Bringing the Classroom Back to Life

Jonathan Dawson and Hugo Oliveira

As part of their first-year curriculum, students at Swaraj University in western India head off on a ten-day “cycle yatra,” a low-technology bicycle journey through nearby villages that provides them with an immersion opportunity to see and experience the world differently. The invitation to the students is to “leave behind your money, credit cards, cell phone, iPod, snack food, and all things plastic” and to “secure your food and shelter with the gifts of your labor, your creativity, and your capacity to build relationships with strangers. You will practice surrender.”

At Schumacher College in Devon, England, master’s students complement theoretical studies in holistic science with a range of more experiential activities, including a Deep Time Walk, a guided 4.6 kilometer walk along a stretch of coastal path that traces the 4.6 billion years of the history of the Earth, with each meter representing 1 million years.

In southern Italy, participants in the educational and artistic experiment known as the Free Home University seek to “generate new ways of sharing and creating knowledge by experiencing life in common.” Among the activities that they have designed as part of their collaborative curriculum is a Walk With the Dead. Drawing on wisdom traditions from around the world associated with the Day of the Dead, they each invoke the spirit of a recently deceased loved one and walk “in conversation” with them from sun-up to sundown, sharing insights at the end of the day.
These examples from around the world illustrate a growing trend in education toward a more innovative, whole-person, and experiential approach that, explicitly or implicitly, is challenging the fundamental assumptions that have underlain the entire history of mass education.

To better understand the significance of this new wave of educational experimentation, and the philosophy underlying it, one must dig into what educational scholar Stephen Sterling calls “the subterranean geology of education”—the hidden assumptions that underpin today’s dominant educational paradigm. These include the assumption that knowledge is more or less fixed and can be divided into relatively autonomous subject silos; that the most effective form of knowledge acquisition is transmission from expert teacher to student; that the intellect is the only legitimate and scientifically verifiable mode of learning; and that education is primarily a private rather than a community-based activity.

In mainstream academia and beyond, each of these underlying assumptions is coming under increasing scrutiny as a growing number of educationalists suggest that it is time for a revolution in our understanding of how learning takes place, informed by insights derived from systems thinking and complexity theory. (See Chapter 12.) These perspectives introduce a much more dynamic understanding of how the world works by shifting the focus from things to relationships and patterns, helping us understand how living systems self-organize and self-sustain, are rich in feedback, and manifest emergent qualities that cannot be predicted from a study of the component parts. In consequence of this emerging shift in perspective, the dominant metaphor is beginning to transition from machine to living system, from dead matter to animate Earth.

This is especially true at this juncture, since, as sustainability researcher Judi Marshall and her co-authors note, “in modern western societies, we are caught in a conceptual trap that renders our accepted ways of understanding our
world unequal to the task that the sustainability challenge offers.” There are solid grounds for believing that most of the critical crises currently converging on our civilization are “wicked,” or complex in nature, lending themselves well to apprehension and engagement through a systems/complexity lens. In this light, it is useful to look at some of the key shifts in educational theory and practice that such a reorientation will entail, as well as examples from pioneering educational institutions of how this is already manifesting on the ground.5

From Objective Truths to Emergent Meaning-making

New approaches to teaching and learning reject the conventional neat separation between the observer and the observed that is central to traditional, mechanistic, educational philosophy. Rather, it is becoming increasingly recognized that the researcher and the object of study affect each other mutually and continually in the research process. There is, in short, no “objective truth” waiting to be cognitively uncovered and communicated to the student as a fixed body of knowledge. Rather, meaning necessarily emerges out of an ongoing, iterative process of experimentation, questioning, and reflection.6

Allan Kaplan, co-founder of The Proteus Initiative, captures the essence of this way of understanding the dance of enquiry between students and the object of their study: “[T]here is a delicate relationship between the world ‘out there’ . . . and the sense-making that we bring to that world; that the phenomenal world we live in arises from the conversation between sense and sense-making.”7

In this context, rather than being rigidly determined in advance, the curriculum takes on a provisional character, demanding the space and flexibility to evolve in directions required by the flow of the enquiries. In the words of educational theorist John Dewey, “the learner and curriculum are each transformed as they interact with each other.” Thereby, the center of gravity of the classroom shifts from the authority of the teacher to the distributed intelligence of the learning community, with students taking ever greater responsibility for the framing and management of their own learning journeys, a process known as heutagogy. (See Box 18–1.)8

A growing number of educational centers have explicitly adopted this approach, encouraging their students to tailor and evolve their own learning journeys in collaboration with coaches and peer learners. In addition to the cycle yatra, students at India’s Swaraj University undertake a series of visits to “new economy” pioneers and social entrepreneurs and then are encouraged to
Research indicates that learning outcomes improve when students can relate the material that they encounter in the classroom to their own life world. This suggests that attention to how we teach is as important as what we teach.

An educational philosophy that expressly highlights the contributions of students as context experts and co-teachers is “heutagogy.” A heutagogical strategy views the instructor not simply as the person who transfers information to the student, but as the person who develops learning skills within learners to prepare them to take responsibility—as co-instructors—for the overall learning experience.

Heutagogical strategies lend themselves uniquely to bringing the multiple contexts, experiences, and perspectives of diverse learners into the learning process. The learners become co-creators of knowledge within an enhanced overall learning experience, since the contexts and perspectives of the participating learners invariably expand and diversify the insights that even the most informed instructor can offer.

In a course that is designed according to heutagogical principles, the role of the instructor is to facilitate learning and to design the course in such a way that the selected learning activities make optimal use of the diverse perspectives that the course participant can contribute. As researchers Jane Eberle and Marcus Childress explain, “rigidly structured environments are not conducive to heutagogy.” Heutagogy requires creativity as it shifts responsibility in the learning process to a mutual commitment to achieving learning goals. A heutagogical learning environment can be created in any setting, including face-to-face, online, and blended modes of instruction. Given the level of responsibility that it places on the learner, it also is uniquely suited for graduate and professional studies that can benefit greatly from the experiences and expertise of the participants.

A curriculum project that employed heutagogical strategies to meaningfully bring into focus the larger economic, social, and environmental context of the learning experience was designed and first implemented in 2013 by then-Global Ecology principal Sabine O’Hara, in collaboration with the University of South Africa (UNISA), a mega-university serving 320,000 students via distance learning. A key objective of the project was to design six signature courses that use heutagogical strategies for the six colleges of UNISA. The signature courses are designed to engage students as co-instructors and “context” experts. Every student is encouraged to bring his or her own life world context into the shared learning experience and to serve as the expert for that particular context and its relevance to the course content.

For example, students were given assignments to collect specific data in their home communities; to identify a pollution problem in their region; to use clear instructions to write a case study about a development issue in their community; to post information gathered in their community; and to comment on the information collected by at least three fellow course participants. These kinds of localized and personalized assignments engage students with each other and with their own context and its demographic,
develop their own ideas for social enterprises with the support of a personal feedback council comprising at least five peer learners; a team of learning facilitators; a mentor; and the leaders of the projects where the students go on two-month placements.9

The online Gaia University follows a similar model, with students supported in their evolving learning journeys as collaborative, self-directed learners by peer guilds, mentors, and supervisors. Student projects range from the design and creation of community currencies to smallholder agriculture projects and the design of ecovillages. The university has no fixed campus, with short courses offered at a range of partner institutions close to the students’ homes.10

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Box 18–1. continued

social, cultural, historical, economic, environmental, and spatial characteristics. As a result, students are more socially and environmentally aware, self-motivated, and committed to civic engagement, sustainability, and social justice. Preliminary assessment results from the UNISA signature courses indicate that a significantly higher percentage of students successfully complete the signature courses compared to other UNISA courses, despite the challenges associated with the online delivery format.

The College of Agriculture, Urban Sustainability and Environmental Sciences (CAUSES) of the University of the District of Columbia, too, has implemented heutagogical strategies in several of its courses. These strategies are especially successful in some of the required science and general education courses that tend to be challenging for the university’s large number of first-generation college students. A Sustainable Urban Agriculture course, for example, requires students to take soil samples from two different locations and to research the land-use history in those locations before they analyse the soil samples and assess the consistency of the test results with the land-use histories. A General Education capstone course organizes students into interdisciplinary teams and assigns them research projects that improve the quality of life of specific Washington, D.C. neighborhoods.

In addition to its students who are seeking academic degrees, CAUSES serves a large number of non-degree-seeking students through its land-grant programs that offer workforce development, certificate, and continuing education courses. (See Chapter 22.) These tend to be short courses that emphasize practical learning and skills development. Yet often, learners are eager to also gain a better understanding of their own place and contribution to the larger community. Several of the land-grant programs have developed a heutagogical approach to address these learning interests of engaged citizens who are committed to sustainability and to improvements in quality of life for their communities.

—Sabine O’Hara is dean of CAUSES at the University of the District of Columbia in Washington, D.C.

Source: See endnote 8.
Central to this research and learning ethic is a suspicion of claims that language can, in any meaningful sense, provide an objective description of a pre-existing reality. Language is understood not as describing some autonomous, value-free progression of pure, abstract knowledge, but rather as being embedded in structural power relations, which, when unquestioned and unchallenged, tend to be insidiously reinforced.

The Ecoverisities Network, an international grouping of activist educational initiatives that are reimagining higher education, facilitates student-centered, self-tailored, intercultural exchange programs, enabling young adults to encounter new cultural norms, practices, and teaching methods as a way of widening their worldviews and skill sets. One of the network members, Red Crow Community College, a Blackfoot Nation community-learning initiative in Alberta, Canada, approaches environmental studies and the other-than-human world from a worldview of respect and interdependence that is firmly rooted in their Indigenous traditions and cosmologies. This includes spending time with tribal elders learning about traditional approaches to medicine and healing.11

Universidad de la Tierra, or Unitierra, in Oaxaca, Mexico, was created in response to a belief that “[t]he school has been the main tool of the State to destroy the indigenous people.” Unitierra has created a learning ethic that is more closely based on indigenous educational practice and that emphasizes informal, peer-supported project-based education over the traditional model of the teacher-student relationship. Local people, with support from the school’s staff, work together on projects such as building clay ovens and other artisanal appropriate technology, exchanging knowledge on design ideas, and gaining practical skills while developing ideas for further common projects.12

All of the above serves to revolutionize the role of the teacher. The primary role of the teachers shifts from being a transmitter of a fixed body of knowledge to being an “educator” (etymology: “to draw out from”), helping students engage creatively and intelligently in their sense-making enquiries. Teachers play the roles of catalyst, mentor, provocateur, and, to some degree, also that of peer within the learning community of which they form a part.13

From Cognitive Rationality Alone to Multiple Ways of Knowing and Learning

The western scientific tradition leans heavily on rationality and validation based on empirical evidence. In the words of John Dewey, “The old center of the universe was the mind knowing by means of an equipment of powers
complete within itself and merely exercised upon an antecedent external material equally complete within itself.”

The new center relocates the learner as being embodied and deeply implicated in multiple relationships within the human and other-than-human world, exploring it with the full range of human faculties: rational and cognitive, experiential, intuitive, relational, and embodied. Linguist George Lakoff goes so far as to argue that all cognition is based on knowledge that comes initially from the body, and that other domains are mapped onto our embodied knowledge using primarily conceptual metaphors.

In a review of the United Nations Decade of Education for Sustainable Development (2005–14), sustainability researcher Daniella Tilbury cites more than twenty studies from scholars worldwide that highlight the alignment of sustainability education with active and participatory approaches to conveying knowledge. Active learning processes of conceptualizing, planning, acting, and reflecting were found to better enable students to engage critically and creatively with the values, skills, and knowledge requirements of sustainable development.

Meanwhile, a recent study into education for sustainable development found that in the absence of emotional engagement, “cognitive understanding is not enough to foster behavioral changes. . . . Emotions concern what gives meaning to life; they frame, transform and make sense of our perceptions, thoughts and activities.” Student engagement on an emotional level, the study found, was essential for behavioral change.

The validation of the “subjective” that this entails brings the classroom back to life. Students are no longer asked to park their emotions, their intuition, and their bodies at the classroom door. Rather, they are invited into a space that welcomes their creativity and playfulness, their passions and their tears. The student’s role shifts from that of object to be operated on to a subject within relationships. British journalist George Monbiot captures this beautifully: “Acknowledging our love for the living world does something that a library full of papers on sustainable development and ecosystem services cannot: it engages the imagination as well as the intellect.”

Schumacher College in England has experimented with introducing applied, hands-on learning curricula before engaging on a more theoretical level. The aim is to enable the world to reveal itself to the students afresh, rather than being pre-packaged and defined in advance by abstract theoretical formulations. For example, an economics class taught by Jonathan Dawson includes theatrical elements, such as having students “embody” the ecological
footprints of different lifestyles associated with different clusters of nations: huge, finger-tip to finger-tip circles representing North American lifestyles, and tight knots of bodies representing African lifestyles. One student-led session on the British enclosure movement saw the class being locked out of their teaching space, giving students a deeper visceral experience that had a much greater impact than a purely conceptual treatment would have achieved.19

From Learning as an Individual to a Community-based Pursuit

The endpoint of conventional approaches to education where knowledge is transmitted from teacher to student is the acquisition of knowledge by the individual student, who has succeeded in absorbing what has been presented. In so doing, the student becomes what educational theorist Ken Gergen calls “a simulacra [superficial likeness] of the authority.” He describes this process of imprinting knowledge on students as “an obliteration of identity and an invitation to lethargy.”20

An alternative interpretation of the learning process that sees knowledge as being socially constructed—shaped through cultural or social practice—is gaining ground. This view challenges the ideology of the self-contained and essentially independent individual learner and asserts, in Gergen’s words, that there can be “no individuality without collectivity, no independence without interdependence.” The student is embedded within multiple relationships with the human and other-than-human world, and it is these relationships that enable and catalyze the emergence of knowledge.21

A learning community promotes thinking across disciplines, enables the diversity of relationships necessary for the generation of quality knowledge, and meets our innate need for sociability. (It is precisely for these reasons that we are seeing the proliferation of innovation hubs and other shared work spaces, which are proving especially popular with young people. This trend mirrors and helps to drive the transition from centralized to distributed organizational forms that we are witnessing across society, not least in education.)22

In this context, it is unsurprising that a common feature of many of today’s pioneering educational initiatives is their rootedness in community. A growing number of educational programs, most notably those offered by Gaia Education, are designed explicitly to be embedded within “living and learning” communities. In these programs, students and staff are often found working side by side managing the education center: growing food, cooking, washing dishes, cleaning, and maintaining the buildings. This expands the “living classroom”
to include all dimensions of the life of the college, enabling a breaking down of the artificial boundaries that conventionally exist between the theory and practice of sustainability. Students learn to grapple with issues relating to decision making and conflict resolution, sourcing and cooking food, and relating to others in respectful and regenerative ways.\textsuperscript{23}

Such practices are not limited to small-scale, non-formal, residential settings. Under the aegis of a recently ended European Union-funded project, CEAL (Community-based Entrepreneurship Action Learning), university students in six European countries, as part of their accredited programs, worked with residents of nearby deprived neighborhoods in the development of projects and facilities for community benefit. Students at Ideen3 in Berlin, Germany, one of the participating educational institutions, worked closely with local communities in a series of innovation labs to design and build several creative sculpture pieces that today populate the neighborhoods in which they were conceived.\textsuperscript{24}

End-of-program evaluations frequently indicate that students that take part in such initiatives prize the immersion experience in the practice of sustainable living above all else. In Japan, assessments have found that students studying in rural villages and participating in village life through experiential learning programs have positive, life-changing experiences and leave more committed to sustainable practices. (See Box 18–2.)\textsuperscript{25}

The embodied and community-based nature of learning described here has implications for the types of assessment associated with accredited education. Schumacher College, among other places, has experimented extensively with allowing students to submit accredited assignments both for collaborative work and for creative, artistic projects—including musical compositions, art exhibitions, video work, and audio podcasts. Growing numbers of schools also are experimenting with self- and peer-assessment as a complement to assessment by the teaching staff, helping students hone their skills in providing insightful, compassionate feedback to their peers.

Revolution in Teaching Practice

The celebrated English anthropologist Gregory Bateson suggested that the root of the various crises converging on our societies derives from a worldview that is founded upon an “epistemological error”—an error in how we conceptualize knowledge—that has led to a perception of, and belief in, separateness that in turn manifests separateness and fragmentation. Education has had a substantial role to play in perpetuating this error.\textsuperscript{26}
Our educational systems are in crisis, beset by multiple sources of disruption. These include the growing gulf between the mindsets, competencies, and skills required to address our converging “wicked” crises and those provided
by a conventional university education, as well as growing student dissatisfaction with what is being offered. Other challenges include increasing commercialization and fees associated with education in many parts of the world (as government funding drops or fails to keep pace with the rise in student numbers), a flourishing non-formal education sector that is to some extent experimenting with new-paradigm teaching practices, and the availability of no- or low-cost high-quality courses on the Internet.27

This crisis also offers opportunities. The core challenge today facing education systems around the world is that of addressing Bateson’s epistemological error, and its faulty perceptions of separateness and fragmentation. This is something that, by definition, cannot be tackled using the old methods alone. Replacing one set of textbooks with another is not going to do the trick. The field of engagement needs to include that subterranean territory that houses our understanding of how knowledge is generated and how students learn. The revolution that is required in our educational practice needs to be felt on an embodied level as much as understood cognitively. (See Box 18–3.) It can be described as nothing short of bringing the classroom back to life.28

Box 18–3. Education for Ecosocial Change

The conception and predominant practices of education are far removed from the principal problem faced by the world today: environmental destruction and its collateral effects in terms of land and social expulsions. And yet this destruction, which affects all life on Earth, mandates an ecological conversion of education and the use of Earth-centric teaching practices that have the capacity to convert all students into agents of ecosocial change.

Education for ecosocial change advocates a holistic education that reformulates the mission of educational action. Education is not preparation for the work of the market society, and learning is not the accumulation of academic knowledge in obsolete curricula—even if this is done through new, innovative teaching methods. Instead, education should imbue all educational activity with ecology and should consist of the comprehensive training of students with multiple intelligences, including ecological intelligence, social and emotional intelligence (see Chapter 8), and moral intelligence.

In its 1996 report, Learning: The Treasure Within, the United Nations Educational, Scientific and Cultural Organization (UNESCO) proposed four educational pillars that need to be recovered: learning to be, learning to co-exist, learning to know, and learning to do. To meet the challenges of the twenty-first century, these pillars have to be

continued
applied to and reworked from an Earth-centric perspective. This involves:

- Learning to be part of the Earth by discovering our deep links with nature in order to construct ourselves with an ecological identity.
- Learning to live in harmony with human beings—especially those who suffer the most from environmental destruction—and with the plants, animal, forests, oceans, etc.
- Learning to know the sciences, arts, and humanities, and knowing how to relate them to the ecological dimension and to environmental problems, so that knowledge comprises this reality.

Learning to “do” using ecosocial practices, and encouraging an orientation toward professions that facilitate the ecological reconstruction of societies.

It is important to establish interconnections among all of the agents of education, including schools and universities, families, youth organizations, civic associations, religious institutions, social movements, and the media. For the transition to a new ecosocial education that links ecology and social problems, it also is vital to establish the nature of its aims. Ecosocial teachings should be common to school-based education as well as to the education undertaken by other agents, such as youth organizations, religious institutions, and families.

In the school setting, the creation of a three-part ecosocial curriculum is a priority:

First, the curriculum needs to be holistic and comprehensive, teaching about ecology, the root and immediate causes of ecological problems, and their consequences and solutions. A holistic look at these will include history, international relations, economics, science, philosophy, and more. Ecosocial education must be incorporated into the very heart of school teaching, forming a new curriculum in which the teaching of mathematics, history, language, physics, and other core subjects is shaped by taking into account the world’s social problems.

Education also cannot focus exclusively on providing information about ecological problems and describing international proposals to reduce them, little by little; instead, it must be transformative. Ecosocial education needs to show the connections between the most important social problems and the political, social, and economic structures that generate them. For example, it is not enough to reduce climate change; society must transform the economic system that changes the climate.

Second, this ecosocial curriculum should cultivate the character of students—teaching morality, ecological connections, the study of consumerism and the manipulation of individuals and societies by advertising, and other influences that shape societal and individual values.
Third, and finally, the ecosocial curriculum should actively encourage ecological activism and offer ample opportunities to engage in activist efforts. This involves ecosocial political mobilization of children, adolescents, and young adults—encouraging them to discover their position as citizens of the Earth, as responsible for its destiny, and as caretakers of the planet and its inhabitants. Ecosocial mobilization is also about educating people to be aware of the structural causes of the Earth’s destruction, to build ecological societies, to take up professions that ecologically rebuild the lives of cities and towns, and to adopt ecological lifestyles in their own everyday lives.

Every family, every school, and every city can play a part in organizing annual projects for ecosocial practices that feed off each other. Ecologist educators and movements should build networks, create stores of good ecological practices, and generate effective systems for communicating these practices. This will facilitate mass ecoliteracy and help environmental movements grow. Partnership between families, schools, and ecological movements is necessary. Schools can be the hub of this partnership.

Educators are at a major crossroads: either they help to reproduce the system that created the ecological crisis, or they intervene actively to change it. They are not—nor can they be—neutral.

—Rafael Díaz-Salazar, Professor of Sociology and International Relations in the Faculty of Political Sciences of the Complutense University of Madrid, Spain.

Source: See endnote 28.
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27. Jim Garrison, “The Holy Grail in Education,” *Huffington Post*, March 4, 2014. A review of a survey of 42,257 students aged 18–25 (the millennial generation) from one hundred countries identified substantial disaffection with conventional formal university education. It found that 53 percent of interviewees see a disconnection between what they are learning today versus what they will need tomorrow. The review concluded that, “Universities will need to transform themselves into a place where young people can not only study and take exams, but learn from doing. To provide them with real-world experiences that are relevant.” See YouthSpeak and AIESEC (in partnership with PriceWaterhouseCoopers), *Improving the Journey from Education to Employment: YouthSpeak Survey Millennial Insight Report* (Rotterdam: 2015), 32; Stefan Collini, *What Are Universities For?* (London: Penguin Books, 2012); Cristina Escrigas, *A Higher Calling for Higher Education* (Great Transition Initiative, June 2016).
