Towards Perennial Learning

MUSINGS FROM A MIDDLEBURY COLLEGE CLASSROOM

WRITTEN AND EDITED BY VICTORIA ANDREWS

NewPerennials

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This book is dedicated to the landscapes of western Vermont. I am grateful for the years I have spent learning from you.

Contents

INTRODUCTION

Instead of citing scholars from all over the world with a dozen letters after their names, *Towards Perennial Learning* synthesizes the ideas of the "mere" students. But college students are the experts when it comes to being students, and for this reason it really, really works! Congratulations to my Middlebury classmate and editor Victoria Andrews for bringing out the best of her classmates' reflections in a rooted, real, relatable, and well-argued book that the education field could learn a lot from.

—Emma Ramirez-Richer '22
   Contributor to *Towards Perennial Learning*

Unveiling Suchness

Hello and welcome. We are so excited that you have chosen to join us here in this text. As we settle in, feel free to take a pause to situate yourself, grab a cup of tea, find a comfortable seat, and perhaps a blanket. My name is Victoria Andrews, and I was a member of the Perennial Turn class of fall 2021 at Middlebury College. I was a New Perennials intern from the summer of 2022 through May of 2023, and I curated and edited this book as part of my internship.[1] It was challenging at times to both write my own thoughts and to accurately depict the work of my peers. I will share more on New Perennials in the pages that follow.

This book is the result of 38 undergraduate students' explorations across two different years, through a global pandemic, a presidential election, and much more. At the heart is one question: *What do we give young people as an alternative to education as we know it?*

For us, that answer has been deeply tied to nature, and we spent the better part of each semester reimagining the ways in which education could be framed. We've worked to make this writing accessible to a broader audience; however, some jargon remains.

In his final paper in the course, Connor Wertz illustrated the concept of revealing the "suchness" of something, a Buddhist teaching which signifies an unveiling. To see something's suchness is to see its existence and essence (Wertz, 2020). I aim to unveil this suchness as it applies to perenniality—the essence of what has been imagined, considered, and described through the participation of two semester-long iterations of inspired college students. While I am the one writing the words on the page, I aim to unveil the hard work already completed by my peers.

The role that my peers and I aspire to fill is to be one that is both a teacher and a student. I do not intend to amplify my thoughts and visions over my peers, but rather to weave a web of ideas. This is a notion that I would like to make clear because much of the writing will be through my personal voice and style. However, the majority of these ideas are not mine. Most of the work we did in this course was through deep collaboration with our peers that extended to partners

1. www.newperennials.org

in the community, but this paper assignment was intended to be work submitted by the individual students.

My intention is not to inform the reader of our collective findings, but rather to learn alongside the reader. I intend to purposefully challenge the notion of teacher and student, as you might observe in the sections that follow. I seek to elaborate on breaking down preconceived notions of power structures in the classroom, and I encourage you to be guided by an open mind through these sections. I also will say with candor that this dissolution of boundaries is important to me as a student in academia. I do not have a doctorate degree to defend my ideas (yet), and neither do my classmates (yet). These statements might evoke skepticism. If they do, I encourage you to be open to a potential adventure that awaits. All thinkers have a place in the world, no matter the level of education and the title associated with their names. This work is a collective example of living, working, and dreaming in community, and it can be viewed through this lens, rather than an expectation of perfection. The intended audience of this piece is anyone willing to read on—teachers, students, travelers, workers. I aim to highlight the discoveries of my peers as a way to encourage conversation and perhaps energize you so much as to bring elements of perenniality into your own communities.

You might be asking: What can you get out of a book collectively written by a group of undergraduates? Put honestly, it is up to you how you shape the absorption of this knowledge. At the very least, it provides interesting musings on perenniality and how we view education at the forefront of social change. At the tail end of many of our educational journeys, we have been privileged recipients of knowledge and teaching for as long as we can remember. Maybe this gives us a different perspective or perhaps naive or youthful points of view.

The Beginning of Our Perennial Learning: New Perennials

Cultivated at The Land Institute in Salina, Kansas, Kernza's roots sink deep below the soil. A perennial grain from intermediate wheatgrass already used for livestock, Kernza is a beacon of hope in revolutionizing sustainable agriculture and a way to decrease soil erosion. While Kernza's roots are being cultivated in Kansas, the work in Vermont's Champlain Valley explores a different application for perenniality [2] on a social scale.

How can ideas of perennial agriculture be adapted across social systems? Where are our roots and how can we intentionally cultivate reciprocity, interrelation, and community? These questions are at the core of New Perennials. Agriculture's 10,000-year history has generated ecologically unsustainable practices and culturally corrosive hierarchies that must change. Within this context, New Perennials draws inspiration for radical change from the work of The Land Institute, which is developing perennial grain crops and polyculture-farming solutions. New Perennials links education, research, and analysis of agricultural transformation with community initiatives to grow, shape, and share the expressions of perennial thoughts and actions.

This emergence started with a willingness to look beyond ideological and practical applications—in our agriculture systems, in our cultural norms, and in our classrooms. In 2015, Wes Jackson and Bill Vitek launched into initial conversations about ecosphere studies and convened a group of colleagues from around the globe to reimagine "the curriculum," the intellectual infrastructure that in higher education too often contributes to the abuse of land and people in the name of profit and progress. In 2016, Aubrey Streit Krug joined Jackson at The Land Institute and, along with Vitek, explored "ologies, "isms," and the arts across age and difference while facing facts and limits. They were creating communities of learning and practice, and exploring perenniality and diversity in cultural systems. They were compelled to respond, recover, and reimagine, each within their own skills and abilities, but also with a willingness to go beyond what they knew and what was comfortable to them.

Since those early convenings, New Perennials and The Land Institute have rooted themselves as co-learners and practitioners working in geographically different regions and connected by a shared history and a vision of probabilities. In 2018, Ecosphere Studies—now the Perennial Cultures Lab—became a program at The Land Institute, and Vitek brought the New Perennials project to Vermont, where it is currently in residence at Middlebury College. And it was in a Middlebury College classroom where New Perennials had its Vermont beginnings. Vitek worked with his new colleagues Marc Lapin and Nadine Canter to create and teach the Perennial Turn course [3], now in its fifth iteration. The course in 2018 and 2019 produced a series of glossary terms [4] that reimagine and introduce vocabulary relevant to the course and the topics studied. In fall 2020 and fall 2021, the Perennial Turn course posed this question to 38 students for their final assignment: What does a Perennial Learning Center [5] (PLC) look

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2. We are using the term "perenniality" to describe how perennial plants live and grow in contrast to annual plants. Perenniality is a characteristic of many plant varieties that live more than one growing cycle/season; establish broad and deep root systems; adapt relationally in and with the diverse ecosystems in which they grow; and prioritize longevity in place, not productivity of seeds.

3. www.newperennials.org/classroom

4. www.newperennials.org/student-work

5. The word "center" took on multiple meanings in the papers submitted by my classmates and me. It signified both actual school-like buildings, but included retirement homes, community centers, and outdoor learning spaces. The word also served to describe an emotional space where we ground ourselves and open ourselves to new learnings.

like to you? From classroom literature, community member interviews, and each student's lived experience and knowledge, they sought to discover some tentative and speculative answers that have become this book.

Five Themes of Perennial Learning

The book highlights five themes of perenniality that emerged over two iterations of the course:

- Lose the Silos
- Reframe Binaries
- Root in Place
- Multiply Knowledges
- Foster Wholes

These themes do not necessarily characterize perenniality as a whole, but they have been consistent topics of discussion, paper topics, and assigned readings from the course. They are fostered and reflected through the exploration of this specific iteration of students, which was significantly affected by the context of the global pandemic and climate change.

These sections are joined by art and poetry, and each section begins with a glossary of important terms to know. Students are cited parenthetically, with complete lists of names and years at the end of the work. Please take the time to read their names at the end and find where their ideas are interwoven in the text itself.

With that, I will leave you with your own inclinations for exploration. We are so excited to share what we are learning, unlearning, relearning, and experiencing.

Lose The Silos

Guiding Questions
- How can education be made more accessible?
- How can education challenge inequality within dominant systems?
- What do silos have to do with it?

Glossary Terms[6]

Dominant Ontology: Ontology refers to the philosophical study of ways of being. In this work, dominant ontology refers to the ways that being/beings are theorized and constructed in any society, often without any overt awareness by those it most impacts, both at the material and conceptual levels.

Intergenerationality: Interactions between individuals of different ages, potentially named by generational delineations. In the PLC context, however, we aim to minimize separation even within naming as much as possible, so quite simply, it can be simplified to "interactions between individuals of all ages."

Linearity and Objectivism: "Linearity is an important logic towards growth, because it perpetuates a singular notion of processes as moving in one direction (forward / larger / better). As linearity maps onto growth, objectivism maps onto accumulation. Objectivism, simply put, is the ability to reduce processes into objects" (Wertz, 2020).

Rigidity: "In a PLC, unlearning rigidity will require challenging the unidirectional role of the teacher in the classroom and a mainly rote activity on the part of the students—who are often subject to the teacher's authority without exploiting

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6. Some of these terms were defined directly in student papers, and others, I defined. Thus, these definitions are subjective and might differ in interpretation from student to student or from reader to reader.

their individual abilities or curiosities. In addition, unlearning rigidity will require distancing from encouraged toxic competitiveness among students—which prevents them from fostering the possibilities of collective learning and peer mentorship" (Serna, 2020).

Siloing: Silos separate bulk items, typically grain in agriculture. They are large towers that keep each material separated in large quantities. Siloing refers to the disconnect that results from compartmentalizing knowledge in education into large quantities of specific subjects that do not interact with one another. In this system of traditional education, we are siloing the mind from the connection to the body and the body from the connection back to the land itself, as well as knowing that is specific to one area from other areas of knowing and being (Wertz, 2020).

Siloing and De-siloing

Siloing separates the mind from the body and the body from the land as we are encouraged to narrow, rather than broaden, our worldview. It is the disconnect that removes experiences from ideas and that allows us to analyze subjects objectively rather than synthetically (Wertz, 2020). We ask, how do we break these silos down?

In understanding siloing and how to deconstruct it, students were informed by the work of Alfred North Whitehead. Wertz highlights the following quote from Whitehead's essay, "The Aims of Education": "The solution which I am urging, is to eradicate the fatal disconnection of subjects which kills the vitality of our modern curriculum. There is only one subject-matter for education, and that is Life—in all its manifestations" (Whitehead, 1929).

De-siloing our education is one way in which theory can be used practically. The following section outlines several ways in which a perennial education can be desiloed, including promoting horizontal structures in the classroom, cross-age interactions, and fostering an education that promotes cooperation, rather than competition.

An Even Playing Field: Moving Horizontally

As we explore the role of siloing in promoting individual achievement, one potential relearning of this hierarchical growth is to shift to a horizontal structure. At its most extreme, this individualism becomes what Wes Jackson at The Land Institute refers to as a domination/subordination relationship—one in which humans exploit both nature and other humans—that ultimately acts in a reductionist way to separate the intrinsic value of what is being exploited from those exercising their control (Roelofs, 2020).

Control is motivated by ego, but also heavily by fear, as humans seek to avoid domination so intensely that they exert the same kind of control and power over others, instead of working collaboratively to squash fears (Behm, 2020). This relationship of domination and control extends to the land, and violence between groups of humans is often a result of access to land and resources.

Ivonne Serna encourages us to recognize the rigidity of this educational model and to become more flexible in the agency that educators and students have in their educational settings. She calls it horizontal leadership.

"Through horizontal leadership, students would be required [to] join the decision-making processes of the PLC and contribute to the achievement of common objectives, without being part of a hierarchical system in which the action and reaction of its members are subject to those of the teacher, considered as head of the group" (Serna, 2020).

The movement towards this system—where no one person is ranked above another—allows for a flow between positions and projects that suits the involved groups or individuals. There is less emphasis on competition between students for the best grades and fewer inhibitions "from fostering the possibilities of collective learning and peer mentorship" (Serna, 2020). There is also less of a power structure guided by imposed rules from those in power, but rather, emphasizing the collective encourages a shared set of norms that will flourish in the classroom.

Horizontal education also allows us to look more deeply and to deconstruct our tendency to silo knowledge. Wertz contextualizes this within his learnings of objectivity and linearity, which provide a slightly different take on Serna's "rigidity"—but both promote an interactive trajectory full of movement away from static learning. Both views on transformation create the space for horizontal systems to be tested with more willingness. These systems also do important work to shift the power onto the collective, beyond historically privileged voices.

All Hands on Deck: Intergenerational Learning

Another important way to work towards a de-siloed perenniality is to encourage intergenerational learning. This learning style breaks down the element of separation that exists within learners by specifically challenging age delineations. This aspect is crucial to the building of a PLC because it allows for cross-generational sharing of experiences and stories (Serna, 2020). This style of learning works to deconstruct learning because it emphasizes the different histories reflected by a group, beyond just "Gen Z" or "Gen Y." Many of these histories, including the one being written now, are rooted in lessons of and from systems of oppression. Rather than lean away from the discomfort of those histories, it is important to give people who wish to share their life experiences firsthand the space and opportunities to do so.

"With this in mind, it is possible to point out how intergenerational learning is extremely perennial because it challenges the separation or categorization of

learners according to specific age groups and because it openly invites the sharing of lessons between different generations" (Serna, 2020).

Intergenerationality can also be applied to the natural world's systems of biodiversity among participating species with a wide range of ages. Warren Galloway compares it to an old-growth forest, writing, "This doesn't necessarily imply that people of all ages learn the same thing, but the idea is that learning happens within a community of people from mixed stations in life" (Galloway, 2020). Galloway's analysis emphasizes the ways in which self-organization happens naturally from participants of varied ages in the natural world, rather than through the social divisions we've imposed on them. Through this perennial framework, we can limit the divisions caused by exploitation and colonialism and allow for a space filled with different experiences and outlooks.

Cooperation > Competition

One of the ideas explored in class was evolutionary biologist Lynn Margulis's revolutionary idea of symbiosis in the natural world—that species aren't necessarily in competition with each other, but are living in a complex web of interactions that serve both the individual and the community[7]. This idea is one that resonated with many students who reflected on how to promote interrelation within human communities.

Simone Ameer writes, "To create a world that is truly a community is to listen to everyone's experience without the goal of trying to mold their lives into yours. A community is not created by making everyone agree with you. It is created by hearing everyone, and finding the commonalities of need and desire" (Ameer, 2020).

Valuing the diversity of a community parallels the diversity of species, under Margulis's idea, demonstrating that to help and serve each other, it is not necessary that there be perfect moral common ground. A community can be comprised of people with similar identities, but as with species, the greater diversity that exists in a community, the more resilient to change the system is as a whole. In this case, the greatest change on our horizon is climate change, and it is imperative that our communities are prepared to adapt.

"When adaptation to change is a shared, community experience, individual sacrifices that cause people to shy away from the modern environmental movement are replaced with an intrinsic, communal drive to create a more symbiotic community" (Wichterle, 2021).

Looking towards the work of de-siloing, collaboration instead of competition helps to deconstruct individual and hierarchical systems that promote the person

instead of the collective. This transition requires a pedagogical shift away from the dichotomy between culture and nature. The current culture is centered in the modern capitalist system, and it allows the promotion of human ideology and success above interactions across species (Landau, 2020). Landau emphasizes that transactional tendencies do not exist just within human-to-human interactions, but that they also extend to how we view and see nature, through domination and subordination ideology.

Warren Galloway adds, "The PLC would run lessons and life off of the shared values of a community, with large amounts of time devoted to envisioning a future that de-emphasizes competition, capitalism, and neo-Darwinist tropes. Students from a young age would be encouraged to identify what parts of our society, philosophy, and economy have been influenced by imperialism and capitalism, and encouraged to envision alternatives. And most importantly, students would be encouraged to experience the symbiotic relationships in the world around them, particularly in nature" (Galloway, 2020).

In terms of actionable implementation, one way to prioritize the mechanisms of collaboration over competition in perenniality is through art. Art can be a way to collaborate with others and promote community works (Wichterle, 2020). One of these practices, as applied to the nonhuman world, is inter-learning[8] work. As part of the Perennial Turn course, we were tasked to inter-learn with an other-than-human member of our community. This allowed us to observe and be in community with these species. What was gleaned from this practice varied from student to student and partner to partner. Some students noted increased attention to their senses that allowed human disturbances such as traffic to be much more prominent. Others noted ways in which they were similar to their partner, such as both being affected by rain or wind during the practices. Inter-learning" is an important practice that helps us view the world differently, beyond a competition in which we humans have "won" evolutionarily. The student art rendered from this exercise is highlighted throughout the book.

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7. For a good introduction to Maruglis's work, see her *Symbiotic Planet: A New Look at Evolution*.

8. www.newperennials.org/classroom

CHAPTER 2
Reframe Binaries

Guiding Questions
- What are the ways in which we can conceptualize concepts beyond "right" and "wrong"?
- What are strategies that allow us to think as a system, rather than in individual components?

Glossary Terms

Binary: Existing in twos; we use a variety of binaries to simplify our life experiences that consist of typically opposite entities.

Learner: One who embarks on an educational journey, no matter the age, professional experience, or any other identifying quality.

Rationality: A word that emphasizes the logic of something, often as it is tied to modern science and the set of values that it promotes. It is used as a binary term when coupled with "tradition" (Nair, 2021).

Systems Thinking: This way of viewing the world involves considering how the system functions as a whole, rather than the individual parts. It holistically explores a broader set of ideas that seek to address causes of systemic functioning, rather than dictating their outcomes.

Tradition: "Tradition is associated with ideas that we consider to be outdated and dangerous, such as patriarchal norms or homophobia. Too many times, throughout history, the term 'tradition' has been used to justify oppression, violence, and hatred. It has prevented people from seeking any knowledge that may disagree with existing norms and values" (Nair, 2021). A lack of emphasis on the importance of tradition in favor of rationality has led to a greater decline in spirituality practices and a maintenance of the status quo (Nair, 2021).

Power Differences and Binary Usage

Binaries emphasize two options, such as hot or cold, good or evil, but they are known to carry vastly different weights. Connotations of certain binaries are often positive, as binaries often depict a concept simplistically and favorably. Although binaries have value in their simplicity, they can be harmful when they reduce complex processes into simple either-ors. There are everyday binaries that can be effectively used as a means of simplification, but the use of binaries as a classification of systems presents problems.

Why does there need to be an answer to a question on a systems scale that is either right or wrong? An important aspect of perenniality is leaning into this complexity and understanding that questions do not need to have objective answers and might not even have to be answered at all. Despite the relative importance of binaries in our society, they can be limiting in situations where incorporating more than two voices can introduce new possibilities and debates.

Decreasing and reframing binaries is currently an incredibly popular practice across disciplines, as people redefine gender norms, sexuality, and so much more. The active work to dissolve these simplicities is crucial to our movement away from silos that might promote one of these binaries as the "morally good" and the other as the "morally corrupt." In education, these binaries are equally as important. As we work to deconstruct the ways in which we characterize our bodies and minds, we can also extend this to our pre-established roles within the education systems.

In exploring these binaries, we have identified three pertinent ones that affect the cultivation of perenniality. The first is the teacher and student binary—how can we break down these preconceived roles in the classroom? The second is the way that perenniality functions in a modern technological role, specifically challenging what we define as traditional, and what we define as rational. Finally, as we move to reconstruct our ways of absorbing information, it's important not to view these learnings and unlearnings as a binary system. How can we learn and unlearn simultaneously and understand that education is a process, not a one-size-fits-all solution?

Teacher/Student

One prevailing idea for breaking down the pre-existing power structure that has a teacher presenting information and a student absorbing it, involves replacing "teacher and students" with "learners."

"Put simply, if the goals of our perennial learning center are to foster compassion for all beings and to question everything, it logically follows that we would question why, in educational institutions, the voices and ways of knowing of some beings are privileged over others. Our perennial learning center must

find a way to provide a platform for all forms of knowledge, regardless of age, expertise, or formal training" (Cowper, 2020).

Learners can establish close relationships with each other through their involvement in this reciprocal system. The shifting paradigm towards learners homogenizes who has the opportunity to explore and reduces the hierarchy that is currently present within these two roles. One way to tangibly facilitate this learning in an educational sphere exists when each member becomes an active participant in their own education. For example, workshops and courses can be taught, where those of certain skill sets act as facilitators in some situations, and as learners in others. These ideas can also translate to intergenerational learning because people can contribute in the ways in which they are able and have agency in exploring what inspires them, no matter how old they are (Cowper, 2020).

This "facilitation" language was powerfully prevalent in our conversations about the creations of PLCs, with the role of the educator being shifted to that of a "facilitator," both in a system that is truly horizontal and one that is not. The role of the facilitator, even if it exists as a learner at the same time, is to be a support system (Sophie Johnson, 2021). This is incredibly important for learners who have been excluded from access to education for identity-related reasons, including but not limited to age, race, sexuality, and socio-economic background. Currently, the Perennial Turn course is centered around facilitating interactions between students and New Perennials' community partners[9]. In fall 2021, this looked like a series of meetings that occurred either on Zoom or in person between students and partners. At these meetings, the students and partners spent two hours together, learning about each other. While it was important for students to discover about the perennial work their partner was doing, it was also an opportunity for partners to ask students about their experiences in the classroom and beyond. My group's meetings were mostly spent conversing on these broader themes, both from our partners' perspectives and our own. In redefining this binary on a broader scale, community partner meetings can become the central place in which this learning can exist between people united by their location in the community (Martin, 2021).

This reframed binary should also be one centered on the cultivation of relationships that are both reciprocal and nourishing for learners. Perenniality is particularly applicable here:

"If the teacher truly seals the deal, the student will leave with the desire to heal their corner of the planet physically, socially, and otherwise. The goal is for the students in the community to play Kernza's[10] role in the environment. That should be what teachers aim to get out of education. After a few years in a teacher-student deal characterized by immense trust and supplying knowledge,

9. www.newperennials.org/partners

10. www.kernza.org

community-healing behavior would hopefully start emerging" (Ramirez-Richer, 2020).

This idea of cultivation as regenerative of the relationships between learners also moves beyond current extractive agricultural systems rooted in capitalist ideas of uniformity of learning, and instead, "Teachers will only know how to present and 'sell' the ideas by paying close attention to the needs and personalities of the students. What it means to keep this knowledge alive will be unique to every single school district and even every teacher-student interaction" (Ramirez-Richer, 2020). This establishes a relationship rooted in mutual trust and observation and can be applied to a learner ideology, too. Participants can gauge the interests of the group through deep observation and listening and propose these ideas through workshops and collaborative learning.

Andrés Oyaga also grounds the dissolution of this binary in the teachings of Illich, noting the importance of the interconnected and nature-based reflection that comes with breaking down uniformity. He writes, "Ivan Illich reflects on the learning environments of the past, reminding us they were places where 'language and architecture and work and religion and family were consistent with one another, mutually explanatory and reinforcing,' where 'to grow into one implied a growth into the others.' Illich doesn't emphasize uniformity, but an ability to learn by learning with/for/of the other individual, honoring and respecting their entirety without a goal to manipulate it. The other human and nonhuman become essential teachers" (Oyaga, 2021).

Breaking down this binary is one of the first steps in revitalizing and revisioning the process of education, and it allows us to move away from inadvertently commodifying students and their role in the classroom.

Rational/Traditional

Perenniality also comes into contact with rationality and traditionality in complex and interwoven ways. Traditions often have connotations rooted in the past, such as those within families and spiritual traditions. As we move towards a world that prioritizes technological advances and modernity, "rationality" has become a powerful opposing force.

The prevalence of technology as an insular method of solving specific problems that are usually caused by earlier technological solutions, rather than as a tool to use in tandem with others, allows it to be designated as a "one-size-fits-all solution." The technocratic geoengineering solutions that are being given the most visibility as viable climate-change solutions, for example, often minimize Indigenous knowledge and ignore questions of justice and morality. Perennial learning would work to insure that "no singular knowledge system should be afforded primacy over all others like modern science has, as it gives proponents of that system a disproportionately large role in determining truth. To combat this,

a PLC would need to include traditional knowledge in the curriculum without discrediting parts that are not backed up by modern science" (Cornish, 2020).

Wes Jackson refers to technological fundamentalism as the most dangerous kind of fundamentalism, emphasizing how technology's power extends the data capabilities of humans and elevates technology's power closer to a greater-than-human power, on par with many religions traditions, albeit a secular one. He notes, "There's a kind of technological fundamentalism at work in the world: too much dependency on technological shortcuts that are supposed to make us healthy, wealthy, and wise."[11] At the same time, both traditional values and rational values can become problematic. Some traditions are rooted in oppression, whereas some rational ways of being erase the potential for multiple ways of knowing and being.

"Over the course of the past three months in this class, we have learned how these binaries— such as that between 'tradition' and 'rationality'—have caused a great dying of spirituality in the human imagination, and a subsequent killing of awareness that other living beings are sentient. It has limited our knowledge to only a few senses, and the consequences have been vast and painful" (Nair, 2021).

Shivapriya Sudhakaran Nair points us towards the danger of creating new secular and scientific traditions in a world where we are becoming increasingly removed from nature. These traditions have modernity on their side, but they further intensify capitalistic and colonial exploitation and pain (Nair, 2021). In the same vein, if we move beyond this binary, can creating new traditions rooted in perennial thinking allow us the agency to innovate and transform traditions, rather than having only options informed and constrained by modernity to work with?

If we are establishing new traditions in the wake of rational thinking, it is essential that their creation is intentional. Kamryn You Mak writes, "Just because something is consistent doesn't mean it's thriving or healthy. Change and stagnation aren't so separate. There's beauty and meaning in ritual and also spontaneity and difference is hugely important" (You Mak, 2021). Nature itself can be spontaneous, as in the creation of symbiotic relationships.

Nair writes, "We have the ability to grow and change on the outside and to evolve our knowledge and roots without throwing away our innate awareness and sense that other beings that we share this earth with deserve respect, attention and love … It is encouraging to learn that we can attempt to enact change, to fight inequity, and to explore new ways of living in symbiosis with each other in small communities. These tiny fractals feed each other and create a plethora of diverse and resourceful communities that try to nourish one another mentally, emotionally, and physically" (Nair, 2021).

11. Jensen, Robert (2022). *Take Nobody's Word for It: A Conversation with Wes Jackson*. Los Angeles Review of Books.

Rationality points us towards finding one "right" answer, but we as a community can redefine knowledge-building on a scale where we are simultaneously right and wrong through constant learning, unlearning, and relearning (Nair, 2021). Exploration is not linear, and unlearning this epistemological assumption works to blur and merge rationality and tradition in ways that may promote perennial ideology and justice.

Learning/Unlearning

"Learnings" and "unlearnings" have been important words at the core of the development of a PLC. The 2020 final papers focused on identifying these learnings and unlearnings, so these phrases were among the most common in the essays from that year. Within these uses, there was a resounding agreement that the separation of learning and unlearning into a binary is extremely detrimental to the creation of a PLC that functions to mirror the natural systems of perennial agriculture.

While the intent of education has become convoluted and messy—meaning different things to different educators, students, and to the overarching system— the point of education has always been centered around the idea of learning. Learning symbolizes the acquisition of knowledge, which can become as colonized and siloed as land and resources, depending on who has access to quality education and what the standards for setting quality education are.

One of the most prominent ways to minimize this polarity between learning and unlearning is by understanding that both can exist simultaneously in time.

This idea has been extremely popular across explorations of perenniality and PLCs:

"I want the word 'relearning' to symbolize a dynamic process that encompasses both learning and unlearning as one (like yin-yang, both living in balance, inextricably tied in a harmonious dance)" (Kornaker, 2020).

"It will be necessary to embark in three simultaneous unlearning and learning processes: first, the unlearning of rigid educational experiences centered around inert ideas. Secondly, the learning of place-based experimental education, and thirdly, the learning of inclusive community-centered educational relationships" (Serna, 2020).

"I believe fiercely that these dual necessities (of deconstructing and synthesizing, of unlearning and learning) are so intimately connected as to be inseparable" (Wertz, 2020).

Furthermore, treating learnings and unlearnings as both simultaneous and inseparable is a tangible way to move out of practice from naturally separating them in people's minds. One way to visualize this is to encapsulate the interdependence of the two terms as nested within each other (Behm, 2020). Because there is no "correct answer" in perennial thinking, it is especially important to view these learnings and unlearnings as a system that repeats and changes, rather than as

one with a distinct start and end. This perspective emphasizes the importance of process rather than promoting an immediate and tangible solution.

"Education is not the acquisition of knowledge, but the fostering of growth and exploration that leads to perpetual learning, which is the foundation of perenniality. As soon as we stop learning, we become entrenched in the dominant ontology" (Lutz, 2021).

Change is foundational to learning and unlearning, and creating a PLC is all about cultivating the conditions for change, and breaking the rigid and linear binaries we have created as means to name and categorize the ways in which we are affected by ineffective or oppressive systems. "Learning" is the second word of "PLC" and the heart of education itself. We must lean into these changes if we seek to reimagine the way our communities grow together.

Root In Place

Guiding Questions
- How can we connect with a physical place/space, regardless of its form?
- Why is this important in education?

Glossary Terms

adrienne maree brown: adrienne maree brown (stylized as amb) is a writer and activist known for her revolutionary books, including *Emergent Strategy*, which has informed several of the key arguments students in the Perennial Turn have made in their papers.

Fractals: One of amb's most popular concepts in *Emergent Strategy*, fractals put emphasis on small-scale change in communities, and how that pattern repeats and expands, eventually moving from small scale to systemic. It is a more manageable way of conceptualizing change by beginning with small, community-based activism that repeats and forms larger movements.

Homebody: "Where is our first home? A body. Our mother's body, to be exact. All bodies come from a body. Only bodies can create new bodies. The body is our home. Home is in the body. Body. Home. Home-Body. This is an unassailable truth for all of us" (Kornaker, 2020).

Intrinsic: Of value that cannot be named or commodified.

Place-based learning: Learning that is with, through, and in the land in which it is occurring.

Roots: Roots "include both the physical structures that stabilize and nourish plants as well as the metaphorical connections between all life forms, our personal histories, and our societal origins. Perennial roots—deeper, stronger, more sustainable—are an excellent metaphor for imaging and creating different futures" (Blachly, 2019).[12]

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12. www.newperennials.org/classroom

Rootedness: The act of being rooted in a community, place, or experience.

We Are the Classroom

The phrase "place-based learning" has been increasingly used in environmental circles with respect to education and changing the way in which humans engage with the nonhuman world around them. It provides context into the landscapes that have shaped both the human and other-than-human inhabitants, and it helps shape our understanding of how human histories of the land—including recognizing colonialism, slavery, and other historical atrocities—are distinctly linked to the use of a place. One way in which place-based learning can actively promote equality in education is by fostering a sense of this mutual respect between the species that we share our space with (Serna, 2020). Serna notes, "In this regard, place-based experiential learning will also facilitate the process of decolonizing education in a PLC because it invites students to care for the forgotten histories and get to know the ignored presents of both the human and nonhuman in the places they call home" (Serna, 2020). Serna calls for the need for "inward thinking" that would identify and foster this deep engagement with place and locality (Serna, 2020).

This "inward thinking" model creates both specificity and relevancy to the knowledge acquired in a PLC, but it also addresses the deep way in which experience with place affects how learners are able to absorb information. A learner from an area struggling with drought might have more knowledge on water conservation tactics in the community and the local water-use laws than a learner who lives under different climate conditions. A learner living next to a river might know about the recreational use of water from that river, and the effects of fertilizer runoff from local farms on algal blooms in the water. It's important that people combine these lived experiences on the land with the histories of it, so that learning feels both relevant and in right-relationship (an ethical interaction with the natural world) with the local landscapes and the beings inhabiting it.

Additionally, it is absolutely essential that place-based learning includes participants who are both human and other-than-human. This further contextualizes the place but also emphasizes that it is not always humans who have felt the oppressive histories of the land, but also the nonhuman inhabitants who have experienced habitat disruption or even extinction. Fostering a human attitude of reciprocity for the other-than-human is a way to both respect and celebrate the importance of our interspecies relationships and lessons (Roelofs, 2020).

One way to seek this reciprocity is through seeing and experiencing the commodification of the other-than-human.

"In order to create the necessary shift to living symbiotically, we must first acknowledge the intrinsic value of the nonhuman world and unify ourselves with it. Although we likely cannot entirely change our language, the Indigenous place-based worldview shows us the benefits of developing a stronger sense of place and the nonhuman beings around us in order to reconnect with nature. By becoming more aware of where we live, we can see the direct effects we have on our surroundings" (Roelofs, 2020).

Promoting the intrinsic value of nature also affords us an opportunity to disengage with the exploitative ways we are conditioned to view nature, hence the above usage of the phrase "Indigenous place-based worldview." It helps move beyond the binary that separates humans and nature.[13]

Place-based learning also introduces an opportunity to engage with expanding what we designate as "appropriate forms of education." It extends to the outdoors to facilitate other-than-human interactions, which allows for creativity, participation, and connection (Peachin, 2020). These three characteristics should be sought and expected through a place-based education model because of the lessons of complexity and difference that allow multiple ways of exploration in nature.

Connectivity can also be facilitated in a PLC by the co-creation of the space by and for the community. Even if this "space" is a practice or represents a physical space, its design for the immediate community connects it to the needs of those in the place at the time (Johnson, 2020). Accessibility of the space, both mentally and physically, is paramount, and if there are changes in the community that this center is not equipped for, it must be ready and willing to adapt.

Rootedness in Space and Time

The 2018 and 2019 Perennial Turn classes created a list of glossary terms.[14] One term that is deeply connected to place is the term "Roots." This definition, created by 2019 Perennial Turn student Adam Blachly, states that roots "includes both the physical structures that stabilize and nourish plants as well as the metaphorical connections between all life forms, our personal histories, and our societal origins. Perennial roots—deeper, stronger, more sustainable—are an excellent metaphor for imagining and creating different futures" (Blachly, 2019). Roots are systems of connectivity that extend both laterally and vertically into the ground. This depth and connectivity is relevant to both human and natural experiences.

13. While it is essential that we promote seeing the intrinsic value of nature through a return to the land, this acknowledgment must be made in an appropriate way from those who are not Indigenous. This includes recognizing the harm that has been done to Indigenous populations that has historically stripped them of power and shifting how that power is structured by giving Indigenous populations a seat at the table in policymaking, having Indigenous leadership, and so much more. This does not include appropriation of Indigenous culture or false allyship.

14. www.newperennials.org/student-work

This definition introduces the question: What does it mean to be rooted and to experience rootedness? Rooted beings, with their roots in place, experience that place and the community and life it has to offer. Place-based education models yield the way for rootedness, and it can be developed and strengthened through practice.

"Rootedness makes the relationships, soft skills, and even mistakes experienced in education relevant to a student and teacher's learning. There is a willingness to go through these less than straightforward learnings because they will make for a more resilient and improved community" (Ramirez-Richer, 2020).

Rootedness prioritizes the quality of connections rather than the number of connections, and the commitment to one place rather than rushing to root in several places less deeply. Furthermore, rootedness can be changed, taught, and developed to avoid stagnation and rigidity.

Ramirez-Richer continues: "Everyone can (and should) become rooted to the land whether they are Indigenous or not. Even if one is not native to a place, they can learn to be. Kimmerer gives a very clear picture of what this looks like: 'Being naturalized to a place means to live as if this is the land that feeds you, as if these are the streams from which you drink, that build your body and fill your spirit... To become naturalized is to live as if your children's future matters, to take care of the land as if our lives and the lives of all our relatives depend on it. Because they do' (Kimmerer 214-215)" (Ramirez-Richer, 2020).

Rootedness also introduces an element of the present—where we are rooted here and now. This is important for living into experiences as they happen, rather than reflecting on them afterwards, or entering into them with a pre-determined expectation of what should happen (Ramirez-Richer, 2020). Learners become active participants in their education and experience ideas and concepts that are relevant specifically to them.

How do we achieve rootedness in our home places? Sometimes it can be achieved by limiting access to things that might prevent roots from growing. One can travel by foot, grow your own food, and do the things that cars and planes might not allow for (Devoto, 2020). Devoto notes, "The goal of this learning is to build people who think and internalize everything that modern society tries to hide from them, whether it be privilege, environmental footprint, or resources" (Devoto, 2020). Admittedly, this is easier said than done if we have adopted a way of life reliant on goods from other places. If we start to localize our own practices, over time roots will form. If we do not root ourselves, the connection between humans and extending to other-than-humans weakens and fades (Roelofs, 2020).

"Perenniality recognizes the roots of the society we have created, and works both in and out of accepted constraints to shift the foundation of the roots deeper into the ground. It does not aim to entirely destroy the roots we have planted. That is neither ecological nor efficient" (Wicherle, 2021).

Roots grow, even if they're not visible from the surface. As we work to change and adapt, we aren't advocating uprooting and rerooting, but rather cultivating the roots we already have and giving them the conditions to flourish and continue to strengthen in communities.

Fractal Change

Fractals, if you recall, exemplify small changes that occur at the community level that also repeat on broader systemic levels. Fractals in social systems are an imitation of a natural phenomenon. One idea that emerged from adrienne maree brown's *Emergent Strategy* is one of fractals and the important implications the development of fractals has on perennial thought and within communities. One inspirational aspect of fractals is that they already exist everywhere in small pockets (Lutz, 2021). For example, the Champlain Valley is a hub of perenniality, as is The Land Institute. As we meet community partners who align with the ideas of perenniality, the work is growing fractally. It still operates at a small scale in particular places (Kansas and Vermont), but it has the potential to spread and grow, and be utilized at larger scales. However, although fractals are a useful metaphor, they do not always have to expand to a larger scale. There are times when large-scale systems force cooperation at smaller scales. Thus, fractals are pertinent, but there are certain situations where they become more tangible and others where their use remains metaphoric.

As these small-scale connections increase, the relationships and connections also increase between human and nonhuman participants, allowing for the aforementioned sentiments of rootedness and community through shared experiences in place (Galloway, 2020). While perennial fractal patterns at community and regional scales are an indispensable part of the solution, they can also help to name and characterize the problems: "It has been difficult to begin having conversations about some of these issues because social media, and the socioeconomic divide that exists, has separated groups in echo chambers in which neither side of the political spectrum is able to effectively communicate with the other. In many ways this is a fractal, up-close version of the entire system of human interaction. People who want to help fix the climate issues caused by humans are faced with bridging the divide between those who deny the existence of any issue" (Smith, 2020).

To address this divide, what if we imagined a PLC as a fractal pattern that builds trust in communities? Trust develops as change occurs and people respond to the ways in which their communities adapt to climate change, for example. This trust fractal could start on a smaller scale and move to a larger scale (Ameer, 2020). It won't be easy, but the discovery of fractal patterns throughout the natural world suggests that small actions can influence larger outcomes: "Enacting emergent strategy requires our whole being, in the way we

act, think, and even exist, to shape our dream of a healthy planet through every little action, reaction, and interaction" (Landau, 2020).

Alana Kornaker's idea of becoming a home-body, referenced in the glossary at the beginning of this section, is a nice example of a fractal pattern radiating outward. She writes, "Where is our first home? A body. Our mother's body, to be exact. All bodies come from a body. Only bodies can create new bodies. The body is our home. Home is in the body. Body. Home. Home-Body" (Kornaker, 2020).

The universe is made from a myriad of atoms, molecules, gasses, minerals, organs, organisms, and ecosystems. Because our bodies are our home and our first homes, we are always at home in the universe (Kornaker, 2020). Thus, the term homebody seeks to situate humans in their unique spatial and temporal role in their own bodies. A home is a place of comfort and a place of dwelling that can be explored. Seeking home-body ideology connects all beings across the planet as well as roots them in the place where they come from. It seeks to cure from the feelings that separate the body from being able to comfortably exist in place.

Homebodies are a good way to imagine large-scale applications of fractals because they provide an opportunity to unite participants in the same way a smaller community fractal might extend out. Becoming a homebody might actually represent the highest degree of change, in which we are all able to see our universal presence and allow it to motivate us to reimagine ways of knowing and being that create more care for those around us.

"It is encouraging to learn that we can attempt to enact change, to fight inequity and to explore new ways of living in symbiosis with each other, in small communities. These tiny fractals feed each other and create a plethora of diverse and resourceful communities that try to nourish one another mentally, emotionally, and physically" (Nair, 2021).

Local and rooted fractal patterns can nourish many of the qualitative aspects of perenniality that are so crucial to the development of learners in a PLC. They also honor these embodied home places, both as markers for human milestones and for fostering relationships with the local human and nonhuman communities.

When exploring how place and space are used in a PLC, we must think about the things we use to define our stories. Did we share where we grew up? Went to school? Started a family? All of these places are significant to our lives, so education ought to be tied to those places that have provided positive experiences, regardless of what or where those spaces are.

CHAPTER 4
Multiply Ways of Knowing

Guiding Questions:
- What are the options when one educational experience does not work for everyone?
- How can the natural world inform these changes?
- How do we live, nurture, and treat each other as if we are creatures in a symbiotic ecosystem?

Glossary Terms:
Creaturely: Characteristic of a creature.

There Are Many Ways to Learn
The dominant educational model follows a strict regimen. Curriculum is established at the state and local levels; teachers are expected to implement it through oral lessons, presentations, and texts; and the students are then assessed on their ability to absorb that information. This method works for some learners, and many of those learners leverage their success within the system, which when combined with identity privileges, allows them to become students at elite private institutions such as Middlebury College. While this dominant model works for the few, it definitely does not work for every student who must navigate this system.

Diversity is a key component of perenniality, and we see it in healthy ecosystems. What if the dominant educational model took this into account both in the production and acquisition of knowledge. Circling back to the binaries we unpacked earlier, the first way to move beyond the paradigm that there is one "right" way to be educated is to understand that there are multiple ways of knowing, beginning with engaging with the natural not as an object to be understood, but as a subject to learn with.

"Learning from nature requires a different way of knowing and a willingness to change our relationship with nature. But, there is a lot to learn from the way natural ecosystems function that can be applied to human systems" (Roelofs, 2020).

Exploring multiple ways of knowing at its core requires us to be open to diverse and complex options for learning, much of which can be explored through the complexity and diversity of species interactions in nature (Roelofs, 2020). On a social scale, "Validating multiple ways of knowing would give space to intuitive, emotional, spiritual, and divine knowledge sources that are often mocked in contemporary society" (Sophie Johnson, 2021). Diversity promotes complex interactions and resiliency, and on a social scale that recognizes multiple ways of learning, it promotes diversity in thought, thus potentially increasing our capabilities to deal with large-scale problems, such as climate change.

When we are exploring multiple ways of knowing in a PLC, how do we decide what to prioritize? Do grades matter? Must every learner become competent in every subject? Should happiness be an important outcome of knowledge acquisition? If we are suggesting several solutions, in what ways should we focus our energy towards meaningful change and transformation?

"PLCs need a structure that allows students to flourish in the nodes of intelligence that best embody their spirit. In this way, they can make meaningful contributions to the systems they are in" (Annalise Johnson, 2021).

The spirit as the heart of education allows for individual goals and enthusiasms within a collective space. It simultaneously focuses on the health of the system and of the learner, rather than focusing on becoming the most "intelligent" (if intelligence is measured according to ability to succeed in the dominant system) and having the most A-worthy papers. Each student's spirit is diverse and pulls them in a new and exciting direction. Exploring multiple ways of knowing ought to validate that.

Assessing learning in this context would include more collaboration between students and teachers, and instantaneous and direct feedback, rather than reliance on assignments like papers and exams requiring lag time to grade and return. For example, grading could be centered on how well students worked together on a shared project (Galloway, 2020). If students do not succeed, failure can be de-emphasized as a negative consequence, but rather as a natural part of life. Galloway calls this "learning in context," which can remove the need to assess a theory and instead center on testing a practice (Galloway, 2020).

Grading allows for hierarchy, separation, and sorting according to who "wins" and "loses" an assignment. It reflects positions of power that privileged individuals can leverage to become "winners" (i.e., extra tutoring sessions after school), that not all students have access to. Assessment, however, is more feedback-based and seeks to promote the individual's learning. Building relationships founded on trust can help individual learning and begin to grow the recognition that multiple truths can exist at the same time (Galloway, 2020). This is true when referring to the truths of knowledge systems and grading systems since both either limit or welcome more than one correct answer.

In the following section, we aim to break down some of the barriers that limit multiple ways of knowing and to offer a view of what those systems might look like through the lens of perennial learning.

Seeing without Conquering

"The false objectivity of science prevents us from exploring, and limits our curiosity. When we attach a scientific label to something, we stop exploring who it is, instead only focusing on what it is" (Landau, 2020).

Exploration-based learning takes on many forms, but at its core, exploration allows learners to engage with their innate curiosity about the things around them. Following what inspires the learner acts both as a motivating force to engage the learner with their own education and allows them to disengage from theory and to get their hands dirty discovering the truths and stories of the world and all there is to learn around them.

Anika Jessup writes, "A hands-on education can also help ground someone in their own beliefs, encouraging a philosophy of multiple ways of knowing. Hands-on education removes someone from a heady, theoretical space of much of academia and instead firmly places them in between the theory and their own personal beliefs, emotions, and experiences" (Jessup, 2020).

Exploration, while it might be a word about travel and discovering the unknown, is actually a grounding experience because it allows learners to put themselves into their education and to cater it to their desires and needs. Learners are able to find depth and breadth in what they want to learn for themselves without feeling constrained by siloing. Exploration at its core here should be driven by a curiosity but not one that co-opts or takes away from another human's or other-than-human's ability to explore and learn safely.

One tangible way to have students engage in exploration is through utilizing primary sources in the classroom. This allows students who are unable to have an outdoor and place-based experience to form their own opinion on documents relevant to history and other subjects, rather than learning about information from a textbook or a teacher's interpretation about what those affected were saying and believed. Primary sources also represent only one perspective on a historical event, so they encourage viewing history with increasing complexity and staying away from the assumption that there is one correct account of something that happened. This can exist in tandem with sense-based education that engages with learners who have access to this type of education both in formal and natural settings, and in their own independent practice (Peachin, 2020).

When examining the idea of how formal versus informal study can be integrated into an exploratory system, it is important that both types of education can be available when possible: "Within this model for the perennial learning center, there must be opportunities both for formal study (reading-

and discussion-based classrooms) and looser, more informal experiential exploration" (Cowper, 2020). Exploration looks different to each student, and engaging with multiple ways of learning should provide options for students to engage with materials in ways that are meaningful to them.

Relevance of education sits at the core of curriculum changes and piloted programs, and this relevance exists within the individual, as well as on a larger collective scale. While we shift from definitions of what formal and informal education mean and how exploration can explore at several levels, it's also critical to question who this education is serving and gearing towards: the unfinished and messy process of the individual, as well as their role in the collective of their class, team, group, etc.

Moving away from siloing and departing from engaging with inert ideas is important even if exploration is done formally by the student in a typical classroom setting, rather than through a mode of alternative learning.[15]

"How can institutions take responsibility for knowledge utilization, and avoid simply dishing out facts that will become inert? … In other words, the key to avoiding inert ideas and academic burnout is to eradicate disciplinary siloing. If institutions take on the responsibility of eradicating disciplinary siloing in their curricula and encourage their students to unlearn it in their own lives, knowledge will be more naturally incorporated into the 'stream,' lifting the burden of actively utilizing knowledge off of the student" (Cowper, 2020).

This emphasizes that a PLC can exist without recreating an entirely new educational system. As is true with each of these sections, perennial learning exists in flux and with opportunities to engage with as little or as much of it as desired. Formal educational systems have the power to touch many more student lives, so it's important that multiple ways of learning can exist within these spaces, as well as tangentially. One simple way to engage learners within the system is to prioritize an educational experience where transdisciplinary questions are encouraged and time is built in specifically for learners to pose questions to each other and the facilitator of the class, workshop, or other program (Cowper, 2020).

Even inside of the dominant educational system, a PLC approach can speak to and call for revolutionary change. Fosco notes, "When education begins to treat learning as a process of discovery, rather than a service that learners are meant to consume, it fosters a sustainable attitude. Moreover, an emphasis on meaningful learning would counter the current culture of overconsumption, competition, and endless capital growth" (Fosco, 2021). Rather than emphasizing a surplus

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15. Alfred North Whitehead coined the term "inert ideas" to mean "ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations." He continues: "Education with inert ideas is not only useless; it is, above all things, harmful." "The Aims of Education," in Whitehead, Alfred North, *The Aims of Education and other Essays* (New York: The Free Press, 1929): 1–2.

of memorization in the classroom, formal systems can be adapted to prioritize meaning rather than quantity of knowledge in classes, which can work to undo the dominant ontology that we need to exist in a society where overproduction and consumption comprise a central ingredient to human and other-than-human survival.

The physical space of schools themselves can be conducive to exploration, such as the Fuji Preschool in Tokyo, Japan. The intent was that the school is not a space that students hope to leave and escape at the end of the day, but one where exploration is paramount and built into design (Fosco, 2021).

Moving into the experimental side of exploration rather than the formal, experiential learning should involve the student rather than be something that happens to the student (Serna, 2020). This model follows a more typically unstructured experience, that gives students more agency to ask the questions that are relevant to them, rather than through a strict curriculum (Tamrat, 2021).

You're (Not) Running Late!

Deadlines. They are some of the scariest things in education and in work. We all have the all-nighter experience. For me, it was the ninth-grade field-journal experiments I struggled to engage in. On the morning that an entry was due and I felt that I had observed nothing meaningful despite hours of effort, I printed out a picture of myself looking sad and wrote "Homo sapiens wishes she did not procrastinate her field journal." For my humor I got brownie points, but what would it have looked like if we were able to turn in our journal each time we felt compelled to observe, rather than rush to do it at the end of each quarter? I imagine that while I may not have seen more deer and foxes, I would have gotten more out of my own ability to manage my time and engage with my field site.

Deadlines exemplify a very annual way of thinking. They signal that learning ceases on a certain topic at a certain point, and from there it is necessary to move onto the next thing. Deadlines exemplify the singularity of the dominant way of learning that could be expanded by shifting into perennial learning methods. Perenniality relies on the cycles, the returning every year of the plants that remained deeply rooted but maybe not quite visible all winter. By viewing time in an educational setting as a cycle, humans can think more like an ecosystem (Gutheil, 2020). This means moving away from learning that happens by the month or year, and linearly towards acing tests and then proceeding to the next grade level. It means, instead, engaging until meaning is made for each learner. Thinking about how plants adapt and shift and change by season, learners can follow the same regenerative cycle, rather than one of succession. Time is an ally for perennial plants and an adversary for annual plants that only get one season to complete their cycle. How can a PLC introduce a more ally-informed notion of time in order to facilitate learning?

"A cyclical timeline eases the fears that come from being in our position (on an ecological collision course towards mass destruction of life on Earth)" (Gutheil, 2020). As many people begin to grapple with climate destruction, lack of policy, looming tipping points, and so much more, emphasizing perennial time in education could exist as a powerful and perennial ideology to promote active hope, rather than a linear trajectory towards doom. What do we need to do to come up next spring? How will what we do change what our world looks like next year? It roots the learner in an uncertainty that can be shaped positively, rather than designating them to an experience filled with helplessness and doom (Gutheil, 2020).

This method does not ensure the perfection of the learner, but it allows humans to separate from the mainstream ideologies that teach us that we are superior to other beings and that prevents us from truly being creaturely in our pursuit of knowledge and interconnectedness (Gutheil, 2020).

Cowper instead describes a relational trust-based model: "In an educational setting, moving at the speed of trust means that learners have time to gather information, question it, investigate it, confirm or deny its reliability, and intentionally choose to accept or reject it as part of their worldview. Free from the pressure of deadlines, learners have the time to draw their own conclusions and integrate them into their lives. This extra time spent meditating upon information also allows for the opportunity to make critical interdisciplinary connections" (Cowper, 2020).

Trust allows learners to move in relation to different fields of study and is often coupled with experience, whether it's a learning that occurs between a learner trusting their own process, the guidance of a facilitator, or relationally to other learners. It separates the idea of progression from an individual process to one that is deeply ingrained in working and collaboration.

Moving at the speed of trust could mean that we never achieve answers and potentially never finish engaging in a process: "Even the synthesis of feelings is tied into a societal tendency of annualism rather than perenniality. As a population, we have cultivated a need to try to understand everything, and that includes feelings. We want answers, which is why we put names to emotions and tell people in words how we feel. Sometimes we need to just live in the pause, and sit with our emotions rather than try to analyze them, reason with them, and argue against them" (Ameer, 2020).

And we have to learn to be okay with this. Learning at the speed of trust means deep listening and reflection, and this emphasizes an unlearning of a finished thought, idea, or solution coming out of education. This is challenging to do when so many of the world's challenges seem to require immediate action and solutions. Perennial learning offers a different path that welcomes the unfinished within an expansive timeline and a diversity of knowledge that keeps us rooted and resilient, even as we worry about the future.

Arielle Landau, Perennial Turn '20. Her painting was inspired by these two questions: What does the perennial turn mean for the more-than-human community? What would the perennial turn mean for the chickadee, for the oak trees, elaeagnus bushes, and hydrangeas they call home?
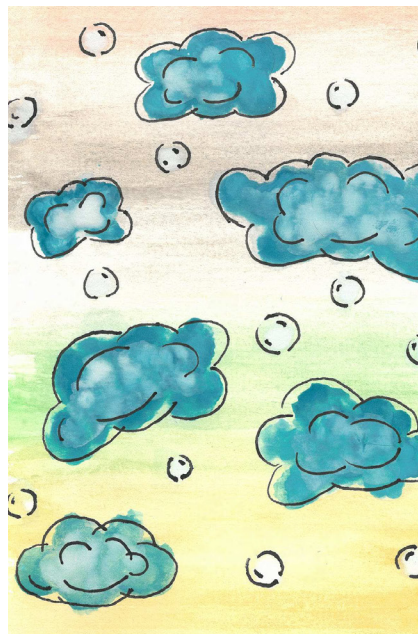
Katie Kosior, Perennial Turn '21. These images reflect some of the weekly themes at the start of the semester. The pieces move from sight to touch, sound, body, movement, and finally, to smell.

風神と
背中合はせの
涼しさよ

TRANSLATION
The coldness
/
pressed against the back of
/
the wind god

Mia Fosco, Perennial Turn '21. Artwork inspired by a haiku written by Katsumi Namekata.

Excerpts from Nora Peachin's interlearning journal, Perennial Turn '20.

Sophie Johnson, Perennial Turn '21. The experience of this piece, about Sophie's interlearning with the Sky, is to be accompanied by "Faith's Hymn" by Beautiful Chorus, which can be found on Spotify, Youtube, Apple music, or Pandora.

Sophie Johnson, Perennial Turn '21. Artwork is based on the differing weekly themes for the first half of the semester.

CHAPTER 5
Foster Wholes

Guiding Questions:
- What does engaging with others look like in perennial learning?
- Where can you apply the ideas of this book outside of this experience reading?

Congratulations! You have made it to our fifth theme. I would like to take a brief moment to thank you for your attention and your open-mindedness. Now is also a great moment for a snack or an opportunity to disengage if you are reading this in one sitting. We welcome your attention no matter the time of day or the number of sittings.

Glossary Terms:

Friend Soup: A metaphorical soup made for and with friends with whatever you can find in your pantry. Bring all that you can in the present, and give love in abundance (Mahler, 2021).

Resilience: Strength and ability to recover and survive in the face of adversity.

Reciprocity: Mutual benefit can occur through a conversation, partnership, or other relationship. Reciprocity should not be viewed as a commodity that is owed, but rather willingness to help and be helped through mutual respect for those who play a role in your life.

Wholeness: The feeling of being whole, completed.

How do you feel whole? This is a big question at the center of perenniality. What does it mean to be full of friend soup? As we begin our final few explorations, we aim to tap into our emotions and explore how they are central to the development of perenniality.

A Recipe for Success!
To start with, have fun! It's easy, right? Well, not quite. As adults, learning how

to have fun might be one of the hardest subjects in our perennial curriculum (Laga Abram, 2020). One way to ground our disconnection is by recognizing the inspiration we get from the world around us.

"We have placed ourselves so 'above' the other creatures of this earth that playing outside is only a thing kids (and particularly privileged and well-resourced adults) do. The disconnect is so built into our culture that it seems nearly impossible to get away from. But the earth we inhabit is also quite impossible to get away from—in that we breathe, eat, drink, dream, walk" (Laga Abram, 2020).

This is an idea echoed frequently by Perennial Turn students, as Mahler concurs: "We've let go of the childish bliss of dreaming" (Mahler, 2021). How do we bring this playful reconnection into our PLC regardless of our age? Ideals?

"For many of us, unlearning this separation requires a practice of stillness in the out of doors that is long and lingering. In the context of the learning center, I imagine this unlearning being present, if not foundational, in nearly every aspect of the curriculum. It is by tapping into our bodies, into the material and sensorial experience of living and feeling that we can begin to notice how obviously we have no way of knowing what other bodies experience, but how clearly they are also experiencing something" (Laga Abram, 2020).

Relearning our ability to connect, and thus, to have fun is rooted in sensory engagement of ourselves and our bodies, but it exists at its core in relation to others. Celebrating the sensations of our collective consciousness unites us under a common body—our home body and allows us to learn, grow, and feel together. "Without collective vision, we are left floundering without direction or motivation" (Mahler, 2021). So, we wonder: How can this be achieved? How do we, in the context of a PLC, check in and listen, and vision, together, so that all who participate feel comfortable, included, and engaged? We think love has something to do with it.

"If we fall into love and oneness with the world, new, previously unimagined doorways can open. This brings us to the space of envisioning. In order to connect with our food, to live more perennially, we must rediscover our ability to vision" (Meadows, 1994). "Imagine the collective wisdom of people, brought together in a perennial learning center, as they envision a path towards a greater connection to our food systems, a greater food sovereignty, and a greater collective resiliency" (Johnson, 2020).

"The collective wisdom of people" is a community whose resilience is directly related to its depth and range of reciprocity; where the emphasis is on cultivating relationships with the people and land, rather than relying on the goods or services they offer. Resilience can also be developed through professional work and sustainable resource management.

"What does this type of resilience look like? One example would be strengthening local resources so that if distant travel becomes impossible, a

community is still able to function. For example, if a diverse, local-agricultural economy is present, food shortages are less likely to destroy a community. Therefore effective education centers might include gardens, food pantries, and other ways of helping the community weather a famine" (Galloway, 2020).

Adelaide Mahler emphasizes that a PLC need not be a physical space but can exist anywhere where conversations and community contribution is prioritized, such as in magazines, discussion forums, and in-person spaces. These spaces can be characterized by intention—taking responsibility, decision-making, and deep listening—to ensure the accessibility of the conversation and the true "hearing" of all its members (Mahler, 2021).

As we think about how to foster wholes in a PLC, we must emphasize the importance of defining a collective space that uplifts and includes diverse identities, rather than continuing to let those with power speak while tokenizing the contributions of those who have been traditionally marginalized.

"We would gain a lot—as so many voices throughout our class have emphasized—from deconstructing the artificial barriers between the sciences, language, history, culture, etc. Studying parts of a whole without the larger context is not perennial thinking" (Gutheil, 2020).

How do we reshape our understanding of these qualities? Kornaker shares, "To me, relearning passionate compassion is a lesson in relearning the beauty in respecting diversity. Relearning intimacy is a lesson in appreciating the subjectivity of all subject matter. Relearning looooove is a lesson in interconnected wholeness" (Kornaker, 2020). What can we do to be more interconnected? How do we move beyond saying one thing about community and wholeness and doing another?

Galloway suggests embodied wisdom as a way to visualize the concepts and beliefs that are so ingrained in us that we do not have to think about them, (Galloway, 2020). Practices that use embodied wisdom can allow us to share our rituals with our communities and share ways in which we find joy and wonder. When every member of a community participates in an open and reciprocal way, conversations can begin to name discomfort, uncertainty, and identify places of agreement and disagreement. Wholes are made up of parts, similar and disparate. So as we share and experience our embodied wisdom with others, and they with us, we all have to be prepared to question and listen to opposing views.

Two other aspects of wholeness are adaptability and healthful learning. We adapt intentionally only after we have been able to form deep trust with one another (Ameer, 2020). Ameer notes, "We must learn that freeing the mind to the practice of adaptability is the key to imagining and creating a perennial future" (Ameer, 2020).

"A learning I wish to place in the space made by these unlearnings is precisely this, that wonder, joy, and beauty are valuable, revolutionary, and central to healthful learning" (Laga Abram, 2020).

Healthful learning also does not necessarily imply happy learning, and grieving and conflict engagement are important processes in communities, especially during times when harm has been done, when the system has failed people and community organizing didn't change the outcome, and generally, as climate destruction looms. Healthful learning—like the word "health" itself—implies a learning that is whole and complete. The future has always been uncertain, and grief is an active and emotional process that will be central to our ability to be open to climate adaptation and resilience. Grief is a process and makes us resilient, and when grieving is done collectively, we can seek a more unified whole.

To conclude our musings on reciprocity, resilience, adaptation, feeling, and wonder, there is a simple and lovely way to give and love in communities: make and share soup. Friend soup can be made from whatever is in the fridge and cooked with care. Friend soup produces dreams of nourishment and well-being. If we bring friend soup to our classrooms and meetings, and if we can be happily surprised when others do as well, we might, together, imagine an abundant community of the near future that we see in our mind's eye and just around the bend. Its name is Benevolence and Love (Mahler, 2021).

I-CARE Coupons
When I was in the first and second grades, there were slips of paper that students would receive for being well-behaved, contributing members of the classroom. They were called I-CARE coupons, and each letter represented a different adjective, which I regrettably do not remember. Each week, one name would be pulled from those who had received coupons all week long, and that student would get a prize. Reflecting on this educational experience, the nourishing intent was there, but so was competition. Although the winner was randomly chosen, my friends and I would often engage in positive behavior with the anticipation of receiving a reward. Our relationships were being built through the anticipation of gratification, though we could opt to continue being positive community members or not once we left the classroom.

Based upon what we've explored throughout this chapter, I'd like to think about how my teachers long ago might have reimagined our I-CARE coupons. What if the reward for our relationship building was a strong network of friends, colleagues, fellow students, and partners that had been built with care, much like Adelaide Mahler's friend soup? Other students have described this idea as well: "Humans are meant and created as social beings. Why not implement this strength in both everyday activities, interactions with family and friends, and in our workplaces? When we share stories and unveil our once-trapped feelings with each other, there will always be someplace in our hearts that have the sympathy and capability to relate to these stories. It's innate" (Lee, 2021).

And: "When asked the question why it matters that we are interconnected, that everything is alive, the answer—that it is beautiful and feels good—should be more than good enough. Let us learn how to be true tenders of our joy, and through this learn how to sit with grief and linger in the ache of life without demonizing the pain, instead allowing its dark chocolate bittersweetness to make life ever more rich" (Laga Abram, 2020).

And: "The concept of deep listening is key to making education more perennial: listening to the body, fellow students, and the natural world are all important aspects of a more cohesive learning environment" (Smith, 2020).

Other examples of actionable ways to develop an I-CARE PLC include "spending significant energy on developing individual and group mindfulness and awareness and addressing community needs that are both community-generative (e.g., childcare, community meals) and rooted in transformational fixes (e.g., trauma-healing, addiction recovery, counseling). Transformative or r estorative justice practices are also excellent practices that approach remediation in a manner that centers the wronged instead of the transgressor, focusing on healing, and the community, which focuses on transforming the conditions which created the wrongdoing" (Wertz, 2020).

If we are seeking I-CARE coupons, we have to engage in genuine care work in a way that values equality and the natural world: "Therefore, to build stronger relationships with each other, we must all learn to care for one another: we must make sure that everyone receives the care they need as well as uphold their responsibility to engage in the care work. In addition, if we can learn to care for fellow humans, we can also learn to care for the nonhuman world and practice, what Aubrey Streit Krug names, 'ecospheric care work'" (Roelofs, 2020).

Annalise Johnson finishes this thought on a lovely note: "If we can learn anything from the biological systems that we are a part of, it is that change needs to be incorporated into the curriculum. Seeds cannot just start learning how to adapt once they exit the first system and move onto the larger one. They need to learn how to find the most nutrient-fulfilling soil amidst all the rocks, roots, and life-forms. This is how they will adapt to the changing circumstances of the real world" (Annalise Johnson, 2021).

Making friends with other-than-human neighbors

Finally, through our exploration of perennial concepts in our readings and class discussions we have taken inspiration from the New Perennials project and its work to relate social systems to plant communities.[16] Sometimes social systems ignore that most living, breathing beings, socialize to some capacity, through symbiosis or even parasitic relationships.

Nature is something that is deserving of mutuality from humans (Tamrat, 2021). Core ideas include honoring and respecting nonhuman relationships, rather than through a hierarchical worldview (Robinson, 2021). Although this might seem like an obvious conclusion to be drawn after reading this book, it is harder to achieve than we might think. Anthropocentrism tells us that we are better than the natural world and thus pushes us into patterns of dominion and control, sometimes rooted in fear.

A PLC's physical space should not exist in separation for the "outdoors," and neither should the theoretical one. Siloing knowledge includes siloing what is human versus what is natural. Engaging with the aliveness of the world rather than one species over another helps us foster this nonhuman connection and build wholeness that relates to both the human experience and the human's perception of the natural experience.

Put simply: perenniality does not exist without the natural world. You can't be rooted without the knowledge of a root. Nature is our teacher, our friend, and often our more-than equal. We should, therefore, work together with it to build resilient social systems that are equipped to meet the changes to come.

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16. "We look to plants—Earth's oldest and most patient teachers—for insights about how to organize our lives" About New Perennials .

Conclusion

"The origin of life is not an event, but a process. It is all happening, all the time. It is amid coercive narratives of dominion and finality that I choose to embrace humility, presence, joy. Doing so will take lifetimes of practice. Abounding with constant emergence and new beginnings, it's a story that never ends" (Gokhale, 2021).

So here we are at the end of this book, and you might be left wondering: What now? Or put so eloquently by Adelaide Mahler, "What is at the core of a perennial learning center so that a seed may be planted anywhere and be able to form the necessary structure to encourage community development?" (Mahler, 2021).

What was at the core of your takeaways that you wish to bring to your community, your classroom, your job, your friendships, relationships, and experiences with other living organisms? How have the five themes my classmates and I considered in our semester-long Perennial Turn course been reflected in your experiences? I can speak personally about my own. Perenniality has helped me connect my college experience at an often regionally isolated institution of higher learning with the larger Vermont community. It has given me roots and the tools and desires to foster those roots in a place and has given me an opportunity to say more about my engagement with the place than "I went to college there." To me, that has helped my experience in Vermont feel especially meaningful and has made this place one that I hope to continuously engage with.

So, I'll now ask you to reflect for a moment. Was there anything you didn't understand? Agree with?

I'm assuming this little exercise will take a few minutes or occur to you on a walk or in the car or as part of a conversation with a family member, colleague, or a friend.

And because it's so easy to forget what we've just read—and this book is full of terms and ideas that may have been unfamiliar until now, here's a quick summary of them. (This usually occurs at the beginning of a book, but I've always found them more useful at the end of a book.)

- We started defining our place and time.

- We expressed ways to dream collectively and develop strategies to de-silo our knowledge through the integration of intergenerationality and diversity in learners' ages and identities.

- We discovered ways to break down the dominant ontology located within many of the binaries we frequently interact with.

- We aimed to reframe our views of teachers and students, rational and traditional thinking, and learning and unlearning concepts.

- We stressed the importance of place in shaping aliveness and the role of other-than-human communities in education.

- We discussed what it means to experience rootedness, specifically as it relates perennial roots to social systems.

- We explored fractals as an organizational metaphor for the potential of small-scale change to inform larger-systems change.

- We identified some of the qualitative sensations at the core of perennial learning.

- We explored what it means to be interrelated and how that care work can be genuinely incorporated into interactions.

- We also acknowledged the importance of other-than-human relationships, in tandem with human relationships.

That's a lot! But we hope, not too much. You can learn more at the New Perennials and Land Institute websites and in the bibliography below. We'd also love to hear from you. Feel free to send a note to newperennials@middlebury.edu.

And just to make this experience feel like school, I'll leave you with a bit of homework. Make some friend soup for those you care about today. When you have the space and time, give in abundance to a relationship in your life. Scrounge up ingredients and reach out to an old friend or show a new one—human or nonhuman—your love. It is together through love and care that we can nourish seeds of perenniality within ourselves and within the spaces we occupy and care about. And imagine if these practices were part and parcel of every classroom, every school and college, every center of learning, and at the center of our own ways of living.

Acknowledgments

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Arielle Landau (she/her)	Gabrielle Martin (she/they)
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Halsey Smith (she/her)	Johan Wichterle (he/him)
Connor Wertz (he/him)	Kamryn You Mak (she/her)

Resources

Kernza
New Perennials
New Perennials–YouTube
The Land Institute

Below is a list of materials we read, listened to, and watched as part of the course. Some books are listed in full that we only read selected chapters of, but this is designed to be a comprehensive jumping-off point.

Videos, podcasts, and links:

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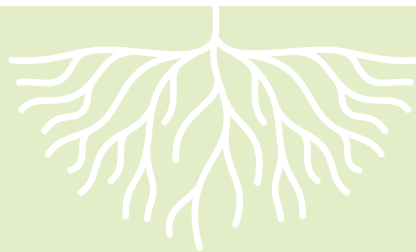
What is education for? What are the possibilities for healing and regeneration when we reconsider the aims and pedagogies of education in the face of ecological tipping points and injustice across the planet? Fortunately, students at Middlebury College have been considering these questions and exploring the possibilities. Towards Perennial Learning gathers the insights and wisdom of a new generation that educators—and learners—everywhere can benefit from.

—Emily Hoyer, educator and community-builder
  UVM Institute for Agroecology

VICTORIA ANDREWS '23, an environmental policy major at Middlebury College, is originally from Westford, Massachusetts. Andrews's academic pursuits led her to the Perennial Turn course, where she felt inspired by its engagement with the local community and found meaning in the place-based learning it inspired. Andrews hopes to bring the important lessons gleaned from the community into this work and any future endeavors.