Chapter 5
The Sustainable Farm School—Waldorf Philosophy and EcoJustice Theory in Aesthetic Contexts

Kurt A. Love, Audra King, Katie L. Love, and Kimberly Gill

A Little Sprouts student in a field at the Sustainable Farm School. Kimberly Gill © 2013

K.A. Love (✉) • A. King • K.L. Love • K. Gill
Central Connecticut State University, Barnard Hall,
Room 226, 1615 Stanley St, New Britain, CT 06050, USA
e-mail: drkurtlove@gmail.com; kingaul@ccsu.edu;
lovekal@ccsu.edu; k@kimberlygill.com

© Springer International Publishing Switzerland 2015

M.P. Mueller, D.J. Tippins (eds.), *EcoJustice, Citizen Science and Youth Activism*, Environmental Discourses in Science Education,
DOI 10.1007/978-3-319-11608-2_5

The Sustainable Farm School in Connecticut (SFS) is an independent school for children 3–18 years old that draws in part from the pedagogical framework and philosophy used in Waldorf schools around the world, while aiming for transformative learning. Transformative learning is at the foundation for the creation of sustainability in nature-human communities. Transformative learning occurs at the nexus of peace (as a result of social justice and ecojustice), deeper levels of imagination (as a result of broadening one's thinking with possibilities and multiple perspectives), and reciprocity (as a result of strengthening our ties with the Earth and aiming for sustainability) (Love 2011). SFS advances the traditional Waldorf model by incorporating ecojustice theory as an equally important framework because of how the teaching and learning intersects with culture and ecology in a current world context. SFS's mission is to provide an educational experience that helps students become community members who critically examine local and global practices that compromise social, cultural, and ecological sustainability, as well as developing the knowledge and skills to be able to creatively produce and support sustainability. The aim of all programs and courses is to help students develop deep relationships with nature and to understand and be able to develop practices of ecological, social, and cultural sustainability. The curriculum for each program and course is rooted in our connections to the Earth. As the conceptual basis for the Farm School, this chapter demonstrates how the aforementioned relationships can be accessed through (a) meaningful play; (b) story-telling; (c) art that connects us with nature, to each other, and to our inner spirits; (d) feminist philosophy with a global perspective; (e) a critical examination of history; (f) a multicultural approach to understanding nature that questions human-over-nature perspectives; (g) food preparation that explores food politics and food growing practices; and, (h) holistic health and wellness. Let's begin with a brief history of Waldorf philosophy and education.

Rudolf Steiner's Vision and Waldorf Education

Rudolf Steiner developed the pedagogical and instructional models for the first Waldorf School that opened in 1919 in Stuttgart, Germany at the Waldorf-Astoria Cigarette Company. The Waldorf educational philosophy can be simply described as the development of the child's heart, hands, and head. This concept references an inherent connection in all courses to a general Earth-based spirituality, physical movement, and academic study. Subsequently, this form of education may be one of the most complex because it focuses on a student's development as being holistic, intuitive, emotional, mental, nature-based, and spiritual.

After witnessing widespread death and destruction in Europe during World War I, Steiner argued for the creation of a more explicitly compassionate, spiritual, and caring society where schooling would reflect his ideals. He focused on the foundations of schooling and its potential for positive impacts in the local community, if not the whole country. Steiner envisioned educational experiences for students that

would be reflexive of their individual and shared needs and development. He described learners as moral and spiritual beings who could build a more balanced, safe, and interconnected society (Easton 1997). This philosophy can be compared with the philosopher Martin Buber (1987), who may have called Waldorf education grounded in "I-Thou" relationships of interconnection and care, which ultimately are the source of a healthy and balanced society. Steiner (2005) argued that the "healthy social life is found when the mirror of each human soul the whole community finds its reflection, and when in the community the virtue of each one is living" (p. 117). He believed that the schooling process needed to be based on meaning, morality, and holism.

Steiner (1995) was also a prominent voice in the development of anthroposophy, which argues that we can understand our spiritualities through scientifically based investigations and with the use of our intuitive experiences. Steiner (1995) asserted that (a) our process of thinking is not just cognitive, but that it is deeply embedded in our higher spiritual consciousness or from Eastern philosophy, our "higher self"; (b) it is necessary to not only be aware of our own energetic state, but to also create a balanced center in order to live a healthy life; and (c) our lives are in constant interaction with karma (the ebb and flow of energy throughout the universe that responds to our own actions and thoughts). Steiner developed his argument for Waldorf schooling from a spiritual perspective, while incorporating a scientifically and philosophically based inquiry processes to describe spirituality. Explicitly incorporating spirituality as part of the educational process and anthroposophy more specifically in U.S. public schools is a standpoint for many people (including the vast majority of educational researchers [see Rawson 2010]) which remains inappropriate and unsettling because of the apparent "separation" between church and state. Although strict adherence to anthroposophical views may not be preferred by some, many U.S. Waldorf schools use it as a guiding principle for developing a consciousness of holism and interconnection.

Waldorf philosophy follows children through their developmental stages of learning. Rather than rushing through the curriculum with the generally accepted idea that children are empty vessels to be filled, Waldorf Schools introduce age-appropriate skills through lessons that honor the child's naturally eager and curious spirit (Petrash 2002). Examples of Waldorf type lessons include having children learn to prepare a simple vegetable soup from scratch, creating paint colors from red, yellow, and blue with water color, and studying the life cycle of a leaf before they learn to read. While Waldorf teachers do not hold children back from reading, they are more interested in developing a child's sense of love, respect, beauty, and creativity, before introducing reading and writing tools.

Waldorf philosophy also integrates the natural world within the classroom as much as possible, including field trips outdoors. A beautiful and "Earthy aesthetic" can be observed, touched, smelled, heard, and tasted in a Waldorf classroom setting. Classroom materials, from wooden building blocks, to modeling beeswax, to recycled paper and hand-knit woolens are sustainably sourced and handmade whenever possible.

Exploring Spirituality and Interconnectedness

An educational experience that supports students' holistic development is widely supported by SFS faculty, staff, parents and students. A holistic educational experience, which we define as one that fully supports freedom, creativity, and imagination, cannot exist if social injustice persists (Greene 1995). In general, teaching and learning are described by well-respected scholars for over a century as a process that ought to be rooted in social justice. Consider the following examples. In 1901, Francisco Ferrer-Guardia (1913) created the *Escuela Moderna* (*Modern School*) in Spain using anarchist and democratic philosophies in order to critically examine issues of power and social injustice. W.E.B. DuBois argued in 1915 that an equal education can create a crucial bridge for Black Americans into society. Carter Woodson (2005), founder of Black History Month, claimed in 1933 that school curricula in the U.S. was deliberately Eurocentric, which acted as a continuing form of social dominance. Brazilian scholar, Paulo Freire offered in 1970 that teachers and students working together in a dialogic experience could pedagogically examine and create socially liberating paths to challenge oppression. James Banks in 1995 and Sonia Nieto in 1996 both offered paths towards multicultural education, rather than a Eurocentric one. Gloria Ladson-Billings argued in 2006 that the historical relationships in the U.S. have not created a learning gap as much as it has created an "educational debt" through slavery, segregation, and reinforced poverty, meaning that institutional and systemic practices of subordination and domination have deliberately slighted Black Americans.

U.S. schools have routinely produced learning experiences that are not very joyful or fulfilling; however, happiness and care are certainly possible and have a profound effect on the learners (Noddings 1992). Learning experiences can even be deeply rooted in compassion, inspiration, and interconnectedness (Palmer 1998). Although well intended, these arguments are regularly located within the social and cultural contexts of schooling with a seemingly deliberate separation from the development and/or significance of spiritual (non-religious) consciousness. While Steiner's philosophy is not taken up by the vast majority of scholars, it is quite regularly sought after by parents who seek out Waldorf schools (Rawson 2010). Perhaps, Steiner is often neglected because his work argues that the spirituality of students is a primary focus and foundation for the development of curriculum and instruction. Doing so in societies that inextricably link spirituality and religion while simultaneously upholding the separation of religious institutions and government might be a reason why spirituality of students is not explored in research literature as routinely as are race, class, sexuality, and gender, for example, which are linked more to hegemony and historically institutionalized forms of oppression.

Non-religious forms of spirituality may be emerging with more understanding, acceptance, and ultimately a possibility for a more common presence in schools. Gary Bouma (2006) argued that there has been a fundamental shift in western culture regarding the cultural assumptions undergirding spirituality from the traditional to rationale (authoritative to protestant approaches) and rationale to emotional and

experience (protestant to individual spiritualities) since the mid-1970s. It is with this understanding that we have created the framework of spirituality for the Sustainable Farm School.

At the Sustainable Farm School, teachers support the inclusion of spirituality, especially as it is expressed through interconnectedness in coursework. Divorcing our spirituality from learning experiences implies an inappropriate separation from engaging "all of our being." We work from the starting point that we are physical, emotional, intellectual, natural (a part of nature) and spiritual beings. This position reminds us that deliberately creating learning experiences that deemphasize or ignore spirituality will hinder one's spiritual growth just as de-emphasizing any other human or natural domain would inherently make it less developed. At the same time, this philosophical underpinning for our school does not mean that we are supporting any one explicit form of spirituality from dominating in the school. We are not secular. We support students (and teachers) so they will have freedom to define spirituality for themselves and bring it to the fore of learning experience on their own terms. While we focus on the interactions of individual-community-nature-spirit, a climate of openness allows for interpretation and freedom. Students are free to reject as much as they take up different spiritualities that they are familiar with or that they might develop too.

The teachers at SFS have an understanding that creating an aesthetic context for spiritual exploration is necessary in their work, and this context provides the exploratory space needed for individual growth. In Carper's *Fundamental Patterns of Knowing* (1978), aesthetic knowing reflects being aware of the present situation with all senses. Aesthetic knowing involves a deep appreciation for the meaning of the situation, involves transformative art and action, and brings together all of the elements that make meaning whole. Our learning community, which is locally and globally interwoven with other schools, offer an overarching basis for aesthetic knowing as the teacher/student experience transformative learning and gain a holistic appreciation of the interconnectedness of the natural world. This learning experience ties together the health of our communities and development of a skill set which lends toward achieving what is most healthy for communities—sustainability (Kaminski 2008).

We use art, literature/mythology, farming/gardening, play, and community wellness as aesthetic contexts for the exploration of spirituality. Inspired by the Waldorf philosophy, we believe individuals prosper and deeply explore their individual paths more successfully in a simple, beautiful, and natural aesthetic. Therefore, we have programming on organic farms throughout the year. As part of this organic schooling experience, all aspects of tending to the land and animals are included as a significant part of the school curricula. As students begin to see deeper connections and become aware of interconnectedness that naturally occur at these farms, we invite them to explore the intersections of sustainability and spirituality, and it is the organic-farms-as-aesthetic-contexts that provide the space, because each of them provides different approaches and connections with spirituality.

Farms and gardens provide deeply aesthetic contexts for connecting and relational learning, as well as interpersonal, spiritual growth. Interestingly, Steiner (2011) is, not only an educational philosopher, but also an early philosopher of what we now call "organic bio-dynamic farming," which contrasts with commercial, large-scale farming practices. There are a few exceptions, but Steiner argues that we should understand the needs of the plant not only from the perspective of material needs (phosphorus, nitrogen, calcium, etc.). Additionally, there is a spiritual connection or *dynamic* condition of the plant-"being." Steiner (2011) argues, "inorganic forces breed only inorganic substances. Through a higher force at work in living bodies, of which inorganic forces are merely the servants, substances come into being which are endowed with vital qualities and totally different from the crystal" (p. 9). This way of viewing the plant offers a different mindset resulting in a paradigm of farming practices that takes into consideration the unique context and set of relationships that are present in every farm. Working within the context of unique relationships for every farm, rather than having a blanket approach regardless of the conditions (commonly done with fertilizing practices in the 1920s in Europe), means that the organic farmer must have a deep knowledge of their farms in order to create healthy growing conditions. In biodynamic gardening and farming, the very act of growing plants is a process that taps into one's spirituality because of the need to intimately know the Earth in relation.

Pedagogy of Sustainability, Eco-critical Examination, and Eco-imagination

A pedagogy of holism, fulfillment, and eco-social and eco-cultural visions are a logical compliments to Steiner's philosophy of spirituality and connection to nature. A combination of Waldorf and ecojustice approaches to teaching form the core foundation for the Sustainable Farm School. Ecojustice is also a pedagogicial approach that upholds the creative cultural and ecological commons as its primary unit of analysis (Gruenewald 2005). This philosophy is grounded in an understanding that nature and culture are not separate, as is often viewed in mainstream, western industrialized culture (Bowers 2006; Martusewicz et al. 2011). Ecojustice theories and pedagogies critically examine root mindsets that form and perpetuate anthropocentric, or human-centered, views in everyday practices. Ecojustice calls into question (a) practices of eco-racism and eco-classism whereby people of color and working class poor are disproportionately the recipients of pollution; (b) the western industrial culture's exploitive practices of non-westernized or increasingly westernized countries; (c) revitalizing the cultural and ecological commons; (d) critically examining root sources of cultural hubris that lead to anthropocentric mindsets and practices; and, (e) ending the mindset of human-over-nature relationship that makes the Earth contingent upon culturally constructed values and practices (Martusewicz et al. 2011). Ecojustice theorists argue that much of what is considered to be "living sustainably" is enclosed by private, for-profit interests, which largely change from local, commons-based living practices to long distance,

large scale production that are wasteful and that compromise the health of the planet (see also, Shiva 2005).

The resulting pedagogy brings into the classroom critical examinations of western industrial culture, globalization, transcontinental business practices, soil depletion, farming practices, and food politics. These teaching practices can connect with community gardening, urban gardening, organic gardening, permaculture gardening, exploring one's community for sites of sustainability and cultural commons, and increasing knowledge of artistic, carpentry, botanical, farming, culinary, and homesteading practices that create more self-reliance and a reestablishing of local community relationships that lead to localized development and economies. Ultimately, these teaching practices recontextualize curricula so that the learning experiences are more connected to local knowledges, practices, and patterns of living that are more ecologically sustainable, supportive of cultural diversity, and that create a conscious of reciprocity between each other and nature.

Waldorf philosophy and ecojustice have common goals of connecting people with the Earth and developing an eco-emotional, eco-interpersonal consciousness. In Waldorf philosophy, the intention is to build an intuitive sense of connection of the self with nature and through nature. As students interact with nature as an aesthetic context and a source of inherent spirituality, students can gain inner balance, a sense of beauty of self in connection with nature, and a sense of peace that can transcend all academics. Similarly, ecojustice has a primary goal of developing a heightened consciousness with a strong sense of being part of nature and having a significant role in the reciprocity and nurturance of nature. However, ecojustice has a more explicit relationship with issues of social justice in community that Steiner implicitly engages with. Steiner argues that caring, holistic individuals in a community would inherently develop a more caring, holistic community, whereas ecojustice may implicitly agree, but it foregrounds the analysis of these issues, practices, and tensions in community. It is this partnership of the natural aesthetic from Waldorf philosophy with the justice-oriented analysis of ecojustice that provides a firm foundation for the Sustainable Farm School.

The Sustainable Farm School—Mission and Vision

The Sustainable Farm School's mission is to provide an educational experience for children ages 3–18 years old that inspires a lifelong love of learning, especially in terms of creating sustainable life skills. These skills are inquiry-oriented, contextualized socio-culturally and ecologically, and aesthetically/spiritually connected. SFS offers core academics and holistic personal development as a vehicle for helping students develop a plan for sustainable living inspired by aesthetics and a sense of interconnectedness. SFS aims to cultivate the skills and virtues needed for personal success through a balance between instruction, exploration, and discovery that lead to creating individual lives and communities that are more sustainable.

SFS provides learning experiences that foster independence, self-sufficiency, and collaboration with people of all ages and levels of ability. The overall trajectory of the

school begins with a focus on developing relationships with nature through art and play. Students are gently and progressively introduced to academics within the context of aesthetics and nature. SFS students participate in daily farm/gardening chores in each of their programs. Learning to successfully interact with the land and animals prepares them with advanced skills and a love for nature. As the students move into the last 5 or 5 years, they do more social, cultural, and ecological analysis still in the context of aesthetics and nature, but with an added emphasis on indigenous and Earth-based mythologies, while simultaneously investigating sustainable technologies. We believe this will prepare students for their effective futures as community members.

We do not believe that providing a traditional and mainstream science educational experience will lead to a more sustainable world. In fact, the heightened, exclusive focus on observation, inquiry, experimentation, and objectification of nature may be a significant contributor to societies that are unsustainable. We do not believe that science education is being accountable to the health of the planet or nature-human communities (See Love 2012). Industrialized/post-industrialized societies tend to use scientific processes largely for profit (thereby, perpetuating consumerism and increasing waste), weaponry, and to perpetuate reliance upon large-scale farming, genetically modified foods, corporate farming of animals, and wide scale use of pesticides and antibiotics. SFS teaches the importance of scientific skills and problem-solving processes, but it is a school that includes critical examination of science (and by extension, technology) as being accountable to the Earth. Science is taught with great care and in accordance with the cycles of the Earth in order to move more successfully towards sustainability.

Waldorf philosophy aims for learning experiences that involve the head, heart, and hands. While some courses emphasize one or two of these over another, all courses find ways to implement all three learning modes. For example, from the very start in pre-school, children learn to finger knit, model beeswax, bake, sing simple mathematical verses, recite poetry, perform music, and they participate in classroom chores. As they get older they take on more advanced tasks and skills. In the middle and upper years, Science or Mathematics will include varying amounts of artistic drawings from the basic parts and functions of the Circulatory System and hand drawn representations of fractals found in nature. Students act out the pumping heart, the churning stomach, and the flowing blood in a rhythmic performance they will remember for years.

The school occurs at many diverse locations ranging from a fully operational organic farm to individual residences in suburban settings to a commercial space in a downtown area of a small post-industrial city, New Britain—still reeling from the massive job loss of the last 40 years. It also serves as a key part of the mission of the school because being at different types of locations means that students can see first-hand that growing food can happen in almost any living space no matter how restrictive the amount of land available might be. We also want students to see that even if they are not able to grow significant amounts of food in their immediate living space, they can be a very important member of their communities helping their local farms, being involved with community supported agriculture (or CSA), and community gardens.

A Sapling and a Solutionary student working together in large organic garden. Kimberly Gill © 2013

SFS teachers value the academic tradition, many of them holding university degrees in their field, while maintaining a natural connection to the Earth. Teachers are hired because they are visionaries in their fields, and the curricula of the school is formed largely by who is able to teach there, rather than having static curricula that instructors have to adhere to. SFS has general expectations for students at various stages, but these can be met in any given content and learning context. The content is shaped by the know-how, not the other way around. Each instructor, whether new to teaching or a seasoned veteran, is at the school because they offer learning experiences that are contexts for envisioning a balanced, creative, diverse, inspired, and sustainable society. Teacher selection process involves inviting community members or receiving requests from interested community members who are gifted in their fields. The director and assistant director vet the potential teacher through an interview process, share the overall framework of the school, and ask for a course title and description. The director and assistant director review the course information and decide whether or not to include the course. The assistant director provides ongoing support to the teacher throughout the duration of the course. Assistance usually involves working with content alignment and teaching methods within the overarching framework of the school. As the trimester continues, collaborations often turn towards making the content even better so that it matches the developmental levels and interests/needs of the students.

Selection of teachers is also connected to the teacher education program at Central Connecticut State University. Pre-service teachers who demonstrate a genuine interest and passion for this kind of educational environment are invited by the Assistant Director, Kurt Love, who is also a faculty member in the department. SFS has a mission of helping public schools to better incorporate a focus on an integrated approach to sustainability, as well as helping public school teachers to see possibilities and advance their own pedagogical practices. SFS utilizes interns from CCSU as some of its teaching staff in order to help them build their own teaching practices in connection with the framework of the school so that they can be more prepared to teach towards sustainability wherever they may go after teaching at SFS. CCSU pre-service teachers are generally willing to put in the extra time for this internship (which is additional to their programmatic field experience requirements) because they not only have an opportunity to design and teach their own course, but having the actual experience with this framework as an instructor is the best kind of preparation to help them in their future classrooms to teach an integrated approach to sustainability.

There are six programs at SFS: *Little Sprouts*, *Saplings*, *Explorers*, *Visionaries, Solutionaries*, and an after-school program for urban public school students. The Little Sprouts and Saplings focus on providing children with free play, artistic exploration, and farm/garden chores. The Saplings programs involve some introductory academic work, but the primary focus/work is largely incorporated through art and story-telling. The Explorer, Visionary, and Solutionary programs are organized by topic-driven courses that meet once per week over a 12-week trimester during autumn, winter, and spring. These courses include permaculture, organic farming, whole food preparation, handwork, mythology, herbology, music, art, science-fiction literature, sustainability and nature, history/civics, Capoiera, math of sustainability, research and presentation, yoga, and philosophy. Each term focuses on a different interdisciplinary cultural theme, unifying lessons and creating a diversity of understandings. During its first 3 years, students came from homeschooling environments, as well as those who recently left public schools. Students range in abilities with some having diagnosed learning disabilities. In total, the school served about 40 students per year, the majority being White, followed by American Indian, Black, and multiracial respectively. The largest numbers of students are in the Little Sprouts program.

The Little Sprouts program is for children ages 3–5 years old. This program offers children with a simple and natural rhythm that welcomes community work, play, and learning together. The program begins with a morning greeting song, after which the children begin their morning garden or farm chores depending on which site they are at. This time involves working together, whether it includes feeding the barnyard animals, watering the plants, sorting vegetables, or tidying up. Next we join for a snack, say a blessing of gratitude to honor and connect with our fresh vegetables, fruits, and crackers, and then proceed into “circle time.” During circle time, the Little Sprouts teacher draws simple math, science,

and language principles into a few songs and poetry verses. Children sing along, get up and move through the gesture games and finger plays. This is their first introduction to simple academics in school. Circle time concludes with a story told, not read, by the teacher. Stories are theatrical and come with natural props and creatures to teach a value-centered lesson, such as practicing patience or sharing. After circle time, the children gather to create a handcraft, paint a watercolor picture, finger knit, model beeswax, or bake bread. The activity rotates through many different mediums, each one offering a new opportunity to build fine motor skills and inspire creativity. After tidying up together, the children have free play, where they can "make believe" and experiment with dollhouses, a wooden kitchen set, musical instruments, and many more natural and often handbuilt toys. When the weather is cooperative, children spend much of their free playtime running through wide-open fields or exploring a nature path near the school with their teacher.

The Saplings program is for children ages five to seven. The Saplings follows a similar routine to the Little Sprouts, with age appropriate garden chores, songs, and activities. The primary difference is that the Saplings have a main lesson instead of circle time. The main lesson is an hour-long academic lesson that incorporates science, language arts, history, math, and multiculturalism. The Saplings begin to learn more skills for homesteading (garden to table, homemade recipes, and handmade objects) during their chore and activity time. For instance, they prepare soups, more complicated bread recipes, learn to sew and knit.

The Explorer program is for children ages seven to ten. At this age, students may explore a variety of academic subjects including language arts, science, math, and history. In addition to the traditional subjects, we offer herbology, circus arts, whole food preparation, Capoeira, homesteading, and handwork, amongst others. Students explore the relationships of their content area classes with relationships to the real world, focusing especially on empowerment. Gardening and farming experiences remain present, and act as an important intellectual and aesthetic "anchor" for the curriculum at this stage. To do so, instructors continuously provide learning experiences that involve students in connecting academic skills with real world possibilities and first-hand experiences that create a real sense of confidence with abilities to work with others. The curriculum is deeply contextualized to allow for meaningful work that has a purpose because it is seen immediately in our communities.

The Visionary program is for students ages 10–13. This program helps students develop their visions of sustainable communities of wellness. As students become more comfortable with critical issues that affect sustainability and wellness within these communities (local, as well as global), they are encouraged to examine potential solutions. Develop ever-growing visions of healthy, happy communities that are working to become more and more sustainable. There is an increased focus on academic subjects within real world, first-hand learning contexts such as farms, gardens, and democratic experiences with local municipalities.

Students preparing soups with vegetables from an organic garden. Kimberly Gill © 2013

The Solutionary program is for children ages 13–18. Students build their visions so that they can develop skills and strategies for solutions that are sustainable, peaceful, and democratic. Students intensify their work in academics like literature, mathematics, art, history, and science, but with a goal to use these as a base for critical examinations and experimentations with creating practices of sustainability in their own lives and working with local and global communities. They learn public speaking, debating, critical forms of analysis of social and ecological issues, volunteering, and connecting with public officials to share experiences and opinions. Instructors in this program focus on developing deep contexts for learning that are immediately connected to the real world and provide first-hand experiences.

Students of different programs at SFS often come together for courses and various activities in order to have experiences across age groups that can promote stronger relationships, mentorship, and appreciation of difference. They may spend part of the day participating in farm and garden chores and also during lunchtime. Some classes such as Capoeira and herbology are combined for Explorer, Visionary, and Solutionary students.

SFS students do not receive grades in their courses; rather, they are held accountable for their classwork, homework, projects, or presentations based on goals that they set with their instructors and families. The aim is to provide aesthetic, meaningful, and critical contexts for learning while strengthening core academic work that helps students develop meaningful experiences that genuinely help them grow cognitively, emotionally, artistically, and as a member in community. Connections to the community are often the reason for a lesson, and academic rigor comes from having a real world reason to study content.

Visionary and Solutionary student working with farm manager, Loren Pola at Sun One Organic Farm in Bethlehem, Connecticut during their Farm Economics course. Kimberly Gill © 2013

There are two after-school programs: one in New Britain, and one in New Haven. Each program has its own independent structure, and it meets once or twice per week throughout the year. The focus in both programs is urban gardening. A partnership with Central Connecticut State University's community outreach center works with New Britain High School students. Since urban organic gardening is the focus, the after-school program has its own small garden located right on Main Street in downtown New Britain. The high school students design and maintain the urban garden, while also learning about issues of sustainability and diversity. In New Haven, students work on a residential site that is converting over to a more permaculture-oriented space.

Three Courses at SFS

Urban Gardening, Philosophy, and Holistic Nutrition

There are many courses at SFS that reflect the framework of the school, and each would be appropriate to describe in this section. Three courses, Urban Gardening, Philosophy, and Holistic Nutrition, are described below to provide three different approaches of how aesthetics, culture, and ecojustice are explored.

Urban Gardening

Students from New Britain High School in New Britain, Connecticut come to an after-school program that focuses on enrichment experiences.

They meet at Community Central, which is a community outreach program operated by Central Connecticut State University. The course starts in February and meets every Monday and Friday until the end of the school year in June. The course has three main objectives: explore issues of social and ecological sustainability, design and create a small urban garden right on Main Street where Community Central is located, and help students who are interested to plan their own gardens at their homes.

After-school high school students building a raised bed garden with course instructor, Jenny Naes, in downtown in New Britain, Connecticut. Kurt Love © 2013

New Britain is a post-industrial city with about 73,000 people with about 48 % White, 37 % Latino, and 13 % African-American with about 49 % speaking a language other than English at home and about 21 % below the poverty line according to the 2010 U.S. Census. New Britain has a range of supermarkets regarding cost. New Britain is also unique because it is the only small city in the state that has a small organic farm. Most students, however when asked, do not know about this farm.

Since February and early March in Connecticut tend to still be cold and snowy, there is very little gardening work that can be done outside. Therefore the first month of the course focuses on issues of sustainability and intersections with culture, social justice, and food security issues. Students look at how work around the country is being done to provide fresh foods in areas that have little access to fresh food, such as Growing Power in Milwaukee and Chicago, and community gardens in Detroit and in Hartford. We discuss the importance of having a vision of balance and wellness in any community and how that applies to their own communities. The focus then turns to an introduction to gardening and planning for the 3′ × 12′ raised bed that is adjacent to Community Central, as well as what the students want to do in their own living spaces including some container gardening or small gardens with their families. Students choose the plants that they want to grow, and they do some initial plantings inside with small containers and trays while there is still a threat of frost. The garden is planned such that early season plants like lettuce and strawberries available before the end of the school year. When students return in September, they have late season plants like tomatoes, peppers, more lettuce, jalapenos, and cucumbers. The focus then turns towards food preparation with organic, seasonal foods into late autumn. The intention of this program is provide an education of the cycle of garden-to-table processes and delve into the issues of food accessibility and politics in urban environments.

Philosophy

Students learn in a philosophy class that the lives and actions of individual human beings, at all times, both shape and are fundamentally shaped by their relationships not only with one another, but with all other living things in this world (Young 2000). How these relationships are structured and the ways in which they function have profound impact on the possibilities for and well-being of all of life, both present and future. When our relationships with other human beings, with non-human animals, or with nature as a whole, are shaped by ideologies of domination and systems of power, the results are not only oppressive for those subordinated by such systems, but they also are destructive for those who stand in the positions of power, not to mention the impact such relationships have for future generations of life (Shiva 2005). This is apparent when we note the inescapable interconnectedness of all living things—a reality that means harm to some means harm to all. If we are to flourish, as human beings and, more importantly, as part of an interconnected whole, then it is crucial that we begin to question and work to transform the many hierarchical relations of domination that define much of contemporary reality, including those that arise among human beings—such as those based on nationality, race, gender, ethnicity, and the like—as well as those structuring the relations between species, especially humans and non-human animals. It is precisely this aim—to question dominant relations of inequality and the ideologies that foster them—that serve to motivate our conversations on animal welfare.

This class is open to Upper School students and designed to promote students' abilities to critically engage with and reason about moral and philosophical questions. The first unit focuses on moral issues and concerns surrounding animal welfare. Specifically, students examine the character of human-animal relationships in the contemporary world. They begin the course with a brainstorming activity in which they identify common social practices involving animals, with particular emphasis on the treatment of animals in the United States. Among the items on the list are: zoos, farms (factory and other), butchers, circus, service dogs, dog fighting, puppy mills, pets, and research. The students examine the items on the list, and then are asked to describe each practice in terms of its purpose, its assumed 'value' or justification, as well as identifying any initial moral concerns that it raises. The aim of this activity is to spend time as a class reflecting on the key assumptions and values underlying the treatment of animals within contemporary western society (Grasswick 2004). This provides the basis for examining dominant ideologies and how these shape the relationship between humans and non-humans.

The students spend the next four class periods examining three specific practices involving animals: factory farming, medical research, and other types of animal research, such as for testing the safety of cosmetics. For each practice examined, students are asked to describe the lives of the animals involved in those practices, and tell stories from he perspectives of the animals. In so doing, they seek to connect empathically with animals, thereby challenging dominant ideological views that serve to disconnect us from other living things; and which present 'human' interests as the only interests. Students express their emotional reactions to this activity in ways that foster deep moral reasoning, enabling them to draw from our discussions of specific practices, broader moral principles for and lessons about the treatment of animals. Thus, in the fourth class, we examine some general moral lessons that we might take from our discussions of factory farming and animal research. Among the questions we address are: What types of relationships do these practices promote between humans and animals? What is morally wrong with these realities? How should these relationships be transformed so they are more in balance with justice and morality (Grasswick 2004)? Based on student's answers to these questions, we create a chart outlining what they perceive to be more harmonious and moral relationships between relevant beings. The students also discuss the implications of the lessons for our own lives and actions, as well as for society as a whole.

The final classes for this philosophy unit focus on reconnecting the students to their communities. Thus, we begin by discussing ways we might put our knowledge to use so to promote a healthier, more just community (Hoffmann and Stake 1998). Ultimately, the students decide that they would use the mediums of art and writing to become advocates for social change. Toward this end, the students each create posters in which they illustrate their moral perspectives on particular practices involving animals. One student, for instance, creates a comic strip while another student draws a monkey who had been subject to medical testing. To accompany these pictures, the students also write letters to companies in which they argue against the use of animals in research and propose alternatives that the company might use in the place of animals. These activities are of critical importance to eco-justice in that they re-connect students and knowledge to their communities and foster their participation as democratic citizens and change agents (Shiva 2005).

Holistic Nutrition

The health of a community, both place and people, is a way of approaching human health and wellness that supports the main tenets of ecojustice including an analysis of culture, politics, and assumptions, and offering a holistic and place-based pedagogy (Bowers 2001). The holistic nutrition course is developed for the students in the lower school, but open to the students in the upper school when their excitement and interest become apparent. This course incorporates ecojustice pedagogy through the utilization of the ecological commons as a unit of analysis, exploration of eco-injustice through exploration of food labeling, and the revitalization of cultural commons through shared origin stories.

Each class has three components: food preparation and eating, story-telling, and nutritional analysis. The class starts with a simple recipe that the students will help prepare and eat. A main ingredient from the recipe is the focus of story telling during food preparation. The stories shared are origin stories or folktales from all over the world surrounding that one food item. For example, when preparing coconut rice and beans stories about the coconut were shared including a tale from Myanmar about how a mischief maker got stuck in a coconut and that is why sloshing is heard when it is shaken. Another tale from India is about a girl who falls in love with the God of the eels, and as a gift he gives her a coconut. The story teaches about how all parts of the coconut are useful for food, water, and fiber, and also explains the "face" on a coconut as the two eyes and nose of an eel.

Katie Love teaching Explorer students during a holistic nutrition class. Kimberly Gill © 2013

These stories reinforce Waldorf philosophy by connecting the children to the food they are working with in a deeply meaningful and spiritual way through understanding the people, places, languages, and cultures that surround it. Lincoln (2000) describes this approach as aligned with ecospirituality, and considers it to be of paramount importance for youth. Ecospirituality is the intuitive awareness of all life, which reflects our responsibility within this relationship, and the deep sense of unification that exists in this level of interconnectedness. It helps to support students' journey as global community members, and increases their desire to be more adventurous with nutritious foods. Conversation also continues during mealtime about the nutritional science of their meal. The students learn to critically read food labels, where food comes from, clarification about terms such as "low fat," or "heart healthy", and finally, what macronutrients the food contains in the form of carbohydrates, protein, and fat.

An educational experience should holistically support a student's "heart, heads, and hands" as mentioned above, and this format for the holistic nutrition course supports all three aspects of self. In addition to the structure of the course, the students are also supported as spiritual beings through self-reflection, journaling projects, and meditation. Students who are viewed as spiritual beings find validation and empowerment to be successful learners (Delany 2006; Dudlt-Battey 2004). "Teaching about holism is not the same as teaching holistically" (Love 2008, p. 263), and students are in a classroom space at the SFS where they can experience both. At the beginning of class the group sometime engages in deep breathing exercises and a brief guided meditation to focus the group collectively to the learning tasks to be accomplished during the period. On days when more controversial issues are discussed (in one case for example, religious restrictions on eating, genetically modified organisms, or political vegetarianism) the class is also guided to create a safe space of disclosure and open mindedness. This process is repeated at the end of class as a way of creating closure, encouraging relaxation, and reconnecting, which fosters a sense of community within the SFS.

Cultivating Caretakers of Their Community

We are purposefully trying a different approach to education that directly addresses the larger ecological issues we are all facing. However, instead of just taking a mainstream environmental education approach, we have created a school that is formed around the concept of interconnectedness and reciprocity with nature. Another common thread present with the parents, students, instructors and directors is that public schools are restricted sites of empowerment and exploration, which has been written about extensively in academic literature. These two concurrent conditions are dangerous for the whole of a society. Our hope with this school is to develop it well, help grow students who become caretakers within their communities and have a consciousness of sustainability and reciprocity.

For more information, go to: http://sustainablefarmschool.com and you can see our artwork at: https://www.facebook.com/SFSCT

References

Banks, J. (1995). Multicultural education and curriculum transformation. *Journal of Negro Education, 64*, 390–400.

Bouma, G. (2006). *Australian soul: Religion and spirituality in the 21st century*. Cambridge: Cambridge University Press.

Bowers, C. A. (2001). *Educating for ecojustice and community*. Athens: University of Georgia Press.

Bowers, C. A. (2006). *Revitalizing the commons: Cultural and educational sites of resistance and affirmation*. New York: Lexington Books.

Buber, M. (1987). *I and thou*. New York: Collier Books.

Delany, C. (2006). Facilitating empowerment and stimulating scholarly dialogue using the world cafe model. *Journal of Nursing Education, 45*, 46.

Dudlt-Battey, B. (2004). Using the holistic paradigm in teaching. In *Development of students, nurses, and teachers* (pp. 345–355). New York: Springer Publishing Company.

Easton, F. (1997). Educating the whole child, 'head, heart, and hands': Learning from the Waldorf experience. *Theory Into Practice, 36*, 87–94.

Ferrer-Guardia, F. (1913). *The origin and ideals of the Modern School* (J. McCabe, Trans.). New York: G. P. Putnam's Sons/Knickerbocker Press.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Grasswick, H. (2004). Individuals-in-communities: The search for a feminist model of epistemic subjects. *Hypatia, 19*(3), 85–120.

Greene, M. (1995). *Releasing the imagination*. San Francisco: Jossey-Bass.

Gruenewald, D. A. (2005). More than one profound truth: Making sense of divergent criticalities. *Educational Studies: A Journal of the American Educational Studies Association, 37*, 206–215.

Hoffmann, F. L., & Stake, J. E. (1998). Feminist pedagogy in theory and practice: An empirical investigation. *NWSA Journal, 10*(1), 79–97.

Kaminski, J. (2008). EcoNurse: Using ICTs to weave ecological activism into the tapestry of nursing curriculum. In *WRCASN conference*, Victoria, British Columbia on 23 Feb 2008.

Ladson-Billings, G. (2006). From achievement gap to educational debt: Understanding achievement in U.S. schools. *Educational Researcher, 35*, 3–12.

Lincoln, V. (2000). Ecospirituality. A pattern that connects. *Journal of Holistic Nursing, 18*, 227–244.

Love, K. (2008). Interconnectedness in nursing: A concept analysis. *Journal of Holistic Nursing, 26*, 255–265.

Love, K. (2011). Enacting transformative education. In C. Mallot & B. Porfilio (Eds.), *Critical pedagogy in the twenty-first century: A new generation of scholars* (pp. 419–453). New York, NY: Information Age.

Love, K. A. (2012). Politics and science textbooks: Behind the curtain of "objectivity". In H. Hickman & B. Porfilio (Eds.), *The new politics of the textbook: Critical analysis in the core content areas* (pp. 133–150). Rotterdam, The Netherlands: Sense.

Martusewicz, R., Edmundson, J., & Lupinacci, J. (2011). *Ecojustice education: Toward diverse, democratic, and sustainable communities*. New York: Routledge.

Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York: Teachers College Press.

Palmer, P. (1998). *The courage to teach*. San Francisco: Jossey-Bass, Inc.

Petrash, J. (2002). *Understanding Waldorf education: Teaching from the inside out*. Beltsville: Gryphon House.
Rawson, M. P. (2010). Sustainable teacher learning in Waldorf education: A socio-cultural perspective. *Research on Steiner Education, 1*, 26–42.
Shiva, V. (2005). *Earth democracy: Justice, sustainability and peace*. Cambridge: South End Press.
Steiner, R. (1995). *Anthroposophy in everyday life*. London: Rudolf Steiner Press.
Steiner, R. (2005). *Verses and meditations* (G. Adams, Trans.). London: Rudolf Steiner Press.
Steiner, R. (2011). *Agriculture course: The birth of the biodynamic method* (G. Adams, Trans.). London: Rudolf Steiner Press.
Woodson, C. G. (2005). *The mis-education of the negro*. Mineola: Dover.
Young, I. M. (2000). *Inclusion and democracy*. Oxford: Oxford University Press.

Kurt A. Love has a Ph.D. in Education from the University of Connecticut. He specializes in science education, ecojustice theory and pedagogy, and curriculum and instruction. He is the Assistant Director of the Sustainable Farm School and an assistant professor in Department of Teacher Education at Central Connecticut State University. He is an advocate for permaculture, community gardening, fossil fuel divestment, and localization of economies and education.

Audra King has a Ph.D. in Philosophy from the University of Colorado at Boulder. Her main areas of specialization social and political philosophy, global justice, and feminist philosophy. She is currently teaching Philosophy, Reasoning, & Social Justice at the Sustainable Farm School and serves as assistant professor of Philosophy at Central Connecticut State University.

Katie L. Love is an assistant professor of Nursing at the University of Saint Joseph and director of the Multicultural RN-BS program. She is the director of sustainability in Health and Wellness at The Sustainable Farm School and teaches holistic nutrition. She is also mother to a 2-year old and twin infants.

Kimberly Gill is the founder and director of the Sustainable Farm School. Kimberly completed her undergraduate work in Sociology and Economics at Westmont College and postgraduate work in fine art at Pratt Institute. She worked as a private teacher for children from various alternative and Waldorf schools in California, New York City, and Poland. Kimberly created SFS because of her lifelong dream to provide children and families of all backgrounds with a holistic education and a model for sustainability.