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10.5193/JEE35.3.412 Journal of Experiential Education • 2012, Volume 35, No. 3

An Environmental Pedagogy of Care: Emotion, Relationships, and Experience in Higher Education Ethics Learning

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Field philosophy is interdisciplinory experiential environmental humanities learning. It grows from a community-focused conception of environmental ethics and place-based environmental education, and it aims to help students develop an awareness of the role of environmental ethics in environmental issues, as well as cultivate an empathetic environmental ethic that might enable them to participate in environmental problem solving. The emotional, cognitive, and physical relationships with people, place, and ideas at the core of field philosophy necessitate a pedagogy that attends to affective learning objectives and relationship building. A shared focus connects literature in experiential education, educational psychology research on emotional engagement, and the ethic of care. A synthesis of this literature grounds an environmental pedagogy of care with meaningful potential for field philosophy.

Keywords: Experiential Learning, Environmental Education. Place-Based, Environmental Ethics, Ethic of Care, Field Philosophy

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iterature in environmental and place-based education argues for direct experience with the natural world to develop relationships with nonhuman nature. Recent scholarship in enviroumental philosophy (Brady, Holland, & Rawles, 2004; Moore, 2004; Preston, 2003) emphasizes the importance of physical connections. to the ecological realities upon which theoretical ethics relies. To shape an empathetic and inclusive euvironmental ethic, students need opportunities to explore their relationship with the natural world experientially, so they can reevaluate it and their environmental values in contexts where they matter. A community-focused conception of environmental ethics (Leopold, 1949), in which relationships with the natural world ground our moral obligations to human and nonhuman communities, drives this notion of field philosophy, which contends that environmental ethical learning should cultivate both an appreciation for the role environmental ethics plays in euvironmental decision-making, as well as a sense of responsibility to address issues. For students to engage with this kind of curriculum, they need more than just abstract theory. Learning must be both an emotional and an iutellectual experience.

There are challenges to integrating field-based learning into environmental humanities curriculum. Often experiential environmental education manifests as embedded experiences in the natural world, where studeuts spend anywhere from several days to several months in the field. While this kind of learning is certainly valuable, these experiences do uot always blend with higher education teaching models. Additionally, humanities courses do not typically include a lab section. Thus, both institutional structure and disciplinary tradition present challenges to integrating experiential learning into the curriculum. But the benefits of experiential learning demand creative solutions to these challenges. These experiences ought to be guided by a thoughtful and cohesive pedagogy-one that grows from the teaching objectives, content themes, and goals of the curriculum. For field philosophy, this pedagogy ought to attend to affective learning variables by encouraging both the development and the interrogation of relationships, as well as emotional and intellectual responses to place and course content.

Experiential education's focus on relationships and emotional connections to content and learning community also permeates educational psychology research on student engagement (Furrer & Skinner, 2003; Skinner, Marchand, Furrer, & Kindermann, 2008; Wentzel, 1997). This same focus characterizes the ethic of care—a theoretical philosophical ethic de-

rived from feminist environmental ethics with direct application to classroom learning (Noddings, 1984, 1992, 2002, 2006; Plumwood, 1991; Warren, 1990). Although experiential education, emotional engagement, and the ethic of care are not often discussed simultaneously, their shared ideas and application unites them. By exploring the connections between this ethical, environmental, educational, and psychological scholarship, we demonstrate how a synthesis can inform a meaningful pedagogy for experiential environmental hnmanities learning, an environmental pedagogy of care, that is attentive to course and curriculum development, instruction, learning environment, and content and process objectives.

The Role of Emotion in Learning

To articulate the roles of emotion and relationship in experiential education, emotional engagement, and the ethic of care, it is necessary first to understand the function of emotion in learning more generally. Scholars argue that emotion impacts attention, focus, and memory. Recent scholarship demonstrates that emotional learning is not a separate or even a parallel process to cognitive learning; rather, affective and cognitive learning are enmeshed elements of a single learning process (O'Regan, 2003; Weiss, 2000; Zembylas, 2007). Neurologist Steven Peterson explains, "You can use emotion to direct attention, and that attention will lead to better learning" (as cited in D'Arcangelo, 2000, p. 70). Weiss (2000) further articulates: "Emotion impels what we attend to, and attention drives learning. So, one of the most important things we have to do is to ensure that learners become emotionally involved in whatever we're teaching them" (p. 47).

Sylwester (1994) connects emotional learning to the kind of whole student education promoted by Dewey (1938) and others when he advocates learning activities that utilize social interaction and full-body engagement. These provide emotional support by enabling students to interact with each other while they participate with the content. Adult educators argue for similar full-sensory learning experiences that stimulate emotional engagement because they foster meaning-making-the development of personal and intellectual meaning through reflection and group processing-and retention. Wolfe (2006) identifies two factors that influence how the brain remembers information: the meaningfulness of the information and its "emotional hook." For older students, researchers emphasize the importance of learning that responds to what students already know to start in a place of emotional comfort and then grow their knowledge through challenge. Sometimes students do not have past experience to contribute to the meaning-making. Iu this case, the emotional hook becomes especially important.

Wolfe (2006) argues that concrete experiences address this deficit of previous experience: "What the new research on learning and the brain



now reveals is that when learners are actively experiencing, new neural networks are created in the same way that networks of nenrons are created from birth as children begin to experience their world" (p. 38). Experience, he explains, sparks an emotional connection with learning material.

The relationship between emotion and learning is particularly important for ethics education. "The recent research indicates that the emotional activation of the brain due to a value conflict takes time to subside," write McCuen and Shah (2007). "Only as the emotional involvement wanes can actions be influenced by cognitive thinking" (p. 45). People experience emotional reactions to situations before they can engage events and ideas intellectually. This makes sense: we feel fear when we hear a noise in the dark before we can rationalize that fear away. If we focus only on cognitive development in ethical learning, students do not develop the skills to understand and address the preceding emotional response. Without proper skills, they may make rash decisions in response to ethical dilemmas. McCnen and Shah (2007) elaborate: "Iustruction to improve emotional maturity must be accompanied by teaching of cognitive subject matter if long-term learning is to occur. Emotions influence the solution of ethical problems as they affect the accuracy of the problem assessment and the accuracy, intensity, and duration of an emotive response" (p. 44). This kiud of emotional learning is likely a process, rather than a measurable outcome. But integrating sensory activities and experiences as an integral element of the curriculum to develop emotional maturity can address this challenge (Johnson & Frederickson, 2000; Proudman, 1992). Empirical studies on the brain support this theoretical evidence (Greene, 2009; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Maddock, 1999).

But including an emotional component in ethics learning runs contrary to most traditional academic approaches to philosophical education; coursework in ethics is often theoretical and not applied. Developing a theoretical understanding of environmental problems is an important goal, but deepening students' involvement with the ideas by adding an affective, as well as this cognitive, emphasis is also important to empower students to apply their euvironmental ethics knowledge. Experiential learning, with its embrace of emotion as an integral piece of the learning process, can help develop the emotional maturity necessary for ethical decision-making in context (Johnson & Frederickson, 2000). Experience can help students—especially students of ethics who will simultaneously develop the language of values and right action—understand the relationship between intellect and emotion. This distinction is important for a theory of environmental ethical learning that aims not just to provide knowledge about ethics and the environment, but also to cultivate both an understanding of environmental ethics' role in problem-solving

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and a personal and collective motivation to participate in the address of environmental issues. Experiential learning can help students develop this awareness.

Affective Learning and Experiential Education

Experiential learning in higher education often manifests as fieldwork for science students, internships or service-learning for business education and the social sciences, and embedded wilderness or studyabroad programs for cultural, group-building, environmental, or skillsdevelopment experiences. Educators cite numerous reasons for employing experiential techniques, many of which echo Johnson and Frederickson (2000): "The primary goal of the experiential component is to deepen the students' understanding of the main ideas of the course by enlisting *experience and emotion as allies in the process of understanding*... that extends to the students' lives and actions" (p. 45, emphasis added).

Additionally, scholars argue that experiential learning can develop a sense of community (Jacobs & Archie, 2008), practical (DiConti, 2004) and problem-solving skills (Itin, 1999), empathy (Jakubowski, 2003), and personal growth (Lindsay & Ewert, 1999). Although all of these are important learning outcomes, it is often the affective component, as suggested in the language of emotion and in the focus on relationships, that differentiates experiential theory from other pedagogical approaches (Proudman, 1992).

As Burnard (1988) suggests, the experiential domain of kuowledge occurs when learners encounter a subject, person, place, or thing personally and directly. There are kinesthetic, cognitive, and emotional connections we make when learning becomes personally experienced with multiple senses. Something emergent happens, scholars suggest, when students learn about a subject while participating in and with that subject (Algona & Simon, 2010). For example, learning about a wolf's habitat, feeling excited about stepping over a wolf print on the trail, and discussing how we honor our obligations to individual animals and species in a single learning experience can help students develop powerful awarenesses about place, responsibility, environmental management, and environmental action that differ from engaging biology, emotional and physical responses to wild animals, and environmental thics discretely.

This is not to suggest that emotional counections are not possible in the classroom. Certainly students can connect to each other and theoretical content within the university walls. But for many students, the impact of school learning is limited. *How does this apply to my life?* they wonder. *Why should I care?* Fear, embarrassment, or ambition can be effective motivators, but external motives do not encourage students to value knowledge for any other sake than to avoid punishment or to get a good



grade. As educators we ought to instead strive for deep, lasting learning (Barr & Tagg, 1995) by helping them develop internal motivations to care about content and the learning process (Dewey, 1938). The emotional eugagement stimulated by experiential learning cau help students develop this curiosity and investment in the learning process.

Emotional Engagement as Learning Goal

Dewey (1938) and others argue that schools ought to create an engaged citizenry, not just educate students with content knowledge. This goal aligns with the action competence goals of environmeutal education (Huugerford &Volk, 1989) and the participatory awareness and motivation at the heart of field philosophy. In this vein, to better propare students for the future, Orr (1991) suggests a shift from subject mastery to personal development, an emphasis on knowledge application and system awareness, and attention to the process and context of learning. The focus, Orr argues, should he ou the role of each individual in a larger social and ecological system and on both personal aud institutional responsibility. These are affective as much as conteut goals.

If we intend for the learning environment to be both preparation for and modeled after meaningful community building, and if we want to develop engaged citizens, we need (at a minimum) to craft curriculum that makes learning personal and purposeful for students. Finding motivation to care, nnderstanding the role of self-reflection in learning, and developing the skills to form relationships with people, places, and content are relevant experiential outcomes (Fien, 1997; Mortari, 2004; Proudman, 1992). Experiential educators can help students recognize the interrelatedness between content learning (whether abstract theory or application) and their life outside of school. This awareness can lead to emotional and personal eugagement with their learning (Algona & Simon, 2010). Often educators cite indicators for these kinds of outcomes anecdotally, with participant observations, or by interpreting self-reported student reflections. These are useful tools and provide insight to the field aud learning experience. To streamline these indicators, though, and to clarify the language we use in discussions about emotional engagement, we might look to the educational psychological research on emotional engagement.

Although the literature on emotional engagement focuses primarily on general learning motivation rather than on course-specific content engagement, it can illuminate the field's conceptual overlap with experiential education. Skinner, Kindermann, and Furrer (2009) define educational engagement as "the quality of a student's connection or involvement with the endeavor of schooling and hence with the people, activities, goals, values, and place that compose it" (p. 494). Studies in

emotional engagement aim to understand and quantify students' emotional and behavioral responses to activities or with subjects. These emotional connections to coursework serve to impact, positively and negatively, one's ability to learn and the learning experience. But the research, especially at the college level, is limited. Handelsman, Briggs, Snllivan, and Towler (2005) summarize the field:

First, many researchers have studied cognitive engagement or the use of students' more complex cognitive strategies (e.g., Meece, Blumenfeld, & Hoyle, 1988; Pintrich & Schunk, 1996). Second, much research has focused on engagement in specific tasks, such as reading (e.g., Guthrie & Alvermann, 1999). Third, studies have focused on engagement in elementary schools and, to a lesser extent, secondary schools (e.g., Skinner & Belmont, 1993). (p. 184)

Most higher education engagement studies occur at the university, rather than the classroom, level. Limitations aside, the authors emphasize most scholars' inclusion of both cognitive and affective components in student engagement; many researchers (Connell & Wellborn, 1991; Deci, Connell, & Ryan, 1985; Guthrie & Anderson, 1999; Skinner & Belmont, 1993) also believe an interpersonal or social component is integral. These findings parallel the nested cognitive, affective, and social components educators cite as meaningful outcomes of experiential learning (Algona & Simon. 2010; Dewey, 1938; Proudman, 1992).

Educational engagement literature also mirrors the language of experiential learning in its focus on community, physical experience, and student development: "Engagement refers to active, goal-directed, flexible, constructive, persistent, focused interactions with the social and physical environments" (Furrer & Skinner, 2003, p. 149, emphasis added). By observing the overlap between the goals of experiential learning and the purpose of emotional engagement research, we can refine methods to understand and assess the emotional engagement generated through experiential learning in higher education. But a guiding pedagogy for experiential environmental philosophy first needs a philosophical core that attends to the affective content and learning goals to gnide the development of the experiential activities and learning environment.

The ethic of care, a context-based relational ethic that roots moral development in relationships between a *carer* and a *cared-for*, resonates with Furrer and Skinner's (2003) definition of engagement. In this approach to ethics, right action depends on the needs of an "other" in relationship, rather than on prescribed rules of good and bad and right and wrong. Moral development is rooted in embodied experiences—a



context-based approach that resonates with experiential education. Connected both to educational (Noddings, 1984, 1992, 2002, 2006) and environmental philosophy (Plumwood, 1991; Warren, 1990), the ethic of care has great potential as a pedagogical framework for field philosophy.

The Ethic of Care in the Learning Environment

Implementing the ethic of care in educational contexts relies on the development of attentive relationships between a carer and a cared-for (student-student, student-instructor, student-content, participants-learning environment). The goal is to integrate it as a guidiug morality in the classroom and as a bridge to the beyond-school world, where it can lead students to right action on behalf of the beings, places, and ideas they value in relationship.

Often these relationships are discussed as reciprocated, but an ethic of care need not be reciprocated in kind. Many argue that while we learn how to inhabit care in relationship with other humans, we can trauslate the feelings these relationships engender into relationships with nonhuman nature and ideas (Fien, 1997; Mortari, 2004; Noddiugs, 1990). Noddings (2002) explains that the ethic of care originates from a universal desire to be cared for and to share positive relationships with at least some other beings. Therefore, "if we value such relations, then we ought to act so as to create, maintain, and enhance them" (p. 21). The "ought" distinguishes this action as moral action, not just simple behavior.

Many traditional ethical theories rely on rules for ethical guidance, but the ethic of care instead relies on context, which means good, bad, right, and wrong depend on the needs of the participants in particular relationships in specific situations. This relational focus parallels Proudman's (1992) description of experiential education as "a series of critical relationships: the learner to self, the learner to teacher, and the learner to the learning environment" (p. 241). By emphasizing the particular (rather than the abstract), the ethic of care aligns with place-based experiential approaches to environmental learning (Elder, 1998; Sobel, 2004). Similarly, the ethic of care connects to experiential learning in its emphasis on reflection, personal growth, and awareness (Algona & Simon, 2010). Noddings (2002) explains, "We need to understand our own capacities and how we are likely to react in various situations. . . . Hence . . . much of [care-based] moral education is devoted to the understanding of self and others" (p. 15). This kind of reactionary self-knowledge coincides with McCuen and Shah's (2007) discussion of emotion in ethics education, as well as with scholarship on the affective and social learning goals of experiential learning (Haluza-DeLay, 1999). Self-awareness and attention to the emotional learning process also reflect important educational engagement variables (Skinner et al., 2009).

Synthesizing these scholarships in theory and practice grows their application and resonance.

Noddings (2002) offers strategies (e.g., cooperative learning, noncompetitive grading, service-learning) to foster the ethic of care in the learning environment. But she emphasizes that strategies alone will not suffice, because every implementation depends on the actors and the content involved. Strategies must be embedded in a classroom where care is promoted through modeling, dialogue, practice, and confirmation rather than employed in a hierarchical environment (Freire, 1970). Noddings (2002) explains: "The result of academic coercion . . . is often frustration and a pervasive feeling of 'being dumb.' . . . If a youth's own legitimate interests and talents are not admired and encouraged, he or she may never really learn what it means to be cared for" (p. 31). Here the ethic of care again joins the discussion of emotion in the learning process, for a care-based classroom seeks to develop positive emotional learning experiences, or to encourage emotional engagement.

Both care scholarship (Noddings, 1984, 1992) and engagement literature (Frenzel, Goetz, Ludtke, Pekrun, & Sutton, 2009; Skinner & Belmont, 1993) also attend closely to the dynamic between a teacher and a student. Cnrriculum that encourages the development of this relationship can facilitate student engagement with the material. An experiential curriculum can foster this relationship because unconventional learning environments allow students and instructors different opportunities to know each other in non-hierarchical ways, such as conversing during transportation, engaging in activities, and participating with hosts, guides, or community members (Noddings, 2002).

Observations about the student-teacher relationship might seem simplistic: Students enjoy relating to their teachers and they enjoy school when they relate to their teachers. But psychological engagement is more than enjoyment: "Children who felt appreciated by teachers were more likely to report that involvement in academic activities was interesting and . . . they felt happy . . . in the classroom. In contrast, children who felt . . . ignored by teachers reported more boredom, unhappiness, and anger while participating in learning activities" (Furrer & Skinner, 2003, p. 159). Although most research on emotional engagement and classroom care ethics involves younger students, the social dynamic of the learning environment—including the teacher-student relationship—also matters for college-aged students (Robbins, Allen, Calillas, Peterson, & Le, 2006).

These relational aspects of all three literatures echo the goals and methods of environmental and place-based learning, which can provide a framework for care-based field philosophy learning experiences. Elder (1998) writes: "Our pressing need now is for a pedagogy that exposes people to the range of their possible relationships in the world, and that gives

them the language and models to explore and express such affiliation within a vivid community of values" (p. 12). The ethic of care, coupled with experiential education theory and techniques, as well as the kinds of metrics and insight provided by research in emotional engagement, serves this need.

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Field Trips: Experience, Emotion, and Engagement in Practice

Although environmental humanities courses do not often include field components, these kiuds of experiences in the natural world or with course content are important for a whole student approach to environmental learning (Algona & Simon, 2010; Foster, 1999). Thus, we need to build opportunities to uupack values, relationships, and identity in enviroumental humanities courses to provide quality environmental, philosophical, and care-based learning experiences. Although embedded experiences in the natural world are an effective tool, these kinds of courses are limited to small student groups and can require challenging logistical and financial wrangling. Using the resources of place-thus eliminating the travel times, logistical hurdles, and expense of distant experiential activities-is also an effective way to build experience into on-campus courses, as well as an opportunity to explore the concepts of place, community, and everyday responsibility as complements to environmental curriculum. In addition to community-based projects with local organizations, courses should use campus natural areas or creeks, local nature centers and parks, farms, zoos, campus energy production sites, recycling centers, or even the design of the campus landscape as meaningful places of entry to interrogate the human/nature relationship, our responsibility to nonhuman others, and the kinds of spaces that enable community building, connections to nonhuman nature, and a wide notion of health. Closer inspection of students' home terrain can enliven their curiosity about the wonder and complexity that surrounds them in their everyday environments, rather than reiuforce the notion that environmeutal learning and ethics apply to only special, faraway places.

Noddings (2006) writes. "Moral life grows out of the practices in our communities and the demands these practices make on us" (p. 11). Explorations of and participation in our communities linked with ethics discussions can stimulate moral development. And because places hold and nurture concepts, hierarchies, values, and meaning, we can learu about the confluence of these elements when experiencing and developing relationships with these places. Place theorist Gruenewald (2003) explains: "Place-conscious education . . . enlists teachers and students in the firsthand experience of local life and in the political process of understanding and shaping what happens there" (p. 620). Self-identity is often rooted in place and conceptions of home, so to know and under-

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stand key a "Inte court learn place 2004 ethic that care some expanse stand one's place(s) better is to actively develop a clearer sense of self—a key element in cultivating an ethic of care. As Gruenewald (2003) writes: "Interest in place-based education often derives from the belief that encouraging an emotional attachment to a place will lead people to care and learn about that place and, subsequently, produce a desire to protect the place" (p. 118). This caring about is a goal of field philosophy (Moore, 2004), as well a theme iu both emotional engagement scholarship and the ethic of care. So if particular attention to one's place can inspire care for that place—and through moral and imaginative leaps (Plumwood, 1991), care for other, related places and ideas—then this kind of attention is something we ought to nurture.

Regular field trips are an effective way to integrate place-based experiential education into the traditional higher education classroom. Roue (2008) describes the role of field trips for humanities and social science learners akin to the role of laboratory learning for science students. And Scarce (1997) writes: "[S]tudents often seem unsure of the connections between daily life and the classroom. Field trips can clarify and coufirm those connectious" (p. 220–21). The material of class gains meauing and purpose when learned in context. The theoretical content gains pragmatic strength through field trips and immersion. Student articulations of their own learning collected in experiential classes (see Dyment & O'Conuell [2010] for a useful discussion of studeut journaling) can help us grow an assessment methodology that speaks to students' emotional engagement with course content.

Experience and Responsibility

Unifying threads that weave through the philosophy of experiential education, emotional engagement research, and the ethic of care—including the importance of relationships and an emotional connection to content, place, and peers—serve Elder's (1998) call for an environmental pedagogy that unites disciplines, addresses problems, fosters connectious, and inspires care. "Love," he writes, "is where attentiveness to uature starts, and responsibility toward one's home landscape is where it leads." An environmental pedagogy of care can cultivate this love and help students develop a sense of moral responsibility for self, others, beings, place, and ideas.

Growing these connections with nouhuman nature will require that students learn how to bridge the boundary between self and other—a facet of community-focused euvironmental ethics (Leopold, 1949; Moore, 2004). An ethic built ou relationships requires attentiveness and respect for other beings and systems outside oneself. These relationships based on love and respect for the uatural world then can address what many environmental scholars consider problematic dualisms between human/nature,

male/female, mind/body, as articulated iu ecofeminist conceptious of the ethic of care (Warren, 1990). Place-based learning fosters these relationships. Knapp (2005) describes this process: "Place-based education is a way to 're-member' participants who feel dismembered from the physical context of their immediate worlds and for them to 'remember' earlier positive contacts with nature... When participants purposefully cousider their relationship to tbe landscape (landfullness), they relate more closely to their world" (p. 278). Relating more closely to the world helps students see themselves as connected to it, not separate from it, which in turn starts the process of community building. Because we often feel more responsible for and empathetic toward those who share our communities (Goraluik & Nelson, 2011), this community building is important.

When beyond-campus places become the spaces for learning, then also the backdrop for students' beyond-academic life, the two worlds of school and life begin to inform each other. Blending these boundaries can also soften other dualisins and create the room for relationships to develop with people, place, and couteut. These experiences, then, can help students make the leap from relationship to responsibility. As Kathleen Dean Moore (2011) writes: "Loving is not a kind of la-de-da. Loving is a sacred trust. To love is to affirm the absolute worth of what you love and to pledge your life to its thriving-to protect it fiercely and faithfully, for all time" (p. 392). Iu loving relationships, she suggests, we understand our obligations to others most clearly, and through understanding we aim to enact these responsibilities in the world. When students learn to care abont each other, the place and context of the learning environment, and nonhuman nature, they begin to develop not just knowledge about environmental ethics, but a personal environmental ethic that can guide their actions as members of the beyond-classroom community.

Conclusion

Relationships, emotion, and particular attention to the learning environmeut as a meaningful place for content and personal development unite the scholarships of experiential and place-based education, emotional engagement, and the ethic of care. Woven together they inform a promising environmental pedagogy of care for higher education field philosophy curriculum. If an important goal of environmental ethics and humanities learning is to develop a personal relationship with the natural world, if a valnable outcome of this learning is personal and collective responsibility for beings, places, and ideas, and if environmental ethics learning is interested in not just knowing about environmental issues and values conflicts, but in using the tools of philosophy to address environmental decision making, then attending to relationships in theory and practice and embracing emotional responses to ideas and situations are

important elements of the learning process. An environmental pedagogy of care places these goals at the center of the curriculum, learning environment, and content. Future work that applies the tools of emotional engagement research to care-based experiential courses will provide more insight into the effectiveness of this pedagogy in stimulating relationships, responsibility, and self-awareness, as well as perhaps enabling ethical shifts.

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