devices and operating systems in contrast to other presentation software (Shrotkatewa, 2021).

**Setting: a context for innovation**

In a time where the effects of a global pandemic have occurred in tandem with major world movements for social justice, human rights, decolonization, and climate change action, and, as of the writing of this paper, military action in Eastern Europe, it is widely acknowledged that this period of destabilization and trauma has been felt by students in higher education campuses around the world. Gutkin (2022, n.p.) highlights how in these tumultuous and often polarizing contexts, the importance of the higher education classroom being a space “safe enough to be uncomfortable” is precisely where students can learn how to deal with other points of view, especially when confronting and talking about controversial and complex issues. Mouffe (2004) contends that “a good society” is not necessarily one where everyone agrees, but rather one where many conflicting views can be expressed and where different possibilities can be explored. Gutkin (2022, n.p.) further asserts that safe spaces provide for the development of the “art of debate” and active listening skills – both of which are essential to develop as students progress through and beyond their academic careers.

A need to foster equitable, diverse and inclusive perspectives is also a pedagogical imperative for developing socially just ways of being, and yet, in the asynchronous classroom¹, a common assumption is that the LMS discussion board can provide such a space for encouraging these perspectives.

In practice, however, the classroom and online discussion forums specifically, can turn into spaces for increasing polarized views and where student voices that bring different perspectives and experiences may be silenced (Gutkin, 2022). In online classrooms, this is most apparent by the physical amount of space a more vocal student can take up in an LMS discussion board forum. Full acceptance of diversity in the classroom not only requires an understanding that morals and values differ among individuals, but also that there is an onus on the educator to provide equitable talking spaces so that the classroom’s “turn-taking machinery” (Hitchcock & Hughes, 1989, p. 165) provides students equitable access to the very conversations they are engaged in. Inclusion in education is about learning what it means for people to dwell in difference together and co-presence in dialogue (Hitchcock & Hughes, 1989).

As educators, we believe that it is the pedagogical responsibility of instructors in higher education to build into their course design the environments and instructional strategies needed for this relational development to flourish. How can instructors move beyond assuming that including institutional code of conduct policies in course outlines will teach what it means to live and learn in and through diversity, respectfully? How can diverse student voices provide spaces for increased learning of course material? And how can the discussion post platform, following a successive, sequential posting format, be transformed into an opportunity for other critical and multimodal literacies to be articulated in the classroom?

Google Slides offered us an opportunity to create a strong community despite our learning being asynchronous. Each week, I looked forward to the insight and creations of my peers through this digital platform. Along with this, I felt commenting on each other’s work really provided that feedback loop we were missing asynchronously. In this way, I found... Google Slides to be so different from what I have experienced through virtual learning (asynchronous and not). It allowed us to have a safe space to create, reflect, and celebrate each other’s differences and standpoints despite our distance and schedules. (Student from one of the classes.)

While once a novel way to replicate the “lively classroom discussion” in online spaces, in the decades since the advent of online learning, the discussion post has been criticized for its over-use and that it can be exhausting for instructors to effectively manage (Lieberman, 2019) and difficult for students to navigate, follow discussions, and stay motivated to post (de Lima et al., 2019). Overall, studies suggest that this format may not yield the depth of authenticity, reflection, and critical analysis expected at the post-secondary level (Sousa, 2021) and suggest that online course platforms can be challenging spaces for students to develop a sense of community, confidence, and belonging (Poquet et al., 2017).

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¹ Asynchronous refers to either fully asynchronous online or hybrid courses where courses are taught in person, but discussion posts and peer interaction happen on the LMS discussion board.
In the following, we present an alternative or supplement to the traditional discussion post, which we refer to as the *Slides Strategy*. We discuss its pedagogical rationale and theoretical underpinnings, describe its integration into course design and assessment, provide an analysis of its contributions to student learning, and conclude with contributions to professional practice and transferability. Throughout, anonymized student perspectives from unsolicited course comments, mid-term feedback, and course evaluations are included. We are passionate about the *Slides Strategy*'s ability to express and render multiple perspectives and invite the complicated and necessary conversations that evolve socially responsible, democratic societies and to exist in difference, through its learner-centered pedagogical design. In using infrastructures that ensure all voices are valued, we build a space for critical consciousness into curriculum design.

It behooves us as people in the academy to create a space where we can have a conversation about even potentially offensive ideas in such a way that we can get past the offense. Academic freedom is vital to help us deal with precisely the kind of contentious and difficult ideas that some people might want to shut down because they can cause harm or offense (Khalid, in Gutkin, 2022, n.p.).

**Pedagogical rationale**

Although Google Slides functions by meeting many of the same curricular objectives as discussion post forums on common LMS systems, it offers unique pedagogical advantages that foster compassionate classroom spaces that allow for authentic engagement, relational learning, and community building that acknowledge a diversity of perspectives, directly attending to the most widely held prerequisite for successful course completion – the quality of the online community (Nagel et al., 2009). Further, although the *Slides Strategy* was being used by Sameshima prior to the COVID-19 pandemic, this strategy is especially useful with an increasing reliance on, and need for, innovative, accessible, dynamic, and supportive online learning environments (Johnson, 2022) to address increasing levels of student disengagement (McMurtrie, 2022).

**Theoretical underpinnings**

Key theoretical underpinnings of this learning design use tenets drawn from the Parallactic Praxis model (Sameshima et al., 2019a), the curricular concept of Ma (Sameshima et al., 2019b), and intentional relational connection building (Sameshima, 2018), each to be explained here. “Making” is a key aspect of the *Slides Strategy*. Making inherently fosters embodied learning, creative aesthetics, and learning wholeness, which bring about increased receptivity and openness to learning, fosters skills of relationality, and models/shares learning-in-process (Sameshima, 2008).

The Parallactic Praxis model involves the creation of multiple representations or response renderings of the same data from different perspectives using multi-modal mediums. In the *Slides Strategy*, students “make” their thoughts materially in a slide. New knowledge is generated in the creation of an artefact that helps the learner understand the data (in this case, the readings). New knowledge is also generated when renderings are presented and juxtaposed with one another (when students see and respond to one another’s works). Discussing the multi-modal renderings is a systematic comparative analysis process that helps the learner better understand the content they are learning about. Viewing the various slides (all responses to the same content theme readings) creates in the learner a negotiation of the self, until they are able to find their own positional identity and personal view of the content being presented. The process of making a slide, an object, or an experience to respond to the content, is a means of materializing meaning. This process is a heuristic acculturating journey of the self (Djuraskovic & Arthur, 2010). “Identifying with the focus of inquiry, self-dialogue, tacit knowing, intuition, indwelling, focusing, and [creating] the internal frame of reference” (2010, p. 1573) are the sequential processes of meaning-making espoused in this process.

The concept of *ma* (Sameshima et al., 2019b) is also a key underpinning of the *Slides Strategy*. Ma is a Japanese concept that points to the attentive consciousness of the space of the not yet. Curriculum theorists have referred to it as the third space, the in-between, a burgeoning space of becoming. Plett (2020) describes this space as one of liminality, where both emptiness and openness exist together; where one story is ending and another just emerging. Ma can be imagined as the space between two far-apart stepping stones, and the “making” is the vehicle that mediates the space between the stones. The *Slides Strategy* involves making an artefact as a response to a reading, and this action operates within a ma space to generate a step between the far-apart stones. As educators, we believe that holding space for students to navigate the uncertain, complex, and ambiguous spaces of learning is the essence of the pedagogical task – and needed to support student transformation. Generating relational connections in the class can be intentional. Making and gifting (creating a slide and sharing it with the class) generate love. The construction of an artefact is an act of materializing thinking. The artefact (the slide, dance, song, etc.) can echo a feeling or resonate with someone who might have an idea or thought that needs a scaffold for meaning-making. This relational resonation is a form of communing, an acknowledgment of identities, and support for developing positionality (Sameshima, 2018). Puig de la Bellacasa (2017) asserts that a relational way of thinking, or “thinking with... creates new patterns out of previous multiplicities, intervening by adding layers of meaning rather than merely deconstructing or conforming to ready-made categories” (p. 72). The recognition of the self in the other creates connection and community, breaking the loneliness of continued separation and isolation in this pandemic and humanity writ large. Indeed, 70% of Millennials and Generation Z report being lonely (Cigna, 2020):
I feel this class has done a fantastic job in creating community by having students comment throughout the week and interact not only with thoughts but, because of the creative aspect which connects to the freedoms the course offers, also with feelings and personal connections... Engaging with peoples’ thoughts on a reading is one thing and I think it’s something many students have become more numb to as it’s been a solution during online learning that is never quite the same as discussing in person. However, the addition of art brought an encouragement of personal connection and interpretation which regular discussion posts often have missing. (Student from one of the classes.)

**Practice: the Google Slides strategy**

This paper draws from using this pedagogical method in five separate, asynchronous, graduate-level fully online classes. The student demographics in these courses were adult, primarily in-practice K-12 teachers. The Slides Strategy was used specifically as a tool for students to generate meaning from their weekly readings and to discuss the reading content with one another. In these classes, Google Slides was not used in the traditional manner – as a presentation backdrop or reference while a speaker is presenting. Rather, each student was given the responsibility of making one slide each week as part of a weekly class deck².

Google Slides is used to collate learning on a topic, as well as integrate the functions of an annotations app (where one can add notes to a text) like Google Jamboard, where multiple people can add brainstorming content to a shared blank page and Twitter, where created content can be responded to in threaded conversations and annotations. The comments can be edited, deleted, or linked directly via a URL. While D2L (Desire2Learn, an LMS platform) has similar features, the Google Slides environment provides a much more intuitive non-linear discussion environment that presents students with an open canvas for creating and learning, as well as collating, threading, and organizing these interactions.

The use of Google Slides in teaching and learning is not unique; however, when this application is coupled with foundational tenets of embodied aesthetic learning (Sameshima, 2008), the generation of multiple perspectives of the Parallaxic Praxis model (Sameshima et al., 2019a) and *ma*, the Japanese concept of supportive creative space for knowledge generation (Sameshima et al., 2019b, 2019c); the possibilities for creating collective enhanced learning are unbounded. There has been consistent positive feedback from students that the Slides Strategy, as framed in these courses, provides strong organizational structure to “Reading Response” type activities; deep access and interaction with difficult content; reflective and reflexive engagement; compassionate relational building with peers; involved, authentic learning and communication; and the development of expanded views by seeing “into” others’ perspectives.

Prior to starting this course, I always knew it was important to gain knowledge from another person’s perspective, but I did not know how critical it was until this course. After seeing the different perspectives of all the different pieces of art that were displayed on Google Slides, I truly understood why understanding another person’s perspective is so important. Collaborating and discussing with others allows you to open up your mind and use your critical thinking skills in order to understand another person’s viewpoint. (Student from one of the classes.)

**Strategy integration into course assignments**

This strategy is introduced in the course syllabus and in the first week of class. The instructor provides an example of what is expected using the example of the Johari Window model³ (Luft & Ingham, 1961) and invites students to respond using a slide in the deck as a “risk-free” and trust-building introduction to the educational space. The instructional slide decks in the first few weeks of the course are led by the instructor, with students completing reading response slides.

**Instructional leadership team**

In the following weeks, a group of student leaders, called the “instructional leadership team” are designated to prepare opening slides for the assigned topic. They are asked to create the following presentation slides:

- A welcoming title slide
- A readings list slide (adding their suggested reading to the core reading(s) linked to the shared readings folder)
- A synopsis/summary of key points slide
- A selection of key quotes slide
- A leading questions slide and instructions
- An individual personal response slide to one of the key concepts

Based on the readings provided, every week, each student creates one slide, integrating any media or creative literacies (Gladwin et al., 2022; Orasi & Sameshima, 2022) they wish, as a content response to materially express their learning. They can make something that they photograph or video, or they can work directly on the slide with text and found images. Students are encouraged to use the Presentation Notes section below the slide to include an artist statement or abstract and applicable references to contextualize their interpretation for peers. Students often make info-graphics

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² In a 13-week course, students made 10 slides. Slides were submitted once a week in response to core assigned readings.

³ The Johari Window Model (Luft & Ingham, 1961) is a trust building tool that is used to improve the dynamics of communication between individuals in group settings. It is a heuristic device for developing human relationships.
like responses initially and branch out to include other forms of arts-integrated research such as poetry, painting, sculpture, performance, etc. The goal of the renderings is to share a personal response that provokes discussion. Based on the artefacts created, students then engage in conversation with an assigned group of peers.

I appreciated the use of Google Slides rather than strictly using D2L. The layout of the slides offers the chance for us to reflect on the readings by sharing a visual representation. Having the visual solidified the theme of the week, and while some members chose to focus on the same texts, there were still different responses to the same text... I particularly enjoyed using Google Slides for the comment discussion board. At times there were multiple conversations occurring on one slide, where new discussion threads reflected different ideas, examples, and reflections. This would be a great tool to use in the elementary and secondary classroom for students to build on each other’s thinking, or to pose a unique idea through their own thread. (Student from one of the classes.)

Strategy integration into evaluation

In a 12-week course, there are 10 weeks of reading responses where 10 percent of the grade is for creating a response and 10% for students engaging with their assigned peer group. Therefore, students have 20% of their full grade attached to engaging and responding to readings. To earn higher marks, students must demonstrate extensive engagement or interact with other students beyond their assigned group of five. They are free to comment on other slides made by students in the course. In this evaluation system, students who miss a full week of readings and responses only lose two percent of their grade. This grading system has promoted wellness during COVID-19, particularly for students who have encountered illness or COVID-related consequences during the term and have selectively opted out of a week of readings as necessary. Set up this way, this system intentionally creates value in learning for the sake of personal interest. While readings, slides, and responses are time-consuming for only two percent of the weekly mark, all these efforts filter into the other assignments for a much more sustained learning experience.

Analysis

Practical benefits of the application

Before the course begins, the instructor sets up a named slide deck for each of the assigned reading weeks – as the creator, the instructor can opt to receive notifications when students are engaged. Class and instructor discussions use the threaded comment and reply features in Google Slides. Students are notified when others comment in their threads – this feature supports ongoing asynchronous online conversations in real-time. Students are also able to use the @name feature to make linked connections between slides and ideas. Further, students can also link readings or other resources within their chats or upload large files (Google automatically creates links for large files and other media). Google Slides compresses comments on the right so that many different conversations can take place simultaneously. This makes it easier to visually navigate and recall which conversation students are taking part in while also not being overwhelming (mentally and timewise) for students to have to scroll through continuous comments in order to engage where they wish, as they would need to, in traditional discussion posts.

I really found that creating a slide as I read was powerful in helping me retain my readings! It was like creating an art piece that encapsulated my most important thoughts and takeaways from the readings. It seemed to imprint things deeper for me in my mind. Visually putting them on a slide was powerful in terms of engaging others in meaningful discussion. I enjoyed seeing how others interpreted the readings visually, and reading other slides helped to reinforce different concepts. (Student from one of the classes.)

Relational learning & changing learner expectations

This strategy relies on the willingness of the student(s) to be personally involved in the learning process, and open to the different shapes of learning and online engagement that employ a pedagogical philosophy where all learning happens in relation (Sameshima et al., 2018).

One thing I value very highly about this class is how the weekly prompts allow students to explore interests through art and the readings of the week. There is a great mixture of structure in terms of tasks we must complete with a mixture of freedom in terms of how we complete each task and what we may focus on within each week. (Student from one of the classes.)

While this strategy creates a learning ecosystem where students have the responsibility and power to control what they create and how they wish to engage with topics and issues that arise in class, students who expect traditional didactic approaches may not embrace this framework.

The instructor didn’t teach us anything - we could have just learned it ourselves. (Student from one of the classes.)
Spaces for authenticity, support, and vulnerability

Figure 1 is a screenshot of a student’s Reading Response slide. This student has created an infographic-type slide to help them make sense of the reading. Please digitally enlarge the screenshot to better read the content as you wish. One student notes, “I’m glad you struggled with this concept at first – makes me feel better about also being unclear.” Another student adds, “Much like you and [blinded], I too was a little confused about this topic at first. I think you bring forth a very interesting point about stage 2... I think that the ability to create different artefacts assists in displaying the various interpretations that we can all gather.” To the left of the screenshot, one can see samples other students have created.

Google Slides made it easy and accessible to convey my learning and creativity. I was able to elaborate on my understanding, using images, videos, poetry, and more. I could link my understanding to other creative works easily while giving credit to the artists. I felt that I could easily organize my responses and thoughts in a creative way that made sense to me, such as through visual collages. One of the most meaningful aspects was the community piece. I could easily interact with my peer’s work, by commenting on their responses and creating a dialogue in real-time. As a visual learner, I felt like I was able to get to know the students in my class more easily, by using Google Slides. I could put a face to the name because of the Google Account profile pictures, and I could more accurately understand other students’ perspectives through the multimodal platform.

(Student from one of the classes.)

McDougall (2015) reports that while adult students are able to demonstrate support and respect as well as discuss sensitive topics in online environments, these outcomes are contingent on the lecturer. Here we focus on the capacity of the tool itself, to inherently create these outcomes. McDougall describes authentic learning spaces as “meaningful, challenging and proactive learning experiences” (p. 96). The researcher describes authentic activities as connected to real-world connections (see Purcell-Gates et al., 2000) and the authenticity of the learning environment as key to improved learning outcomes (see Herrington & Oliver, 2000). When students make their own symbolic responses, they are materially extending themselves, and their identities, into the objects they create. The representation of understanding they create is original and authentic. This material closeness merges the space between formal school learning and real-world learning, thereby creating the capacity for authentic engagement with the otherwise distanced curriculum. McDougall (2015) further describes the concept of ‘authentic discussion’ as meaningful analytical discussion (see McCann, 2003) requiring critical thinking and analysis (see Johannessen, 2003), and evidencing metadiscourse – students articulating and reflecting on their thinking (see Caflee et al., 1994). Depth of learning is contingent on the level of risk and autonomy (McDougall, 2015) and thus, using Parallaxic Praxis tenets within the Slides Strategy makes possible deep authentic learning spaces as students have extensive options on what to make, what medium they wish to use, and autonomy in expressing their learnings.

One of the reasons I loved and enjoyed this style of learning was because I got out of it as much as I invested, and then some. For independent learners who are highly motivated, I felt like I had more control over when and how I engaged with the material. (Student from one of the classes.)

My personal experiences as a student in online courses where a large portion of the grades was based on discussion posts have been pervaded with academic showmanship and/or requirements to respond to others’ posts where it was evident that the classmate had not engaged with the material. This made the discussions forced, and awkward, and if I am being truthful, the connection to my peers, whom I could only know through their words, lacked as much authenticity as my learning in this space. I can also admit to previously being the well-intentioned educator on the other side of administering these forums.

Both I and my teaching colleagues have observed that many students can also seem defensive when asked probing questions on their discussion posts. (Orasi’s reflection.)

Content, student motivation, engagement, and well-being

Kerr and Frese (2016) report that up to 80 percent of university students do not read their assigned readings. The reasons the researchers provide are unpreparedness, lack of motivation, time constraints, and underestimation of reading importance. The Google Slides Strategy addresses each concern. Unpreparedness: This strategy allows students to learn from and with their peers. They can see what others have posted and can build from others’ ideas. Motivation: Students are motivated to complete a slide because they are part of a team. The team is small enough so that their contribution is valued and missed (usually four to five students). Moreover, we have noted that the students also receive significant feedback and engagement from their peers outside of their teams. While traditional assignments are made for the teacher and grade, in this case, the
student’s slide contribution is a personal meaning-making creation because it is relatively decoupled from mark value (the slide and engagement with peer slides are only worth a maximum of two percent of the grade) and is considered a pedagogical gift/lesson for the other. **Time constraints:** Students understand that the weekly assignment is only a possible two percent of the grade (one percent for a slide and one percent for interaction), and stressed or ill students have chosen at times to intentionally skip a week to reset. **Importance of the reading:** This has not been an issue, as there are core readings, supplementary readings, and student-contributed readings. Students are given the autonomy to manage their own time with weekly readings prioritized by the instructor as core and supplementary readings and are able to choose one or all readings to incorporate into their weekly slide. In addition, students who may have elected to skip a particular reading may still see it reflected in another student’s slide, reinforcing the importance of the chosen readings to the weekly topics.

Significantly, from a well-being perspective, students also indicated that the slide-making and peer interaction created excitement and a “looking forward” to both creating artefacts and “seeing” others’ weekly reflections. Wise et al.’s (2014) research found that the quality of student posts has also benefitted when students are reading and engaging with their peers’ posts. Students in our classes indicated that the slides were sources of motivation and inspiration, which is particularly important in the context of the isolation of many online asynchronous graduate studies programs and even more so during a pandemic. Students frequently reported a greater sense of community and personal connection with peers in this online space explicitly comparing this space to their other discussion spaces.

I am so grateful for the opportunity to engage with my peers in such dynamic, engaging, and thought-provoking conversations week after week. It has been a real comfort to open my emails day after day and see how we are all dealing with and coping with COVID by engaging positively with our coursework. (Student from one of the classes.)

Looking at Figure 1 again, one can see a screenshot of the shared Google Slides environment. Along the left, students can view instructional slides created by the group leaders of the week and slides classmates have created. In the center, students create their own slide – a response to the core reading(s) of the week. To the right, peer responses and conversations about the slides appear. The conversations can be collapsed and are also threaded. In this example, the student has chosen to create an infographic-based slide. It is common that most students begin with infographics, and as they become more comfortable with risk-taking through the course, many will begin using other modalities and decreasing the amount of text on the slide (while usually writing more in the Notes section). Of interest in this slide is how students are helping one another understand the course content, while also making connections and referencing other concepts in the readings.

Although discussion forum features in most LMS systems also provide for the uploading of image, video, or audio files, incorporating alternative presentation formats successfully (and meaningfully) requires additional pedagogical considerations. Inviting students to present their knowledge of course content in different modalities without the pedagogical imperative to also cultivate a safe space and a sustained ethos of exploration and play in the classroom environment is unlikely to create a transformative change in their learning of the relational. First, there has to be a space for play and multimodal experimentation that is modeled by the instructor. In this strategy, the instructor leads through examples in the first weeks of class. The learner-centeredness of this design also enables the learner to initiate how far to take their response each week. This was particularly important for highly motivated and more advanced students in the class, as well as those at the other end of the spectrum who may have not been invited to present their learning in alternative ways in their prior learning environments. In short, this approach was able to meet the students where they were at, providing guidance and structure as well as greater autonomy in the “shape” and direction of discussion posts.

In the students’ comments to one another, we also observed evidence of community and of students-as-teachers, moving the peer-to-peer relationship from a text-based one to one that is multidimensional, bringing “volume, depth and range of possibilities to how we relate to one another” (Dewhurst, 2022, p. 12). While peers did still support one another on a job well done, they were not afraid to ask difficult questions of each other, relate the content to their personal and professional experiences outside of the course, reflect a level of compassion and mutual support, risk-take, and even sprinkle humour here and there. Google Slides provides concrete examples of how multiple lines of thinking and understanding can simultaneously inhabit a space, a foundational tenet of the Parallaxic Praxis model. A student writes:

![Figure 1: Example of Reading Response slide using modeling to make meaning. Please expand to view.](image-url)
Without a doubt, though, the moment of most significant shifting in my perception/learning occurred when I first encountered the Ma Space. This caused an explosion in my brain that reverberated throughout the course of the semester, and I know that it will have a deep impact on my worldview for the remainder of my degree and life. I had long been at odds with the dualistic nature of so many elements of academia specifically (as well as the world in general) and had engaged in much thought as to how I could possibly bridge concepts/ideas/worldviews that seemed to be in such opposition to each other. The Ma Space provided me with a new way to understand the seemingly oppositional nature of these things, as not needing to be necessarily resolved, but as generating the area in which the real detail could be investigated and revealed. (Student from one of the classes.)

Figure 2 offers an example that demonstrates the depth of engagement with the reading assignment and provocative interaction with peers. Below the slide, there is a ‘Presentation Notes’ section where the slide-maker may add an artist statement, abstract, or references. Please expand the screenshots to enlarge the text. The example demonstrates students’ engagement with the content and one another and emphasizes how this strategy enables teaching how to think, not what to think.

Figure 2: Depth of learning and interaction. Screenshot of a Google Slide.

In Figure 3 specifically, a student has created hand-painted shoes as their reflection slide for the week’s topic of community activism. As an artefact created as part of the last week of the 12 week-long course, the shoes demonstrate the students’ growth in creative risk taking and theorizing through metaphor.

Class community

Finally, the creation of weekly slides assisted with the retention of readings as well as an ongoing record of the class’s cumulative growth over the term. Students appreciated the ability to easily access prior weeks’ slide decks to refer to and reflect on. The collective slide decks became a space to proudly exhibit and document learning.

Google Slides felt more like a gallery and collaboration over D2L because you could see people’s work on the slides bar, get a sense of [the] theme, and by the end of the week, there was a collection of work [that] reflected the theme. On D2L, there would be more of a disconnect in this way as everyone has their own thread, and you have to click into it to see the work rather than having the outline as Google Slides has. (Student from one of the classes.)

Contributions to professional teaching practice

As the owner of the Slide Deck, when a comment is made, the instructor receives a notification in their email. Treated like a text chat feature, the instructor can very quickly read the submission and immediately make a comment or not (even from a phone). Students can also set up notifications and can continue chats with peers similar to chat messaging. Reading comments in real-time as students post them allows those in the class to dwell on their thinking in an ongoing way.

Interacting on Google Slides was also much easier to keep track of and user-friendly compared to discussing through D2L. (Student from one of the classes.)

I was able to really put a lot of myself, my creativity, my personality, and my own understanding through such a digital medium! I wish more courses incorporated this as a way to strike discussion since it made the course more personable and allowed a safe space for on-the-spot collaboration. (Student from one of the classes.)

Compared to moderating LMS discussion boards in the past, we have found that interactions with students using the Slides Strategy are more creative and thought-through because there is an express goal of engaging with the other (as compared to engaging with the content). In this way, students are being mentored in a contiguous manner, different from teacher/student communication that is predominantly transactional or about the content. We
purposely do not comment or respond in every conversation, but we still read all the threads students are creating and can connect them to peers who are not in their interaction bubble or provide references or resources.

**Conclusion**

**Engagement**

It is also important to discuss how using this methodology has contributed to the individual instructor’s engagement and fulfillment. It is no secret that the task of teaching in these tumultuous times has been equally challenging for educators. Teacher shortages, teacher attrition, and teacher burnout continue to be issues in the profession (Blazer, 2010; Loveless, 2022). While teaching using the Google Slides Strategy requires the instructor to manage their time for interacting/assessing student work differently; for example, by adding smaller, more frequent blocks of time to the course, both of us, as instructors, have noted benefits that are inspiring, motivating, and affirming.

Although every course assignment and semester brings its own set of challenges and rewards, our learnings from students in this space have been impactful. We have observed a level of engagement and growth in the students that inspires as well as teaches us about the students we are working with. In this reciprocal space, each week of the semester, we have observed the students navigate the weekly discussions and peer interaction with progressively reflective, imaginative, and critical posts. The modalities of their reflections have also advanced from relying on images from the internet as metaphors of representation of their understandings, to composing music and vocal scores, making clay and digital sculptures, creating paintings, poems, choreographing dance routines, and even writing personal narratives to share their understanding with the class. The Google slides themselves have become pedagogical tools for the entire class community and have demonstrated the growth of a diverse group of learners, and a pedagogical community with important viewpoints, interpretations, and knowledge to share. Further, as the students in these classes are teachers themselves, numerous students commented on wanting to use the strategy in their own K-12 classes.

I’m learning a lot about practices that I had not considered before. I enjoy the subjectivity that we get to display each week, and seeing others’ perspectives is fascinating. The slide and comment process are also a new format [that] I will be utilizing when I get back to teaching. (Student from one of the classes.)

While the Slides Strategy was used in graduate-level courses focusing on Arts in the Curriculum and an introduction to Arts Integrated Research Approaches to intentionally echo the theoretical underpinnings of arts-integrated research; this structured strategy promotes deep reflective and reflexive inquiry, creativity, exploration, attention to detail, aesthetics and form, and can be used at any level, course or discipline that can comfortably use Google Slides as a presentation application.

**Recommendations**

For instructors wishing to integrate this strategy into their teaching practice, particularly for classes with younger/K-12 students, students from disciplines outside of education, or as part of hybrid synchronous/asynchronous course delivery, we recommend the following:

- **Modeling of the strategy and the possibilities of alternative presentation formats** by the instructor. While instructors may encourage alternative presentation formats in their classroom or online post forums; in practice, students may need more guidance or encouragement with the use of exemplars in order to actively and effectively pursue these options. These activities gradually build student confidence.

- **Integrating the strategy throughout the course or term.** As arts-integrated researchers and teachers, we have both observed that it takes time for students to deeply engage with new ways of seeing and communicating their understandings. Time and practice are needed so that students can find their own positioning of “how” to see, conceptualize, and think about the implications.

- **Using the weekly response as a form of low stakes formative assessment** allows for the instructor to recognize where students may be struggling and offer guidance and support. Although it may be tempting to use this strategy as a major project/course deliverable, we believe it is far more effective as a sustained practice of creating and meaning-making.

- **Requiring all students to sign a confidentiality agreement.** This can be done directly in the notes section of the first week’s Slides⁴. This serves as a visual reminder of student obligations and sets the tone for ethical engagement with others.

**Looking forward**

One of the key benefits of pairing Parallactic Praxis with Google Slides is that students see evidence of a connection between the formal curriculum content and their lived experiences. They are also able to see the broader aims of education as they are able to extend and integrate an academic article into their lived worldviews. Learning to see others’ perspectives also grows important capacities for

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⁴ In an introductory slide, the instructors created a confidentiality statement and each student was asked to record their name below in the notes section to acknowledge commitment and consent.
compassion and the key question of our lives together: How do we learn, live and sustain this world well together?

Often, when I felt a little demotivated or wanted to be inspired, I just jumped into our Google shared folder and wandered through the slides of my colleagues. It kind of brought me to life again. It reminded me of the many perspectives that surround us all, and how they are such a valuable part of the learning process. (Student from one of the classes.)

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