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Adapting to New Modes of Teaching During COVID-19: Developing Instructional Approaches that Empower Learners and Facilitate Virtual Learning Experiences

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Abstract

For institutions relying on in-person college experiences, the impacts of COVID-19 were particularly disruptive. Students anticipating on-ground learning opportunities and interactions were forced to adapt to online classroom experiences during a time of uncertainty, trauma, and racial unrest. Many instructors engaged in fast-track learning on different teaching approaches and digital technologies to transition courses to fully online or other modalities. Not all on-ground course experiences translated well into virtual spaces to facilitate student achievement of particular learning outcomes. Such abrupt changes in course modality posed distinct challenges at high-touch small college environments and necessitated reimagining how to support learners during the pandemic. Through the lenses of a director of a center for teaching and learning as well as two professors who were center fellows and who implemented transformative practices in their courses during the pandemic, this essay discusses contemplative and field- and object-based teaching approaches that helped instructors tackle pandemic obstacles and support student learning through powerful online educational experiences.

Keywords: transformative learning, pandemic, contemplative pedagogy, field study, object-based learning

Overview

In this reflective piece, a center for teaching and learning (CTL) director and two professors who were faculty fellows at the CTL during the COVID-19 pandemic discuss transformative teaching approaches that helped instructors across disciplines address instructional challenges and foster student learning. In general, the impacts of the COVID-19 pandemic led many instructors to reimagine their individual definitions of transformative learning experiences when they shifted to online teaching spaces. Faced with quickly learning effective teaching approaches in unfamiliar instructional modalities, the necessity to navigate classroom and field experiences that required retooling in virtual environments, and the realities of uncertainty, trauma, and racial unrest defined by the time, such instruction during COVID-19 was unprecedented. Flexibility and creativity resulted in many teaching innovations that were transformative for student learning, leading to changes in students' frames of reference and a revaluation of assumptions held (Mezirow, 1991). We experienced and witnessed such transformative learning during COVID-19 as instructors (faculty fellows) or in working in partnership with instructors (CTL director) whose previous teaching experiences were largely within in-person contexts. Out of necessity the

instructors confronted assumptions about online teaching that altered many of their views on whether meaningful learning could occur in such spaces.

This essay focuses on the transformative learning experiences in courses integrating contemplative pedagogy practices, virtual field experiences, and object-based learning. Contemplative pedagogy is a set of strategies to promote inquiry and self-reflection (CMind, 2020). These strategies use critical thinking but augment the rational with emotional, spiritual, and embodied ways of knowing, thus providing a rich compounding of experience and reflection that can facilitate deeply transformative changes in points of view and modes of inquiry (Barbezat & Bush, 2014, p. 9-11). By emphasizing students' own experiences and resources, contemplative practices such as beholding, journaling, and deep listening empower students to express themselves and approach challenges and problems with a sense of openness and growth mindset. The contemplative pedagogy practices encouraged students to reevaluate their frames of reference to see the private and social sides of themselves as they navigated through the pandemic, empowering them as learners.

On-ground field-based learning can foster connectedness among students and their instructors, facilitating learning (Fedesco et al., 2020). While students describe how virtual field trips cannot replace the in-person experience, they value how such activities help them make connections with course material (Seifan, et al., 2020). Virtual field learning experiences challenged students to bring a new understanding to the places and landscapes observed as they spent time focused on beholding, and learning through their engagement with such activities. Specimens in hand, whether sent to the students, or newfound there at home, were the centerpiece of object-based learning and a point of attachment to the course experience, connecting students to the material, and even to each other. This pedagogical mode allows students to discover novelty and nuance in a highly engaged way (Chatterjee & Hannan, 2015).

In subsequent paragraphs we describe these learning opportunities in more detail, discussing the journey, providing examples, reflections, challenges, as well as opportunities.

Transformation Through Contemplative Teaching

Christopher Phillips, Professor of English

Students in my English 202: Spiritual Writing course came into Fall 2020 in an online modality, after several months of COVID-19-influenced experiences had left them disoriented and anxious. Students frequently spoke in class and wrote in journals about feeling out of sync. They had more free time than they knew what to do with, they felt pressured to accomplish too many things; they swung between boredom and overwhelm, with deep uncertainty about the future. While it might seem that students in this condition were ill-equipped to learn anything significant about themselves, about writing, or about their world, I believe they were unusually ready to explore those deep, tangled fields of knowledge. "Suffering seems to get our attention," says ecumenical teacher Richard Rohr; "Prayer and suffering … are probably the two primary paths of transformation …. Silence and suffering seem to be necessary teachers in all the great traditions" (Rohr, 2003, p. 15, p. 115). If suffering was already shaping my students, I hoped that guiding them into silence for contemplative inquiry (a secular, academic counterpart to Rohr's prayer) would help them transform their viewpoints about writing and themselves. I had developed a suite of contemplative practices over years of teaching the course—though only face-to-face—and I hoped they would help students face these challenges.

The first and most fundamental practice, then, was silence (Wall, 2014; Woodward, 2010). At the start of each class meeting, the entire class shared a minute of sustained silence. Students could close their eyes, turn their cameras off, pray, do breathwork, or simply hold still. The first few times, most students experienced some discomfort with this practice; several said they had never been asked to be silent for that long at once. After about the second week of class, many students reported looking forward to the minute of silence, appreciating its "no demands" quality and finding it helpful to reset from whatever they'd been doing to the "now" of the class meeting. Simply learning to be quiet, and to claim the silence as a way to mark a threshold between past and present, were already key skills that students could adapt into other settings.

Silence helped our class reconsider how discussion might take place in an online course. One of the most important actions silence affords is listening, to oneself as well as to others (Simmer-Brown, 2013). Listening to others was foundational to the course, both in class meetings and in weekly small group meetings students held together to work on their writing and to stay connected with each other. During class meetings, some students faced connectivity issues that interfered with camera and microphone use; others did not always feel comfortable sharing out loud in the full-class Zoom space, though nearly all students noted that it was much easier to be open and talkative with classmates in "breakout rooms" of three or four students each (the full class had sixteen students). I made an effort early in the semester to normalize written chat contributions as an alternative to spoken comments. As I invited students to choose their preferred modality, I also kept an eye on the chat to include comments in discussion as they came up, and offered follow-up comments, appreciations, and questions responding to student chat comments. I also sought to normalize silence as an element of conversation early on, hoping to convey, as one student put in in their course evaluation, "silence grows things." This meant we might have long pauses between comments, or between my asking a question to the class and a student responding; it might mean that we would have a substantive, meaningful discussion for a full half hour using only written Zoom chats. Silence grows things, indeed.

This use of writing in real time to connect and express ourselves engaged a major theme of the course: writing as a life skill. While students engaged each other's writing as a form of communication, the course emphasizes "writing-to-learn" at least as much as "writing-to-communicate." Writing is a form of thinking, and the course guides students to think-by-writing about who they are, what they know, and how they can use their language to improve their lives and the lives of others (Forsman, 1985). Journaling is a core practice toward this end, but assignments are also left open-ended enough that students must reflect enough to decide what they want to write—for instance, on the question, "Where do you come from?" Such deceptively simple questions tended to take students "back to the basics," rethinking the stories they told about themselves and the ones that they had heard from family and mentors over the years.

This rethinking fed into another key concept in the course, the Zen idea of "beginner's mind." As Zen master Shunryu Suzuki (1999) explains, "In the beginner's mind are many possibilities, but in the expert's mind, there are few" (p. 21). In other words, to approach anything as a beginner is to invite new ways of seeing and imagining one's activity, even when it is highly familiar to an individual. In the course, students collectively undertook learning a new skill—drawing as a way of seeing—and documented their experience, then related that experience to something in which they were already accomplished, such as academics or sports. By cultivating a beginner's mind, students considered how, as their usual academic and life routines had been so disrupted during the Fall 2020 semester, they could see their work anew as students, making space for reconsidering assumptions they might never have scrutinized in the hurried routine of "the normal."

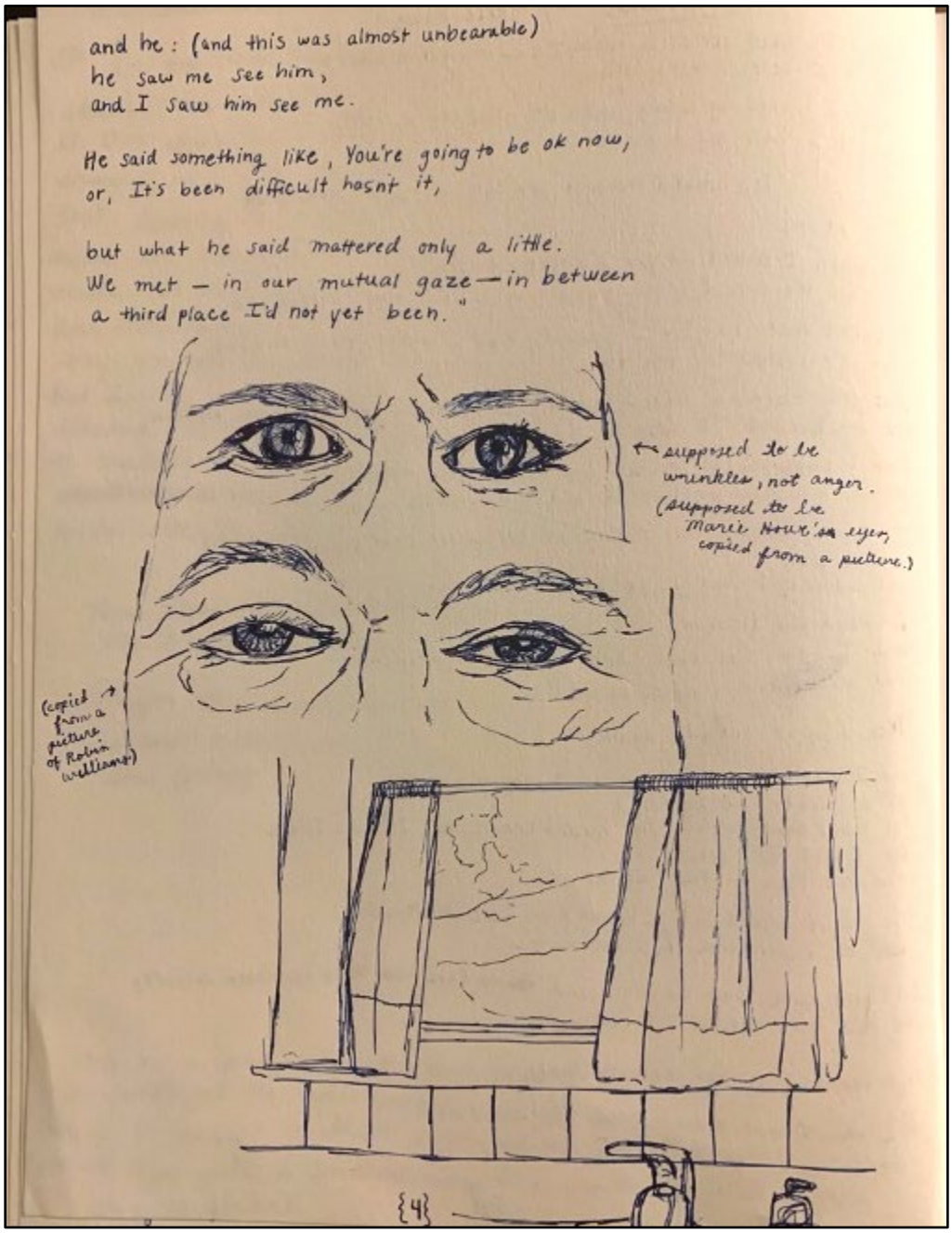

Figure 1: Renee Mercereau, from "What the Beginner's Mind Means to Me." Courtesy of the artist.

One last practice that aided this path of transformation was beholding (Barbezat and Bush, 2014, 148–57). Sometimes called "slow looking" (Tishman, 2017) or, in a social activist context, "bearing witness" (Dunn, 2014), beholding involves bringing the visual attention to bear on a person, place, or thing, resisting applying an agenda or questions to what is beheld, but rather waiting for the mind to notice what it notices, and with what emotions. Again, drawing was a powerful way to introduce students to beholding, as they practiced techniques such as "blind contour drawing," a classic artistic discipline of drawing something without looking at one's paper. By de-emphasizing the result (a "good" or "realistic" drawing) and highlighting the attention-focusing process, most students were surprised at how much more they could *see*, regardless of what showed up on the page. As students became more accustomed to settling into their observations, I introduced other applications of beholding. In particular, I incorporated

images that engaged with race and racism, ones that may provoke strong emotional responses in students for a range of reasons, into our practice.

One example from a class session highlights the power of this kind of bearing witness as well as the potential pitfalls involved and possible strategies for anticipating and managing those hazards. We began with several minutes of beholding images such as Andrew Wyeth's painting *The Drifter* (1964), a sympathetic portrait of his homeless neighbor, Willard Snowden. I then explained that the next image could be upsetting, that students should feel free to turn their own cameras off while beholding it, and that if students started to feel overwhelmed by the image that they should feel free to look away, and even to leave the space they were in for a walk, a drink of water, or something that would help them reset. The image was a photograph of a public lynching, altered by John Lucas for Claudia Rankine's book *Citizen* (2014) by removing the victims from the frame, leaving a crowd of onlookers as the focus of the image. Following three minutes of beholding, students remained in silence, sharing in deep, rhythmic breathing that I facilitated. Students then spent a few minutes journaling about their reactions. Those reflections were the students' own and were not to be shared, I told them, but the class spent a few minutes debriefing the experience by sharing brief reflections in the chat space. A number of students mentioned being shocked at how "normal" everyone looked in the photograph, knowing that the people portrayed were in close proximity to two lynching victims. Students also described how painful it was to look, even with the more gruesome features of the photograph removed, and to not be able to do anything. We briefly discussed how to face feelings of helplessness in the face of suffering and violence, but a number of students were unsure where to go next with the reflections the class activity had brought up for them. In the future, such exercises in beholding will likely support students' transformation more fully when connected with other readings, activities, and engagement with social issues in more concrete ways such as CBL (community-based learning), in which students' directed engagement with our local community would provide the occasion and material for learning. Nevertheless, within the context of the pandemic, asking students to consider how and why they respond to images of suffering and injustice right now is essential self-reflection in a moment that demands intense levels of engagement and mutual assistance, even as people are physically more distant from each other.

There was no guarantee that the suffering of life in a pandemic or the practice of contemplative inquiry would lead to transformation this fall. And yet, student after student expressed their surprise and delight at realizing how much they had accomplished and changed over the course of fourteen less-than-ideal weeks of instruction. Among student evaluations comments were reflections on students' new views of writing, of themselves, and of their potential as learners and communicators:

> "I have approached writing in a very direct way for so long it was nice to be able to see it differently."
>
> "I have learned how to rethink a lot of things. This course was almost like hitting a reset button, and I got to learn how to do things in a different way."
>
> "The most helpful thing I've learned in this course is being patient and open minded with myself when it comes to learning new ideas and new practices."
>
> "I have learned to write about myself, which is typically very difficult for me to do since most of my past writing has been the standard argumentative and thesis driven writing."

While these statements are gratifying for me as an instructor, my own experience and reflection this semester has helped me see my own parallels to each of those students' comments. One of the gifts of this disruptive time is being able to grasp that, even as I encourage students to embrace transformative learning, I am myself transforming. Barbezat and Bush (2014) stress in their discussion of best practices in contemplative pedagogy that the instructor's own practice and willingness to take on the discipline of contemplative inquiry is the single most important contributor to successful learning with this approach.

With so much to rethink, try out, give up, and wonder about, I as an instructor have just as much need for transformation as my students do.

Transformation Through Field- and Object-Based Learning

David Sunderlin, Associate Professor of Geology

Natural history asks for close observation of places and things, and thus leans heavily on field study (Fedesco et al., 2020) and object-based learning (Chatterjee & Hannan, 2015). Evidence in the study of natural history is often physical and originated "out in the field." Zoomed out, aspects of a landscape's form and make-up can tell of its history of environmental creation. For instance, places that were glacially influenced during the last ice age show tell-tale signs of those conditions as scratched and scraped rock surfaces on boulders or hillslopes. Here in Pennsylvania cold ice in the Pleistocene smooth-sculpted sandstone bedrock that was deposited on a warm tropical beach millions of years before. Both the substances and shapes of landscapes tell stories. At a smaller scale, found objects obtained from the field can be brought back and "read" as a hand-held source of more knowledge about the place and time from which it came. The rock's sand grains themselves, or the details of once marine fossils within, add to our understanding of the local setting as a window into the regional and global history of earth and life. Like landscapes, small objects too tell their origin story and their subsequent evolution since.

During the COVID-19 pandemic, I built virtual field- and object-based components into two courses in remote learning settings to study landscapes and specimens. In an introductory geology course in spring 2020 I modified a laboratory exercise examining the building stones on campus and in the nearby community into a virtual field exercise. In this same course, I adapted two scheduled in-person off-campus field trip lab experiences into video tours of the field sites. I also remodeled the last laboratory activity of the semester into an exercise about the bedrock geology under each student's place where they were studying remotely. Usually this was the student's home, a place familiar to them.

In an upper-level paleontology course in Fall 2020 I focused on an object-based learning approach to engaging students by sending each student fossils to observe with "hands on." I sent examples of all the study organism groups that I featured through the semester as well as a separate collection of samples gathered from a field site which I featured in a virtual field tour in that course. Most of the objects were not initially recognizable to the students as they had never had exposure to these time-exotic, unfamiliar materials, the remains of organisms long extinct.

Whether it be a geographic place that is visitable in some way or a physical object holdable in the hand, it is physical evidence of events and processes that have happened in the past. In teaching on-campus and now remotely, I have placed much weight on this idea. I need the students to know that historical science is not a "just-so" story told from a human's mouth or a textbook, but rather it is a process of evidenced-based reading and interpreting where the rocks and fossils are the pages and words. The big landscapes and the small objects are the "texts" for these courses and in a remote learning setting they can still be found and observed and read.

In the introductory-level natural history-themed course, I focused our attention on seeing the *familiar* with new eyes. For one activity, students took a close, geological look at Lafayette College's campus buildings they all recognized (Figure 2a–b). In another, they considered the geological make-up, shape, and history of their "home" campus on College Hill in Easton, PA, USA and sites nearby (Figure 2c). Most impactfully, the students also researched their home landscape setting as a way to tie the course to their own present, remote-from-campus lifeworld. These places that were well-known to the student were now able to be seen from a new vantage point, one of earth historical significance based on what they learned in how to read form and material evidence in earth science.

Having spent time in all of these settings, students have grown a sense of familiarity with them. But with the goal of looking again, with an earth historical view, the usual things gain new definition and meaning. The "same old" became "frontier" as students saw evidence in their familiar campus buildings of ancient rivers that once covered the land from which the building stone was quarried. Students realized the antiquity of the material from which they were built and the buildings have new life. There in that

virtual learning setting at home, students felt an attachment to the campus they left at the start of the pandemic.

With virtual field trip video labs at what were to be the scheduled class trips (Figure 2d–e), students got to understand how to examine a field setting, and then could employ that model in freshly examining their home landscape, effectively discovering something new about a place they already know a lot about. The goal of these exercises was to show the value of a re-look, and to stimulate curiosity and exploration of the familiar in an altered frame of reference.

Figure 2: Clipped image from the GEOL 130 video tour of prominent building stones on the Lafayette College campus. b. Map of buildings at Lafayette College on which video tour was based. c. Bedrock geology underneath Lafayette College's campus on a familiar road. d. Clipped image from a virtual field trip video tour at a local geology field site. e. Clipped image from a virtual field trip video tour with base map geology.

In the upper-level paleontology course, the ***unfamiliar*** was the focus, with otherworldly hand-specimens of fossils drawing our attention. Place an extinct rugosid in a student's hand and they feel that, yes, it is a shell of sorts, but not like any they have seen in their beach-combing experience at the shore. With a box full of such curiosities arriving at the students' homes prior to the semester, students reported being immediately engaged with the objects that were the foundation of their upcoming coursework for the semester. Many of the students opened them with their families, laying them out on the kitchen table, excited about what they were, and what they didn't yet know about them all. After the course's evolutionary theory conceptual emphasis at the beginning of the semester, we turned to the fossil specimens, the evidence on which it is all based.

I asked students to look closely at each specimen and to do so through drawing. After a few small beginner lessons on drawing technique, I asked that the students sit with the fossils in this way, with little direct guidance as to what they should be seeing. Instead, I let them behold each object in their own exploratory way, with occasional reference to resources of their class notes, recorded mini-lectures I put up on the course site. The students were asked to deduce what they could from the object's physical form, leading to deep analysis and hypothesis construction (Hannan et al., 2016). The seemingly mundane act of drawing a fossil and then annotating with newly learned anatomy and functionality requires time spent

with the specimen. Students did this during synchronous, free-form sessions as well as on their own time, producing rich "concept sketches" (Figure 3) (Johnson & Reynolds, 2005).

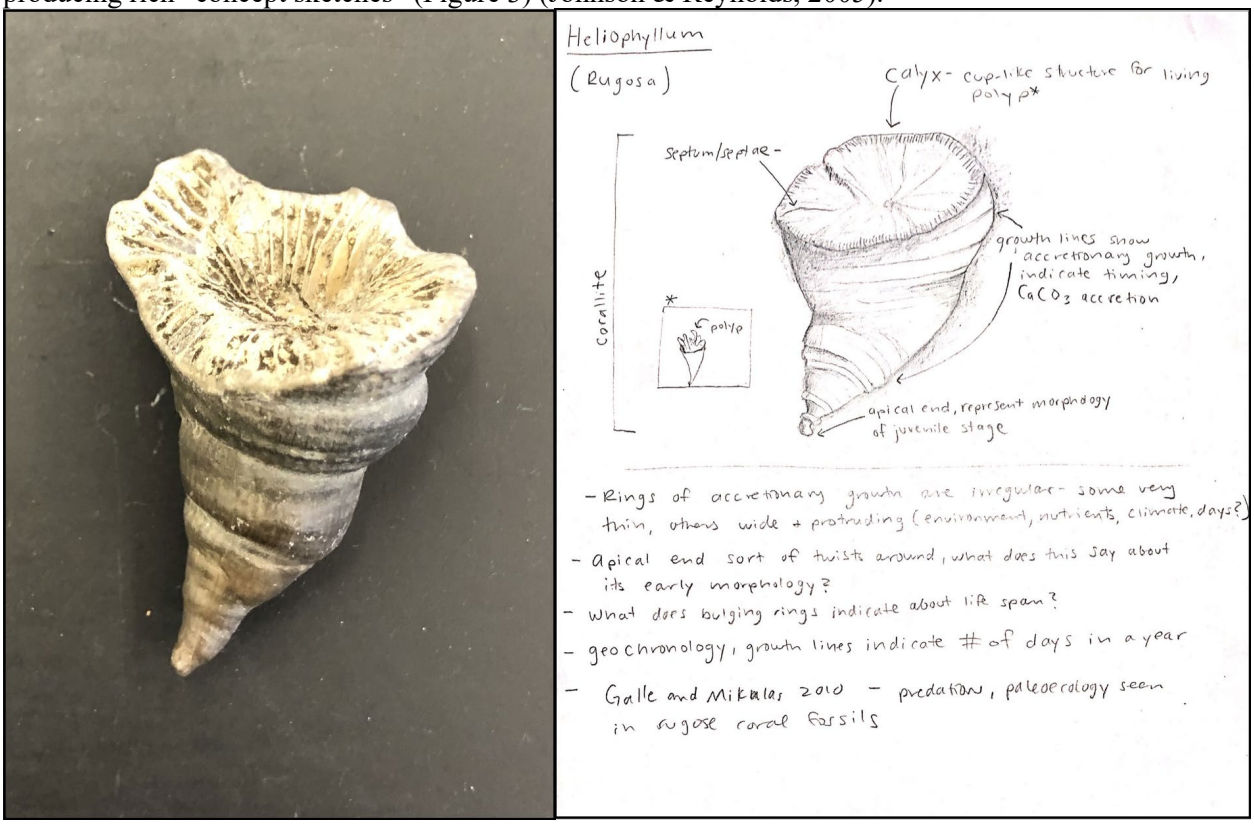

Figure 3: Fossil rugose coral (*Heliophyllum sp.*) and a student's concept sketch with annotations and idea notes beneath. The fossil is 3cm tall and from outcrops of the Mahantango Formation of the Devonian Period (~380 million years old) in [state]. Used with student permission.

Like everything, fossils are more than their name. Students sketched the hard anatomy and pondered the soft parts now decayed away. They jotted ideas about the organism's life mode long ago, and thoughts on how we could know more about it by examining further evidence. The time spent touching and contemplating a strange thing before them led to research ideas, investigation of what the physical presence of the thing means for the history of earth and life, and added to the student's frame of reference. The student notes below ranged from posing of hypotheses to exclamations of fascination, the objects clearly stimulated the students from in subject knowledge as well as the affective domain (Nicholl & Davies, 2019). Through all of this, the fossils became less unfamiliar, and many developed a particular attachment to their "favorites."

Both of my courses during the pandemic approached transformative learning in remote settings by using concepts and materials accessible in different ways to alter the perspective of a student's familiar lifeworld, or accreting onto it with something entirely new. And both of these courses achieved that goal with students commenting positively in course evaluations. Some students anecdotally described their socially-distanced jogging route as being like a field expedition of discovery. Other students surprised themselves by noting that the stone of their front stairs was now "way more interesting".

> "I learned how to investigate science and understand concepts through exploring rather than just reading about them."

> "(I) have gained more of an appreciation for my surroundings and things I previously took for granted."

> "I will never look at a rock the same way ever again."
>
> "I think I learned most how to infer and learn from the environment around me and how I can just tell certain things about the past by glancing at what is sitting in the present!"
>
> "After this course it is impossible to take a trip, walk, hike, or drive without thinking about the complex world beneath your feet."
>
> "This course taught me to be more observant of the world around me."
>
> "I think it's important that anyone who wants to make the world a better place understands the materials under their feet and surrounding them every day."

An additional positive impact of the object-based handling and learning approach was that students reported feeling a centeredness on the act of learning in the class when they had specimens in their hands. It has long been known that just the holding of a study object enhances a learner's participation in their own learning with the immediacy of experience (Willcocks, 2015).

However, the approaches did have their logistical challenges. Although temporarily frustrating to students, I think that they ultimately provided benefits to the learning experience. As students examined their own bedrock geology using the online resources in the Spring 2020 introductory course, many were challenged by the technical language in their research, even with a semester of geological education behind them. But with small coaching from me, as well as quick online searching, many of the students reached a translation that allowed them to extract meaning from the rocks, and were ready to venture outside to see "their bedrock" for themselves. With each person learning remotely about the bedrock in their own place, it was a challenge to me, the instructor, to understand each of the 45 students' unique geological settings. But as I learned from them, and as they compared "their" bedrock to that of their classmates, it brought us all into valuable learning conversations. Similar discussions arose in my Fall 2020 paleobiology course as students showed and compared the variability in the fossil study specimens they had been sent. Though some samples of a few particular groups were lacking a feature, or were slightly different in shape and size, the student discussion among themselves, and with me, added to their understanding of how "messy" the world is, and just what we can learn from the fossil record. Without any single fossil in their collection being "picture perfect" to match the diagrams in a textbook, the students appreciated the value of a long look with a hand lens of what was and what wasn't there.

Although the pandemic has taken much away from the college educational experience at high-touch institutions, it has arguably provided students a chance for more of a valuable resource, time for contemplating. In a remote educational setting, with this focused time, students can concentrate on some aspects of place-based and object-based learning. What I have come to see in advising meetings over the past months, too, is that as a student's identity of place and person has changed in the COVID-19 pandemic, their relationship with their time is changing too. Many have slowed down it seems. The time my students have spent examining something out the window, under their feet, or in their hand for these course experiences is transferable as a powerful mode of inquiry in other aspects of their lives as well. Re-examining the familiar and seeking out the unfamiliar are both doable from home, and in some ways may be just as effective there as anywhere.

Fellows Program as a Transformative Faculty Learning Community

Faculty Fellows

While the COVID-19 disruption to learning at our college challenged us, we have found great inspiration in the ways that it has stimulated conversations in our community. Many of these conversations began amid the rush to move online in March 2020 and the summer of learning online

pedagogy at a small liberal arts college. As faculty fellows in the 2020-21 academic year, we are now talking and thinking even more intentionally about the remote experience and how we share the path toward promoting transformative learning in these trying times.

In our work with the center for teaching and learning this year, we have moderated two series of online discussion events related to the topics of field study and contemplative pedagogy that we discuss in this paper, with voices and views from across the disciplines, and ranging from instructors to student learners. We have been struck by the commonality of the goals we have for our courses, divisions apart. We have benefited from the seed spreading of pedagogical ideas from seemingly disparate disciplines. We have been inspired by students describing their desire to be challenged in ways that draw them into the course material and the learning experience. We have also benefited from expanding the "room" in which we host our conversations; while prior faculty fellows had offered programming for our college's community, the Zoom platform allowed us to extend the invitation as far as our online networks would reach, with participants joining from multiple time zones. This has taken us beyond our comfort zones, but the result has been inspiration, synergy, and (as in this essay) collaboration. Even as we have seen the benefits of slowing down in our own classrooms, we are benefitting from each other's ideas by taking the time to really consider what it is we are doing as educators. Even sharing a simple breathing exercise online, across multiple time zones and yet in embodied sync with each other, brought new insight and resources into conversations about teaching.

Conclusion

Contemplative teaching, field-based study adapted virtually, and learning focused on objects were instructional practices that allowed students to engage in transformative online learning experiences during the COVID-19 pandemic. By practicing silence, beginner's mind, and beholding, students engaged with course material in new ways, providing powerful opportunities for reflection on learning during the pandemic. Virtual field- and object-based study enabled students to grapple with time and place during the pandemic with skills and appreciation that is transferable to other aspects of their lives. Beholding was a practice shared by both faculty fellows during the pandemic, given the powerful nature of this approach on focusing attention and encouraging reflection across learning contexts. As aligned with Mezirow's transformative learning theory, students engaging in these learning opportunities challenged their assumptions about the subject matter whether through contemplative practices, engagement in virtual settings, or interactions with physical objects. Additionally, the collaborative effort of faculty fellows working with the center for teaching and learning staff during a time of intense challenge presented additional opportunities. Such interactions allowed colleagues to share their ideas and struggles respective to their teaching approaches as they sought to foster connections with their students and colleagues. The fellowship program offered a model for mutual support and generative thinking about pedagogy when teaching practices needed to be reevaluated on a short timescale.

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